Registered number: 5965190

ENRC Management (UK) Limited Annual Report and Accounts 2021



Strategic report

Results

The result of ENRC Management (UK) Limited (the 'Company') is a profit for the year of £400 thousand (2020: £1,593 thousand). The Company has total equity of £11,379 thousand (2020: £10,979 thousand).

Principal activity and review of the business

The Company provides management services to subsidiary undertakings of Eurasian Resources Group S.à r.l. ('ERG S.à r.l.'), its ultimate parent. The Director does not anticipate any significant changes to the business in the future.

Key performance indicators

No key financial and other performance indicators have been identified for the Company.

Principal risks and uncertainties

The principal risks and uncertainties of the Company are integrated with the principal risks and uncertainties of the ERG S.à r.l. and its subsidiaries ('the Group') and are not managed separately. For risks related to the military conflict between Ukraine and Russia refer to note 2 of the Accounts.

Whilst macroeconomic uncertainty persists as the world continues to grapple with and recover from the COVID - 19 pandemic, the Company is confident that it can successfully continue its business activities.

On behalf of the board

Dmitry Melnikov Sole Director

Date: October 5, 2022

Director's report

Director

The Director of the Company who was in office during the year and up to the date of signing the Annual Report and the audited financial statements (the financial statements are further referred as the 'Accounts') is Dmitry Melnikov.

Dividends

The Director has not declared any dividends in 2021. The Director does not propose any other dividend payments.

Qualifying third party indemnity provisions

Eurasian Natural Resources Corporation Limited, a direct parent of the Company, has entered into deeds of indemnity for the benefit of the Director of the Company in respect of liabilities to which he may become liable in his capacity as a Director of the Company. These indemnities are qualifying third party indemnity provisions within the meaning given to that term by Section 234 of the Companies Act 2006. These indemnity provisions were in force during the year and remain in force at the time this report is approved.

Financial risk management

Financial risk management of the Company is integrated with the financial risk management of the Group, and not managed separately. The Company is exposed to liquidity risk, credit risk, foreign currency risk and interest rate risk. The Group has internal policies in place, to ensure adequate response to the risks. There have been no significant changes to any risk exposures from the previous year and as such no changes in the processes for managing risks.

Going concern

Refer to note 2 of the Accounts.

Events after the balance sheet date

Refer to note 16 of the Accounts.

Outlook

The principal activity of the Company is not expected to change in the near future.

Statement of Director's responsibilities

The Director is responsible for preparing the Annual Report and Accounts in accordance with applicable law and regulation.

Company law requires the Director to prepare the Accounts for each financial year. Under that law the Director has prepared the Accounts in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law). Under company law the Director must not approve the Accounts unless he is satisfied that they give a true and fair view of the state of affairs of the Company and of the profit or loss of the Company for that period. In preparing the Accounts, the Director is required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable United Kingdom Accounting Standards, comprising FRS 101, have been followed, subject to any material departures disclosed and explained in the Accounts;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the Accounts on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Director is responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Director is also responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable him to ensure that the Accounts comply with the Companies Act 2006.

Director's report (continued)

Director's confirmation

In the case of the Director in office at the date the Director's report is approved:

- so far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and
- the Director has taken all the steps that he ought to have taken as a Director in order to make himself
 aware of any relevant audit information and to establish that the Company's auditors are aware of that
 information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Independent auditors

The independent auditors, PricewaterhouseCoopers LLP, having indicated their willingness to continue in office will be deemed to be re-appointed for the next financial year in accordance with section 487(2) of the Companies Act 2006 unless the Company receives notice under section 488(1) of the Companies Act 2006.

On behalf of the board

Dmitry Melnikov Sole Director

Date: October 5, 2022

Comprehensive income statement

		Year ended 31 December		
£ thousand	note	2021	2020 (restated)	
Revenue	4	222	303	
Administrative expenses	5 .	(199)	(285)	
Impairment reversal/(impairment) on amounts owed by group undertakings, other debtors and investments	10,7	427	(661)	
Net other income	8	2,325	2,354	
Interest payable to Group undertakings		(2,375)	(503)	
Gain on disposal of investment		-	385	
Profit before income tax		400	1,593	
Income tax expense	9	-	-	
Profit for the year		400	1,593	
Comprehensive income for the year		400	1,593	

Balance sheet

		At 31 December	
£ thousand	note	2021	2020
Fixed assets			
Investments	7	-	-
Property, plant and equipment		21	28
Current assets			
Amounts owed by Group undertakings	10	28,672	41,767
Other debtors .	11	15,445	10,628
Cash and cash equivalents		16	18
Current liabilities			
Amounts owed to Group undertakings	12	(18,639)	(1,414)
Other creditors	13	(6,763)	(5,135)
Net current assets		18,731	45,864
Non-current assets			
Other debtors	11	2,053	
Non-current liabilities			
Amounts owed to Group undertakings	12	(9,426)	(34,913)
Net assets		11,379	10,979
Equity	•		
Called up share capital	14	1	1
Retained earnings		11,378	10,978
Total equity		11,379	10,979

The notes on pages 7 to 11 are an integral part of the Accounts.

The Accounts on pages 4 to 11 were authorised for issue by the Director on 5 October 2022 and signed by:

Dmitry Melnikov Sole Director

Statement of changes in equity

£ thousand	Called up share capital	Retained earnings	Total
Balance at 1 January 2020	1	9,385	9,386
Comprehensive income for the year	-	1,593	1,593
Balance at 31 December 2020	1	10,978	10,979
Comprehensive income for the year	-	400	400
Balance at 31 December 2021	1	11,378	11,379

Notes to the Accounts - 31 December 2021

1. Significant accounting policies

General information

The Company is a private limited company, limited by shares, and is incorporated and domiciled in England, the United Kingdom. The registered office of the Company is 8th floor, 20 Farringdon Street, London, England, the United Kingdom, EC4A 4AB. The principal activity of the Company is to provide management services to subsidiary undertakings of ERG S.à r.l.

Basis of preparation

The Accounts are prepared under the historical cost convention in accordance with the Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101), and in accordance with the provisions of the UK Companies Act 2006 as applicable to the companies reporting under FRS 101.

The immediate parent of the Company is Eurasian Natural Resources Corporation Limited incorporated and domiciled in England, the United Kingdom.

The ultimate parent of the Company is ERG S.à r.l., which is the smallest and largest group to consolidate these Accounts. The ultimate parent is incorporated in the Grand Duchy of Luxembourg. The registered office and domicile of ERG S.à r.l. is 9, rue Sainte Zithe, L-2763 Luxembourg, the Grand Duchy of Luxembourg. Copies of ERG S.à r.l's. consolidated accounts are publicly available. Consequently, the Company has taken advantage of the exemption provided by Section 400 of the Companies Act 2006 not to prepare group accounts. Therefore, the Accounts include financial information about the Company as an individual undertaking rather than as a group.

The principal accounting policies have been consistently applied to all the years presented.

No new standards, or amendments to standards, or interpretation that are effective for the year ended 31 December 2021 have had an impact on the Company.

FRS101 disclosure exemptions

The following disclosure exemptions have been adopted under FRS 101:

- IFRS 2, 'Share based payments': paragraphs 45(b) and 46 to 52
- IFRS 7, 'Financial instruments: Disclosures'
- IFRS 13, 'Fair value measurement': paragraphs 91 to 99
- IAS 1, 'Presentation of Financial Statements': paragraphs 38; 10(d); 16; 38A; 38B-D; 111; and 134-136
- IAS 7, 'Statement of Cash flows'
- IAS 8, 'Accounting policies, changes in accounting estimates and errors': paragraphs 30 and 31
- IAS 24, 'Related party disclosures': paragraph 17
- The requirements in IAS 24, 'Related party disclosures' to disclose related party transactions entered into between two or more members of a group.
- IAS 36, 'Impairment of Assets': paragraphs 130 (f) (ii), 130 (f) (iii), 134 (d)-(f), 135 (c)-(e).

Restatement of a comparative information

The Company re-assessed certain third-party costs incurred on behalf of the parent, which are subsequently recharged to the parent. In previous years, the Company was treated as a principal in these transactions and presented these items on a gross basis as expenses and corresponding revenues. During 2021 management has concluded that the company has, in fact, been acting as an agent in relation to these transactions and accordingly has presented them net in the statement of comprehensive income. This has resulted in both Revenue and Expenses being reduced by £42,578 thousand. In addition to this other income of £798 thousand was received on behalf of the parent and recognised as Net other income and subsequently returned to the parent as a deduction to revenue. As the company has been acting as agent in relation to these transactions, the comparative period has now been restated to increase Revenue and reduce Net other income by this amount. To reflect the nature of recharged interest payable to Group undertakings, the Company has restated this income from Revenue to Net other income, amounting to £503 thousand.

Notes to the Accounts - 31 December 2021

1. Significant accounting policies (continued)

		•	Year ended
	Year ended		31 December
	31 December		2020
£ thousand	2020	Restatement	(restated)
Revenue	42,586	(42,283)	303
Administrative expenses	(42,863)	42,578	(285)
Net other income	2,649	(295)	2,354

Functional and presentation currency

The functional and presentation currency of the Company is GBP.

Investments

Investments are held at cost less accumulated impairment losses.

Investments carried at cost are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of the investment exceeds its recoverable amount. The recoverable amount is the higher of an investment's fair value less cost of disposal and value in use. Investments that have suffered impairment are reviewed for possible reversal of the impairment at each reporting date. An impairment reversal is recognised for the amount by which the recoverable amount of the investment exceeds its carrying amount to the extent that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the investment.

Revenue

Revenue from contracts with customers is recognised when control of services is transferred to customers at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those services. Revenues are shown net of VAT and discounts. Under agreements where the Company acts as an agent, third-party costs incurred on behalf of the parent, including the legal expenses, are excluded from both revenue and operating expenses.

Debtors

Amounts owed by Group undertakings and other debtors are recognised initially at fair value and subsequently carried at amortised cost less any allowance for expected credit loss.

Creditors

Amounts owed to Group undertakings and other creditors are recognised initially at fair value and subsequently carried at amortised cost using the effective interest method.

2. Critical accounting estimates, assumptions and judgements in applying accounting policies

Inherent in the application of many of the accounting policies used in preparing the Accounts is the need for management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the Accounts and the reported amounts of revenues and expenses during the period. Actual outcomes could differ from the estimates and assumptions used. The critical judgements and estimates that could have a significant impact on the results of the Company are set out below and should be read in conjunction with the information provided in the notes to the Accounts.

Impairment of investments

The Company reviews the carrying values of investments to determine whether there is any indication that these assets are impaired or require reversal of impairment. Based on the analysis of the internal and external factors, management determined there were no indicators of impairment reversal at the end of the reporting period.

Notes to the Accounts - 31 December 2021

2. Critical accounting estimates, assumptions and judgements in applying accounting policies (continued)

Expected credit loss

Allowance for expected credit loss (ECL) possible within the next 12 months or expected over the remaining life of the exposure is recognised for amounts owed by Group undertakings and other debtors based on credit risk of borrowers with comparable credit rating. ECL is based on the Company's assessment taking into account credit default swap (CDS) rates of comparative companies and the underlying estimated future cash flows of financial instruments. CDS rates have decreased for the year due to market conditions.

Going concern

In February 2022, a military conflict between Ukraine and Russia commenced. A number of countries and international organisations, including the United States of America, the European Union, Switzerland and the United Kingdom imposed a series of sanctions against the Russian government, various companies, including major lenders of the Group (Sberbank of Russia and VTB Bank (PJSC)), and certain individuals. This resulted in significant disruption to financial and commodity markets. The Group complies with all sanctions applicable to its business activities in accordance with adopted compliance policies.

The Board of Managers of ERG S.à r.l. has reviewed the liquidity available for the period until 29 February 2024. Throughout the period under review the Group generates sufficient cash flow to maintain a position above minimum working capital and debt servicing requirements. The Managers of ERG S.à r.l. considered downside scenarios reflecting additional potential sanctions to ensure proactive measures would be executed.

The Group continuously monitors its financial position to ensure adequate liquidity headroom is in place to support its business needs and to ensure compliance with loan covenants or to obtain waivers where appropriate. As of 30 June 2022, the Group complied with applicable covenants.

The Group did not make a scheduled payment to an affiliate of VTB Bank (PJSC) due to sanctions. The Group concluded that it would be in a position to use the relevant sanctions provisions of the credit facility to establish that non-payment does not represent an event of default, and therefore the creditor is not entitled to declare the outstanding debt under the credit facility due and payable prior to its maturity. The Group assessed that non-payment under this credit facility does not trigger the cross-default provisions in other loan facility agreements and is exploring options to resolve the matter in compliance with all applicable laws and regulations.

In June 2022, Standard & Poor's upgraded the credit rating of the Group to B from B- with stable outlook. In June 2021, Moody's upgraded the rating to B1 from B2, and improved the outlook to stable from negative.

The Group appreciates the dependence of liquidity on commodity prices in its key markets, the exposure to foreign exchange volatility, and ability to raise additional funding when required. To ensure adequate liquidity is available to meet contractual obligations, the Group ensures continuing focus on operational efficiency, working capital improvements and allocation and spending of capital expenditures budget.

The Managers of ERG S.à r.l. therefore consider that the Group can access adequate resources to continue its business operations for the foreseeable future, and therefore, the Director considers that the Company can access adequate resources to continue its business operations for the foreseeable future and that the preparation of these accounts under the going concern basis is appropriate.

Notes to the Accounts - 31 December 2021

3. Key management compensation and employee information

The Director did not receive any compensation in respect of the services to the Company during the year (2020: £nil).

The Company had no employees during the year (2020: none).

4. Revenue

The revenue is from the provision of management services in the United Kingdom to the immediate parent.

5. Administrative expenses

	Year ended 31 Decembe		31 December
	·	2020	2020
£ thousand	2021	(as restated)	(as reported)
Legal, financial, advisory (Note 1)	-	-	42,546
Other	199	· 285	317
Total	199	285	42,863

6. Auditors' remuneration

•	Year ended 3	1 December
£ thousand	2021	2020
Audit of the Company	23	22
Total	23	22

The Company incurred audit fees on behalf of subsidiary undertakings of ERG S.à r.l. of £68 thousand (2020: £65 thousand).

7. Investments

·	Shares in
£ thousand	group undertakings
Cost	
At 1 January 2021	-
Additions	16,115
At 31 December 2021	16,115
Accumulated impairment	
At 1 January 2021	-
Charge	16,115
At 31 December 2021	16,115
Net book value	
At 31 December 2020	_
At 31 December 2021	_

£16,115 thousand was contributed to ENRC Business and Technology Services (UK) Limited by way of set-off against trade receivable from ENRC Business and Technology Services (UK) Limited. Impairment charge resulted from recoverability assessment.

Notes to the Accounts - 31 December 2021

8. Net other income

Net other income for the year includes £2,375 thousand of interest recharges to a subsidiary undertaking of ERG S.à r.l. and £50 thousand of net foreign exchange expense. (2020 (as restated): £503 thousand of interest recharges and net foreign exchange gain of £1,851 thousand).

9. Income tax expense

	Year ended 31	December
£ thousand	2021	2020
Profit before income tax	400	1,593
Notional tax charge at 19% UK tax rate	(76)	(303)
Non-deductible expenses	82	(126)
Group relief	(6)	429
Income tax expense	-	-

The Company is a member of a group for the purposes of relief within Part 5, Corporation Tax Act 2010.

A deferred tax asset was not recognised on unused tax losses of £589 thousand (2020: £426 thousand) on the basis of insufficient evidence of taxable profits being available against which the deferred tax asset may be utilised.

UK corporation tax rate increase from 19% to 25% (effective 1 April 2023) was substantially enacted at the balance sheet date. No deferred tax at the balance sheet date was recognised.

10. Amounts owed by Group undertakings

Amounts owed by Group undertakings mainly consist of receivables from the provision of management services in the United Kingdom to a subsidiary undertaking of ERG S.à r.l.

A reversal of impairment of £427 thousand was recognised in the Comprehensive income statement mainly as a result of decrease in the year-end balances of amounts owed by Group undertakings.

Amounts owed by Group undertakings were settled by way of set-off against amounts owed to Group undertakings.

11. Other debtors

Other debtors balance at 31 December 2021 mainly consists of VAT receivable of £10,000 thousand and receivables in relation to legal retainers of £7,394 thousand, net of ECL of £108 thousand.

12. Amounts owed to Group undertakings

The amounts of £10,476 thousand and £17,544 thousand owed to a subsidiary undertaking of ERG S.à r.l. at 31 December 2021 bear interest rates of 6.8%, 7.5% and are repayable in 2025, in 2022, respectively.

13. Other creditors

Other creditors balance at 31 December 2021 mainly consists of payables in relation to legal, financial, advisory services received.

14. Called up share capital

Authorised, issued and fully paid share capital is £1 thousand consisting of 1,000 shares of £1 par value each.

Notes to the Accounts - 31 December 2021

15. Related undertakings

The Company holds a direct interest in ENRC Business and Technology Services (UK) Limited and ERG Management (South Africa) (Pty) Ltd.

Investee	Principal activity	Class of shares	Shares held	Address	State of incorporation
ENRC Business and Technology Services (UK) Limited	Holding	Ordinary	100%	8th Floor, 20 Farringdon Street, London, EC4A 4AB	England and Wales
ERG Management (South Africa) (Pty) Ltd	Administration	Ordinary	100%	Lower Bulding, 1 Sturdee Ave, Rosebank, Gauteng, 2196, Johannesburg	South Africa

16. Events after the balance sheet date

In February 2022, a military conflict between Ukraine and Russia commenced. A number of countries and international organisations, including the United States of America, the European Union, Switzerland and the United Kingdom imposed a series of sanctions against the Russian government, various companies and certain individuals. This resulted in significant disruption to financial and commodity markets. The Company continues to comply with all sanctions applicable to its business activities in accordance with adopted compliance policies.

The Company voluntarily liquidated ENRC Business and Technology Services (UK) Limited on 18 January 2022.

The UK government has announced that the change in the main rate of corporation tax from 19% to 25% would not take effect from 1 April 2023, with the main rate of corporation tax remaining at 19%.

Independent auditors' report to the members of ENRC Management (UK) Limited

Report on the audit of the financial statements

Opinion

In our opinion, ENRC Management (UK) Limited's financial statements:

- give a true and fair view of the state of the Company's affairs as at 31 December 2021 and of its profit for the year then
 ended:
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Accounts 2021 (the "Annual Report"), which comprise: the Balance sheet as at 31 December 2021; the Comprehensive income statement and the Statement of changes in equity for the year then ended; and the Notes to the Accounts, which include a description of the significant accounting policies.

Basis for opinion

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

Independence

We remained independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Conclusions relating to going concern

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the Director's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the Company's ability to continue as a going concern.

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

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Director is responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic report and Director's report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on our work undertaken in the course of the audit, the Companies Act 2006 requires us also to report certain opinions and matters as described below.

Strategic report and Director's report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic report and Director's report for the year ended 31 December 2021 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic report and Director's report.

Responsibilities for the financial statements and the audit

Responsibilities of the Director for the financial statements

As explained more fully in the Statement of Director's responsibilities, the Director is responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Director is also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' responsibilities for the audit of the financial statements

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

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

Based on our understanding of the Company and industry, we identified that the principal risks of non-compliance with laws and regulations related to the failure to comply with the UK tax regulation, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. Audit procedures performed by the engagement team included:

- · enquiring of management and internal legal counsel around actual and potential litigations and claims;
- reviewing minutes of meetings of those charged with governance;
- reviewing financial statement disclosures and testing to supporting documentation to assess compliance with applicable laws and regulations, including UK tax regulation; and
- challenging assumptions and judgements made by management in their significant accounting estimates; and
- identifying and testing journal entries, in particular any journal entries posted with unusual account combinations or posted by senior management.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not obtained all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- · certain disclosures of Director's remuneration specified by law are not made; or
- the financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Daulet Bei.

Daulet Bekmukhamedov (Senior Statutory Auditor) for and on behalf of PricewaterhouseCoopers LLP Chartered Accountants and Statutory Auditors London
5 October 2022

ENRC Management (UK) Limited Registered number: 5965190 to be annexed to the accounts on record

Eurasian Resources Group S.à r.l. Annual Report and Accounts 2021

Table of contents

About this report	2
Introduction	6
CEO Report	7
Corporate review	12
Performance	12
Key initiatives and events in 2021 and early 2022	16
2025 Strategy.	18
Divisional review	20
Ferroalloys Division	20
Iron Ore Division	22
Alumina and Aluminium Division	24
Copper, Cobalt and Other Non-ferrous Division	27
Energy Division	29
Logistics Division	32
Financial review	33
Group performance	33
Key events in 2021	34
Risk management	37
Principal risks and mitigation actions	37
Consolidated management report	41
Audit report	44
Consolidated income statement	48
Consolidated statement of comprehensive income	49
Consolidated balance sheet	50
Consolidated cash flow statement	51
Consolidated statement of changes in equity	52
Notes to consolidated financial statements	53

About this report

Please note the following abbreviations throughout this report:

- ERG = Eurasian Resources Group S.à r.l. (the ultimate parent company of the Group)
- Group = ERG and its subsidiaries
- ERG BV = Eurasian Resources Group B.V. (a wholly owned subsidiary of ERG)

The following sections are based on a Consolidated balance sheet and Consolidated income statement for the Group:

- CEO Report
- Corporate review
- Divisional review
- Financial review
- Risk management
- Consolidated management report

The information in these sections is unaudited unless otherwise stated.

Forward-looking information

This Annual Report and Accounts contain certain forward-looking statements. Forward-looking statements are not based on historical facts and are inherently prospective in nature. Forward-looking statements may be identified by the use of terminology including, but not limited to, 'intend', 'aim', 'project', 'anticipate', 'estimate', 'plan', 'believes', 'expect', 'may', 'should', 'will', 'potential', 'possible', 'investigate', 'explore', or similar terms.

Forward-looking statements involve known and unknown risks, uncertainties and other variables that may cause actual performance, events and outcomes to vary significantly from any future performance, events or outcomes expressly or implicitly anticipated by such forward-looking statements. Such variables may include, but are not limited to, actual operational performance, market conditions, exchange rate fluctuations, operational disruption, macroeconomic dynamics, political uncertainty, government regulation and other related factors. As such, undue reliance should not be placed on such forward-looking statements.

Forward-looking statements contained in this report are only made with respect to the situation at the date of publishing. ERG will not be under any obligation and will not undertake to update or revise any forward-looking statements contained in this report after this date.

Proposed infographics¹

Business model

Finance

We seek to use all funds efficiently, whether obtained through financing or generated from operations or investments.

People

We rely on the skills, wellbeing and motivation of employees, contractors and service providers to generate value.

Relationships

We seek to build and sustain constructive relationships with all our stakeholders that are based on mutual respect, transparency and trust.

Natural resources

It is critical that our businesses responsibly manage all the natural resources used in our processes, given their finite nature.

Capital assets

Significant financial investment in the purchase, development and maintenance of property, plant and equipment has provided us with the capacity to generate longer-term returns.

Activities

- Exploration and execution;
- Development;
- Mining;
- · Processing and beneficiation;
- Smelting and metallurgy;
- Sales:
- · Post-mining reclamation;
- Logistics²;
- Energy³.

Key products

- · Ferroalloys (stainless steel);
- · Cobalt (lithium-ion batteries, alloys, magnets);
- Copper (infrastructure construction, transportation, electrical and electronics);
- Aluminium (transportation, infrastructure construction);
- Iron ore (steel);
- · Coal (energy heat).

¹ Could be a part of a different section in the final designed version.

² Logistics and transportation services to support our own operations as well as third party businesses.

³ Generation of power for our operations and third parties in Kazakhstan.

Key markets

- · China;
- European Union;
- Kazakhstan;
- Russia;
- Japan.

Outputs

Financial

Underlying EBITDA, revenue, free cash flow.

Social

Community social investments, economic value.

Environmental

CO2 emissions.

Our vision

An international, sustainable, socially responsible and efficient natural resources company.

Our mission

Be the best at what we do. Navigate global change whilst holding true to our values. Responsibly unlocking the potential of the Earth and its people, ensuring the prosperity of those who rely on us.

Our values

Safety

- We put safety first;
- We ensure safe labour conditions for all our employees and contractors, continuously working to prevent any injuries occurring in the workplace.

Unity

- We work together as a team of passionate people aiming to achieve our set goals;
- We respect the cultural and regional traditions where we operate.

Efficiency

- · We are focused on delivering results;
- · We manage our resources carefully to achieve results;
- · We prioritise the most relevant issues;
- · We minimise tasks that do not bring value.

Development

- · We appreciate our employees and create conditions for their development;
- We efficiently implement new technologies and develop as a company;
- We ensure the sustainable development of the Group.

Responsibility

- We fulfil our obligations to our employees, their families, customers, partners, shareholders and society;
- We carefully manage the resources and the environment entrusted to us;
- We build a culture of mutual confidence and respect in the Group, as well as with partners and customers.

Key commodities

Division	Ferroalloys	Iron Ore	Alumina and Aluminium	Copper, Cobalt and Other Non- ferrous	Energy	Logistics
Revenue (US\$m)	2,512	2,085	1,013	2,637	591	124
EBITDA (US\$m)	1,402	887	416	1,392	220	54
Region	Kazakhstan	Kazakhstan and Brazil	Kazakhstan	Democratic Republic of the Congo (the DRC) and Zambia	Kazakhstan	Kazakhstan

Messaging

- A major diversified natural resources producer
- · Prioritising sustainable development and responsible sourcing
- Increasing production, revenue and EBITDA
- Operating in accordance with the Group's 2025 Strategy
- An embedded strategy to support our vision
- A focus on risk management, personnel safety, and employee welfare
- Six divisions supported by a central sales and marketing department

Introduction

About ERG

With a global presence and a workforce of almost 68,000⁴ people ERG owns integrated mining, processing, energy, logistics and marketing operations primarily in Kazakhstan, the DRC and Brazil.

ERG represents one third of the metals and mining industry in Kazakhstan, and is the world leader in high-carbon ferrochrome production by chrome content. We are also a substantial supplier of iron ore, aluminium and alumina in Eurasia, as well as a provider of energy and railway services.

Our Metalkol RTR operation in Africa is the world's second largest producer of cobalt. In Africa, we are also a large producer of copper – with further development projects focused on coal, manganese, platinum, bauxite and fluorspar. In Brazil, we are developing an integrated iron ore mining and logistics operation (BAMIN).

Key metrics in 2021

Operational:

- -6.0% gross ferroalloy production: 1,685.6kt (2020: 1,792.8kt);
- +20.6% iron ore pellets production: 5,726.1kt (2020: 4,748.3kt);
- +7.4% iron ore concentrate production: 8,988.1kt (2020: 8,366.0kt);
- -4.9% alumina production: 1,315.1kt (2020: 1,383.3kt);
- -0.8% aluminium production: 262.4kt (2020: 264.6kt);
- +18.0% copper metal: 94.8kt (2020: 80.3kt);
- -0.9% copper concentrate production: 102.4kt (2020: 103.3kt);
- +25.5% cobalt hydroxide production: 20.7kt (2020: 16.5kt);
- +3.5% coal production: 29,890.6kt (2020: 28,871.0kt);
- +8.2% electricity production: 16,000 GWh (2020: 14,793 GWh).

Financial:

- +108.1% Underlying EBITDA: US\$4,210 million (2020: US\$2,023 million);
- +28.5% capex: US\$735 million (2020: US\$572 million).

Sustainability:

- 30 employees died from health complications related to COVID-19 or pneumonia;
- 10 work-related fatalities:
- 0.93 LTIFR (2020: 0.61);
- +3.3% in GHG emissions (CO2e): 25.1 mt CO2e (2020: 24.3 mt CO2e);
- -9.2% in community social investment spending: around US\$65 million (2020: more than US\$65 million);
- +35.3% in economic value distributed to stakeholders: US\$6,240 million (2020: US\$4,611 million).

⁴ Excluding contractors.

CEO Report

In 2021 we continued to observe serious challenges in both the global economy and the mining and metals sector. However, I am proud to say that ERG has taken every measure to ensure the safety of its people, their families and local communities, as well as further support and develop our business.

We entered 2022 with a backdrop of geopolitical turmoil, notably the tragic events in some of the core regions of the Group's presence, including unrest in Kazakhstan in January, and then the hostilities in Ukraine and the related unprecedented economic sanctions against many Russian stakeholders. We support the global call for an urgent peaceful negotiated settlement in Ukraine. On behalf of ERG's senior management, I also offer my whole-hearted condolences and sympathies to all those affected by these tragic events.

In addition, the COVID-19 pandemic remains a global concern, and a priority area of focus for ERG. Sadly, 30 of our colleagues passed away from health complications related to COVID-19 or pneumonia during the last year. At ERG, we have continued to do all that we can to provide full support to our employees throughout the pandemic, as well as continuing to monitor the situation in every region of our operation.

I am sad to report that in 2021 our business also suffered 10 work-related fatalities – every loss of life is sorely felt. We have implemented corrective safety measures and maintain our aim to achieve Zero Harm.

I would also like to express our sadness at the passing of Mr Alijan Ibragimov, one of the ERG founding shareholders and member of the Board of Managers, whose guidance and vision were paramount to the creation and development of ERG.

Each of our former colleagues is an irreplaceable loss to us at ERG and my sincere condolences are with their families and friends.

In the course of 2021, despite serious global and local challenges, ERG has continued to show tremendous unity and mutual support to help the business succeed through adversity. Providing for the wider ERG family and local communities, as well as contributing to Kazakhstan and our other core regions, remains the key goal in our common efforts to ensure the highest possible standards of production and service. In 2021, ERG succeeded in strengthening its operational results and financial position and also continued to improve its sustainable development performance in its effort to become a more efficient, socially responsible and resilient company.

Sustainable development

In 2021 we continued to integrate sustainable development into our business. This included the establishment of a dedicated Environmental, Social and Governance (ESG) Committee in the first half of 2021. The Committee will serve as the principal decision-making body in relation to our ESG policies and goals, provide in-depth analysis of our ESG projects and ensure accountability across our business. The Committee will play a fundamental, long-term role in helping us pursue continuous improvement – and respond to fast-evolving stakeholder expectations. During the year, the Committee initiated a formal process to establish the ESG targets and action plans, including renewable energy and GHG reduction targets.

Prioritising our people and safety

The principle of sustainability lies at the heart of our operations worldwide. In 2021, we continued embedding safe and responsible production practices across our assets globally.

In Kazakhstan we finalised our Safety strategy and commenced planning to support its rollout in 2022. In addition, we continued to implement our risk-based occupational and process safety management system in line with ISO 45001. Metalkol RTR in Africa continued to work towards the certification of our SHS management system to ISO 45001. This included the ongoing implementation of internal industrial hygiene audits in preparation for future external audits against the standard. In Brazil we continued to develop a comprehensive Occupational Health and Safety Management System based on the requirements of ISO 45001 and with plans to achieve certification to the standard in the upcoming years.

Societal impact

In terms of our broader role in society, we distributed US\$6,240 million in value to our stakeholders (2020: US\$4,611) – ranging from our suppliers and contractors, to our host governments.

In Kazakhstan, we continued to focus our CSI efforts on the most important socio-economic development priorities identified by our local communities. This included the delivery of our three-year programme, which helps support long-term socio-economic development in our operating regions. We implement this programme through partnerships with government at national and regional levels, including through our regional memoranda of understanding (Regional MoUs). This is based on an in-depth analysis of the specific development needs of each operating region, identified through targeted engagement surveys.

In the DRC, we signed a five-year Community Development Plan Agreement with the DRC's government, which included expanding our agricultural projects to increase food security in local communities, as well as constructing schools in other areas across the country.

Responsible production and supply chain

In 2021 we continued to ensure that our own supply chain is responsibly managed through the ongoing implementation of our Group Supplier Code of Conduct. This also enables us to demonstrate to downstream value chain actors that they can source minerals from us with confidence and this included the expansion of our Clean Cobalt Framework, which now also integrates copper, and the rollout of our new Responsible Aluminium Framework. Both frameworks are in line with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

We are working with the Good Shepherd International Foundation to eliminate child and forced labour in the mining and metals sector and, as part of this, we issued an Action Pledge in support of the UN's International Year for the Elimination of Child Labour. We continued working closely with international stakeholders – including through the Global Battery Alliance and Re|Source – to improve sourcing practices within the industry.

Moreover, our efforts to ensure that chromium production is responsible and sustainable have been recognised by the International Chromium Development Association with the award of the 'Responsible Chromium Label' which verifies that Kazchrome has gone above and beyond the standard requirement needed to responsibly source chromium. The mark was achieved following an evaluation by the independent CSR agency Ecovadis, which awarded Kazchrome the Ecovadis Silver Award.

Environmental stewardship

The adoption of Kazakhstan's new Environmental Code in early 2021 further reinforced the importance of our existing efforts to improve our air quality performance. In 2021, we continued to focus on further reducing particulate emissions at the Aksu and Aktobe Ferroalloys Plant, Aluminium of Kazakhstan and Eurasian Energy Corporation.

During the year, we also further strengthened Group-level management at all our large-scale waste storage facilities. This includes the centralisation of tailings storage facilities (TSF) management

structures in both Africa and Kazakhstan. We also continued to apply our ongoing third-party risk review process, carried out by international experts in order to supplement our existing internal analysis.

Reprocessing and waste commercialisation is playing a growing role in our business – and our pursuit of 'circular economy' solutions. One of the most notable examples is Metalkol RTR in the DRC, which is reprocessing historical third-party tailings.

Similarly, at Kazhcrome's Donskoy GOK operation, we initiated the design of a new facility with a planned annual processing capacity of 1.7mt of chrome-bearing tailings a year.

Financial and operating performance

ERG's operational performance in 2021 has also been exceptional – the valuable work of all of our employees resulting in another year of impressive production and financial results. It was a positive year for the commodities industry overall, and the Group was well-positioned to take advantage of this.

In Brazil, this was the first full year of operation at our BAMIN iron ore project and we produced 1mt of iron ore in total. Our copper and cobalt assets in the Democratic Republic of the Congo operated according to plan, with ERG's overall copper and cobalt hydroxide output increasing by approximately 18% and 26% respectively. At Metalkol RTR, production increased and a higher grade and recovery rate of metal was achieved. As we all move towards the green energy transition, ERG's well balanced portfolio across products and geographies is the Group's key strength.

Revenue and Underlying EBITDA

In 2021, we achieved exceptional financial performance, increasing our revenue by 59% to US\$8,530 million (2020: US\$5,356 million). Our EBITDA also rose by 108% to US\$4,210 million (2020: US\$2,023 million). Our revenue increase was driven by higher output, mainly at Metalkol RTR, and higher prices for many of our major products.

Despite high-performing products, average price performances remained mixed across most products in our portfolio. The LME cash copper price represented a year-on-year increase of 51% and achieved a decade long high. Copper price was underpinned by global economic recovery and a refined copper market deficit amidst strong demand. Cobalt prices were supported by strong demand, increasing by 22% year-on-year, whilst supply grew at a slower pace of 15% year-on-year.

Debt position and credit rating

Financial markets around the world have been significantly affected by the conflict in relation to Ukraine – both by shocks to the international financial system, and to the resultant sanctions levied by European and North American governments on many Russian institutions. Financial markets in Kazakhstan were also further unsettled by the unrest of January 2022. Taken together, the past year has presented unprecedented global challenges from a financial perspective. Despite this, I am proud to say that ERG has surpassed all expectation: over the course of 2021, the Group has managed to decrease its debt by more than US\$800 million in nominal terms as a result of regular principal payments and early prepayments and the fact that we have taken no new financing, except for financing taken under our refinancing projects. Additionally, we have optimised existing debt in order to extend our debt maturity profile and improve the cost of financing. We have created additional liquidity reserves, which will allow us to fund our investment projects and enhance our financial stability.

In February 2022, the conflict between Ukraine and Russia resulted in a number of countries and international organisations, including the US, the European Union, Switzerland and the UK imposing a series of sanctions against the Russian government, various companies, including major lenders of the Group (Sberbank of Russia and VTB Bank (PJSC)), and certain individuals. This resulted in significant disruption to both financial and commodity markets.

The Group continues to comply with all sanctions applicable to its business activities in accordance with adopted compliance policies. As a consequence of the sanctions in March and April 2022, the Group renegotiated and amended applicable terms of certain financing arrangements and terminated certain transactions and activities with Sberbank of Russia, VTB Bank (PJSC), VEB and/or their subsidiaries, including the following:

- US\$218 million has been paid in connection with early termination of commodity derivative contracts:
- US\$550 million undrawn committed facility was terminated;
- US\$314 million has been paid in connection with early termination of certain financing transactions;
- principal and interest payments for up to two years were deferred resulting in estimate of finance income of up to approximately US\$160 million.

In June 2021, the rating agency Moody's upgraded the Group's assigned credit rating to B1, while simultaneously raising the rating outlook from 'Negative' to 'Stable'.

In 2021, S&P upgraded the Group's assigned credit rating to B- while simultaneously raising the rating outlook from 'Stable' to 'Positive,' reflecting the expected growth in EBITDA and planned debt repayment due to high global demand and stable commodity prices.

Looking at the year ahead and beyond

Despite the volatility and uncertainty in early 2022, we continue to embed our Strategy 2025 - which was earlier approved by our Board of Managers. This integrated strategy – which is underpinned by well-defined strategic goals, the development of our ESG committee and resources, key performance indicators (KPIs) and implementation levels – will help us achieve our vision of being 'an international, sustainable, socially responsible and efficient natural resources company'.

Looking to the future, our strategic priorities are achieving balanced portfolio growth, maintaining high standards within our workforce, ensuring that we contribute to the sustainable development of our host regions, continuing to drive efficiency in all that we do, and continuing to produce a stable financial performance.

We are endorsing our strategy through the implementation of the many of the actions detailed throughout this report. In Kazakhstan, key activities include the expansion of our Donskoy GOK Chromium mine, the development of our Kacharsky Iron Ore mine, the construction of a new Special Coke plant at Shubarkol Komir and many sustaining projects in our Aluminium businesses and elsewhere. Additionally, we are actively looking at how to develop our power business in a sustainable way for the future of our business and the country.

In Africa, we are finalizing our decision about the implementation of CUT 4 at our Frontier mine as well as exploring at opportunities to restart production at Boss Mining and Chambishi. Additionally, we are working to make continuous improvements to efficiency and production capacity at Metalkol RTR.

In Brazil, BAMIN has also signed a concession agreement with the Brazilian Federal Government to complete and operate a section of the FIOL (East-West Integration) railway. The project is set to boost the country's economic growth at both the federal and local level, strengthening the rail network across 20 municipalities in Brazil, while also boosting foreign trade. We will continue to develop options for the development and financing of this important project through 2022 and the following years.

In February 2022, Mr Beibut Atamkulov stepped down from his Board position. We would like to thank him for his years of service and efforts to grow ERG. We warmly welcome Mr Yerulan Zhamaubayev, Deputy Prime Minister – Minister of Finance of the Republic of Kazakhstan, to ERG's Board and look forward to working closely with him.

Overall ERG's business remains well positioned for success. The whole Group is committed to delivering a sustainable future for the benefit of all of our stakeholders including employees and communities. I would like to thank all our stakeholders, who have both ensured that we have finished 2021 in a strong position, and whose efforts and hard work mean we can look to future with confidence.

Benedikt Sobotka

Chief Executive Officer

Corporate review

Performance

Operational

Generally, 2021 was a very positive year for commodity markets. The rally that started in 2020 continued in 2021. Demand accelerated across the board in tandem with sizeable fiscal stimulus and vaccine-led reopening plans. The supply-side was slower to catch-up due to supply chain disruptions, logistical constraints and energy shortages. Despite that, the Group has managed to increase production output of copper metal, cobalt hydroxide, iron ore, coal and electricity generation and to sustain existing production output of aluminium and copper concentrate.

Total ferroalloy production decreased by 6% to 1,686kt gross output (2020: 1,793kt) reflecting the gradual commissioning of Furnace No.64 in Aksu in H1 2021 following renovation. In addition, production decreased due to a lack of material from the Khromtau enrichment plant. Improved operation of Furnace No.64 is expected in 2022 which will increase production capacity volumes while the "10th Anniversary of Kazakhstan Independence" (DNK) mine will be developed to increase the amount of material.

Production of iron ore pellets and concentrate increased by 12% to 14,714kt (2020: 13,114kt) reflecting capital investments made at the Kacharsky iron ore mine which allowed the Group to satisfy higher demand from major customers.

In 2021, we launched a programme at Kacharsky to apply modern, international-standard production methods and, in the longer run, raise output from 16mpta to 26mpta. This includes a transition from a railway-based transportation system to a high-productivity mobile mining fleet model based on 220t dump trucks and 30m³ capacity excavators.

In 2021, our Brazilian entity BAMIN produced 1mt of iron ore, which was sold to both domestic and foreign customers. In addition, BAMIN was successful in the bid to complete and operate the first 535km stretch of the FIOL railway (East-West Integration). FIOL will provide a high capacity and low-cost link between ERG's Pedra de Ferro mine in Caetite and its Porto Sul port in Bahia state. Construction of Porto Sul private terminal has continued and remains on schedule.

Aluminium production during 2021 was relatively stable at 262.4kt (2020: 264.6kt) as our Kazakhstan Aluminium Smelter operated above the maximum designed capacity of 250kt. Alumina production decreased by 5% to 1,315kt (2020:1,383kt) due to a decrease in sales volumes as Chinese authorities imposed COVID-19 quarantine measures at the Khorgos and Dostyk-Alashankou checkpoints for the passage of rail and freight from Kazakhstan entering China.

Group copper metal and cobalt hydroxide production increased to 94.8kt and 20.7kt respectively (2020: 80.3kt of copper and 16.5kt of cobalt hydroxide). This was due to a strong performance at Metalkol RTR project where production ramp up to designed plant capacity (120kt of copper and 20kt of cobalt) together with higher metal recovery and grade were the main drivers. We are continuing to enhance the operation's production processes to ensure the achievement of planned output levels.

The production saleable copper concentrate at Frontier mine saleable copper concentrate decreased by 1% to 102.4kt (2020:103.3kt) in line with the mine plan due to lower metal recoveries and grade. Currently, Frontier is focused on mining of Cut 3 with life-of-mine ending in 2023. The Group has made good progress with a feasibility study for the development of Cut 4 which will further extend life-of-mine.

The production of thermal coal was at 29,891kt (2020: 28,871kt), mainly reflecting higher volumes at Shubarkol Komir to fulfil both orders from industrial and domestic consumers in the Republic of Kazakhstan and export sales. Electricity generation increased by 8% to 16,000 GWh (2020: 14,793 GWh) because Kazakhstan Electricity Grid Operating Company (KEGOC) restricted the period of capitalised repairs from 105 to 30 days in order to satisfy record high demands and ensure a consistent supply of electricity across the country.

Financial

2021 market context

Ferroalloys	Ferrochrome prices hit 13-year high in 2021 with Chinese tender prices and EU spot benchmarks showing ~60% YoY increase. Strong prices were driven by Chinese energy constraints negatively impacting local Ferrochrome production, healthy demand growth from significant stainless steel production and cost increases throughout the value chain.
Iron ore	Iron ore prices experienced one of the most volatile years in their history, surging to an all-time high of US\$233/t in May before falling below US\$90/t in November. In the first half of 2021, Chinese economic stimulus and increased steel production were the primary drivers of the record prices, while the price drop later in the year was largely triggered by China's steel production restrictions and the decline in the local property sector.
Alumina and aluminium	2021 was a very strong year for the aluminium market. Power shortages and production restrictions in China, a sharp recovery in global aluminium consumption as well as a reduction in global inventories led to a large market deficit and the highest LME price levels since July 2008. In the alumina market, production disruptions in South America and China took the benchmark Australia FOB price to its highest level since 2018.
Copper, Cobalt and Other Non-ferrous division	The LME cash copper price averaged a record US\$9,317/t in 2021 (+51% YoY), supported by the strong global economic recovery, a weaker US dollar, the rollout of coronavirus vaccines and tight physical markets. The standard grade-low cobalt metal price averaged US\$23.98/lb in 2021 (+56% YoY) and the hydroxide payable-low averaged 89.1% in the same period (+24.4% YoY). Cobalt prices were supported by extremely strong demand - especially from the EV battery sector and supply limitations due to inadequate production levels and logistical disruptions to the supply chain.
Energy	The global economic recovery, a reduction of natural gas, low wind generation in Europe, and supply tightness resulted in sharp price increases for coal with major price benchmarks more than doubling YoY.
Logistics	During 2021 there was an increase in railway car rental rates compared with 2020.

Sustainable development

In 2021, we continued to make progress in preparing our business for the future. This included implementing a range of initiatives in order to:

- Continue the transformation of our business, including through the embedding of sustainability into our decision-making via our dedicated ESG Committee, cultural transformation and a focus on continuous improvement;
- Develop our project portfolio, including through the ramp up and expansion of our Metalkol RTR cobalt and copper operation, which will actively 'clean-up' legacy waste from previous operators in the DRC as well as the start of production at BAMIN our high-grade, low-impurity iron ore operation in Brazil. In addition, we are creating an advanced capital project management system and continue to enhance project management capabilities of our teams;
- Embed technology and efficiency across our business, including through our Digital Strategy; and
- Pursue financial resilience, including through the maintenance of appropriate liquidity and the enhancement of our Group debt portfolio.

In the first half of 2021, we established an Environmental, Social and Governance (ESG) Committee, tasked with the integration of sustainability practices into our Group strategy and decision-making processes. During the year, the Committee initiated a formal process to establish ESG targets and action plans. This process is due to complete in 2022.

Health and safety

In line with our Values, we put safety first. We aim to achieve Zero Harm – and we are committed to delivering a healthy, safe, productive and stable working environment for all our employees and contractors.

In 2021, we experienced a disappointing year with regard to our safety performance. We are deeply saddened that this included the loss of seven employees and three contractors (2020: three employees and one contractor). We express our sincere condolences to all those affected by these events. All fatalities are unacceptable, and we continue to focus on achieving Zero Harm.

Thorough investigations have taken place into each fatal incident to identify the causes, inform appropriate prevention measures and help minimise the risk of recurrence.

The lost time injuries (LTIs) including fatalities rose to 108 (2020: 70)⁵. This resulted in an increased lost time injury frequency rate (LTIFR) of 0.93 (2020: 0.61)⁶.

COVID-19

Tragically, we lost 30 colleagues from health complications related to COVID-19 or pneumonia during the year.

In 2021, we continued to implement a co-ordinated and comprehensive response to COVID-19 to help safeguard the health and well-being of our workforce. By the end of the year, the majority of our employees in Kazakhstan had been vaccinated through government-run vaccination programmes, while many have also received their booster vaccines. In the DRC, we supported government-run vaccination programmes to help our employees at Metalkol RTR and Frontier to access vaccines.

⁵ Employees only.

⁶ Employees only and including employee fatalities.

With this in mind, we continued to implement a range of preventative measures across our global operations and offices, including:

- using thermal scanners and touch-free thermometers at checkpoints, on buses and at our offices;
- regular disinfecting of our facilities and vehicles, as well as the installation of air recirculators in crowded locations;
- · distribution of personal protective equipment and hand sanitisers;
- applying social distancing in workplaces and the use of remote or hybrid working arrangements where possible;
- · delivering of employee and contractor awareness raising.

In addition, we also established a post-COVID rehabilitation programme in Kazakhstan to provide treatment to our employees. In the DRC, our employees were provided with medical support at our onsite health clinics.

Community social investment

ERG's worldwide corporate social investment (CSI) contributions were around US\$65 million (2020: US\$65 million). During the year, we continued to support other national-level social investment projects. Most notably, this included a donation of US\$17.8 million to the Foundation for the Development of Art, Cinema and Science in Kazakhstan aimed at preserving the historical and cultural heritage. We continued to support regional development through Memoranda of Understanding with local governments in Kazakhstan. In 2021, this support amounted to US\$21.4 million (2020: US\$17.4 million).

Energy and greenhouse gas emissions

In 2021, our total energy use increased to 279,841 terajoules (2020: 270,197 terajoules), with 81% of direct energy sourced from coal generation (2020: 83%). This reflected:

- increased consumption of coal at EEC in Kazakhstan to help address a national energy generation deficit;
- increased natural gas consumption at the Akturbo power plant in Kazakhstan, following the completion of capital repairs there;
- increased natural gas consumption at SSGPO's central heating and power plant (CHPP) due to the start of heating supply to the city of Rudny;
- increased diesel consumption as a result of vehicle activity.

Meanwhile our GHG emissions rose to 25.1mt of CO2e (2020: 24.3mt of CO2e), largely due to increased coal consumption at EEC as mentioned above.

Renewable energy

Kazakhstan has national targets to generate:

- 15% of electricity from renewables by 2030 (i.e. wind, solar and small-scale hydro);
- 50% of electricity from renewables and alternative energy sources (e.g. nuclear power) by 2050.

In this context, we are advancing plans to develop a portfolio of renewable energy projects. This includes a pilot project near Donskoy GOK to develop approximately 150MW in wind generation capacity ("Khromtau-1" wind power plant). Following completion of a feasibility study in 2021, we plan to start construction in 2022. There is potential to further expand our wind capacity at the site by a further 150MW (Khromtau-2, currently at design stage). We are also investigating other possible sites in Kazakhstan in order to develop additional, large-scale wind and solar power generation projects over the coming years.

⁷ Note that following a feasibility study we decided to locate all 150 MW of planned installed capacity at Khromtau site instead of splitting it between Khromtau and Ekibastuz site as we had previously been examining in 2020.

The fact that our operations in Africa region largely rely on hydropower significantly reduces their carbon footprint and limits opportunities for further GHG reductions. However, given its occasional reliance on back-up diesel generators, we are examining opportunities to supply Metalkol RTR with solar power, thereby enhancing the reliability of its supply and reducing its cost base.

In addition, in Kazakhstan we advanced plans to generate energy using off-gas from our ferroalloy production process, thereby reducing our energy from conventional sources. This included the conclusion of a feasibility study for a 100MW, off-gas-fuelled power station at Aktobe Ferroalloys Plant, with plans to begin the detailed design process in 2022. In addition, we are:

- investigating the potential conversion of Aksu Ferroalloy Plant's boiler house to off-gas as well;
- considering the development of an off-gas fuelled power unit at our new Special Coke Plant.

Economic value generated and distributed

Our long-term ability to generate shareholder value is ultimately contingent on our ongoing revenue generation, as well as the delivery of shared economic benefits to our other stakeholders.

In 2021, the economic value we generated increased by 53% to US\$7,994 million (2020: US\$5,209 million). This was primarily driven by higher prices for all of our major products as well as increased production of cobalt hydroxide and copper metal as a result of the Phase 2 production ramp-up at Metalkol RTR.

Of this revenue, US\$6,240 million, or 78%, was distributed to our stakeholders (2020: US\$4,611 million). This increase reflected, among other things:

- higher corporate income tax, mineral extraction tax and royalty payments due to higher earnings;
- increased operating costs, due to increased prices for materials, ramp-up at Metalkol, increased subcontractor costs related to the Cut 3 project at Frontier and stripping activity at SSGPO's Kacharsky mine and higher repair costs due to the roll-over of activity from 2020;
- higher capital expenditure, reflecting deferred investment from 2020 and 2021;
- increased wages and benefits, reflecting a higher headcount in Africa to support increased production, the indexation of salaries in Kazakhstan to enhance our labour market competitiveness.

In addition, we continue to ensure that our own supply chain is responsibly managed through the ongoing implementation of our Group Supplier Code of Conduct as well as maintaining our ability to demonstrate to downstream value chain actors that they can source minerals from us with confidence. In 2021, this included the expansion of our Clean Cobalt Framework, which now integrates copper, and the rollout of our new Responsible Aluminium Framework. Both frameworks are in line with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Key initiatives and events in 2021 and early 2022

Operating

In the DRC, the Metalkol RTR production facility has been successfully ramped up and can now operate at levels close to its design capacity of 120kt of copper and 20kt of cobalt.

In Brazil, at BAMIN we produced 1mt of iron ore at Pedra de Ferro mine, part acquired the FIOL Stage 1 railway concession in a government auction, and took forward the construction at the Porto Sul port site.

The Group started construction of a new 400kt special coke plant which will provide cost-effective reductants to Kazchrome to support its smelting activities. The new plant will enable Shubarkol Komir to manufacture a high value-added product and cut the imports of reducing agents significantly. In addition

to special coke, the new plant will produce more than 70ktpa of coal tar and oil from Shubarkol Komir's coal. Coal tar is used primarily for the production of refined chemicals and to treat various skin conditions.

In 2021 at Aluminium of Kazakhstan as part of the Environmental Programme we continued to install four new advanced electric precipitators / hybrid filters at sintering furnaces to reduce the emissions of particulate matters into the air and fulfil our obligations under the integrated environmental permit issued by the state authorities. Investments amounted to US\$44 million.

Modification of credit facilities

In August 2021, we signed amendment agreements with one of our lenders to improve certain terms and conditions of existing facility agreements, including:

- Interest rates under the Sberbank of Russia facility agreements were substantially decreased, which had a positive impact on the cost of debt for the Group;
- The final maturity date of both facilities with Sberbank of Russia was extended until 2030, which
 improves the Group's debt repayment profile and secures additional liquidity in the medium time
 frame;
- Revolving credit line in the amount of up to US\$550 million and with an extended availability period was opened and is fully available, increasing liquidity flexibility;
- Decrease of the principal by, among others, voluntary prepayment on the holding perimeter and the new copper prepayment agreement for US\$300 million.

Key financing initiatives

In June-July 2021, we prepaid US\$250 million of loans owned to Kazakhstani banks and replaced this financing with a loan from VTB Bank (PJSC). Following this debt portfolio optimisation we decreased our debt portfolio's effective interest rate and guaranteed the repayment of the new loan in 2030.

The Group prepaid US\$340 million to Sberbank of Russia during 2021. This initiative, together with a limited amount of new financing and scheduled principal repayments led to a substantial reduction of the Group's total financial indebtedness. This has enhanced the Group's balance sheet metrics and financial position supporting further discussions with lenders and rating agencies.

Maintenance and Improvement of our credit ratings

In June 2021, the rating agency Moody's upgraded the Group's assigned credit rating to B1, while simultaneously raising the rating outlook from 'Negative' to 'Stable'.

The upgrade to B1 with 'Stable' outlook reflects the expected EBITDA growth and planned debt repayment due to high global demand and stable commodity prices.

In 2021, Standard and Poor's affirmed B- rating with an improved 'Positive' outlook, reflecting projections of increased EBITDA based on stable production and rising commodity prices and, as a result, improved financial stability to meet financial obligations.

Social unrest in Kazakhstan

In January 2022 Kazakhstan faced extraordinary events associated with significant social unrest. The situation in all regions of the country stabilised by the end of January. The President of Kazakhstan announced political and economic reforms which are ongoing.

Conflict in Ukraine

In February 2022, a military conflict between Ukraine and Russia commenced. A number of countries and international organisations, including the US, the European Union, Switzerland and the UK imposed a series of sanctions against the Russian government, various companies, including major lenders of the Group (Sberbank of Russia and VTB Bank (PJSC)), and certain individuals. This resulted in significant disruption to financial and commodity markets. The Group continues to comply with all sanctions applicable to its business activities in accordance with adopted compliance policies.

Strategy 2025

During the year, we continued to embed our Strategy 2025 - which was approved by our Board of Managers. This integrated strategy – which is underpinned by well-defined strategic goals, Key Performance Indicators (KPIs) and implementation levers – will help us achieve our vision of being 'an international, sustainable, socially responsible and efficient natural resources company'.

Our strategic priorities are:

- balanced portfolio growth;
- a happy and professional team;
- sustainable development of our host regions;
- · efficiency in all that we do;
- financial stability.

Strategic priorities	Strategic goals
Balanced portfolio growth	
Steady growth and development of the asset portfolio in Kazakhstan and beyond	 Further develop existing assets in Kazakhstan; Increase returns on the existing portfolio of international assets; Optimise our portfolio through new natural resource opportunities and/or divestment; Further develop the Group's power generation business.
A happy and professional team	
Development of our employees' competencies and the maintenance of their safety and well-being.	 Deliver safe working conditions; Improve employee health and well-being; Deliver comfortable workplaces; Develop strategic skills and competencies; Improve employee benefits; Improve ERG's employee proposition and status as an employer; Further develop our corporate culture; and Develop our talent pool and leadership pipeline.

Sustainable development of our host regions		
Contribution to the socio-economic development and well-being of communities in our regions of operation.	 Improve the well-being and prosperity of communities in our regions of operation; Maintain international environmental standards – including those relating to water, air and soil – to support local well-being in our regions of operation; Support entrepreneurship and the development of the business environment in our host countries. 	
Efficiency in all that we do		
A strong focus on pursuing efficiency at Group.	 Reduce unit costs by eliminating bottlenecks and improving productivity; Improve organisational effectiveness; Improve sales effectiveness; Develop a culture of continuous improvement supported by relevant tools and mechanisms. 	
Financial stability		
The maintenance of financial sustainability, whilst delivering decent shareholder returns.	 Maintain a sustainable level of dividend yield for shareholders; Maintain high returns on invested capital; Achieve and maintain acceptable level of debt; Maintain high levels of liquidity to support resilience in the face of changing market conditions. 	

In the first half of 2021, we established an Environmental, Social and Governance (ESG) Committee, tasked with the integration of sustainability practices into our Group strategy and decision-making processes. During the year, the Committee initiated a formal process to establish ESG targets and action plans in relation to the following areas:

Reduction of ERG environmental impact, including GHG emissions	Comfortable environment for living: clean water, air, soil
Development of communities and regions of operation	Well-being of local communities in the host regions and a favourable social environment
Happy diverse and healthy team	Zero fatalities and injury rate reduction, close-knit diverse team, provided with decent working conditions
Leadership in business standards	Corporate leadership in the industry, the highest ethical business standards

This process is due to be completed in 2022.

Divisional review

ERG is a leading diversified natural resources producer and operates through six divisions supported by a central sales and marketing department.

Ferroalloys Division

We produce and sell ferroalloys for use as alloying products by third-party steel producers. Our strategic sales destinations include China, Japan, Europe, the US, South Korea and Russia.

ERG is the world leader in high-carbon ferrochrome production by chrome content – with the lowest unit cost of production. The Ferroalloys Division is vertically integrated, using its own chrome and manganese ore mines to feed its ferroalloy production plants. The division also benefits from its own gas-fired power plant in Aktobe, competitively priced power supplied by our Energy Division and transportation services supplied by our Logistics Division.

2021 highlights

- -6% in total gross ferroalloys production: 1,686kt (2020: 1,793kt) due to gradual commissioning of Furnace No 64 and lack of material from Khromtau enrichment plant.
- +65% in chrome ore stripping: 7,175 kcbm (2020: 4,351 kcbm) at Kazchrome, due particularly due to the development of small deposits to increase our resource base at Donskoy GOK.
- In December, 2021 the Group also acquired Manganese Zhairema JSC, a Kazakhstan-based company whose operations involve the mining and processing of manganese ore. The deal will support the Company's strategic goals in the ferroalloys markets and further increase the efficiency of our Ferroalloys Division.

Market context in 2021

- Chinese FeCr prices, the base indicators for other regional FeCr benchmarks, reached 1.30-1.40 \$/lb Cr levels in August 2021 the highest levels since 2008. 2021 annual average Chinese FeCr spot prices were ~1.14 US\$/lb Cr also the highest annual average level since 2008 and 60%+ year-on-year increase.
- Such a strong price environment was driven by the several key factors:
 - Supply shock in Q1 2021 after the introduction of the Chinese "dual control" regulations aimed at limiting energy consumption and CO2 emissions;
 - Another supply shock in Q3 2021 caused by electricity shortages in "coal powered" Chinese provinces;
 - Healthy 10%+ FeCr year-on-year growth in demand driven by key stainless steel enduse segments pent-up demand and general recovery in global economic activity;
 - Cost increase throughout the value chain after a global increase in freight rates, significant hike in reductants prices and increased electricity tariffs in China and other FeCr-producing regions.
- By the end of 2021 demand in the global FeCr market far exceeded pre-pandemic levels while supply was still only around 2019 levels. In addition, input cost inflation put additional upside pressure on prices.
- The price of the key FeCr cost component Cr ore showed only a relatively small increase of ~20% year-on-year for South African material in 2021 due to bottlenecks on the FeCr supply side. However, during 2022, a strong increase in FeCr production is expected, which would significally boost Cr ore demand and lead to stronger Cr ore price support and another potential round of FeCr cost inflation.

Key Facts		2021	2020	% change
Third-party Sales Volumes				_
High-carbon ferrochrome	'000t	1,288	1,480	(13.0)%
Medium-carbon ferrochrome	'000t	13	15	(13.3)%
Low-carbon ferrochrome	'000t	43	37	16.2%
Ferrosilicochrome	'000t	29	32	(9.3)%
Ferrosilicomanganese	'000t	78	65	20.0%
Ferrosilicon	'000t	44	37	18.9%
Total Ferroalloys	'000t	1,495	1,666	(10.2)%
Production				
Chrome ore	'000t	3,385	3,692	(8.3)%
Manganese ore concentrate	'000t	390	154	153.2%
Ferroalloys total gross	'000t	1,686	1,793	(6.0)%
Ferroalloys total net	'000t	1,540	1,653	(6.8)%
High-carbon ferrochrome gross	'000t	1,432	1,546	(7.4)%
High-carbon ferrochrome net	'000t	1,345	1,454	(7.5)%

Results

US\$ million	2021	2020	% change
Revenue	2,512	1,623	54.8%
Underlying EBITDA	1,402	662	111.8%

Performance in 2021

The Ferroalloys Division contributed US\$1,402 million or 33% to the Group's Underlying EBITDA (2020: US\$662 million or 33%). The increase in EBITDA reflected the strong price environment for ferroalloys. The main factor contributing to the ferroalloys price increase in 2021 was the shortage of supply in the market and cost increases across the value chain. This positive price impact was partially offset by lower sales volumes and increased operating expenses.

Sales volumes were lower by 10%, 1,495kt⁸ compared with 1,666 kt in 2020 caused mainly by the lack of material from Khromtau enrichment plant. This was triggered by delays in mine operations at DNK mine at Donskoy GOK as a result of adverse mining and geological conditions, as well as a shortage of railway cars for ferroalloys shipments due to delay in deliveries of railway cars.

Increased operating expenses were partly driven by higher purchase prices of reductants (mainly due to higher prices for coking nuts and metal coke) and increases in employment costs due to salary indexation done in January and July.

Capital expenditure

The Ferroalloys Division's capital expenditure in 2021 was US\$291 million (2020: US\$189 million).

The key project for the division is the development of the DNK mine (part of Donskoy GOK). In 2021, emphasis was placed on projects aimed at increasing the production of chromium concentrate (starting from 2022):

- slime processing of Donskoy GOK tailing dumps (+600 ktpa of concentrate);
- enrichment of jigging tailings in heavy media and modification of the thickening unit at the plant (+140 ktpa of concentrate).

⁸ The reported figures exclude the volumes of 24kt produced at furnace No.64 that were capitalised as a part of the renovation costs until July 1, 2021 as a result of completion of furnace No.64 in workshop No.6 commissioning.

In 2021, work on the development of small deposits of Kazchrome continued.

Work continued to bring furnace No.64 to its design capacity. Investment in the renovation of Furnace No.64 reached US\$ 99 million. The Group continued to implement a programme to increase productivity of workshop No.4 of the Aktobe Ferroalloys Plant, which enabled it to reach a record volume of ferroalloys production - 430 kt (2020: 380 kt).

Planning for 2022 and beyond

Kazchrome is evaluating a number of projects to increase production and optimise costs.

In terms of mining, this includes building the capacity of the ShDNK-2 mine and increasing the capacity of the ShDNK-1 mine, the development of additional satellite deposits, additional exploration to find new chrome ore, launch of new manganese ore deposit, and the development of legacy chromium-bearing overburden dumps, as well as the recycling of manganese dumps.

In terms of beneficiation, this includes the recycling of slimes from Donskoy GOK's tailing dumps to produce additional volumes of chrome concentrate (including additional flotation circuit to maximize recovery), to increase the overall recovery of beneficiation and the capacity of fines beneficiation (OMK).

In terms of metallurgy, Kazchrome will further modernize its Aktobe Ferroalloys Plant Workshop No.4 to overachieve its design capacity of 440 ktpa. Focus will also be placed on the further processing of slag materials to produce additional volumes of metal concentrate and construction materials. In addition, Kazchrome will perform a range of projects aimed at increasing production and decreasing costs.

Iron Ore Division

The Iron Ore Division consists of producing assets in Kazakhstan, as well as early production, exploration and development assets in Brazil. We are a major exporter of iron ore products (including concentrate and pellets) from Kazakhstan. Strategic sales destinations include Russia, China and Kazakhstan.

2021 highlights

- +7.4% in saleable concentrate production: 8,988kt (2020: 8,366kt) driven by demand.
- +20.6% in pellet production: 5,726kt (2020: 4,748kt) to meet the market demand following changes in customer mix.
- +20.2% in sales of iron ore products to customers in Russia: 8.9mt (2020: 7.4mt) to compensate decreasing sales to clients in China due to logistical constraints.
- Brazilian subsidiary BAMIN was the successful winner of the auction for the 535 km FIOL subconcession, materially de-risking the development of its Pedra de Ferro mine, and ensuring a high capacity logistics solution to the Porto Sul export port.

Market context in 2021

- Iron ore prices experienced one of the most volatile years in their history, reaching a historical maximum of US\$233/t in May 2021, supported by China's economic stimulus and a record steel production (+12% year-on-year from January to June 2021).
- China's industrial sector continued to struggle due to power shortages caused by coal shortages, as well as tougher environmental requirements for steel and hot metal production plants.
- Elevated steel and hot metal production prompted the Chinese government to introduce stricter regulations for steelmaking capacity. Blast furnace utilisation rates dropped from nearly 90% in the first half of 2021 to below 75% in the second half of 2021, while the full year steel output declined year-on-year for the first time since 2015.
- Reduced demand for iron ore pushed prices to below US\$90/t in Q3 2021, recording the fastest price drop in history, while China's iron ore imports declined year-on-year for the first time since 2018.

- Prices stabilized around US\$120-130/t towards the year-end, supported by Vale's operational issues and the gradual ease of steelmaking restrictions in China.
- In 2021, iron ore prices averaged US\$159/t, rising 47% above the 2020 average price.

Key Facts		2021	2020	_% change
Third-party Sales Volumes				
Iron ore concentrate	'000t	8,770	8,391*	4.5%
Iron ore pellets	'000t	5,797	5,194*	11.6%
Production				
Iron ore mined	'000t	33,748	30,864	9.3%
Iron ore primary concentrate	'000t	16,269	13,701	18.7%
Iron ore concentrate	'000t	8,988	8,366	7.4%
Iron ore peliets	'000t	5,726	4,748	20.6%

^{*}Restatement reflects the correction of immaterial error in prior year.

Results

US\$ million	2021	2020	% change
Revenue	2,085	1,252	66.5%
Underlying EBITDA	887	433	104.8%

Performance in 2021

The Iron Ore Division contributed US\$887 million or 21% to the Group's Underlying EBITDA (2020: US\$433 million or 21%). The Group hedged a large proportion of its exposure to iron ore prices in 2021. Higher 2021 revenue on the back of higher prices was partially offset by US\$384 million realised losses on our iron ore hedges (2020: US\$164 million).

Increases in operating expenses were partly driven by increases in subcontractors costs due to higher stripping volumes (+21% to 65,128 kcubm against 53,972 kcubm in 2020) as the Group started active development of mining operations at Kacharsky iron ore mine. In addition, the Group's salary indexation in January and July led to higher employment costs.

Capital expenditure

The Iron Ore Division's capital expenditure reached US\$211 million in 2021 (2020: US\$99 million).

The investment was aimed at maintaining the current level of production at our iron ore assets in Kazakhstan (US\$115.7 million). In 2021, under the project 'Reconstruction of the Kacharsky iron ore mine', the development of a 10-year mining plan was completed as well a proposal for optimising the project. The Group signed a contract for new Hitachi dump trucks and shovels and received six of the dump trucks in 2021. Reconstruction of the Kacharsky iron ore mine supports the Group strategic development plan for the Kacharsky iron ore mine and will increase production to 26mtpa.

In 2021, BAMIN achieved several important milestones reinforcing its focus as an integrated operator from mine to port. The Pedra de Ferro mine completed its first full year of commercial production of high grade direct-shipping ore (DSO) for domestic and export consumption with about 1mt produced in 2021. In September, BAMIN acquired the FIOL Stage 1 railway concession in a government auction, allowing the completion and operation of a high capacity rail link from Pedra de Ferro to Porto Sul. Finally, 2021 marked the first full year of early works construction at the Porto Sul port site. Total capital expenditure in Brazil was US\$95.7 million.

Planning for 2022 and beyond

The market appears to be positioning for a rebound in steel and iron ore demand in the first half of 2022, built on expectations that Beijing will once again provide the stimulus to support economic growth. However, increasing iron ore inflows into China and growing port inventories should limit upward price momentum in the near term. In the second half of 2022 iron ore prices are expected to continue their mainstream gradual decline, unless major supply disruption risks materialise.

The Iron Ore Division will continue execution of a number of major projects to improve its cost position and ensure further growth of production volumes and long-term sustainable development. The projects in the most mature stage include:

- Further acceleration of the Kacharsky iron ore mine development, which will include the
 continuation of the renovation programme for the mining fleet, development of new infrastructure
 facilities and optimisation of the life-of-mine mining plan. This project will make a major
 contribution to the reduction of division's operating costs and sustaining capital expenses and
 simultaneously secure a stable supply of iron ore in the long-term;
- Execution of a sophisticated multi pit optimisation programme for all the other iron ore mines, covering optimisation of the mining plans and blending strategy;
- Assessment of renovation options for SSGPO ore concentrating and pellet production plants. The
 corresponding programme will contribute to the reduction of sustaining capital expenditure, while
 securing stable production volumes and product quality.

In addition, the division will continue to evaluate a pipeline of further development opportunities, including those focused on improving concentrate and pellet quality, potential entry into new product segments, improvement of mining equipment utilisation and related costs, reduction of internal rail transportation costs and further extension of Industry 4.0 technologies usage across the value chain. The division will also be making further investments aimed at the continued improvement of HSE aspects. The ongoing major retrofit programme at Rudnenskaya TPP will be executed throughout 2022 until 2028 as will the renovation of the Kachary heating plant. At the same time, all the open-pit mines will be equipped with a dedicated fleet of 13 water-sprinkling vehicles. These investments are expected to result in a decrease of solid emissions into atmosphere of up to 70%.

In Brazil, operations in 2022 will focus on implementing targeted investments to reduce operating costs and ensure stability of production volumes and quality. Construction at port site will continue with implementation of access roads and completion of critical path enablement activities such as land acquisition. For the railway, due diligence of as-built assets will be completed, and detailed planning and engineering for completion of remaining works undertaken. In addition to these activities, value engineering will be performed to optimize value and de-risk construction.

Alumina and Aluminium Division

This division is the only producer of alumina and aluminium in Kazakhstan. We sell alumina to third-party aluminium producers and use it to produce our own high-quality aluminium.

The majority of the aluminium produced was sold to customers in Europe and the CIS.

2021 highlights

- -4.9% in alumina production: 1,315kt (2020: 1,383kt) at Aluminium of Kazakhstan. Production is
 primarily affected by lower shipments due to COVID related logistical restrictions, when the
 capacity of the China-Kazakhstan border crossing was significantly reduced, and a deficit of
 railway cars for alumina shipments.
- -0.8% in aluminium production at Kazakhstan Aluminium Smelter was broadly in line with 2020: 262.4kt (2020: 264.6kt).

- +7.7% in bauxite mining: 4,370kt (2020: 4,058kt).
- +22.2% in stripping at Aluminium of Kazakhstan: 45,993 kcbm (2020: 37,619) due to optimisation and postponement of works conducted in 2020.

Market context in 2021

- 2021 was an extraordinary year for the global aluminium market. Commodies Research Unit (CRU) estimated that the global market saw a 1.1mt deficit a sharp drop from a significant surplus seen in 2020.
- Despite the reemergence of the deficit, the growth in aluminium production was constrained by global energy problems and the 'dual-control' policy in China.
- Aluminium production costs increased significantly in 2021 driven by energy shortages, rising electricity prices and production disruptions at alumina refineries.
- Meanwhile, the drive towards decarbonisation coupled with global economic recovery, supported aluminium demand in 2021. Aluminium consumption benefited from 'green investments' such as expansion of electricity grids, production of frames for solar panels, eco-friendly aluminium packaging, and a transition towards electric vehicles (which are more aluminium intensive than traditional vehicles with internal combustion engines).
- As a result, the annual average LME price jumped by 46% year-on-year in 2021 to US\$2,480/t. The LME aluminium spot price reached a 13-year high of US\$3,180/t in October 2021.
- On the supply side, production disruptions at South American and Chinese alumina refineries in Q3, as well as rising input costs (mainly caustic soda and fuel prices) resulted in higher prices.
- As a result, the annual average Australia FOB alumina price increased by 22% year-on-year to US\$330/t. Nevertheless, while aluminium prices rose throughout the year, alumina prices remained largely unchanged (excluding the above mentioned surge in Q3 2021), as demand was suppressed by constraints in aluminium production growth.

Key Facts		2021	2020	% change
Third-party Sales Volumes				
Alumina	'000t	763	836	(8.7)%
Aluminium	'000t	247	258	(4.3)%
Production				
Bauxite mined	'000t	4,370	4,058	7.7%
Alumina produced	'000t	1,315	1,383	(4.9)%
Aluminium produced	'000t	262	265	(1.1)%

Results

US\$ million	2021	2020	% change
Revenue	1,013	756	34.0%
Underlying EBITDA	416	248	67.7%

Performance in 2021

The division contributed US\$416 million or 10% to the Group's Underlying EBITDA (2020: US\$248 million or 12%).

The increase in revenue by US\$257 million to US\$1,013 (2020: US\$756 million) was driven by higher sales prices for aluminium and alumina. This price factor was partially offset by lower sales volumes for alumina and US\$44 million realised losses on our aluminium hedges and higher operational expenses.

During the year, stripping volumes were increased by 8,374kcubm or 22% due to optimisations in 2020 and postponement of works to 2021 due to delays in procurement of equipment as a result of COVID-19 uncertainties in 2020. Bauxite mining reached 4,370kt (2020: 4,058kt) reflecting higher stripping volumes. Nonetheless, alumina production decreased by 5% due to lower shipments affected by challenges caused by pandemic related logistical bottlenecks at the Kazakhstan-China border and by a deficit of railway cars for some shipment destinations.

Aluminium production remained stable at 262.4kt (2020: 264.6kt) of saleable aluminium. The sales volumes of aluminium were 247kt, which is lower than sales volume in 2020 (258kt) due to large amount of goods in transit at the end of 2021.

Higher operational expenses linked to higher raw material expenses, primarily mazut and higher employment costs due to salary indexation done in January and July.

Capital expenditure

Alumina and Aluminium Division's capital expenditure in 2021 was US\$64 million (2020: US\$90 million).

In 2021, work continued on the development of open pit No. 4 at the Vostochno-Ayatsky field and the open pit No17 at the Krasnogorsky bauxite site, which ensured the development of up to 1mtpa and 300mtpa, respectively.

Also during 2021, the electric filters of the sintering furnace were put into operation, which reduced dust emissions into the atmosphere by 90%. We started to replace the electric precipitators of two sintering furnaces. The Group invested US\$44 million in the implementation of this project as part of the Environmental Programme, which will allow it to fulfill its obligations under integrated environmental permit issued by state authorities.

During the year, the Group implemented the reconstruction of a dust-and-gas cleaning system at the power station at Pavlodar Aluminium plant, aiming to reduce particulate emissions into the air. The project budget under the Environmental programme amounted to US\$9.9 million.

Planning for 2022 and beyond

Aluminium of Kazakhstan will implement several projects to ensure a stable and sustainable development:

- In terms of mining, the development of the new VAM-2 mine will ensure a stable flow of bauxite ore until 2024;
- In terms of beneficiation, completion of research in to beneficiation methods, which include kaolinite washing and iron sands removal;

- In terms of metallurgy, continued efforts to remove the production bottleneck at the red mud washing and filtration unit;
- In terms of the environment, continue to realise the ecological strategy and considerably decrease rates of pollution at the sintering unit and power plant.

Copper, Cobalt and Other Non-ferrous division

Our Copper, Cobalt and Other Non-ferrous Division is primarily focused on the DRC, where we mine and produce copper cathode/sulphide concentrate and cobalt hydroxide.

We also own the Chambishi copper and cobalt refinery in Zambia, which is currently placed on care and maintenance. In addition, we have a number of exploration and development assets – primarily in the DRC, Mozambique, South Africa, Mali and Zimbabwe.

2021 highlights

- We continued to ramp-up of Metalkol which can now provide production volumes at levels close to its design capacity. +18.1% copper cathode production: 94.8kt (2020: 80.3kt) and +25.5% cobalt hydroxide production: 20.7kt (2020: 16.5kt).
- -0.9% in production of copper concentrate at Frontier mine: 102.4kt (2020: 103.3kt) in line with the mine plan.

Market context in 2021

- The LME cash copper price averaged a record US\$9,317/t in 2021, representing a year-on-year increase of 51%. The price climbed to an all-time high of US\$10,725/t on May 10, exceeding the previous high of US\$10,148/t set a decade earlier.
- Copper's 2021 price strength was underpinned by a strong global economic recovery, a weaker US dollar, the rollout of coronavirus vaccines and tight physical markets.
- S&P Global estimates a refined copper market deficit of 158ktpa, amidst a robust growth in stimulus-fuelled demand outside of China and struggling supply, especially from key mines in Chile and Peru, which succumbed to numerous high-profile disruptions. Severe shipping delays in the second half of 2021 amplified the impact of the deficit.
- Moreover, throughout 2021, copper continued to benefit from strong speculative investor interest
 due to its critical role in the green economy, as a key ingredient in the booming electric vehicle
 and renewable energy infrastructure sectors.
- In the cobalt space, the Fastmarkets MB standard grade-low metal price averaged US\$23.98/lb in 2021, an increase of 56% year-on-year. Throughout the course of the year, the price surged by a remarkable 119%: from US\$15.30/lb on January 1 to a peak of US\$33.50/lb on December 31 the highest level since 2018.
- At the same time, the Fastmarkets MB hydroxide payable-low averaged a record 89% in the same period up by 24% year-on-year. However, unlike the metal price, the payable-low remained comparatively stable throughout the year, trading in a narrow, but very high, range of 82-93%.
- Cobalt prices were supported by extremely strong demand growth throughout 2021, especially from the electric vehicle (EV) battery sector, which experienced a doubling of sales from the previous year. Nonetheless, traditional metallic end-use sectors also experienced robust growth, particularly in Europe and the US in the second half of 20201. Overall, CRU estimates that the demand for refined cobalt in 2021 increased by 22% year-on-year.
- In contrast, CRU estimates that cobalt supply grew at a slower pace of 15% year-on-year, with the restricted availability of physical hydroxide further constrained by persistent logistical delays between the DRC and China, particularly during the second half of 2021. Overall, CRU estimates a substantial cobalt supply shortfall of nearly 13.7kt for 2021.

Key Facts		2021	2020	% change
Third-party Sales Volumes	,			
Copper metal	'000t	90.9	81.1	12.1%
Copper concentrate (Frontier)	'000t	102.3	104.4	(2.0)%
Cobalt metal	'000t	0.9	1.2	(25.Ó)%
Cobalt hydroxide	'000t	20.2	17.0	18.8%
Production				
Saleable copper metal	'000t	94.8	80.3	18.1%
Saleable copper concentrate (Frontier)	'000t	102.4	103.3	(0.9)%
Cobalt metal	'000t	_	0.1	(100.0)%
Saleable cobalt hydroxide	<u>'000t</u>	20.7	16.5	<u>25.5%</u>
Results				
US\$ million		2021	2020	% change
Revenue		2,637	1,494	76.5%
Underlying EBITDA		1,392	584	138.4%

Performance in 2021

The division contributed US\$1,392 million or 33% to the Group's Underlying EBITDA (2020: US\$584 million or 29%). Revenue in 2021 increased to US\$2,637 million (2020: US\$1,494 million), driven by higher output at Metalkol, as well as copper and cobalt prices rallying during 2021.

Metalkol continued ramping up production and achieved increased production of +18% copper cathode (94.8kt compared 80.3kt in 2020) and +26% cobalt hydroxide (20.7kt compared 16.5kt in 2020). In addition, higher metal recovery and grade supported growth in production. Metalkol also reached strong sales results and achieved sales volumes of 90.9kt of copper metal (2020: 81.1kt) and 20.2kt of cobalt hydroxide (2020: 17.0kt) driven by increase in production and expansion of our client-base.

The increase in EBITDA was partially offset by increased operating costs and realised hedge losses for copper metal of US\$117 million. Increase in operating costs includes higher mining royalties as a result of the corresponding increase in copper and cobalt prices, higher repairs and maintenance expenses at Metalkol RTR due to amortization of equipment and increased subcontractors' mining expenses at Frontier due to additional works at Cut 3 to expand the life of mine.

Capital expenditure

Copper, Cobalt and Other Non-ferrous Division's capital expenditure in 2021 was US\$119 million (2020: US\$69 million). This reflects completion of Metalkol Phase 2 and further capital expenditures required for production assets in DRC.

In 2021, the Group continued to invest in the extension of Frontier mine's life of mine. This includes the Cut 3 project, which is focused on stripping up to 29 million cubic metres of overburden – in order to push back the pit boundaries and expose more than 45mt of economically recoverable ore. The project will continue supporting an average production of 80ktpa of copper contained in concentrate until 2024.

This will potentially prepare for a subsequent Cut 4 project.

Planning for 2022 and beyond

As the Metalkol RTR production facility has been successfully ramped up and can now operate at production levels close to its design capacity, the key focus becomes improving the operational efficiency of the production assets and managing the technological and business risk. To achieve this target, a number of new projects has been initiated, including a new cobalt dryer, industrial batteries to mitigate power interruptions, and the metal balance study to better manage the metal recovery and losses. In

addition, we have launched a new study to evaluate opportunities to further increase production volumes at Metalkol.

The Group is finalising an evaluation of the investment decision to extend the life of mine for the Frontier operations by implementing the Cut 4 project. In parallel, considering the favourable price outlook, we continue to look for new opportunities and potential technological improvements to utilize the Boss and Chambishi assets, and develop some of the other mining licences the Group currently possesses.

The Group believes that transparency from all stakeholders is necessary for a truly sustainable supply chain. In 2020, we have joined forces with the other leaders in the battery industry in the Re|Source consortium, a pioneering technology solution to trace responsibly sourced cobalt from the mine to the electric vehicle. In 2021, the consortium thoroughly tested the use of Re|Source across the supply chain, including Metalkol and other participating mining sites in the Democratic Republic of Congo, Umicore's cobalt refinery in Kokkola (Finland) and a battery maker in Tesla's supply chain. The pilot has laid a strong foundation for the technology's wider rollout in 2022, whereby all cobalt from Metalkol will be traced from the first mile.

Energy Division

The Energy Division is one of the largest electricity generators in Kazakhstan, producing 15% of the country's electricity in 2021. It sells the majority of the electricity that it produces (approximately 83%) to our other entities and the rest to third parties. The division is also a major coal and semi-coke producer. The coal is used by the division to generate electricity and is sold both to our other entities and to third parties. Our Shubarkol Komir 'Original' brand of coal is recognised as one of the best in the region, due to its low-ash, high-calorie characteristics.

The global response to climate change will require the transition towards renewable power generation and electrification of transport, amongst other technological interventions. The widespread consensus around the need to decarbonise the global economy was reinforced at the 26th UN Climate Change Conference in November 2021. It was also expressed in the 2015 Paris Agreement on climate change (of which Kazakhstan is a signatory), as well as the Government of Kazakhstan's commitment to achieving carbon neutrality by 2060. In this context, metals and mining companies face growing stakeholder pressure with respect to their carbon footprints. At the same time, decarbonisation presents potential growth opportunities for the sector.

Having carried out an analysis of the risks and opportunities posed by climate change to our business, we are working to increase the proportion of energy we obtain from non-coal sources. The nature of our fixed capital equipment and infrastructure, as well as the relatively nascent nature of Kazakhstan's renewable energy sector, means that this is not something we can do quickly.

Nevertheless, we are focused on reducing our carbon emissions on a medium- to long-term basis, without undermining the foundations of our business. This includes an additional focus on bringing our existing wind project in Kazakhstan into operation and significantly expanding our renewable energy portfolio in the coming years. In 2021, we also initiated a formal process to establish 2030 targets for introducing renewable energy and reducing GHG emissions.

In addition, in 2021 we established an ERG Decarbonisation Think Tank to support our longer-term carbon and climate change management efforts.

2021 highlights

- +3.5% in coal production: 29,891kt (2020: 28,871kt).
- +8.2% in electricity production: 16,000 GWh (2020: 14,793 GWh).
- The Group started the construction of a new special coke production plant with a capacity of 400ktpa.

Market context in 2021

- Thermal coal markets experienced a significant recovery in 2021 following a poor performance in 2020 due to the pandemic. Most of the regions showed an increase in coal-fired generation, which was compensated by lower availability of generation from renewables and a deficit of natural gas.
- Chinese thermal generation increased to 8% year-on-year, the Yunnan province with its extensive hydro-generation facilities suffered from drought. Chinese coal imports rose by 7% to 323mt, the highest since 2013.
- Germany's thermal coal imports surged by 28% to 26mt, which according to the German
 association VDKI, was due to the economic recovery, high gas prices that prompted a gas-tocoal switch, as well as the biggest fall on record in wind generation. As a result, Germany's coalfired generation rose by 27% year-on-year.
- Indian coal-fired generation also rebounded in 2021, after a sharp fall in 2020, rising by 13% year-on-year and coal's share in the total power mix increasing to 79% in 2021 from 76% in 2020.
 However, Indian coal imports were lower than in 2020, as the country managed to increase domestic coal output.
- The average European CIF ARA benchmark price jumped by 120% year-on-year to US\$113 per tonne.
- The FOB Newcastle Australian benchmark (6,000kcal) on the Asian market increased by a similar 125% year-on-year to US\$135/t.

Key Facts		2021	2020	% change
Third-party Sales Volumes				
Coal Eurasian Energy Corporation JSC	'000t	4,793	4,973	(3.6)%
Coal Shubarkol Komir JSC	'000t	11,257	10,118	11.3%
Semi-coke	'000t	40.3	25.2	59.9%
Electricity	GWh	3,647	1,838	98.4%
Consumption				_
Coal consumed in the production of electricity	'000t	8,620	8,333	3.4%
Electricity produced and consumed for own use	GWh	1,099	1,053	4.3%
Production				
Coal Eurasian Energy Corporation JSC	'000t	17,128	17,407	(1.6)%
Coal Shubarkol Komir JSC	'000t	12,762	11,464	11.3%
Semi-coke	'000t	213.8	212.5	0.6%
Electricity	GWh	16,000	14,793	8.2%

Results

US\$ million	2021	2020	% change
Revenue	591	510	15.9%
Underlying EBITDA	220	172	27.9%

Performance in 2021

The Energy Division contributed US\$220 million or 5% of Group EBITDA (2020: US\$172 million or 9% of Group EBITDA). Revenue increased by US\$81 million from US\$510 million in 2020 to US\$591 million in 2021, reflecting both a higher demand for electricity and higher market prices. The higher production

volumes of thermal coal were mostly caused by recovery in the thermal coal market, post pandemic, which had a positive impact on the sales of thermal coal following the increased demand from new clients. The increase in electricity generation was mainly due to the system operator KEGOC restricting the period of capitalised repairs from 105 to 30 days in order to satisfy record high demand and to ensure a consistent supply of electricity in Kazakhstan.

Along with higher production volumes of coal and electricity, the division's expenses increased, impacted by new drivers such as higher stripping volumes due to demand for low-ash coal, which requires extraction at sites with high stripping ratio, introduction of Metal Extraction Tax for coal instead of Rent Tax starting from 2021 and higher employment costs due to salary indexation and increase in January and July.

Capital expenditure

Capital expenditure for the Energy Division was US\$111 million in 2021 (2020: US\$99 million).

In 2021, a project was initiated to reconstruct power unit No.8 with an increase in capacity from 300MW to 320MW in order to meet the needs of the Group and instead of purchasing electricity on the open market. Along with higher capacity, emissions will be reduced to 20 mg/Nm³. Work continued on the design of a second fuel supply duct for a reliable and uninterrupted fuel supply to the power plant of JSC EEC, as well as the design of the second section of ash dump No.3 of JSC EEC for storage of ash and slag waste.

During the year, the construction of a new plant for the production of special coke with a capacity of 400ktpa began. The implementation of the project will enable the Group to meet its internal needs for reducing agent at Kazchrome, which will reduce the volume of imports from Russia and China. The start of production is planned for May 2023.

Planning for 2022 and beyond

- A focus on 'stay-in-business' capital expenditure on EEC's coal-fired power generation units –
 particularly on targeted repairs instead of full replacements, as well as more limited life
 extensions.
- Further progress on our renewable energy projects through the initiation of construction of our Khromtau-1 wind power project, finalising the design of our Khromtau-2 project and completion of our assessment of additional, large-scale wind- and solar-generation sites in Kazakhstan.
- Initiate the design stage of the off-gas-fuelled power station construction at Aktobe Ferroalloys
 Plant as well as investigate the potential conversion of Aksu Ferroalloy Plant's boiler house to offgas.
- Design and build 100 MW power plant which uses FeCr offgas as a primary fuel. This power plant will improve energy efficiency of our production by co- generating electricity from the waste offgas.
- Complete the construction of the semi-coke plant (400ktpa) with improved quality at Shubarkol Komir to decrease reductant costs for Group ferroalloys production and increase sales to external clients.
- Consider the development of an off-gas fuelled power unit at our new Special Coke Plant.
- Build additional sorting capacity and develop railway infrastructure in Western pit of Shubarkol Komir to increase its share in total production. As a result, we expect a reduction in mining costs due to lower stripping coefficient and haulage distance in Western pit.
- Further improve the operational efficiency of key mining equipment at both Vostochny pit and Shubarkol Komir. The key driver of improvements is expected to be reducing downtime through fleet unification and the use of an automatic fleet management system.
- Implement pilot project for autonomous haulage (driverless dump car) at Vostochniy pit leading to the automation of overburden transportation with a total volume of 4,248m3 per annum. As a

result of the project we expect to reduce the consumption of tyres, fuel, staff cost and maintenance costs, and raise operational efficiency by decreasing downtimes and increasing transportation speed.

Logistics Division

Our Logistics Division provides transportation and logistics services to the Group's principal operating divisions in Kazakhstan, as well as to third parties.

2021 highlights

- +5.7% in freight forwarding: 13,072kt (2020: 12,371kt) due to increased demand in Kazakhstan and Russia.
- Increased rental rates for railway cars compared with 2020.

Key Facts		2021	2020	% change
Transportation Total tonnage transported by rail	'000t	52,139	53,076	(1.8)%
Sales Volumes				
Third party freight forwarding	'000t	13,072	12,371	5.7%
Results				
US\$ million		2021	2020	% change
Revenue		124	121	2.5%
Underlying EBITDA		54	44	22.7%

Performance in 2021

The Logistics Division contributed US\$54 million or 1.3% to the Group's Underlying EBITDA (2020: US\$44 million or 2.2%). Revenue increased by US\$3 million to US\$124 million (2020: US\$121 million) driven by higher rental rates for railway cars across Kazakhstan. EBITDA increased by US\$10 million or 23% driven by lower operating costs due to a decrease in the purchase price of wheel fleets and empty mileage costs as a result of changes in the route mix with more lower tariffs and shorter distances as longer routes were harder to undertake due to logistical constraints at the Chinese border. Staffing costs increased due to the salary indexation and increase in January and July 2021.

Capital expenditure

During 2021, US\$7.5 million (2020: US\$8.4 million) was spent to improve competitive transportation services for other Group divisions. The expenditure included US\$5 million for leasing open wagons and dump trucks, as well as the repair of equipment.

Planning for 2022 and beyond

The priority of the division is to provide Group's entities with transportation and logistics services. The division expects a potential increase in the required number of railway cars. We intend to purchase pellet and cement wagons due to growing shipment volumes and turnover to China, any other requirements will be outsourced. In addition, our captive logistics operator TransCom renewed its strategy and continues working on various operational efficiency targets.

Financial review

Key 2021 highlights

- +59.3% in revenue: US\$8,530 million (2020: US\$5,356 million).
- +28.5% in capital expenditure: US\$735 million (2020: US\$572 million).
- B- (Positive) and B1 (Stable) credit ratings from Standard & Poor's and Moody's respectively (compared to B- (Stable) and B2 (Negative) in 2020).

Group performance

Underlying EBITDA and cost of sales

Underlying EBITDA increased by 108% to US\$4,210 million (2020: US\$2,023 million). This was driven by a 59% increase in Group revenue to US\$8,530 million (2020: US\$5,356 million) in higher output at our Copper, Cobalt and Other Non-ferrous Division, namely Metalkol RTR, and higher prices for all major products (although iron ore, aluminium and copper price gains were partially offset by hedging losses). The gains were partly offset by lower sales volumes of ferroalloys mainly due to lack of material at Khromtau enrichment plant and Alumina due to logistical constraints and lack railway cars for transportation.

Kazchrome remained our major contributor to Group EBITDA (US\$1,392 million or 33% compared with US\$658 million or 33%). The increase in EBITDA reflects the strong price environment for ferroalloys. Copper, Cobalt and Other Non-ferrous Division caught up in terms of its contribution to Group EBITDA (US\$1,392 million or 33% compared with US\$584 million or 29%) reflecting production ramp up at Metalkol and strong price environment for copper and cobalt.

Net realised losses from the Group's hedging programme were US\$392 million higher (2021: US\$544 million, 2020: US\$152 million). The largest portion of this increase US\$220 million, is attributed to our iron ore hedges (2021: US\$384 million 2020: US\$164 million). The realised losses on hedges are booked under operating expenses.

Excluding the effect of hedges, increased operating expenses reflect increases in production volumes at Metalkol, higher employment costs due to indexation and an increase in the minimum wage rate in Kazakhstan, higher costs for raw materials due to inflated price of materials (reductants, reagents, caustic soda, mazut and etc.).

Capital expenditure

In 2021, our payments for capital expenditure were US\$735 million (2020: US\$572 million). Increases in capital expenditure represent our initiative to capture favourable market conditions and rolled over expenses from 2020 due to the postponement of several projects as a result of COVID-19 uncertainties. The focus of the investment programme was on both expansionary projects and sustaining capital investments to maintain our production volumes and reduce future costs at our existing assets.

Key examples included:

- development of ShDNK-2 mine at Donskoy GOK;
- further enrichment of slime tailings and production of sellable concentrate at Donskoy GOK;
- development of small pit at Donskoy GOK;
- · reconstruction of Kacharsky iron ore mine;
- · construction of semicoke plant;

 development of open-pit mines No.9 at Ayatskiy deposit, No.17 Krasnogorskiy site, VAM-4, KBR-4 site at Aluminium of Kazakhstan.

Dividends

During the year ended 31 December 2021, we declared dividends of US\$300 million at US\$3,871 per share (2020: US\$ nil million) as detailed in note 22 of the consolidated financial statements.

Cash flow

Net cash generated from operating activities

We generated US\$2,565 million in net cash from our operating activities (2020: US\$905 million). This 183% increase was driven by (amongst other factors):

- market price increase for all Group's major products.
- higher EBITDA on the back of Metalkol RTR ramp-up and increase of production at SSGPO and Shubarkol Komir.

Net cash used for investing activities

We used a net total of US\$699 million in cash for investing activities (2020: US\$573 million) – most of which was focused on capital expenditure. In 2021, we focused on completion of a number of in-progress projects and sustaining capital investments to maintain our production capacity. The increase in capital expenditure was due to the postponement of several projects from 2020 to 2021, and an increase in acquisitions of subsidiaries, namely the purchase JSC Manganese Zhairema, which will allow the Group to focus on making our business more vertically integrated, develop its raw materials base and further increase the efficiency of the Ferroalloys Division.

Net cash used for financing activities

In 2021, net cash outflow from financing activities was US\$998 million, compared with a net cash outflow of US\$136 million in 2020. The amount drawn from credit facilities totaled US\$1,003 million (2020: US\$346 million). Proceeds from borrowings were utilised to refinance existing loans and as such the Group repaid US\$1,870 million (2020: US\$459 million).

The net repayments of borrowings totalled US\$867 million (2020: US\$113 million). The Group incurred fees of US\$15 million (2020: US\$12 million) for arranging new facilities and restructuring existing facilities with VTB Bank (PJSC) and Sberbank of Russia.

In addition, the Group incurred outflows related to:

- dividends paid to owners of the Company: US\$118million (2020: US\$0 million)
- dividends to non-controlling interests: US\$5 million (2020: US\$3 million).

Tax

The Group's income tax expense for 2021 was US\$856 million (2020: US\$268 million), with an effective tax rate (ETR) of 27.5% (2020: 75.3%). The Group's ETR is higher than the income tax rate of 20% applicable in the Republic of Kazakhstan, where the majority of the Group's operations are located. This largely reflected higher profits in Africa in 2021 as well as tax losses in Europe for which no deferred tax is recognised.

Key events in 2021

Debt optimisation

In early June 2021, we utilised a new tranche of US\$250 million from VTB Bank PJSC. The interest rate for this tranche is similar to other financing received from the bank and the final maturity is in 2030. The funds were redirected for repayment of other loans with higher interest rates and shorter maturities. In

June 2021, the Group fully repaid its loan of US\$70 million to Kazakhstan Development Bank and fully repaid its loan to Eurasian Development Bank of US\$95 million. In July 2021, another loan to Kazakhstan Development Bank was partially prepaid in the amount of US\$85 million. These loans had interest rates in the range of 6.00%-6.50% and maturity in the range of 2021 – 2027.

The interest rate under the credit facility with Sberbank Kazakhstan was reduced by 2% per annum in total as a result of amendment agreements signed in March and September 2021.

In August 2021, we finalised a significant project with Sberbank of Russia to amend and restate our existing credit facilities. As a result, the maturity of the loans was extended until 2030, the interest rate was reduced by 0.5% subject to certain conditions being satisfied and certain commercial terms are improved. We established a revolving credit of US\$550 million that is unutilised to date and being kept as a liquidity reserve. In addition, we concluded a copper prepayment agreement with a subsidiary of Sberbank of Russia of US\$300 million.

In December 2021, we prepaid US\$40 million of Shubarkol's loan from Sberbank of Russia. We have in total made voluntary prepayments to Sberbank of Russia of US\$340 million.

Scheduled principal payments, early prepayments and a limited amount of new financing reduced the Group's debt as of the end of 2021 by more than US\$800 million compared with the end of 2020. The effective interest rate for the debt portfolio also improved by 0.27% per annum.

These debt optimisation initiatives noticeably improved leverage, extended our debt maturity profile and reduced the cost of financing. We also created additional liquidity reserves to enhance our financial stability.

Credit rating

In June 2021, the rating agency Moody's upgraded assigned credit rating to B1, while simultaneously raising the rating outlook from 'Negative' to 'Stable'.

The rating was upgraded to B1 with 'Stable' outlook, which reflects the expected EBITDA growth and planned debt repayment due to high global demand and stable commodity prices.

In 2021, Standard and Poor's affirmed B- rating with an improved 'Positive' outlook, reflecting projections of increased EBITDA based on stable production and rising commodity prices and, as a result, improved financial stability to meet financial obligations.

Events after the balance sheet date

In January 2022 Kazakhstan faced extraordinary events associated with significant social unrest. The situation in all regions of the country stabilised by the end of January. The President of Kazakhstan announced political and economic reforms which are ongoing.

In February 2022, a military conflict between Ukraine and Russia commenced. A number of countries and international organisations, including the US, the European Union, Switzerland and the UK imposed a series of sanctions against the Russian government, various companies, including major lenders of the Group (Sberbank of Russia and VTB Bank (PJSC)), and certain individuals. This resulted in significant disruption to financial and commodity markets. The Group continues to comply with all sanctions applicable to its business activities in accordance with adopted compliance policies.

In January and February 2022, RCB Bank Limited and CQUR Bank LLC, lenders of the Group, assigned the aggregate of US\$2,981 million borrowings to VTB Bank (PJSC). Standard & Poor's, Moody's, and Fitch withdrew credit ratings of Sberbank of Russia and VTB Bank (PJSC).

In March and April 2022, the Group renegotiated and amended applicable terms of certain financing arrangements and terminated certain transactions and activities with Sberbank of Russia, VTB Bank (PJSC), VEB and/or their subsidiaries, including the following:

- US\$218 million has been paid in connection with early termination of commodity derivative contracts;
- US\$550 million undrawn committed facility was terminated;
- US\$314 million has been paid in connection with early termination of certain financing transactions;
- principal and interest payments for up to two years were deferred resulting in estimate of finance income of up to approximately US\$160 million.

Certain trading activities of the Group with a counterparty were terminated due to concerns about the longer-term stability of such counterparty in the context of the sanctions in relation to certain Russian entities and individuals. This exposed the Group to potential impairment risk sensitivity with respect to assets in the Iron Ore Division. The Group is taking proactive mitigating measures to secure alternative sales channels to ensure the risk is mitigated.

Volatility in foreign exchange markets resulted in the recognition of a US\$47 million net foreign exchange gain in the consolidated income statement and a US\$114 million currency translation difference expense in the consolidated comprehensive income statement for the four months ended 30 April 2022.

The Group acquired 1.71% non-controlling interest in Aluminium of Kazakhstan JSC for approximately US\$3 million cash consideration resulting in consolidation of 100% ordinary shares ownership.

Tax environment

The Group is strongly committed to complying with all applicable laws, rules and regulations along with adherence to the Group Tax Policy and Tax Code of Conduct.

Risk management

Our risk management framework helps us to identify and understand potential threats to the sustainability of our business. This includes our most material sustainable development issues, which have the potential to impact our people, local communities and the environment, as well as our ability to achieve our operational and strategic objectives.

The political and economic situation in the world is currently highly unstable. The sanctions restrictions imposed on Russian companies in relation to the conflict in Ukraine have significant implications for many countries, especially those with historical economic ties to Russia and Ukraine.

The Group's Management responded promptly to the risks that arose. In order to increase the effectiveness of the response, a Global Crisis Team (GCT) has been created. GCT holds regular meetings, the task of which is to assess the impact of the conflict between Russia and Ukraine on the Group's activities and develop priority measures to reduce the negative consequences for the Group. The main tasks for the GCT are regular analysis of sanctions already imposed against Russian companies as well as those, that might potentially be introduced and their impact on the Group, development of measures to ensure continuity of our production processes with the necessary supplies and raw materials, including the timely delivery of products.

In January 2022, Kazakhstan faced extraordinary events associated with significant social unrest. As part of the response to these events in the most acute period of the crisis, the GCT met regularly, to ensure the safety of the Group's personnel, continuity of production processes and compliance with obligations to counterparties. Following the end of the January crisis, the Group analysed the impact of these events and developed measures to reduce future risks.

Our principal risks are set out in the table below. There may be additional risks yet unknown to the Group and other risks currently not believed to be material, which could have a significant impact on our business performance and financial results.

Principal risks and selected mitigation actions

Key risk areas	Selected mitigation actions
Environmental risks The nature of our activities and processes mean they have, in the absence of appropriate controls, the potential to harm the environment.	■ ISO 14001-certified and/or aligned environmental management systems. ■ Implementation of our Environmental Strategy in Kazakhstan, including the phased implementation of advanced filter and air monitoring technology at our key operations. ■ Group-level, large-scale waste storage facility risk review process.
Climate change risks We face regulatory and market risks in relation to our GHG emissions that require the implementation of appropriate management actions.	■ Short-term implementation of wind-power projects in Kazakhstan and longer-term development of larger-scale renewable energy projects. ■ Implementation of energy efficiency measures at our operations in Kazakhstan, as well as ISO 50001-certified energy management systems in Kazakhstan. ■ Analysis of our carbon transition risks to better understand and manage exposure, and inform future carbon strategy. ■ Factoring-in of GHG emission implications when making long-term investment decisions, with the aim of reducing our emissions where it is commercially feasible to do so.

Social risks

Our business activities may negatively affect nearby communities. Therefore, there is a risk this could affect our social licence to operate. Similarly, a failure to deliver broader social benefits to our workforce, many of whom live in relatively remote mine towns, would result in a loss of talent and skills and would make it hard to recruit new employees.

- Community social investment (including through our Regional Memoranda of Understanding with regional governments, aimed at promoting socio-economic development in our mining towns in Kazakhstan).
- Application of Commitments Register framework as well as the Clean Cobalt and Copper Framework in the DRC.
- Social attitude monitoring in our host regions and the maintenance of community grievance mechanisms.
- Implementation of employee housing programmes, as well as the improvement of local urban environments.

Health, safety and security risks
The nature and location of our
operations mean they have, in the
absence of appropriate controls, the
potential to affect the physical wellbeing and health of our employees,
contractors and community members.
This includes the potential for COVID19 infections both inside and outside of
work.

- ISO 45001-certified occupational health and safety management systems in Kazakhstan as well as management systems in Africa that are informed by ISO 45001.
- Zero Harm approach towards critical health and safety risks.
- Safety management system audits.
- Integration of safety targets into managers' KPIs.
- Risk assessment using Hazard Identification (HAZID) methodologies.
- Dedicated programme to address COVID-19 risks in our workforce, while maintaining operational continuity (Including PPE, social distancing, changed working patterns, screening, testing and other related approaches).

Compliance and governance risks
We are subject to a range of internal
and external compliance obligations,
including those relating to sanctions,
confidentiality, data protection, human
rights, money laundering / the
financing of terrorism and bribery and
corruption. Any non-compliance in this
regard could results in financial and
non-financial sanctions, as well as
reputational damage.

- Group Compliance Programme, including training / monitoring of adherence to policies and guidance (Code of Conduct, Supplier Code of Conduct, etc.).
- Updated counterparty and supply chain due diligence processes, including a focus on human rights / OECD Due Diligence Guidance ⁹.
- Sanctions Compliance Programme.
- Data protection programme.
- Maintenance of whistleblower system.

Regulatory and legal risks

There are a number of factors that could affect our regulatory context and present risks to our business. This includes the introduction of new (or changes to existing) laws and regulations by our host governments.

- Monitoring of potential legislative and regulatory changes.
- Representation of our interests through professional bodies/associations.
- Monitoring of compliance with our license and permit obligations.

Political risks

There are varying degrees of political stability in our host countries. We conduct our business in complex environments, which are characterised by ever-changing political dynamics and the potential for unexpected risks.

■ Monitoring and analysis of political and macro-economic trends in our regions of operation.

⁹ OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Price risks

A substantial decline in – or volatility around – commodity prices could materially affect our business, including our financial results and our liquidity.

- Regular review and forecast of short and medium-term market fundamentals (consumption, supply, availability, etc).
- Maintenance of long-term sales contracts that link commodity prices to benchmarks.
- Price analysis and hedging of commodity prices.
- Development of alternative sales channels.

Production and operational risks

Challenging operational environments have the potential to result in business interruption, damage to physical property, unplanned downtime, asset shutdowns, and uncertainty in geological formations and mineralisation.

- Risk-based reliability planning and maintenance.
- Maintenance of a resilient power supply system/long-term contracts with reliable suppliers.
- Control of input materials, including the introduction of a raw material control system.
- Implementation of business continuity management processes.
- Infill drilling and ore body modelling.
- Maintenance of property damage/business interruption insurance

Supply chain and logistics risks

The Group's large supply chain exposes it to risks relating to contractual non-compliance by suppliers, including non-delivery, changes in prices for purchased goods and shortages of transportation for goods.

- Creation and maintenance of supplementary stocks of critical items (including PPE).
- ■Regular review of supplies of critical reagents/materials.
- Quality/specification/completeness controls related to the supply of goods and services.
- Long-term contracts and category strategies for key goods/ services (including formula pricing).
- Maintenance of our own fleet of railway wagons.

Capital project execution risks

A failure to deliver major capital projects within planned timeframes, budgets and quality criteria could negatively affect long-term profitability and reputation, including our ability to attract future financing.

- Systematic, transparent and stage-gated project implementation process.
- Enhanced project due diligence, including independent project reviews prior to stage gates.
- Contingency planning based on quantitative schedule and cost risk analysis.
- ■The insurance of construction risks and risks relating to the delayed start-up of critical capital projects.
- Monitoring/control of project deadlines, budgets and rampup, etc.

Financial risks

Risks relating to ability of the Group to carry out necessary operational and investment activities, and the potential for these to be undermined by credit risks, liquidity risks, foreign exchange risks and interest rate risks. Also, any deterioration in cash flow and profitability that could adversely affect our ability to meet our existing financial obligations, including debt repayments, and lack of access to commercially viable external financing.

- Maintenance of strong relationships with existing lenders, the expansion of our credit lines, as well as improvements to our debt portfolio, funding opportunities and conditions.
- Regular updating of our cash flow plan and control of the Group's liquidity level.
- Compliance with covenants.
- Monitoring of the Group's open FX position.
- Monitoring of tax legislation compliance.
- Credit control process implementation, including the setting of counterparty credit limits and alignment control.

Personnel management risks

The fact we operate in remote locations poses risks in terms of our ability to attract personnel with the skills and experience we need, as well as the outflow of qualified personnel.

IT and information security risks
In the context of our digitalisation and
the enhancement of our Information
Technology (IT) landscape, we
recognise that this exposes us to
potential risks, including, but not limited
to: loss of access to IT infrastructure;
disruption of business processes
including Industrial Control Systems;
internal and/or external fraud; data
leakage and data breaches; noncompliance with information security
regulations; and other related risks.

- Maintenance of competitive remuneration packages.
- Training and development to maintain the skills pipeline.
- Implementation of an effective incentivisation and retention system.
- Implementation of social support programmes for personnel (see 'Social risks' above).
- Vulnerability management (and patching), regularly external and internal network perimeter scanning, penetration testing and Red teaming.
- Hardening of infrastructure, services and operating systems to reduce vulnerabilities.
- Classification of company data and setup control on all company data according to its criticality.
- User awareness training.
- Continuous improvement of our detection and response capabilities by our Security Operations Centre and Information Security teams using sophisticated tooling (e.g. Endpoint Detection and Response, web filtering, Data Leakage Prevention).
- Enhancement of our email security through training and simulated phishing campaigns for all users as well as critical user groups (e.g. IT, executive management).
- Implementation of identity and access management framework.
- Implementation of network security controls (e.g. encryption of structured critical data, network segmentation) in our IT and OT environments.
- Backup testing and Disaster Recovery exercises for all critical systems.

Consolidated management report

The Managers present their report and the audited Consolidated financial statements for the year ended 31 December 2021.

Principal activities

The Group is a leading diversified natural resources group with integrated mining, processing, energy, logistical, and marketing operations. Production assets are located in the Republic of Kazakhstan, Zambia, Brazil and the DRC. The Group has six operating Divisions: Ferroalloys, Iron Ore, Alumina and Aluminium, Energy, Logistics, and Copper, Cobalt and Other Non-ferrous.

Corporate review

The Corporate review has been prepared to provide the Company's shareholder and other interested parties with a fair review of the business of the Group and a description of the principal risks and uncertainties facing it. In accordance with the law on the register of commerce and companies and the accounting and annual account of undertakings dated 19 December 2002 (as amended), information required to be disclosed in this regard has been presented in the report as follows:

- CEO Report on pages 7 to 11;
- Corporate review on pages 12 to 19 which includes information on financial and operational performance, key initiatives and events in 2021 and early 2022 and 2025 Strategy;
- Divisional review on pages 20 to 32;
- Financial review on pages 33 to 36;
- Risk management on pages 37 to 40, 53 to 54 and 88 to 94.

All of the above form part of the management report required by the accounting legislation of the Grand Duchy of Luxembourg.

Managers

The Managers who held office during the financial year ended 31 December 2021 and up to the date of signing the Consolidated financial statements are those listed below:

Manager	Occupation	Domicile	Date of appointment	Date of resignation
Mr Bakyt Sultanov	Class A Manager	Kazakhstan	17/06/2013	
Mr Alexander Machkevitch	Class B Manager	Switzerland	17/06/2013	-
Mr Alijan Ibragimov	Class B Manager	Switzerland	17/06/2013	03/02/2021
Mr Patokh Chodiev	Class B Manager	Switzerland	17/06/2013	-
Mr Beibut Atamkulov	Class A Manager	Kazakhstan	20/06/2013	21/02/2022
Mr Shukhrat Ibragimov	Class B Manager	Switzerland	03/03/2021	-
Mr Yerulan Zhamaubayev	Class A Manager	Kazakhstan	22/02/2022	-

Mr Alijan Ibragimov passed away on 3 February 2021.

The following individuals served as delegates to the daily management of the Company:

Delegate	Position	Date of appointment
Mr Benedikt Sobotka	Chief Executive Officer	15/01/2014
Mr Satzhan Temirgaliyev	Chief Financial Officer	02/04/2018
Mr Dmitry Melnikov	Chief Legal Officer	01/01/2017

The Company is contractually bound by a sole signature of any of the Managers or the joint signatures of two delegates to the daily management.

Managers' indirect interests in ordinary shares:

	Number of ordinary shares			
	31 December	31 December		
Manager	2021	2020		
Mr Alexander Machkevitch	16,059	16,059		
Mr Alijan Ibragimov	· -	16,051		
Mr Shukhrat Ibragimov	16,051	_		
Mr Patokh Chodiev	14,390	14,390		

Mr Shukhrat Ibragimov was appointed to the Board of Managers at the proposal of Silverfjord Holding SARL, which was previously beneficially owned by Mr Alijan Ibragimov.

Events after the balance sheet date

Details of events after the balance sheet date, including January events in Kazakhstan and a military conflict between Ukraine and Russia, have been disclosed in notes 32 and 1 to the Consolidated financial statements.

Financial instruments

Details of the Group's financial risk management, objectives and policies, together with details of financial instruments are described in note 26 to the Consolidated financial statements.

Research and development activities

The Group has a research and development center, which reviews scientific and technological developments to improve existing mining and metallurgical processes as well as discover innovative technologies and approaches to be implemented at our entities.

The Group incurred costs amounting to US\$6 million (2020: US\$7.5 million) during the year in relation to research and development activities.

Management responsibility statement

We confirm to the best of our knowledge that the Consolidated financial statements which have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and the undertakings included in the consolidation taken as a whole, and that the Consolidated management report presents a fair review of the development and performance of the business and the position of the Group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

The Consolidated financial statements on pages 48 to 99 were approved by the Board of Managers on 9 June 2022 and signed on its behalf by:

Mr Alexander Machkevitch
Chairman / 2014

Mr Benedikt Sobotka Chief Executive Officer

Financial instruments

Details of the Group's financial risk management, objectives and policies, together with details of financial instruments are described in note 26 to the Consolidated financial statements.

Research and development activities

The Group has a research and development center, which reviews scientific and technological developments to improve existing mining and metallurgical processes as well as discover innovative technologies and approaches to be implemented at our entities.

The Group incurred costs amounting to US\$6 million (2020: US\$7.5 million) during the year in relation to research and development activities.

Management responsibility statement

We confirm to the best of our knowledge that the Consolidated financial statements which have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and the undertakings included in the consolidation taken as a whole, and that the Consolidated management report presents a fair review of the development and performance of the business and the position of the Group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

The Consolidated financial statements on pages 48 to 99 were approved by the Board of Managers on 9 June 2022 and signed on its behalf by:

Mr Alexander Machkevitch Chairman Mr Benedikt Sobotka Chief Executive Officer



Audit report

To the Shareholders of Eurasian Resources Group S.à r.l.

Report on the audit of the consolidated financial statements

Our opinion

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of Eurasian Resources Group S.à r.l. (the "Company") and its subsidiaries (the "Group") as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union.

What we have audited

The Group's consolidated financial statements comprise:

- the consolidated income statement for the year then ended;
- · the consolidated comprehensive income statement for the year then ended;
- the consolidated balance sheet as at 31 December 2021;
- · the consolidated cash flow statement for the year then ended;
- · the consolidated changes in equity statement for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting
 policies.

Basis for opinion

We conducted our audit in accordance with the Law of 23 July 2016 on the audit profession (Law of 23 July 2016) and with International Standards on Auditing (ISAs) as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" (CSSF). Our responsibilities under the Law of 23 July 2016 and ISAs as adopted for Luxembourg by the CSSF are further described in the "Responsibilities of the "Réviseur d'entreprises agréé" for the audit of the consolidated financial statements" section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with the International Code of Ethics for Professional Accountants, including International Independence Standards, issued by the International Ethics Standards Board for Accountants (IESBA Code) as adopted for Luxembourg by the CSSF together with the ethical requirements that are relevant to our audit of the consolidated financial statements. We have fulfilled our other ethical responsibilities under those ethical requirements.



Other information

The Board of Managers is responsible for the other information. The other information comprises the information stated in the annual report including the consolidated management report but does not include the consolidated financial statements and our audit report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Managers and those charged with governance for the consolidated financial statements

The Board of Managers is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs as adopted by the European Union, and for such internal control as the Board of Managers determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Managers is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Managers either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Responsibilities of the "Réviseur d'entreprises agréé" for the audit of the consolidated financial statements

The objectives of our audit are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.



As part of an audit in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures
 that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Group's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Managers;
- conclude on the appropriateness of the Board of Managers' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation:
- obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements.
 We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.



We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

The consolidated management report is consistent with the consolidated financial statements and has been prepared in accordance with applicable legal requirements.

PricewaterhouseCoopers, Société coopérative Represented by

Luxembourg, 9 June 2022

Electronically signed by: Andrei Chizhov

Andrei Chizhov

Consolidated income statement

		Years ended 31 December		
US\$ million	note	2021	2020 (restated)	
Revenue	3	8,530	5,356	
Cost of sales	5	(3,504)	(3,115)	
Gross profit		5,026	2,241	
Distribution costs	6	(281)	(220)	
General and administrative expenses	7 ·	(711)	(569)	
Research, business development and exploration costs	8	(100)	(78)	
Impairments	9	(36)	(9)	
Other operating expense	10	(976)	(780)	
Other operating income	10	696	295	
Operating profit		3,618	880	
Finance income	12	135	355	
Finance cost	13	(640)	(879)	
Profit before income tax		3,113	356	
Income tax expense	14	(856)	(268)	
Profit for the year		2,257	88	
Profit/(loss) attributable to:				
Owners of the Company		2,223	100	
Non-controlling interests		34	(12)	

Consolidated comprehensive income statement

	Years ended 31 December		
US\$ million	2021	2020	
Profit for the year	2,257	88	
Other comprehensive (expense)/income, net of income taxes:		•	
Items that may be subsequently or are reclassified to profit or loss:			
Currency translation differences	(154)	(397)	
Cash flow hedges	(127)	(4)	
Cash flow hedges – reclassification to profit	44	(20)	
Items that will not be subsequently reclassified to profit or loss:			
Remeasurement of employee benefit obligations	(1)	2	
Comprehensive income/(expense) for the year	2,019	(331)	
Comprehensive income/(expense) attributable to:			
Owners of the Company	1,986	(324)	
Non-controlling interests	33	(7)	

Consolidated balance sheet

	_	31 December		
US\$ million	note	2021	2020	
Assets				
Non-current assets	·			
Property, plant and equipment	15	9,800	10,048	
Intangible assets	16	131	137	
Other financial assets		103	116	
Deferred tax asset	14	124	58	
Other, a second	17	177	109	
Total		10,335	10,468	
Current assets				
Inventories	18	1,329	972	
Trade and other receivables	19	1,335	942	
Cash and cash equivalents	20	1,523	665	
Total		4,187	2,579	
Total assets		14,522	13,047	
Equity				
Capital reserve	22	3,159	3,159	
Reserves		288	(1,398)	
Attributable to owners of the Company		3,447	1,761	
Non-controlling interests		145	. 110	
Total equity		3,592	1,871	
Liabilities				
Non-current liabilities		•		
Borrowings	23	6.824	7,714	
Deferred tax liability	14	1,179	1,214	
Asset retirement obligations	24	98	92	
Employee benefit obligations		31	28	
Other	_	82	79	
Total		8,214	9,127	
Current liabilities				
Trade and other payables	25	1,387	1,182	
Borrowings	23	609	669	
Income tax payable		541	50	
Other taxes payable		179	148	
Total		2,716	2,049	
Total liabilities		10,930	11,176	
Total equity and liabilities		14,522	13,047	

These Consolidated financial statements were approved by the Board of Managers on 9 June 2022, and were signed on its behalf by

Mr. Alexander Machkevitch

Chairman

Mr. Benedikt Sobotka Chief Executive Officer

Consolidated balance sheet

	_	31 December		
US\$ million	note	2021	2020	
Assets	· · · · · · · · · · · · · · · · · · ·			
Non-current assets				
Property, plant and equipment	15	9,800	10,048	
Intangible assets	· 16	131	137	
Other financial assets		103	116	
Deferred tax asset	14	124	58	
Other	17	177	109	
Total		10,335	10,468	
Current assets				
Inventories	18	1,329	972	
Trade and other receivables	19	1,335	942	
Cash and cash equivalents	20	1,523	665	
Total		4,187	2,579	
Total assets		14,522	13,047	
Equity				
Capital reserve	22	3,159	3,159	
Reserves		288	(1,398)	
Attributable to owners of the Company		3,447	1,761	
Non-controlling interests		145	110	
Total equity		3,592	1,871	
Liabilities				
Non-current liabilities				
Borrowings	23	6,824	7,714	
Deferred tax liability	14	1,179	1,214	
Asset retirement obligations	24	98	92	
Employee benefit obligations		31	28	
Other		82	79	
Total		8,214	9,127	
Current liabilities				
Trade and other payables	25	1,387	1,182	
Borrowings	23	609	669	
Income tax payable		541	50	
Other taxes payable		179	148	
Total		2,716	2,049	
Total liabilities		10,930	11,176	
Total equity and liabilities		14,522	13,047	

These Consolidated financial statements were approved by the Board of Managers on 9 June 2022, and were signed on its behalf by

Mr. Alexander Machkevitch Chairman Mr. Benedikt Sobotka Chief Executive Officer

Consolidated cash flow statement

		Years ended	31 December
US\$ million	note	2021	2020
Cash generated from operating activities	21	3,514	1,574
Interest and other similar expenses paid		(576)	(444)
Income tax paid		(382)	(241)
Income tax refund		_	9
Interest received		9	7
Net cash generated from operating activities		2,565	905
Cash flow from investing activities			
Purchase of property, plant and equipment	÷	(711)	(560)
Acquisition of subsidiaries		(27)	(17)
Purchase of intangible assets		(24)	(12)
Loans and deposits (granted)/ proceeds		(4)	1
Proceeds from disposal of intangible assets		2	_
Proceeds from disposal of property, plant and equipment		31	7
Proceeds from disposal of subsidiaries		34	8
Net cash used for investing activities		(699)	(573)
Cash flow from financing activities			
Borrowings – proceeds		1,003	346
Borrowings – repayments		(1,870)	(459)
Payment of arrangement fees		(15)	(12)
Acquisitions of non-controlling interests	31	7	(8)
Dividend paid to owners of the Company		(118)	_
Dividend paid to non-controlling interests		(5)	(3)
Net cash used for financing activities		(998)	(136)
Net change in cash and cash equivalents		868	196
Cash and cash equivalents at the beginning of the year		665	472
Foreign exchange loss on cash and cash equivalents		(10)	(3)
Cash and cash equivalents at the end of the year	20	1,523	665

Purchase of property, plant and equipment include US\$11 million of capitalised borrowing costs (2020: US\$28 million).

Consolidated changes in equity statement

•	Attributable to owners of the Company						•		
US\$ million	Share capital	Capital reserve	Retained earnings	Translation reserve	Hedge reserve	Other reserve	Total	Non- controlling interests	Total equity
Balance at 1 January 2020	_	3,159	6,140	(7,237)	7	5	2,074	139	2,213
Profit/(loss) for the year	_	_	100		_	_	100	(12)	88
Other comprehensive (expense)/ income			_	(402)	(17)	(5)	(424)	5	(419)
Comprehensive income/ (expense)		_	100	(402)	(17)	(5)	(324)	(7)	(331)
Dividend	_	_	_	_	_	_	-	(3)	(3)
Other changes in non-controlling interests	_	_	11	_	_		11	(19)	(8)
Balance at 31 December 2020	_	3,159	6,251	(7,639)	(10)	_	1,761	110	1,871
Profit for the year	_		2,223	_	_		2,223	34	2,257
Other comprehensive expense		_		(153)	(62)	(22)	(237)	(1)	(238)
Comprehensive income/ (expense)	_	_	2,223	(153)	(62)	(22)	1,986	33	2,019
Dividend	_	_	(300)	_	_	_	(300)	(5)	(305)
Other changes in non-controlling interests	_	_	_	_			_	7	7_
Balance at 31 December 2021	_	3,159	8,174	(7,792)	(72)	(22)	3,447	145	3,592

1. Principal accounting policies

General

Eurasian Resources Group S.à r.l. (the 'Company') is organised under the laws of the Grand Duchy of Luxembourg as a private limited liability company for an unlimited period. The Company's registered address and domicile is 9, rue Sainte Zithe, L-2763 Luxembourg, the Grand Duchy of Luxembourg. The Consolidated financial statements as at and for the year ended 31 December 2021 comprise the Company and its subsidiaries (the 'Group').

The Company, together with its subsidiaries, is a leading diversified natural resources group with integrated mining, processing, energy, logistical and marketing operations. Production assets are located in the Republic of Kazakhstan, Zambia and the Democratic Republic of the Congo ('DRC'). The Group has six operating divisions: Ferroalloys, Iron Ore, Alumina and Aluminium, Energy, Logistics and Copper, Cobalt and Other Non-ferrous.

Basis of preparation

The Consolidated financial statements have been prepared on a going concern basis in accordance with International Financial Reporting Standards ('IFRS') as adopted by the European Union ('EU').

The Consolidated financial statements have been prepared under the historical cost convention as modified for the revaluation of certain assets and liabilities as further explained in the respective accounting policies.

The preparation of the Consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates and judgments in applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the Consolidated financial statements are disclosed in note 2.

Going concern basis

Whilst macroeconomic uncertainty persists as the world continues to grapple with and recover from the COVID-19 pandemic, Group management is confident that the Group can successfully continue developing as a socially responsible, resilient and efficient business with the support of our partners and employees.

In February 2022, a military conflict between Ukraine and Russia commenced. A number of countries and international organisations, including, the United States of America, the European Union, Switzerland and the United Kingdom imposed a series of sanctions against the Russian government, various companies, including major lenders of the Group (Sberbank of Russia and VTB bank (PJSC)), and certain individuals. This resulted in significant disruption to financial and commodity markets. The Group complies with all sanctions applicable to its business activities in accordance with adopted compliance policies.

The Board of Managers has reviewed the liquidity available for the period until 31 October 2023. Throughout the period under review the Group generates sufficient cash flow to maintain a position above minimum working capital and debt servicing requirements. The Board considered downside scenarios reflecting additional potential sanctions to ensure proactive measures would be executed.

The Group continuously monitors its financial position to ensure adequate liquidity headroom is in place to support its business needs and to ensure compliance with loan covenants or to obtain waivers where appropriate. As of 31 December 2021, the Group complied with applicable covenants.

In March and April 2022, the Group has renegotiated and amended applicable terms of certain financing arrangements, as well as terminated certain transactions and other business activities with Sberbank of Russia and VTB bank (PJSC). The Group has also terminated business activities with certain counterparties in view of, among other things, operational and other concerns in the context of the sanctions in relation to certain Russian entities and individuals.

In June 2021, Standard & Poor's affirmed B- rating of the Group but improved the outlook to positive from stable thanks to surging commodity prices and stable output. In June 2021, Moody's upgraded the rating to B1 from B2, and improved the outlook to stable from negative, to reflect the recovery in commodity prices while continuing growth of cobalt and copper production in the Group's Metalkol RTR processing facility.

The Group appreciates the dependence of liquidity on commodity prices in its key markets, the exposure to foreign exchange volatility, and ability to raise additional funding when required. To ensure adequate liquidity is available to meet contractual obligations, the Group ensures continuing focus on operational efficiency, working capital improvements, and allocation and spending of capital expenditures budget.

The Managers therefore consider that the Group can access adequate resources to continue its business operations for the foreseeable future and that the preparation of these Consolidated financial statements under the going concern basis is appropriate.

Changes in accounting policy and new standards

The Consolidated financial statements have been drawn up on the basis of accounting policies consistent with those applied in the Consolidated financial statements for the year ended 31 December 2020 except for changes in classification of certain costs recognised in the consolidated income statement. Adoption of amendments to standards effective from 1 January 2021 did not have a significant impact on the Group. The Group has not early adopted any standard, interpretation or amendment that has been issued, but is not yet effective. The Group is evaluating potential impact arising from new standards, amendments to standards, interpretations and improvements that have been issued, but are not yet effective.

Comparative information

The Group has improved classification of costs to better reflect the function of costs and be consistent with mining industry practice. Comparative information was restated.

			Year ended 31
	Year ended 31		December 2020
US\$ million	December 2020	Reclassification	(restated)
Cost of sales	(3,111)	(4)	(3,115)
Distribution costs	(215)	(5)	(220)
General and administrative expenses	(651)	82	(569)
Research, business development and exploration			
costs	(10)	(68)	(78)
Other operating expense	(775)	(5)	(780)

Basis of consolidation

The Consolidated financial statements of the Group include the consolidation of the financial statements of the Company and its subsidiaries drawn up to 31 December 2021. Subsidiaries are those entities, over which the Company has control. The Company controls an entity when the Company is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries are consolidated from the date on which control is transferred to the Company (acquisition date) and are deconsolidated from the date that control ceases.

The financial statements of subsidiaries are prepared for the same reporting year as the Company, using consistent accounting policies, and intercompany transactions, balances and unrealised gains and losses on transactions between subsidiaries are eliminated.

Non-controlling interest is a portion of net results and of the equity in a subsidiary not attributable, directly or indirectly, to the Company.

The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of acquiree's identifiable net assets.

Functional and presentation currency

All amounts in the Consolidated financial statements are presented in millions of US dollars, unless otherwise stated.

The functional currency for major entities in the Group is determined as the currency of the primary economic environment in which the entities operate. The following additional factors are considered in determining the functional currency of a foreign operation:

- whether the activities of the foreign operation are carried out as an extension of the reporting entity, rather than being carried out with a significant degree of autonomy;
- whether transactions with the reporting entity are a high or a low proportion of the foreign operation's activities;
- whether cash flows from the activities of the foreign operation directly affect the cash flows of the reporting entity and are readily available for remittance to it;
- whether cash flows from the activities of the foreign operation are sufficient to service existing and normally expected debt obligations without funds being made available by the reporting entity.

The functional currency of the operating entities in the Republic of Kazakhstan is the Kazakhstani tenge (KZT).

For the Sales and Marketing entities and significant African operations, the functional currency is the US dollar (US\$). The functional currency of the Company is the US\$. The exchange rates for significant operating entities are set out below.

	31 December		Average	
	2021	2020	2021	2020
Kazakhstani tenge (KZT)	431.80	420.91	425.94	412.95
Brazilian real (BRL)	5.58	5.20	5.65	5.16
South African rand (ZAR)	15.90	14.69	15.86	14.90
Congolese franc (CDF)	1,980.71	1,950.97	1,974.57	1,852.12

Foreign currency translation

Transactions in currencies other than the functional currency are translated to the functional currency at the rate of exchange ruling at the date of the transaction, unless hedge accounting applies in which case the contract rate is used. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate of exchange ruling at the balance sheet date.

Exchange gains and losses on settlement of foreign currency transactions and the translation of monetary assets and liabilities are taken to the Consolidated income statement, except when recognised in other comprehensive income, depending on whether intra group monetary assets and liabilities are regarded as a part of a net investment in a foreign operation where a settlement is neither planned nor likely to occur in a foreseeable future.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

All intra Group monetary assets and liabilities within Kazakhstani operations have been concluded not to form the part of an investment in a foreign operation. Accordingly, all the related foreign exchange gains and losses have been recognised in the Consolidated income statement.

Translation from functional to presentation currency

The results and financial position of all Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities are translated at the closing rate at the date of the Consolidated balance sheet:
- income and expenses for each income statement are translated at average monthly exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions);
- all resulting exchange differences are recognised as a separate component of equity; and
- goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as
 assets and liabilities of the foreign entity and translated at the closing rate at the date of the
 Consolidated balance sheet.

Revenue recognition

A significant portion of production is sold under contracts of sale of goods. Revenue from contracts with customers is recognised when control of the goods (generally, upon delivery) or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

Revenues are shown net of VAT and discounts. Certain of the commodities delivered to customers are provisionally priced at the date revenue is recognised. The prices are generally finalised within 3 months. Such adjustments to revenue are dealt with under IFRS 9 'Financial Instruments' rather than IFRS 15 'Revenue from Contracts with Customers' and therefore the IFRS 15 'Revenue from Contracts with Customers' rules on variable consideration do not apply. Such adjustments therefore represent revenue from sources other than contracts with customers.

Employee benefits

Defined benefit plans

The Group provides long-term employee benefits to employees before, on and after retirement, in accordance with labour union agreements in Kazakhstan and the DRC. The agreements typically provide for one-off retirement payments, financial aid for employees' disability, significant anniversaries and funeral aid. The entitlement to some benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. Such benefits are valued consistent with an unfunded defined benefit plan in accordance with IAS 19 'Employee Benefits'.

The future benefits that employees have earned in return for their service in the current and prior periods is discounted to determine the present value. Since Kazakhstan and the DRC do not have an extensive market of high quality corporate bonds, the market yields on government bonds with a maturity closest to average duration of actuarial liabilities are used as a basis for discount rates.

The calculation is performed annually internally or by a qualified, independent actuary depending on the complexity of computations.

The expected costs of the benefits associated with one-off retirement payments are accrued over the period of employment using the same accounting methodology as used for defined benefit post-employment plans. This means that the difference between the fair value of the plan assets (if any) and the present value of the defined benefit obligations is recognised as an asset or liability on the Consolidated balance sheet.

Actuarial gains and losses related to remeasurement of defined benefit pension plan obligations shall be recorded within other comprehensive income. Remeasurement of other long-term employee benefits are recognised in profit and loss.

For this purpose, actuarial gains and losses comprise both the effects of changes in actuarial assumptions and experience adjustments arising because of differences between the previous actuarial assumptions and what has actually occurred.

Other movements in the net surplus or deficit are recognised in the Consolidated income statement, including current service cost, any past service cost and the effect of any curtailments or settlements. Benefit costs are split between (i) the cost of benefits accrued in the current period (service cost) and benefit changes (past-service cost, settlements and curtailments); and (ii) finance expense or income. This analysis is presented in the Consolidated income statement or in the notes to the Consolidated financial statements.

Defined contribution plans

The Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. Contributions to defined contribution plans are recognised in the Consolidated income statement as an employee benefit expense in the period in which they are due.

Payroll expense and related contributions

Wages, salaries and social insurance funds, paid annual leave and sick leave, bonuses and non-monetary benefits are accrued in the period in which the associated services are rendered by the employees of the Group.

On behalf of its employees, the Group pays those statutory pension and post-employment benefit amounts prescribed by the legal requirements of the countries in which it operates. These payments are expensed as incurred unless capitalised.

Finance income and cost

Finance income comprises interest income on funds invested, gain on modification of borrowings and unwinding of loss on origination of loans.

Finance costs comprise interest expense on borrowings, expenses from the unwinding of discount on asset retirement obligations, expenses from the unwinding of discount on financial instruments, expenses from the unwinding of discount on employee benefits obligations, amortisation of arrangement fees on credit facilities, accelerated unwinding of debt issue costs/discount.

Finance income and costs include foreign exchange gains and losses that relate mainly to loans receivable, borrowings, and term deposits (more than three months).

Interest income and expenses are recognised on a time proportion basis, using the effective interest method. All interest and other costs incurred in connection with borrowings are expensed as incurred as part of finance costs unless incurred on borrowings to finance the acquisition of a qualifying asset.

Borrowing costs to finance the acquisition of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use. All borrowings are classified between specific borrowings and general borrowings for the purpose of capitalisation.

Borrowing costs which relate to borrowings made specifically to fund the acquisition of a specific qualifying asset are fully capitalised during the period when this specific qualifying asset is being constructed. Borrowings which do not qualify as specific are defined as general borrowings.

For general borrowings the capitalisation rate is used to determine the amount of borrowing costs eligible for capitalisation.

Income tax

The income tax expense for the period comprises current and deferred tax. Current tax expense is the amount of tax estimated to be payable or recoverable in respect of the taxable income or loss for a period, as well as adjustments to estimates in respect of previous periods. It is calculated on the basis of the tax laws and rates enacted or substantively enacted at the balance sheet date.

Deferred tax represents the amount of income taxes payable or recoverable in future periods in respect of temporary differences, unused tax losses and unused tax credits. The deferred tax is recognised in respect of temporary differences between the tax bases of assets and liabilities and their carrying amounts in the Consolidated financial statements, subject to the exceptions below.

Deferred tax is not accounted for if it arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognised for all deductible temporary differences, carry forward of unused tax credits and unused tax losses to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences, carry forward of unused tax credits and unused tax losses can be utilised.

Deferred tax assets are reviewed at each balance sheet date and are reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax assets to be utilised.

Deferred tax is provided on temporary differences associated with investments in subsidiaries, interests in joint ventures, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is determined using tax rates and laws that have been enacted or substantively enacted at the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the recognised amounts and the deferred tax assets and liabilities are intended to be settled either simultaneously or on a net basis.

Exploration and evaluation

Exploration for and evaluation of mineral resources include the search for mineral resources after the Group company has obtained legal rights to explore in a specific area, as well as the determination of the technical feasibility and commercial viability of extracting mineral resources.

Exploration and evaluation expenditures related to an area of interest are written off as incurred until management concludes that it is probable that future costs will be recovered through successful development and exploitation of the area of interest, or alternatively through its sale, from which point they are carried forward as an asset in the Consolidated balance sheet and are included within the assets under construction component of property, plant and equipment at cost less impairment charges.

Capitalised costs include costs directly related to exploration and evaluation activities in the relevant area of interest.

General and administrative costs are allocated to an exploration or evaluation asset only to the extent that those costs can be related directly to operational activities in the relevant area of interest. All capitalised exploration and evaluation expenditure is assessed for impairment if facts and circumstances indicate that impairment may exist.

For the purpose of assessing impairment, the exploration and evaluation assets subject to testing are grouped with relevant existing cash-generating units of operating mines that are located in the same geographical region. Where the assets are not associated with a specific cash-generating unit, the recoverable amount is assessed for the specific exploration area. Any impairment loss is recognised as an expense in accordance with the policy on impairment of non-financial assets.

Identifiable exploration and evaluation assets acquired as part of a business combination are recognised as assets at their fair value at the date of acquisition.

Property, plant and equipment

Property, plant and equipment is carried at cost less accumulated depreciation and any accumulated impairment loss.

Cost includes the original purchase price of the asset, costs attributable to bringing the asset to its working condition for its intended use and estimated future cost of closure and restoration of the asset.

Depreciation is recorded over the useful life of the asset, or over the expected remaining life of the mine if shorter, as follows:

- buildings (including mining premises): 10 to 60 years on a straight-line basis;
- mining assets (including mineral rights): on a units of production basis;
- plant and equipment: 5 to 30 years on a straight-line basis;

- motor vehicles: 5 to 30 years on a straight-line basis; and
- land: not depreciated.

The residual value of an asset is nil if the Group expects to use the asset until the end of its physical life. Estimates of residual values and useful lives are reassessed annually, and any change in estimate is taken into account in the determination of future depreciation charges.

The individual significant parts of an item of property, plant and equipment (components), whose useful lives are different from the useful life of the asset as a whole, are depreciated individually, applying depreciation rates reflecting their anticipated useful lives. The cost of replacing major parts or components of property, plant and equipment items is capitalised and the replaced part is retired.

Subsequent costs are included in an asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repair and maintenance costs are charged to the Consolidated income statement in the period in which they are incurred.

Specialised spare parts and servicing equipment with a significant initial value and a useful life of more than one year are recognised as items of property, plant and equipment. Other spare parts and servicing-related equipment are recognised as inventories and accounted for in the Consolidated income statement on utilisation.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of the assets disposed of and are recognised in the Consolidated income statement.

Property, plant and equipment is tested for impairment if facts and circumstances indicate that impairment may exist, in accordance with the impairment policy below.

i) Mining assets

Once a project has been established as commercially viable, capitalised expenditures are transferred from 'exploration and evaluation' to 'mining assets'. In addition, mining assets include mineral rights, expenditure incurred to establish or expand production capacity, costs to conduct mining construction and mining capital works, as well as costs arising from mining preparation works during the development or mine reconstruction phase.

Development expenditure incurred by or on behalf of the Group is accumulated separately for each area of interest in which economically recoverable resources have been identified.

Such expenditure comprises costs directly attributable to the construction of a mine and the related infrastructure, including the cost of materials, direct labour and an appropriate proportion of production overheads.

When further development expenditure is incurred in respect of a mining asset after the commencement of production, such expenditure is carried forward as part of the mining asset when it is probable that additional future economic benefits associated with the expenditure will flow to the Group. Otherwise such expenditure is recognised as a cost of production.

Once a project has been fully commissioned, depreciation is charged using the units of production method, based on proved and probable reserves, with separate calculations being made for each area of interest. The units of production basis results in a depreciation charge proportional to the depletion of proved and probable reserves.

Mining assets are included within the category 'buildings and mining assets' of property, plant and equipment.

ii) Assets under construction

Assets under construction are capitalised as a separate component of property, plant and equipment. Self-constructed assets include the cost of materials, direct labour and an appropriate proportion of allocated overheads. On completion, the cost of construction is transferred to the appropriate asset category. Assets under construction are not depreciated. Depreciation commences on the date when the assets are available for intended use.

iii) Stripping costs

Stripping costs comprise the removal of overburden and other waste products from mines. Stripping costs incurred in the development of mines and open pits before the production commences are capitalised as part of the cost of constructing the mines and open pits, and depreciated using the unit of production method over the lives of the mines or open pits.

Stripping costs incurred during the production phase of operations are treated as a production cost that forms part of the cost of inventory.

Impairment

The carrying amounts of property, plant and equipment and all other non-financial assets are reviewed for impairment if facts and circumstances indicate that impairment may exist.

An intangible asset that has an indefinite useful life, such as goodwill, is tested for impairment annually and whenever there is an indication that the asset may be impaired.

The Group tests an asset or cash-generating unit ('CGU') for impairment by comparing its recoverable amount with its carrying amount. When an impairment review is undertaken, the recoverable amount is assessed by reference to the higher of 'value in use' and 'fair value less costs of disposal'.

A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

Value in use is the net present value of expected future cash flows of the relevant CGU in its current condition. Value in use is determined by applying assumptions specific to the Group's continued use of the asset or CGU and does not take into account future developments.

The estimates used for impairment reviews to determine value in use are based on detailed mine plans and operating budgets.

Future cash flows are based on management's best estimates of:

- quantities of the reserves and mineral resources for which there is a high degree of confidence of economic extraction;
- future production levels;
- future commodity prices; and

 future cash costs of production, capital expenditure related to construction in progress and development projects that are not yet completed, close down, restoration and environmental clean up.

Fair value less costs of disposal is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date less incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs and income tax expense.

Where there is no binding sale agreement or active market, fair value less costs of disposal is based on the best information available to reflect the amount that the Group could receive for the CGU in an arm's length transaction.

If the carrying amount of the asset exceeds its recoverable amount, the asset is impaired and an impairment loss is charged to the Consolidated income statement so as to reduce the carrying amount in the Consolidated balance sheet to its recoverable amount. For assets excluding goodwill, a previously recognised impairment loss is reversed if the recoverable amount increases as a result of a reversal of the conditions that originally resulted in the impairment.

This reversal is recognised in the Consolidated income statement and is limited to the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised in prior years. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Business combinations and goodwill

The acquisition method of accounting is used to account for business combinations. The Group elects on a transaction-by-transaction basis to measure non-controlling interests at the value of their proportion of identifiable assets and liabilities or at full fair value. The excess of the consideration transferred, amount of any non-controlling interest in the acquired entity, and acquisition-date fair value of any previous equity interest in the acquired entity over the fair value of the net identifiable assets, liabilities and contingent liabilities acquired, represents goodwill.

'Bargain purchase gain' which is the excess of the net identifiable amounts of the assets acquired and liabilities assumed over the aggregate of the acquisition-date fair value of the consideration transferred and the amount recognised for the non-controlling interest, is recognised immediately in the Consolidated income statement.

The consideration transferred in a business combination is measured at fair value of the assets transferred, the liabilities incurred to the former owners of an acquiree and the equity interests issued by the Group, with contingent consideration recognised at fair value as part of that consideration transferred. The obligation to pay contingent consideration is classified as either liability or equity on the basis of the terms and conditions of the contingent consideration.

In a business combination achieved in stages, previously held equity interest in the acquiree is remeasured at its acquisition date fair value and the resulting gain or loss, if any, is recognised in the Consolidated income statement.

Goodwill acquired through business combinations has been allocated to those CGUs or groups of CGUs that are expected to benefit from the business combination. These CGUs or groups of CGUs represent the lowest level within the Group at which goodwill is monitored for internal management purposes and these CGUs or groups of CGUs are not larger than the Group's operating divisions, which are its product groups.

Goodwill is tested for impairment annually in accordance with the impairment policy described above. Goodwill is initially measured as the excess of the aggregate of the consideration transferred and the fair value of non-controlling interest over the net identifiable assets acquired and liabilities assumed. Subsequently, goodwill is measured at cost less accumulated impairment losses.

Intangible assets

Intangible assets, which are acquired by the Group and have finite useful lives, are stated at cost less accumulated amortisation and impairment losses. Intangible assets acquired in a business combination are capitalised at fair value when the fair value can be measured reliably on initial recognition. Intangible assets are tested for impairment if facts and circumstances indicate that impairment may exist, in accordance with the impairment policy described above.

Intangible assets are amortised using the straight-line method over their useful lives not exceeding 5 years.

Financial assets

Classification

The Group classifies its financial assets into the following measurement categories: financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income, and financial assets at amortised cost. The classification depends on the Group's business model for managing financial assets and the contractual terms of the cash flows. Management determines the classification of its financial assets at initial recognition.

Non-derivative financial assets

The Group classifies its non-derivative financial assets as at amortised cost only if both of the following criteria are met: (a) the asset is held within a business model with the objective of collecting the contractual cash flows; and (b) the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

Financial assets at amortised cost include loans receivable, trade receivables (other than provisionally priced trade receivables), and other financial assets that are held with the objective of collecting contractual cash flows. After initial measurement at fair value, the financial assets are measured at amortised cost using the effective interest rate ('EIR') method, less impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR.

The EIR amortisation is included in finance income in the Consolidated income statement. The losses arising from impairment are recognised in profit or loss.

Derivative financial assets

Derivative instruments (including instruments with embedded derivatives such as provisionally priced receivables) are measured at fair value through profit or loss, and are held for trading or designated as cash flow hedges relating to highly probable forecast transactions.

The effective portion of a change in fair value of a derivative contract designated as a cash flow hedge is recognised in other comprehensive income until the hedged transaction occurs; any ineffective portion is recognised in the Consolidated income statement.

The amount in accumulated other comprehensive income is reclassified to income when the hedged transaction is recognised in the Consolidated income statement.

Cost of hedging deferred in a separate reserve in equity is transferred to the Consolidated income statement only when the hedged transactions occurs.

Gains and losses on derivative contracts not qualifying or not designated as hedges are recognised in the Consolidated income statement.

Derecognition

The Group derecognises financial assets when: (i) the assets are redeemed or the rights to cash flows from the assets have otherwise expired; (ii) the Group has transferred the rights to the cash flows from the financial assets and transferred substantially all the risks and rewards of ownership of the assets; or (iii) the Group has neither transferred nor retained substantially all risks and rewards of ownership but has not retained control. Control is retained if the counterparty does not have the practical ability to sell the asset in its entirety to an unrelated third party without needing to impose additional restrictions on the sale.

Impairment

The Group assesses the expected credit losses associated with its financial assets carried at amortised cost. The impairment provisions for financial assets are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation. This judgement is based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

Inventories

Inventories are valued at the lower of cost and net realisable value. Cost of inventory is determined on a weighted average basis.

Cost includes all costs incurred in the normal course of business in bringing each product to its present location and condition. Cost for raw materials, consumable stores and other inventories is purchase price or extraction cost.

Cost for work in progress and finished goods is the cost of production, including the appropriate proportion of depreciation and overheads based on normal operating capacity, but excluding borrowing costs. Net realisable value is based on estimated selling price in the ordinary course of business less any further costs expected to be incurred to completion and disposal.

Trade and other receivables

Trade and other receivables (other than provisionally priced receivables which are carried at fair value through profit or loss) are recognised initially at fair value and subsequently carried at amortised cost using the effective interest method less provision for impairment.

The Group applies the simplified approach to providing for expected credit losses, which permits the use of the lifetime expected loss provision for all trade receivables. In calculating the expected credit loss rates for trade receivables, the Group considers historical loss rates for each category of counterparties, and adjusts for forward looking macroeconomic data. The accounts receivables have been divided in aging buckets and based on a historical analysis on defaults and recovery rates, a percentage for expected credit losses has been determined. The movement in the provision for impairment from the previous reporting period is recognised in the Consolidated income statement.

Subsequent recoveries of the amounts previously written off are credited against general and administrative expenses in the Consolidated income statement.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

Balances restricted from being exchanged or used to settle a liability for at least 12 months after the balance sheet date are included in other financial non-current assets, while balances restricted for more than three months but less than 12 months after the balance sheet date are included in trade and other receivables. Restricted balances are excluded from cash and cash equivalents in the Consolidated cash flow statement.

Financial liabilities

Classification

The Group classifies its financial liabilities into the following measurement categories: financial liabilities at fair value through profit or loss and other financial liabilities measured at amortised cost. Management determines the classification of its financial liabilities at initial recognition.

Non-derivative financial liabilities

The Group measures non-derivative financial liabilities at amortised cost. The non-derivative financial liabilities (including borrowings) are initially recorded at fair value less any directly attributable transaction costs. Borrowings are subsequently measured at amortised cost using the effective interest method. Amortised cost is calculated by taking into account any issue costs and any discount or premium on settlement.

Any difference between the proceeds net of transaction costs and the redemption value is recognised in the Consolidated income statement over the period of the borrowings using the effective interest method.

Where a loan is obtained at interest rates different from market rates, the loan is remeasured at origination to its fair value, which is calculated as future interest payments and principal repayments discounted at market interest rates for similar loans. The difference between the fair value of the loan at origination and its cost (fair value of the contribution to the borrower, net of transaction costs) represents an origination gain or loss.

The origination gain or loss is recorded in the Consolidated income statement within finance income/cost unless it qualifies for recognition as an asset, liability or a charge to equity in accordance with the substance of the arrangement. Subsequently, the carrying amount of the borrowing is adjusted for amortisation of the origination gain or loss and the amortisation is recorded as finance income/cost using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

Derivative financial liabilities

Derivative instruments are measured at fair value through profit or loss, and are held for trading or designated as cash flow hedges relating to highly probable forecast transactions.

The effective portion of a change in fair value of a derivative contract designated as a cash flow hedge is recognised in other comprehensive income until the hedged transaction occurs; any ineffective portion is recognised in the Consolidated income statement.

The amount in accumulated other comprehensive income is reclassified to income when the hedged transaction is recognised in the Consolidated income statement. Cost of hedging deferred in a separate reserve in equity is transferred to the Consolidated income statement only when the hedged transactions occurs.

Derivatives embedded within contracts that are not already required to be recognised at fair value, and that are not closely related to the host contract in terms of economic characteristics and risks, are separated from their host contract and recognised at fair value; associated gains and losses are recognised in the Consolidated income statement.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged, cancelled or expired.

Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial modification of the terms of an existing financial liability, this transaction is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. A gain or loss from extinguishment of the original financial liability is recognised in the Consolidated income statement. When an existing financial liability is replaced by another one from the same lender on not substantially different terms, or the terms of an existing liability are not substantially modified, such an exchange or modification is not treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the Consolidated income statement.

Trade and other payables

Trade and other payables are accrued when the counterparty performs its obligations under the contract and are carried at amortised cost using the effective interest method.

Provisions for liabilities and charges

Provisions for liabilities and charges are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as a part of finance cost.

Asset retirement obligations and other environmental provisions

An obligation to incur asset retirement costs occurs when environmental disturbance is caused by exploration, evaluation, development or ongoing production. Costs are estimated on the basis of a formal closure plan and are subject to a regular review. The estimates are based on Management's interpretation of compliance with current environmental legislation in the country of operation.

Asset retirement costs arising from the installation of a plant and other site preparation work, discounted to their net present value, are provided when the obligation to incur such costs arises and are capitalised into the cost of the related asset. These costs are charged to the Consolidated income statement through depreciation of the asset and unwinding of the discount on the provision.

Depreciation is included in operating costs while the unwinding of the discount is included as a finance cost.

Changes in the measurement of a liability relating to the decommissioning or site rehabilitation of a plant and other site preparation work are added to, or deducted from, the cost of the related asset.

Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax from the proceeds.

Dividends are recognised as a liability and deducted from equity at the balance sheet date only if they have been approved before or on the balance sheet date.

Dividends are disclosed when they have been proposed before the balance sheet date or when declared after the balance sheet date, but before the Consolidated financial statements are authorised for issue.

2. Critical accounting estimates and judgements in applying principal accounting policies

The Group makes judgements in the process of applying accounting policies. The Group also makes estimates and assumptions concerning the future. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates may differ from the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year and areas of judgements that have a significant effect on the amounts recognised in the Consolidated financial statements are discussed below.

Ore reserve estimates

Ore reserve estimates are calculated based on Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of December 2012 (the 'JORC code') which requires the use of reasonable assumptions, including:

- future production estimates, including proved and probable reserves, resource estimates and committed expansions;
- expected future commodity prices based on current market prices, forward prices and the Group's assessment of the long-term average prices; and
- future cash costs of production, capital expenditure and rehabilitation obligations.

The Group's ore reserves are based on its best estimate of product that can be economically and legally extracted from the relevant mining properties.

Estimates are developed after taking into account a range of factors including quantities, ore grades, production techniques and recovery rates, forecast commodity prices and production costs.

Estimates are normally supported by drilling samples and geological studies by independent mining engineering consultants. Significant judgement is required to generate an estimate based on the geological data available.

Ore reserve estimates may change from period to period. This may impact the Group's financial results. Changes in these estimates may impact depreciation charges, impairment charges on individual assets and CGUs, and asset retirement obligation provisions.

Life of mines

Contracts for subsurface use expire between 2022 and 2050. The Group expects that the subsurface use contracts will be extended at nominal cost until the end of the lives of the related mines. Any changes in these assumptions may impact depreciation charges, impairment charges on individual assets and CGUs and asset retirement obligations, as these items have been measured using the assumption that the subsurface use contracts will be extended until the end of the mine life.

Going concern

Note 1 provides details of going concern assessment for the Group.

Asset retirement obligations

Provision is made for asset retirement obligations when the related environmental disturbance takes place. Decommissioning and rehabilitation expenditure is largely expected to take place at the end of the respective mine lives.

Provisions are measured using the net present value of the expected costs as outlined in notes 1 and 24 to the Consolidated financial statements.

The provision represents Management's best estimate of the costs that will be incurred based on legislative and regulatory requirements. Significant judgement is required as many of these costs will not crystallise until the end of the life of the mine.

Estimates are reviewed annually and based on Management's interpretation of compliance with current environmental legislation in the country of operation. Significant changes in environmental legislation, restoration techniques and estimates of contamination will result in changes to provisions from period to period.

The long-term inflation rates currently applied in the calculations are disclosed in note 24 being the estimates of the rate of inflation over the mine lives. The discount rates currently applied in the calculation are disclosed in note 24 being the estimates of the risk-free, pre-tax interest rates for long-term government securities.

Impairment of assets

The Group considers, at least annually, the recoverability of all assets if there have been any indications of impairment.

Non-current assets

Note 1 outlines the Group's policy for impairment of long-term non-financial assets and goodwill. Significant judgement is used to determine the present value of cash flows used (including the estimated quantum and timing) in the Group's impairment models.

Judgement is also employed in the assessment of the value of an asset or a group of assets prior to the receipt of a confirmed offer as well as for the estimation of future cash flows required to determine value in use.

The Group is currently capital constrained which limits its ability to develop its assets in the most effective manner and maximise their value.

As a result, where impairment indicators have been identified, 2021 impairment reviews have been performed on the basis of fair value less costs of disposal taking into account of how a less capital constrained market participant would develop the assets held by the Group.

The valuations have been carried out using a combination of techniques (classified as level 3 under the fair value hierarchy).

The cash flow projections utilised in impairment models were based on the Group's long-term strategic plans. The long-term US inflation rate has been used as the assumed growth rate, which was applied for the years where no direct input was available.

The price assumptions were based on internal management five year forecasts for commodity prices, which were then benchmarked with external sources of information to ensure that they were within the range of available analyst forecasts, as well as on forecasts by independent experts.

Key assumptions which formed the basis of forecasting future cash flows in the impairment models are:

- commodity prices, which are based on internal forecasts by the management of the Group's sales
 and marketing business as well as on forecasts by independent experts. The main sources for
 inputs into internal forecasts are Bloomberg, CRU, Wood Mackenzie, Platts and Metal Bulletin.
 These internal forecasts are comparable to the forecasts of industry market researchers;
- long-term costs are set in line with current operational performance, as adjusted for future inflation rates in countries of operation and, where applicable, the expected movements in key input costs;
- successful extraction, processing and sale of the reserves and resources in accordance with the quantities described in the report on Ore Reserves and Mineral Resources and companies' longterm mine plans;
- compliance with regulations in the area of licencing to ensure maintenance and retention of tenure
 and permits. The legal system and dispute resolution mechanisms in some countries may be
 uncertain so that we may be unable to enforce our understanding of our title, permits or other
 rights. Changes to the laws or their more stringent enforcement or restrictive interpretation could
 cause additional expenditure to be incurred or impose suspensions of licenses;
- a long-term US inflation rate average of 2.0% (2020: 2.0%) per annum and a long-term Kazakhstani inflation rate average of 5.5% (2020: 5.9%), in line with external forecasts;
- in determining the discount rate to be applied to the future cash flows, the Group used the posttax Weighted Average Cost of Capital ('WACC'), adjusted for the country risk premium for each CGU accordingly. The rates used were in the range of 10.3% - 11.5% (2020: 9.3% - 11.8%); and
- KZT/US\$ long- term exchange rate used is KZT444/US\$ (2020: KZT448/US\$).

The impairment test for SSGPO CGU was particularly sensitive to changes in commodity prices and discount rate. At 31 December 2021, excess of recoverable amount over carrying value was approximately US\$29 million. Whilst the Managers remain confident in the assumptions used in the recoverable amount computation, decrease in iron ore market prices by approximately 0.3% or increase of discount rate by approximately 0.2%, taken in isolation, would cause the recoverable amount to equal the carrying value.

The impairment test for Aluminium of Kazakhstan CGU was particularly sensitive to changes in commodity prices and discount rate. At 31 December 2021, excess of recoverable amount over carrying value was approximately US\$nil million. Whilst the Managers remain confident in the assumptions used in the recoverable amount computation, negative change in any of the key assumptions, taken in isolation, would cause an impairment charge.

As a result of the annual impairment testing, Management do not believe that the carrying value of long-term non-financial assets was impaired at 31 December 2021, except for the CGUs where impairments have been identified which are further discussed in note 9.

Contingent liabilities

The Group exercises judgement in measuring and recognising the exposure to contingent liabilities related to pending litigation or other outstanding claims subject to negotiated settlement, mediation, arbitration or government regulation, as well as other contingent liabilities (refer to note 28).

Judgement is necessary in assessing the likelihood that a pending claim will succeed, or a liability will arise, and to quantify the possible range of the financial settlement. Because of the inherent uncertainty in this evaluation process, actual losses may be different from the originally estimated provision.

Taxation

The Group is subject to the taxation requirements in the jurisdictions in which the Group operates. Significant judgement is required in determining the position for income taxes across these jurisdictions owing to the complexity of tax laws, frequent changes in tax laws and regulations, and the manner of their implementation. Judgement must also be exercised whilst interpreting the interaction between different taxes and interaction between tax rules of different jurisdictions.

Tax provisions are recognised in accordance with tax laws enacted or substantively enacted by the tax authorities in the jurisdictions in which the Group operates, and in accordance with requirements of the applicable accounting standards.

Note 14 contains information on current period tax charges, prior period adjustments, current and deferred tax assets and liabilities including, where appropriate, provisions against uncertain tax positions.

Functional currency

Management exercised judgment in determining the functional currency of the Company (the ultimate holding company) and intermediate holding companies of the Group. The selection of the functional currency has an effect for the recognition or non-recognition of foreign exchange gains and losses on external and intra-group borrowings.

Based on the analysis performed, Management concluded that the US dollar ('US\$') is the functional currency of the Company and the intermediate holding companies of the Group.

The Group developed an accounting policy for the determination of the functional currency of the ultimate holding company based on the company's own operations.

The Company does not perform operational activities, thus the analysis of the primary indicators is not applicable.

The analysis of the secondary indicators supported the conclusion that the US\$ is the functional currency of the Company as its share capital, intra-group liabilities, and investments are denominated predominantly in US\$ and the external financing provided to its non-autonomous operations is denominated predominantly in US\$.

The functional currency of the intermediate holding companies of the Group was assessed based on the fact that none of them are autonomous, therefore Management has concluded that their functional currency is the same as the functional currency of the ultimate parent company, the US\$.

Long-term incentive plan

In 2017 the Company entered into a remuneration plan with some key management personnel. As part of this remuneration plan, the Company granted long-term incentives that are conditional to some vesting conditions including the occurrence of a liquidity event (including the sale or partial sale of the Group), the payment of dividends above a limit or the achievement of other financial targets by the Group. These incentives had, initially to be achieved before the end of 2019 with an option to extend until the end of 2021 but were subsequently extended to the end of 2027 (this extension took place on 20 August 2021, with a new agreed due date for the end of 2027 and an option to extend to the end of 2029). Amounts which have crystallised under these arrangements are set out at note 4.

If further of these incentives were to crystallise then amounts payable by the Company under these schemes may represent a material amount for the Company and the Group and will depend upon the amount of any proceeds arising from a sale or partial sale or other liquidity event. Determination of the liability depends on several assumptions, such as (i) the probability of occurrence of a triggering event and (ii) estimation of the payout. Management best estimation at 31 December 2021 is that none of the triggering events will occur within the time frames, as defined in the employment agreements, and therefore no liability or expense has been recognised in the Consolidated financial statements for this plan (except as detailed at note 4).

3. Divisional information

Management has determined the operating divisions based on the reports reviewed and used by the Board of Managers to make strategic decisions.

The divisional Underlying EBITDA includes items directly attributable to the operating division, as well as those that can be allocated on a reasonable basis.

The disclosure of divisional information is not required by IFRS and is presented to provide readers of the Consolidated financial statements with additional information.

3. Divisional information (continued)

The Group is organised on the basis of six (2020: six) operating divisions:

- Ferroalloys comprises extraction and sale of chrome ore, as well as production and sale of ferrochrome and other ferroalloys;
- Iron Ore comprises extraction of iron ore, production and sale of iron ore concentrate and pellets, and exploration and development of assets in Brazil;
- Alumina and Aluminium comprises extraction of bauxite, as well as production and sale of alumina and aluminium;
- Copper, Cobalt and Other Non-ferrous comprises extraction of cobalt and copper, production and sale of copper and cobalt products, and exploration and development of assets in Africa;
- Energy comprises extraction and sale of coal, as well as production and sale of semi-coke and electricity; and
- Logistics comprises provision of logistical services to Eurasian based Group operations as well
 as freight forwarding to third parties.

Internal charges between divisions have been reflected in the performance of each operating division. The Group has a number of activities that exist principally to support the metals operations, including power generation, coal mining and transportation. Inter-division transfers or transactions are performed under a cost-plus pricing structure. The revenue generated from third parties is measured in a manner consistent with that in the Consolidated income statement. The identified operating and reportable divisions of the Group are the same as those that applied to the Group's Annual Report and Accounts for the year ended 31 December 2020.

Year ended 31 December 2021 US\$ million	Ferroalloys Division	Iron Ore Division	Alumina and Aluminium Division	Copper, Cobalt and Other Non- ferrous Division	Energy Division	Logistics Division	Corporate	Intra Group Eliminations	Total
Revenue	2,502	2,071	973	2,637	318	26	3	-	8,530
Inter-division revenue	10	14	40	-	273	98	. 8	(443)	
Divisional revenue	2,512	2,085	1,013	2,637	591	124	11	(443)	8,530
Divisional operating profit/(loss)	1,250	1,099	352	1,074	68	41	(266)	-	3,618
Finance income									135
Finance cost									(640)
Profit before income tax	•		_						3,113
Income tax expense									(856)
Profit for the year									2,257
Depreciation and amortisation	(153)	(111)	(58)	(354)	(98)	(13)	(16)	-	(803)
Professional fees and other exceptional litigation costs	(2)	1	. (1)	_	_	_	(95)	-	(97)
Impairments	`-	(9)	(2)	27	(52)		` -	-	(36)
Costs related to COVID-19	. (2)	(2)	• -	(2)	(2)	-	(1)	-	(9)
Restructuring costs	-	-	-	(3)	-	-	-	-	(3)
Unrealised gain on derivatives	-	327	-	20	-	-	-	-	347
Net operating foreign exchange gain/(loss)	5	6	(1)	(10)	-	•	7	-	7
Gain from disposal of subsidiaries	-	-	_	4	-	-	•	-	4
Other	-	-	(2)	-	-	-	-	-	(2)
Underlying EBITDA (note 29)	1,402	887	416	1,392	220	54	(161)		4,210
Average number of employees	19,654	17,392	13,156	3,447	7,822	816	4,542		66,829

3. Divisional information (continued)

Year ended 31 December 2020 US\$ million	Ferroalloys Division	Iron Ore Division	Alumina and Aluminium Division	Copper, Cobalt and Other Non- ferrous Division	Energy Division	Logistics Division	Corporate	Intra Group Eliminations	Total
Revenue	1,617	1,241	720	1,494	253	31		_	5,356
Inter-division revenue	6	11_	36	_	257	90		(400)	
Divisional revenue	1,623	1,252	756	1,494	510	121	_	(400)	5,356
Divisional operating profit/(loss)	495	116	189	225	69	31	(245)		880
Finance income			-						355
Finance cost									(879)
Profit before income tax Income tax expense								-	356 (268)
Profit for the year									88
Depreciation and amortisation	(153)	(114)	(61)	(294)	(97)	(13)	(14)	_	(746)
Unrealised loss on derivatives Professional fees and other	-	(205)	-	(34)	-	-	-	-	(239)
exceptional litigation costs	(5)	-	_	_	-	-	(81)	_	(86)
Costs related to Covid-19 Net operating foreign exchange	(8)	(7)	(4)	(2)	(4)	-	(13)	_	(38)
(loss)/gain	(1)	15	7	(18)	(2)	_	(17)	_	(16)
Impairments		(3)	(1)	(5)	-	-	_	_	(9)
Restructuring costs	_	-	_	(6)	_	-	_	_	(6)
Loss on disposal of subsidiary	_	(2)	_	_	_	-	_	_	(2)
Other Underlying EBITDA	-	. (1)	-	-	-	-	-	-	(1)
(note 29)	662	433	248	584	172	44	(120)		2,023
Average number of employees	19,764	17,402	13,428	3,473	8,113	804	3,614		66,598

Revenue consists of sales of goods recognised at a point in time – 99% (2020: 98%). Revenue includes US\$442 million revenue from sources other than from contracts with customers (2020: US\$134 million charge).

4. Transactions and balances with related parties

Transactions incurred in the ordinary course of business with related parties in the years ended 31 December 2021 and 31 December 2020 were as follows:

US\$ million		Sales	Purchases	Net finance income
Class B Managers			- -	
2021	•	_	(85)	6
2020		1	(89)	6
Other			, ,	
2021		_	(1)	_
2020			(1)	

'Class B Managers' category is made of Class B Managers and all entities under their control. Purchases in 'Class B Managers' category include reimbursement of business travel costs to represent the Group and defence of reputation costs.

4. Transactions and balances with related parties (continued)

Outstanding balances with related parties at 31 December 2021 and 31 December 2020 were as follows:

US\$ million	Other financial assets	Trade and other receivables	Borrowings	Trade and other payables	Cash and cash equivalents
Class B Managers			·		
2021	32	4	(9)	(79)	819
2020	27	5	(4)	(20)	454
Other			` ,	` ,	
2021	_	_	(6)	(166)	_
2020	<u>-</u>	_	(5)	(46)	_

Tables above exclude transactions and balances with the DRC Government and the Republic of Kazakhstan Government. The details of transactions with the government bodies are presented below.

Class B Managers and all entities under their control are related parties of the Group as a result of Class B Managers' indirect interests in the ordinary shares of the Company. Class B Managers of the Company are Mr. Alexander Machkevitch, Mr. Patokh Chodiev and Mr. Shukhrat Ibragimov.

Transactions and balances with Government

The Government of the Republic of Kazakhstan and related entities are related parties of the Group as a result of the Government's 40% shareholding in the Company. The Group has a number of transactions with the Government of the Republic of Kazakhstan and related entities, including but not limited to:

- social investment and donations amounted to US\$10 million in 2021 (2020: US\$20 million);
- services received in relation to transportation of electricity and energy and in relation to supply
 and transportation of fuel and oil-associated gas, national railway services and a variety of other
 services that amounted to US\$223 million in 2021 (2020: US\$234 million);
- taxation and similar payments (including royalties and mineral extraction taxes) in accordance with the tax legislation of the Republic of Kazakhstan; and
- loan agreements with the Development Bank of Kazakhstan.

The DRC Government and its entity, La Générale des Carrières et des Mines ("Gecamines"), are related parties based on their participation set out below:

- the DRC Government holds 5% interest in Metalkol SA and Frontier SA;
- Gecamines holds 49% interest in Boss Mining SAS;
- Gecamines holds 25% interest in Swanmines SAS.

The Group had a number of transactions with the DRC Government and its entities, including, but not limited, services relating to the supply of energy, taxation and similar payments (such as royalties) in accordance with the DRC laws and regulations.

Key management compensation

Key management are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly.

4. Transactions and balances with related parties (continued)

Compensation for key management personnel (excluding the Managers of the Company and excluding long-term incentive plan disclosed in a corresponding section below) is set out in the table below:

	Years ended 31 December			
US\$ million	2021	2020		
Salary and other short-term benefits	53	54		
Long-term benefits	_	25		
Total	53	79		

Balances outstanding with key management arising from key management compensation and representing accrued but unpaid bonuses were US\$26 million as at 31 December 2021 (accrued but unpaid bonuses and amounts accrued under other long-term benefits as at 31 December 2020: US\$67 million). US\$22 million amount was paid in respect of other long-term benefits for the year ended 31 December 2021 (2020: US\$51 million).

Board of Managers compensation

Compensation payable to the Managers of the Company is for services performed for the Group. US\$0.4 million was paid to the Managers for the year ended 31 December 2021 (2020: none).

Long-term incentive plan

US\$15 million was accrued for the year ended 31 December 2021 under the long-term incentive remuneration plan (in respect of dividend targets met) and US\$88 million under the long-term incentive remuneration plan (in respect of Net debt to EBITDA target met) with certain key management personnel (2020: none). US\$11 million had been paid at 31 December 2021 (2020: none).

5. Cost of sales

	Years end	ded 31 December
US\$ million	2021	2020 (restated)
Materials and components used	(1,052)	(942)
Depreciation and amortisation	(729)	(674)
Staff costs	(624)	(542)
Mineral extraction tax, royalties and other taxes	(368)	(264)
Mining services	(303)	(213)
Power and energy	(200)	(168)
Repairs and maintenance	(173)	(122)
Insurance	(57)	(44)
Transportation costs	(19)	(25)
Restructuring costs	(2)	(1)
Changes in inventories	175	(3)
Other	(152)	(117)
Total cost of sales	(3,504)	(3,115)

6. Distribution costs

	Years end	ded 31 December
US\$ million	2021	2020 (restated)
Transportation costs	(153)	(123)
Taxes and duties	(64)	(42)
Agency and commission fees	(14)	(21)
Staff costs	(9)	(5)
Other	(41)	(29)
Total distribution costs	(281)	(220)

7. General and administrative expenses

·	Years end	Years ended 31 December		
US\$ million	2021	2020 (restated)		
Staff costs	(331)	(244)		
Professional and other services	(152)	(130)		
Sponsorship and donations	(72)	(56)		
Depreciation and amortisation	(31)	(35)		
Business travel	(29)	(26)		
Taxes and duties	(13)	(19)		
Allowance for receivables	(6)	2		
Restructuring costs	(2)	(3)		
Other	(75)	(58)		
Total general and administrative expenses	(711)	(569)		

Contributions to a number of different non-recurring individual social development infrastructure projects at the national level in Kazakhstan amounted to US\$37 million (2020: US\$41 million), and primarily related to healthcare, education, cultural and recreation projects.

8. Research, business development and exploration costs

•	Years ended 31 December		
US\$ million	2021	2020 (restated)	
Staff costs	(35)	(28)	
Professional and other services	(28)	(16)	
Exploration costs	(18)	(17)	
Other	(19)	(17)	
Total research, business development and exploration costs	(100)	(78)	

9. Impairments

JS\$ million	Years ended 31	31 December	
	2021	2020	
Eurasian Energy Corporation	(52)		
Comide/Swanmines	27	_	
Other	(11)	(9)	
Total impairments	(36)	(9)	

9. Impairments (continued)

Impairment of Eurasian Energy Corporation (Energy Division) results from changes in feasible business plans, and on-going pressure on costs, price forecasts, and capital expenditure. The CGUs were valued using DCF and have recoverable amounts of coal CGU US\$163 million and power CGU US\$382 million, respectively, which are their fair value less costs of disposal. US\$52 million impairment loss relates to the impairment of property, plant and equipment.

The reversal of impairment loss of Comide/Swanmines (Copper, Cobalt and Other Non-ferrous Division) results from improved price forecasts. The CGU was valued using in-situ value and has a recoverable amount of US\$378 million, which is its fair value less costs of disposal. US\$27 million impairment loss reversal relates to the property, plant and equipment.

10. Other operating income and expense

	Years end	ded 31 December
US\$ million	2021	2020 (restated)
Unrealised gain on derivatives	347	4
Foreign exchange gain	238	189
Realised gain on derivatives	38	27
Other	73	75
Total other operating income	696	295
Realised loss on derivatives	(582)	(179)
Foreign exchange loss	(231)	(205)
Depreciation and amortisation	`(41)	(34)
Staff costs	(16)	(13)
Unrealised loss on derivatives	` _	(243)
Other	(106)	(106)
Total other operating expense	(976)	(780)

Unrealised gain on derivatives resulted from decreased forecast iron ore market price. Realised loss on derivatives resulted from increased realised commodity market prices.

11. Employee benefit expense

·	Years ended 3	31 December
US\$ million	2021	2020
Wages and salaries	(923)	(770)
Compulsory social security costs	(63)	(55)
Contributions to defined contribution plans	· (11)	(3)
(Expense)/income related to employee benefit plans	(3)	2
Total employee benefit expense	(1,000)	(826)

Defined benefit obligations relate to lump sum payments upon retirement and other payments to pensioners. Other actuarial employee benefit obligations relate to non-pensioners and include lump sum payments for anniversaries, injuries and other financial aid.

12. Finance income

	Years ended 3	1 December
US\$ million	2021	2020
Foreign exchange gain	70	11
Gain on modification of borrowings	47	313
Interest income	9	7
Other	9	24
Total finance income	135	355

Gain on modification of borrowings resulted from revision of certain credit facility agreements (refer to note 23).

13. Finance cost

	Years ended 3	1 December
US\$ million	2021	2020
Interest expense on borrowings	(473)	(577)
Foreign exchange losses	(67)	(283)
Unwinding of discount on financial instruments	(60)	(22)
Loss on borrowings	(21)	`-
Amortisation of arrangement fees on credit facilities	(10)	(9)
Unwinding of discount on asset retirement obligations	(9)	(8)
Unwinding of discount on employee benefits obligations	(2)	(2)
Other	(9)	(6)
	(651)	(907)
Less: amounts capitalised on qualifying assets	11	28
Total finance cost	(640)	(879)

Loss on borrowings resulted from revision of estimated future cash payments.

14. Income tax

	Years ended 31	December
US\$ million	2021	2020
Current income tax expense	(916)	(290)
Deferred income tax credit	60	22
Total income tax expense	(856)	(268)

Statutory income tax rate is 20% in the Republic of Kazakhstan, where the majority of the Group's operations are located.

14. Income tax (continued)

At 31 December 2021

US\$ million				2021	2020
Profit before income tax				3,113	356
Notional tax charge at 20%				(623)	(71)
Unrecognised tax losses				(150)	(125)
Effect of tax rates in other jurisdic	tions			(83)	(28)
Withholding tax				(28)	(12)
Non-deductible expenses				(20)	(22)
Prior period charges				(10)	(14)
Other				58	4
Income tax expense				(856)	(268)
US\$ million	Mineral rights	Accelerated capital allowances	Tax losses	Other	Total
At 1 January 2020	(1,147)	(271)	92	60	(1,266)
Credited/(charged) to profit	21	16	(30)	15	22
Credited to other comprehensive income	_	_	_	6	6
Exchange differences	63	29	(2)	(8)	82
At 31 December 2020	(1,063)	(226)	60	73	(1,156)
Credited/(charged) to profit	4	29	(8)	35·	60
Credited to other comprehensive					
income	_	_	_	21	21
Exchange differences	15	6	(1)		20

Years ended 31 December

129

51

(1,055)

Deferred tax asset	58
Deferred tax liability	(1,214)
At 31 December 2020	(1,156)
Deferred tax asset	124
Deferred tax liability	(1,179)
At 31 December 2021	(1,055)

(191)

(1,044)

US\$124 million deferred tax asset (2020: US\$58 million) was recognised on a basis of future taxable profit forecasts.

Available gross tax losses carried forward and deductible temporary differences, for which no deferred tax assets were recognised are set out below, and would expire as follows:

	31 December
US\$ million	2021 2020
10 years	492 520
Unlimited	1,210 1,095
Total	1,702 1,615

Taxable temporary differences associated with investments in subsidiaries, for which deferred tax liability was not recognised amounted US\$1,259 million (2020: US\$1,158 million).

15. Property, plant and equipment

		Buildings and mining	Mineral	Plant and		Assets under	
US\$ million	Land	assets	rights	equipment	Vehicles	construction	Total
Cost							
At 1 January 2020	43	2,230	4,795	2,942	860	3,014	13,884
Additions	1	17	<i>'</i> –	55	28	427	528
Additions on business							
combination	_	3	<u>-</u>	1	_	_	4
Change in asset retirement							•
costs (note 24)		(1)	. –	_	_	_	(1)
Transfers		177 [°]	_	1,591	31	(1,799)	<u>'</u>
Net transfers from/(to)				•		,	
current assets	_		_	4	(2)	13	15
Disposals	(1)	(9)	_	(35)	(21)	(17)	(83)
Exchange differences	(5)	(141)	(264)	(208)	(75)	(150)	(843)
At 1 January 2021	38	2,276	4,531	4,350	821	1,488	13,504
Additions	3	45	21	92	38	573	772
Change in asset retirement	-						
costs (note 24)	_	3	_	1	_	_	4
Transfers	_	133	_	448	57	(638)	_
Net transfers (to)/from						` ,	
current assets	_	(1)	_	4	_	28	31
Disposals	_	(4 7)	(30)	(68)	(27)	. (2)	(174)
Exchange differences	(1)	(40)	(64)	(62)	(17)	(33)	(217)
At 31 December 2021	40	2,369	4,458	4,765	872	1,416	13,920
Accumulated depreciation a	ind impa						
At 1 January 2020	_	(976)	(364)	(1,232)	(346)	(43)	(2,961)
Disposals	_	5.	_	32	20	ຸ 12	69
Depreciation charge	_	(150)	(70)	(440)	(82)	_	(742)
Transfers	_	(23)	_	(2)	1	24	-
Impairment charge (note 9)	_	(1)		(3)	-	(5)	(9)
Exchange differences		45	18	93_	28	3	<u> 187</u>
At 1 January 2021		(1,100)	(416)	(1,552)	(379)	(9)	(3,456)
Disposals		31	_	55	24	2	112
Depreciation charge	_	(163)	(69)	(491)	(80)	_	(803)
Transfers	_	(5)	_	(2)	_	7	_
Impairment charge (note 9)	_	3	17	(44)	(2)	(2)	(28)
Exchange differences		14	6	28	6	1	55
At 31 December 2021		(1,220)	(462)	(2,006)	(431)	(1)	(4,120)
Carrying value					4	4	40.010
At 31 December 2020	38	1,176	4,115	2,798	442	1,479	10,048
At 31 December 2021	40	1,149	3,996	2,759	441	1,415	9,800

15. Property, plant and equipment (continued)

Additions to assets under construction included US\$11 million of capitalised borrowing costs (2020: US\$28 million). The average capitalisation rate was 5% (2020: 6%). Carrying value of right of use assets was US\$143 million at 31 December 2021 (2020: US\$161 million) that includes US\$217 million cost (2020: US\$215 million) and US\$74 million accumulated depreciation (2020: US\$56 million). Additions to right of use assets were US\$29 million (2020: US\$22 million), and depreciation charge was US\$22 million (2020: US\$22 million).

Significant transfer to plant and equipment at 31 December 2020 resulted from completion of Metalkol RTR Project Phase 1.

Capital expenditure commitments at 31 December 2021 amounted US\$943 million (2020: US\$223 million).

16. Intangible assets

	Internally			
US\$ million	generated	Goodwill	Other	Total
At 1 January 2020	27	86	35	148
Additions	16	_	6	22
Amortisation	(13)	_	(7)	(20)
Exchange differences	(2)	(7)	(4)	(13)
At 31 December 2020	28	79	30	137
Additions	14	_	7	21
Amortisation	(8)	_	(7)	(15)
Impairment charge		(8)	_	(8)
Exchange differences	(1)	(2)	(1)	(4)
At 31 December 2021	33	69	29	131

Goodwill of US\$29 million, US\$27 million, and US\$11 million is attributed to iron ore, ferroalloys, and alumina and aluminium divisions, respectively (2020: US\$37 million, US\$28 million, and US\$12 million, respectively).

17. Other non-current assets

	At 31 Decemb		
US\$ million	2021	2020	
Prepayments for property, plant and equipment and related services	172	107	
Other	5	2	
Total other non-current assets	177	109	

18. Inventories

	31 Decer		
US\$ million .	2021	2020	
Consumable stores	417	339	
Finished goods	286	218	
Raw materials	276	181	
Work-in-progress	260	194	
Other	194	147	
Less write-down for obsolete and slow-moving inventory	(104)	(107)	
Total inventories	1,329	972	

Reversal of inventory write-down of US\$4 million (2020: US\$6 million) is recognised within cost of sales, and US\$1 million (2020: write-down of US\$5 million) is recognised within other operating expense.

19. Trade and other receivables

	3	31 December
US\$ million	2021	2020
Trade receivables provisionally priced	293	193
Trade receivables	277	300
Derivatives	126	_
Restricted cash	71	1
Other receivables	48	33
Other	29	20
Loss allowance	(14)	(15)
Total financial assets	830	532
Other taxes	217	268
Prepaid expenses	181	48
Advances to suppliers	103	86
Income tax receivable	9	13
Impairment	(5)	(5)
Total non-financial assets	505	410
Total trade and other receivables	1,335	942

Loss allowance of trade and other receivables at amortised cost:

					31 D	ecember
_			2021			2020
LIOC TO THE TOTAL	0	Loss	N1-4	0	Loss	NI.4
US\$ million	Gross	allowance	Net	Gross	allowance	<u>Net</u>
Current and not past due	284	(2)	282	268	(3)	265
Within 3 months overdue	53	(1)	52	65	(5)	60
3 to 6 months overdue	18	-	18	3	-	3
6 to 12 months overdue	4	-	4	6	-	6
Over 12 months overdue	62	(7)	55	8	(3)	5
Individually impaired	4	(4)	-	4	(4)	-
Total trade and other receivables		•				
at amortised cost	425	(14)	411	354	(15)	339

19. Trade and other receivables (continued)

Movements of loss allowance for trade and other receivables at amortised cost:

US\$ million	2021	2020
At 1 January	15	15
Charged	14	11
Uncollectable (written off)/reversed	(5)	1
Unused amounts reversed	(10)	(10)
Exchange differences	`	`(2)
At 31 December	14	15

20. Cash and cash equivalents

		December
US\$ million	2021	2020
Cash at bank and on hand	831	579
Short-term deposits	692	86
Total cash and cash equivalents	1,523	665
Bank overdrafts	-	(2)
Net cash and cash equivalents	1,523	663

21. Cash generated from operating activities

		Years ended	31 December
US\$ million	note	2021	2020
Cash flow from operating activities		•	
Profit before income tax	•	3,113	356
Adjustments for:			
Depreciation and amortisation		803	746
Net finance cost	12, 13	505	524
Allowance for receivables		6	(2)
Impairments		36	. 9
Write-down of inventories		(5)	(1)
Net operating foreign exchange (gain)/loss		(7)	15
Other		24	5
		4,475	1,652
Changes in trade and other receivables		(429)	(264)
Changes in inventories		(388)	(55)
Changes in trade and other payables		(166)	176
Changes in asset retirement obligations		` (6)	(3)
Changes in employee benefit obligations		(4)	(2)
Changes in other taxes payable		32	70´
Cash generated from operating activities		3,514	1,574

22. Capital and dividend

	Par value	Number	Ordinary shares
	of each share	(issued and fully paid)	US\$'000
At 31 December 2021	\$1	77,500	78
At 31 December 2020	\$1	77,500	78

Capital reserve is a capital contribution by the shareholders of the Company.

22. Capital and dividend (continued)

Fully paid ordinary shares carry one vote per share and carry the right to dividends as declared from time to time.

The Company declared dividend as set out below:

	2021		2020	
·	US\$/share	US\$ million	US\$/share	US\$ million
Dividend (Final 2020)	1,677	130	_	_
Interim dividend	2,194	170		
Total		300	<u> </u>	

23. Borrowings

		31 December
US\$ million	2021	2020
Non-current	· · · · · · · · · · · · · · · · · · ·	
Bank borrowings	6,505	7,132
Term borrowings	13	. 12
Lease	88	117
Total third party	6,606	7,261
Bank borrowings	197	436
Lease	21	17
Total related party	218	453
Total non-current	6,824	7,714
Current		
Bank borrowings	400	491
Term borrowings	4	_
Lease	40	50
Bank overdrafts	_	2
Total third party	444	543
Bank borrowings	160	123
Lease	5	3
Total related party	165	126
Total current	609	669
Total	7,433	8,383

23. Borrowings (continued)

					Decembe
US\$ million	currency	maturity	interest rate	2021	2020
Non-current					
Bank borrowings	US\$	2028-2030	5.10%	3,339	3,120
Bank borrowings	US\$	2025-2030	4.5% - 5.75%	2,306	3,469
Bank borrowings	US\$	2030	4.5% + 3M SOFR	284	_
Bank borrowings	EUR	2024	5.80%	259	355
Bank borrowings	US\$	2026	4.78%+1M SOFR	232	_
Bank borrowings	US\$	2026	6.75%	85	93
Lease	KZT	2022-2028	2.00% - 10.00%	61	84
Lease	US\$	2024	7.50%	26	33
Term borrowings	US\$	n/a	n/a	. 13	12
Lease	ZAR	2024	n/a	1	_
Bank borrowings	US\$	2022	6.00%	_	95
Total third party				6,606	7,261
Bank borrowings	US\$	2026	6.30% - 6.72%	102	312
Bank borrowings	US\$	2025	4.00%	95	124
Lease	KZT	2022-2067	n/a	21	17
Total related party				218	453
Total non-current				6,824	7,714
Current					
Bank borrowings	US\$	2025-2030	4.5% - 5.75%	171	254
Bank borrowings	EUR	2024	5.80%	69	75
Bank borrowings	US\$	2026	4.78%+1M SOFR	67	_
Bank borrowings	US\$	2028-2030	5.10%	46	151
Bank borrowings	US\$	2030	4.5% + 3M SOFR	37	_
Lease	KZT	2022-2028	2.00% - 10.00%	31	41
Bank borrowings	US\$	2026	6.75%	10	10
Lease	US\$	2024	7.50%	8	8
Term borrowings	KZT	2022	4.00%	4	_
Lease		2022 - 2024	n/a	1	1
Bank overdrafts	US\$		9.00%		2
Bank borrowings	US\$	2022	6.00%	_	1
Total third party	ΟΟΨ	2022	0.0070	444	543
Bank borrowings	US\$	2026	6.30% - 6.72%	127	20
•	US\$	2025	4.00%	33	33
Bank borrowings Lease	KZT	2025	4.00% n/a	- 5 - 5	33
	US\$			5 —	
Bank borrowings		2021	6.50%		70
Total related party				165	126
Total current	· · ·			609	669
Total				7,433	8,383
ı vıaı				1,700	

23. Borrowings (continued)

The Group signed amendments to the existing credit facility agreements with Sberbank of Russia (PJSC) to extend the tenor until 2030, to refinance certain portion of debt, to improve certain commercial terms, including reduction of interest rate subject to certain conditions being satisfied, and to get access to additional liquidity of up to US\$550 million. Applicable interest rate under the both credit facilities with the lender was reduced by 0.5% starting from the end of September. The Group prepaid its debt and improved debt allocation within the existing credit facility agreements, resulting in a reduction in financial indebtedness to the lender by US\$640 million.

The Group entered into a US\$300 million prepayment facility arrangement with an affiliate of the Sberbank of Russia (PJSC). The facility matures in 5 years and bears a floating market benchmark based interest rate. US\$300 million was drawn down.

The Group signed amendments to the existing credit facility agreement with an affiliate of the Sberbank of Russia (PJSC) in the Republic of Kazakhstan to reduce applicable interest rate by 2%.

The new tranche in the amount of US\$250 million was received from VTB Bank (PJSC), which is repayable in 2030 and bears interest at a rate similar to previous tranches. US\$155 million was prepaid to the Development Bank of Kazakhstan, and \$95 million was prepaid to the Eurasian Development Bank to achieve debt portfolio optimisation.

US\$14 million was assigned from VTB Bank (PJSC) to VTB Bank Kazakhstan under the credit facility agreement.

	Carrying values			Fair values	
US\$ million	2021	2020	2021	2020	
Bank borrowings	7,262	8,182	7,520	8,401	
Term borrowings	17	12	17	12	
Bank overdrafts	_	2		2	
Total	7,279	8,196	7,537	8,415	

US\$ million	2021	2020
At 1 January	(8,383)	(8,642)
Cash movements	1,458	594
Other non-cash movements	(536)	(305)
Exchange gain/(loss)	28	(30)
At 31 December	(7,433)	(8,383)

Other non-cash movements includes primarily interest expense and unwinding of discount.

The Group's credit facility agreements include a number of financial and non-financial covenants. The Group complied with applicable covenants at 31 December 2021 and 31 December 2020.

At 31 December 2021, the Group had US\$550 million (refer to note 32) of undrawn committed facilities (2020: US\$300 million) and US\$nil million of undrawn uncommitted facilities (2020: US\$50 million).

24. Asset retirement obligations

The Group has a legal obligation to complete landfill site restoration during mining operations and decommission its mining property after closure. The timing of decommissioning activity is subject to reassessment at the same time as the revision of the Group's proved and probable reserves.

		31 December
US\$ million	2021	2020
Current	4	4
Non-current	98	92
Total asset retirement obligations	102	96

Movements in asset retirement obligations are as follows:

	Asset	Site	
	decommissioning	restoration and	
US\$ million	costs	re-vegetation	Total
At 1 January 2020	35	65	100
Unwinding of discount	3	5	8
Capitalisation	(1)	3	2
Utilisation	(1)	(1)	(2)
Production costs	(2)	(3)	(5)
Exchange difference	(1)	(6)	(7)
At 1 January 2021	33	63	96
Unwinding of discount	3	6	9
Capitalisation	4	-	4
Acquisition of subsidiary	_	2	2
Exchange difference	_	(2)	(2)
Transfer	_	(1)	(1)
Utilisation	. (3)	-	(3)
Production costs	3	(6)	(3)
At 31 December 2021	40	62	102

In accordance with its subsurface use contracts, the Group makes annual obligatory contributions to a deposit fund for the closure costs which will take effect upon exhaustion of the mineral deposits at the end of the respective mine lives.

The amount of the provision for asset retirement obligations is determined using the nominal prices effective at the reporting date and applying the forecasted rate of inflation for the expected period of the life of the mines. Uncertainties in estimating these costs include potential changes in regulatory requirements, decommissioning and reclamation alternatives, and the level of discount and inflation rates.

Principal assumptions made in the calculations of asset retirement obligations are presented below:

				31 December
		2021		2020
	Kazakhstani entities	African entities	Kazakhstani entities	African entities
Discount rate Inflation rate	9.3% - 11.0% 4.7% - 8.0%	8.0% - 13.26% 1.4% - 6.8%	6.0% - 11.0% 5.3% - 6.8%	8.0% - 13.0% 1.2% - 5.0%

25. Trade and other payables

		31 December
US\$ million	2021	2020
Trade payables	666	492
Derivatives	114	291
Other	243	60
Total financial liabilities	1,023	843
Accruals relating to employee entitlements	216	165
Advances received from customers	16	33
Asset retirement obligations	4	4
Other	128	137
Total non-financial liabilities	364	339
Total trade and other payables	1,387	1,182

26. Financial and capital risks management

The Group's activities expose it to a variety of financial risks. Responsibility for management of these risks is allocated between the treasury (foreign exchange risk, credit risk, capital risk, liquidity risk), corporate finance (interest rate risk) and sales and operations planning (commodity price risk) teams, depending on the process ownership and skills required to manage the risk effectively.

Credit risk

Credit risk of the majority of Group sales is covered by letters of credit or cash prepayments against documents. The credit terms are subject to internal policy to ensure credit limits are within the policy. The Group's counterparty Credit Risk Management Policy on managing credit risk arising from granting trade credit to the customers of the Group sets goals, principles and rules, establishing the process for managing credit risk arising from granting trade credit to the Group's customers. For all key Group buyers, credit limits are defined in order to ensure Group credit risk exposure is aligned with approved risk appetite level.

The Group's policy is to invest surplus funds with relationship banks and highly rated liquidity funds. When placing investments and deposits the Group assigns individual counterparty exposure limits based on published credit ratings or an internal credit assessment. Monitoring of these counterparties is carried out on a regular basis to ensure all credit exposures are quantified, and if required, appropriate actions are taken to reduce risk.

The Group placed cash and deposits to financial institutions with credit ratings ranging from A+ to BBB-and from BB+ and lower/unrated in the amount of US\$29 million (2020: US\$28 million) and US\$1,494 million at 31 December 2021 (2020: US\$637 million), respectively. For information on credit ratings in subsequent period, please refer to Note 32.

The Group has established relationships with a number of international and domestic banks in the areas, where the Group operates.

			31 December
US\$ million	note	2021	2020
Cash and cash equivalents	20	1,523	665
Trade and other receivables	19	830	532
Other financial assets		103	116
Total maximum credit risk exposure		2,456	1,313

The maximum uncollateralised exposure to credit risk for cash and cash equivalents, trade and other receivables and other financial assets by geographic region is as follows:

_				31 December 2021
	Cash and cash	Trade and other	Other financial	
US\$ million	equivalents	receivables	assets	Total
Eurasia	1,225	335	43	1,603
Africa	232	77	9	318
Europe and Middle East	55	168	47	270
Asia Pacific	6	150	_	156
Rest of the World	5	100	. 4	109
Total	1,523	830	103	2,456

_				31 December 2020
	Cash and cash	Trade and other	Other financial	
US\$ million	equivalents	receivables	assets	Total
Eurasia	520	175	54	749
Asia Pacific	1	204	_	205
Europe and Middle East	65	83	47	195
Africa	72	57	11	140
Rest of the World	7	13	4	24
Total	665	532	116	1,313

Top 10 customers as a proportion of the outstanding balance of trade receivables amounted 84% (2020: 81%).

Liquidity risk

The Group's principal sources of liquidity are cash generated from operations and corporate credit lines. Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. Fluctuations in commodity prices and overall economic uncertainty may have an adverse impact on forecasted cash flows as well as the ability to access capital at reasonable pricing. The Group's approach to managing liquidity is to ensure that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions. This is achieved by close monitoring of the Group's key financial resilience indicators and producing regular cash forecasts as well as securing adequate cash reserves or bank facilities for meeting future liabilities. Liquidity risk is currently identified at all levels (regional and Group) and measured through various term forecast and stress scenario forecasts. The Group's going concern status is discussed in note 1.

The following tables summarise the Group's financial assets and liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the tables are the contractual undiscounted cash flows, translated at balance sheet date exchange rates.

Non-derivative financial assets and liabilities

	_							31 Decen	1ber 2021
US\$ million	note	Carrying value	Contractual cash flows	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	After 5 years
Borrowings	23	(7,433)	(10,204)	(1,052)	(903)	(1,183)	(943)	(971)	(5,152)
Trade and other payables	25	(909)	(909)	(909)	_	_	_	_	_
Other non-current liabilities		(30)	(36)	_	(15)	(6)	(4)	(4)	(7)
Cash and cash equivalents	20	1,523	1,523	1,523	-	_	_	_	_
Trade and other receivables	19	704	704	704	-	_	_	_	_
Other financial assets		18	25		5	6	4	3	7
Net position		(6,127)	(8,897)	266	(913)	(1,183)	(943)	(972)	(5,152)

	_							31 Decem	ber 2020
US\$ million	note	Carrying value	Contractual cash flows	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	After 5 years
Borrowings	23	(8,383)	(11,282)	(1,185)	(1,281)	(1,051)	(1,295)	(2,861)	(3,609)
Trade and other payables	25	(552)	(552)	(552)	_	_	_	_	_
Other non-current liabilities		(64)	(61)	(35)	(18)	(3)	(1)	(1)	(3)
Cash and cash equivalents	20	665	665	665	·	-	_	_	_
Trade and other receivables	19	532	532	532	-	_	_	_	
Other financial assets		. 9	10		3	2	1	11	3
Net position		(7,793)	(10,688)	(575)	(1,296)	(1,052)	(1,295)	(2,861)	(3,609)

Derivative financial assets and liabilities

	31 December 2021						31 D	ecembe	<u>2020</u>	
US\$ millions	Carrying value	Contractual cash flows	Less than 1 year	1-2 years	- 2-3 years	Carrying value	Contractual cash flows		1-2 years	2-3 years
Commodity derivatives	(20)	_	_	_		(302)			_	
Outflow	-	(146)	(106)	(38)	(2)	· -	(302)	(290)	(11)	(1)
Inflow	_	125	125	` -	_	_	` _	`-	` -	_
Net position	(20)	(21)	19	(38)	(2)	(302)	(302)	(290)	(11)	(1)

Foreign exchange risk

The majority of the Group's production costs are denominated in Kazakhstani tenge (KZT) and US dollars (US\$) while the majority of sales are denominated in US\$. The Group is therefore exposed to the risk that movements in exchange rates will affect both its operating profit and cash flows.

The Group's foreign currency exposure arises from:

- highly probable forecast transactions (sales/purchases) denominated in foreign currencies; and
- monetary items (mainly intercompany receivables, payables and borrowings) denominated in foreign currencies.

Foreign exchange exposures are regularly reported and reviewed for any mitigating action that may be required.

The table below summarises the foreign currency exposure on the net monetary position of each Group entity against its respective functional currency, expressed in the Group's presentation currency.

US\$ million	KZT	US\$	RUB	EUR	GBP	ZAR	Other
31 December 2021	_						
Kazakhstani entities (KZT)	n/a	358	(55)	(123)	_	_	3
Marketing and holding entities (US\$)	_	n/a	_	(241)	73	4	(7)
Marketing Russian entities (RUB)	_	(7)	n/a	_	-	_	_
UK management entities (GBP)	_	(36)	-	_	n/a	_	_
African entities (primarily US\$)	_	(506)	_	25	(85)	(30)	38
Brazilian entities (BRL)	_	(469)	_	_			_
Net monetary (liability)/asset position	_	(660)	(55)	(339)	(12)	(26)	34
31 December 2020							
Kazakhstani entities (KZT)	∍n/a	(1,033)	(60)	(195)	_	_	3
Marketing and holding entities (US\$)	-	-n/a	(22)	(270)	124	4	132
Marketing Russian entities (RUB)	_	5	n/a	_	_	_	_
UK management entities (GBP)	_	(47)	_	. –	n/a	_	_
African entities (primarily US\$)	_	(540)	-	8	(66)	(11)	31
Brazilian entities (BRL)		(387)	_	_		· -	
Net monetary (liability)/asset position		(2,002)	(82)	(457)	58	(7)	166

US\$ balances for African entities represent US\$ balances in non-US\$ functional currency entities.

Intercompany balances are included to fully reflect the Group's exposure to foreign currency risk. The principal exchange rates are presented in note 1.

As at 31 December 2021, based on the net monetary position as set out in the previous table, the sensitivity to a reasonable possible change in the US dollar exchange rate of the Group's profit before tax is as follows: if the US dollar had strengthened/weakened by 20% against Kazakhstani tenge with all other variables held constant, the recalculated profit before tax for the year would have been US\$60 million higher and US\$90 million lower (2020: US\$172 million lower and US\$258 million higher based on 20%), mainly as a result of foreign exchange gains/losses on translation of US dollar/Kazakhstani tenge denominated cash and cash equivalents, trade receivables and loans receivable, and foreign exchange losses/gains on translation of US dollar/Kazakhstani tenge denominated trade payables and borrowings. This sensitivity analysis does not include impact on the Group's operating profit.

The Group does not consider the sensitivity to a reasonable possible change in the US dollar exchange rate (15%) against RUB and (5%) against EUR, GBP, ZAR, BRL and other currencies to be significant.

Fluctuations of US dollar exchange rate against RUB does not have a significant impact on the Group's operations as net monetary position in RUB is immaterial.

Interest rate risk

For interest rate risk the Group measures and monitors the risk using sensitivity analysis. The Group has financial assets and liabilities which are exposed to changes in market interest rates. These assets and liabilities are exposed to fair value interest rate risk or cash flow interest rate risk depending on whether they are subject to fixed or floating rates of interest.

The Group's policy is to maintain a balance between fixed and floating interest rates on long-term borrowings to prevent the debt portfolio being over exposed to interest rate movements. However, during 2021 the interest rate on the long-term debt portfolio was predominately fixed to provide certainty of interest costs.

The Group's significant interest bearing assets and liabilities are as follows:

·	31	December 2021	31	December 2020
US\$ million	Fixed rate	Floating rate	Fixed rate	Floating rate
Cash and cash equivalents	667	28	85	1
Trade and other receivables	58	1	56	1
Other financial assets	37	6	24	
Borrowings	(6,773)	(620)	(8,350)	
Net position	(6,011)	(585)	(8,185)	2
Effect of 1% increase in interest rates on profit before income tax	n/a	(6)	n/a	_

All other financial assets and liabilities are non-interest bearing.

All the Group's interest-bearing assets and liabilities are fixed-rate and measured at amortised cost, so not sensitive to interest rate movements.

The impact on equity is the same as the impact on income. This analysis assumes that all other variables, in particular foreign exchange rates, remain constant.

Commodity price risk

The Group adopted hedge accounting of aluminium derivative contracts to manage risk of change in cash flows from highly probable forecast aluminium sales. Possibility remains that hedging instruments chosen may not always provide effective mitigation of the underlying price risk. The hedging instruments available may differ in specific characteristics to the risk exposure to be hedged, resulting in an ongoing and unavoidable basis risk exposure. Hedge accounting is considered an integral part of the Group's risk management activities.

The results of our sensitivity analysis to commodity price risk are mainly impacted by our use of swap and option instruments to manage the risk of these commodity prices. Where hedge accounting is adopted this sensitivity is reported below as an impact in the income statement or otherwise in equity.

To mitigate commodity price risk, the Group proactively manages price fluctuations for commodities, including monitoring changes in macroeconomic factors, price indices, benchmarks.

The Group's commodity derivatives and trade receivables provisionally priced are exposed to the risk of fluctuations in prevailing market commodity prices.

Sensitivity on open commodity derivative contracts at 31 December 2021

A ten percent increase in aluminum market prices would decrease profit before tax by US\$nil million (2020: US\$nil million), and would decrease equity by US\$61 million (2020: US\$30 million decrease), and a ten percent decrease in prices would increase profit before tax by US\$nil million (2020: US\$nil million) and would increase equity by US\$58 million (2020: US\$26 million increase).

A ten percent increase in iron ore market prices would decrease profit before tax by US\$42 million (2020: US\$80 million) and a ten percent decrease in prices would increase profit before tax by US\$42 million (2020: US\$80 million), with no additional impact on equity.

A ten percent increase in copper market prices would decrease profit before tax by US\$31 million (2020: US\$39 million) and a ten percent decrease in prices would increase profit before tax by US\$31 million (2020: US\$43 million), with no additional impact on equity.

All commodity derivative contracts were terminated in 2022.

Sensitivity on trade receivables provisionally priced at 31 December 2021

A ten percent increase in ferroalloys market prices would increase profit before tax by US\$14 million (2020: US\$34 million) and a ten percent decrease in prices would decrease profit before tax by US\$14 million (2020: US\$34 million), with no additional impact on equity.

This analysis assumes that all other variables remain constant.

Capital risk management

The Group's objectives in capital management are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to achieve this overall objective, the Group's capital management, among other things, aims to ensure compliance with financial covenants attached to its interest-bearing borrowings that form part of its capital structure (refer to 'Going concern basis' in note 1).

The key financial ratios monitored for covenant compliance are:

- net debt to EBITDA;
- EBITDA to finance charges;
- net debt to equity.

The Group considers the following balances as a part of its capital management:

			31 December
US\$ million	note	2021	2020
Borrowings	23	7,433	8,383
Capital reserve	•	3,159	3,159
Reserves		288	(1,398)
Total capital		10,880	10,144

The Group manages its capital structure in light of changes in economic conditions and compliance with financial covenants. In order to maintain or adjust the capital structure, the Group may adjust the amount of returned capital to shareholders, issue new shares or sell assets to manage its debt level. The Group currently has credit ratings of B1 with a stable outlook with Moody's (2020: B2 with a negative outlook) and B- with a positive outlook with Standard & Poor's (2020: B-/B with a stable outlook).

Fair value of financial instruments

Fair values of derivatives, embedded derivatives, and provisionally priced trade receivables are level 2 measurements derived from standard option pricing models, discounted cash flows models using quoted prices, such as forward commodity prices and US dollar swap curves, based on observable market activity.

Fair values of financial instruments carried at amortised cost are derived from expected cash flows discounted at prevailing interest rates for new instruments with similar credit risks and maturities. Fair value of borrowings excluding leases is level 2 measurement amounting US\$7,537 million (2020: US\$8,415 million). Fair values of other financial assets and liabilities carried at amortised cost approximate their carrying values.

27. Auditor's remuneration

	Years ended 31 December		
US\$ million	2021	2020	
Fees payable to the Company's auditor for the audit of the Company			
and Consolidated financial statements	1.5	2.0	
Audit of the Company's subsidiaries	3.7	4.0	
Other assurance services	0.1	1.0	
Total	5.3	7.0	

28. Contingencies

Between 2011 and 2013, ENRC was engaged in an internal investigation into certain matters, including allegations concerning its African and Kazakhstan businesses. Throughout that period, ENRC voluntarily provided the Serious Fraud Office ('SFO') with a considerable volume of information resulting from this investigation. In late April 2013, the SFO decided to open a formal investigation into ENRC. The SFO has confirmed that it is 'not at present actively investigating' the Company's operations in Kazakhstan. ENRC has provided a further substantial volume of documentation to the SFO, both voluntarily and in response to formal statutory requests. To date, the SFO has not indicated to ENRC the precise scope of their investigation. However, the SFO has commenced formal interviews with individual suspects. ENRC is not privy to the SFO's intended timeline for the investigation and has no visibility on whether the investigation will be resolved before the end of 2022. ENRC is represented by specialist external counsel.

The Group exercises judgement in measuring and recognizing the exposure to risks and related contingent liabilities arising from, inter alia, pending litigation or other outstanding claims, tax and other governmental audits such as currency control and risks such as the breach of sanctions. These matters can be subject to negotiated settlement, mediation, arbitration or government regulation, and therefore judgement is necessary in assessing the likelihood whether a liability will arise, and to quantify the possible range of the financial outflow.

As at 31 December 2021, the Group was in discussions with some tax authorities in respect of the application and interpretation of the tax laws. The Group believes that additional tax assessment by tax authorities in relation to these contingent exposures is not probable. Therefore, no material provisions were recorded in these Consolidated financial statements.

The Group is routinely subject to tax audits by the Kazakhstan and African tax authorities. The outcome of these audits and assessments is uncertain. However, the Group believes that the final outcome of any audit pending assessment is not likely to have any material impact on these Consolidated financial statements.

29. Reconciliation of non-GAAP measure

Underlying EBITDA

	_	Years ended 31 December	
US\$ million	note	2021	2020
Profit for the year		2,257	88
Adjustments for:			
Income tax expense	14	856	268
Depreciation and amortisation		803	746
Finance cost	13	640	879
Professional fees and other exceptional litigation costs		97	86
Impairments	9	36	9
Costs related to COVID-19		9	38
Restructuring costs		. 3	6
Unrealised (gain)/loss on derivatives	10	(347)	239
Finance income	12	(135)	(355)
Net operating foreign exchange (gain)/loss	10	(7)	` 16 [°]
(Gain)/loss from disposal of subsidiaries		(4)	2
Other		`2	· 1
Underlying EBITDA		4,210	2,023

30. Non-controlling interests

Non-controlling interests are set out below:

	<u>31 De</u>		
US\$ million	2021	2020	
Metalkol SA	66	48	
TNC Kazchrome JSC	27	20	
SSGPO JSC	79	65	
Shubarkol Komir JSC	18	21	
Chambishi Metals PLC	(29)	(27)	
Other	(16)	(17)	
Total	145	110	

Other comprises subsidiaries in which no individual balance attributable to non-controlling interests is material.

30. Non-controlling interests (continued)

Information below is before intercompany eliminations.

Summarised balance sheet

Summarised balance sheet					
		TNC Kazchrome		Shubarkol	Chambishi
US\$ million	Metalkol SA	_JSC	SSGPO JSC	Komir JSC	Metals PLC
31 December 2021		-	<u> </u>		
Non-current assets	3,636	3,071	1,175	393	4
Current assets	770	1,321	1,247	383	23
Total assets	4,406	4,392	2,422	776	27
Non-current liabilities	1,461	2,371	· 710	267	295
Current liabilities	1,498	332	316	77	23
Total liabilities	2,959	2,703	1,026	344	318
Net assets/liabilities	1,447	1,689	1,396	432	(291)
Non-controlling interests	66	27	79	18	(29)
Non-controlling interests %	5.00%	0.65%	1.84%	1.76%	10.00%
		TNC			
		Kazchrome		Shubarkol	Chambishi
US\$ million	Metalkol SA	JSC	SSGPO JSC	Komir JSC	Metals PLC
31 December 2020					
Non-current assets	3,755	2,884	1,132	396	6
Current assets	355	678	772	384	30
Total assets	4,110	3,562	1,904	780	36
Non-current liabilities	2,782	2,145	620	334	291
Current liabilities	240	367	695	57	21
Total liabilities	3,022	2,512	1,315	391	312_
Net assets/liabilities	1,088	1,050	589	389	(276)
Non-controlling interests	48	20	65	21	(27)
Non-controlling interests %	5.00%	0.65%	1.84%	1.76%	10.00%
Summarised income statement					
Sammansea moonle statement	•		Yea	ar ended 31 De	cember 2021
		TNC			
LION asilia a	Markall of OA	Kazchrome	666D6 166	Shubarkol	Chambishi
US\$ million Revenue	Metalkol SA 1,537	<u>Jsc</u> 2,484	SSGPO JSC 1,849	Komir JSC 203	Metals PLC 10
Expenses	(1,178)	(1,520)	(1;020)	(151)	(26)
Profit/(loss) for the year	359	964	829	52	(16)
Profit/(loss) attributable to non-		-	_		
controlling interests	18	6	15	1	(2)
Comprehensive income/(expense) for					
the year	359	926	803	42	(16)
Comprehensive income/					
(expense) attributable to non-controlling	10	6	15	4	(0)
interests	18	6	15	1_	(2)

30. Non-controlling interests (continued)

_	Year ended 31 December 202					
		TNC Kazchrome		Shubarkol	Chambishi	
US\$ million	Metalkol SA	JSC	SSGPO JSC	Komir JSC	Metals PLC	
Revenue	786	1,611	1,091	177	13	
Expenses	(831)	(1,433)	(819)	(139)	(35)	
Profit/(loss) for the year	(45)	178	272	38	(22)	
Profit/(loss) attributable to non-						
controlling interests	(2)	2	5	1	(2)	
Comprehensive income/(expense) for				•		
the year	(45)	76	209	2	(22)	
Comprehensive income/ (expense) attributable to non-controlling						
interests	(2)		4		(2)	

Summarised cash flows

	Year ended 31 December 2021					Year e	ended 31 D	ecember 2020
				Net increase/ (decrease) in cash and cash		_		Net increase/ (decrease) in cash and cash
US\$ million	Operating	Investing	Financing	equivalents	Operating	Investing	Financing	equivalents
Metalkol SA	693	(78)	(497)	118	227	(116)	(81)	30
TNC Kazchrome JSC	688	(309)	(6)	373	440	(329)	(70)	41
SSGPO JSC	978	(724)	(114)	140	378	(311)	(59)	8
Shubarkol Komir JSC	110	169	(279)	_	59	(42)	(13)	4
Chambishi Metals PLC	(1)	(1)	2		(3)	(1)	4	

31. Principal subsidiaries

The Group comprises a large number of subsidiaries and it is not practical to include all of them in a list in these Consolidated financial statements. Therefore, the Group discloses only those subsidiaries that have a more significant impact on the profit or assets of the Group. A full list of subsidiaries is filed along with these Consolidated financial statements to Registre de Commerce et des Sociétés in Luxembourg.

					31 Dec	ember 2021
Subsidiary	Principal activity	Country of incorporation	Proportion of equity interest held by the Parent Company (%)		Effective proportion of ordinary shares/ equity interest held by non-controlling interests (%)	Proportion of preference shares held by the Group (%)
SSGPO JSC	Mining and processing	Kazakhstan	-	100.00	1111010313 (70)	81.56
Shubarkol Komir JSC	Mining and processing	Kazakhstan		100.00		46.39
TNC Kazchrome JSC	Mining and processing	Kazakhstan		99.99	0.01	92.85
Aluminium of Kazakhstan JSC	Mining and processing	Kazakhstan		98.29	1.71	02.00
Frontier SA	Mining and processing	DRC		95.00	5.00	-
Boss Mining SAS	Mining and processing	DRC		51.00	49.00	_
Comide SARL	Mining	DRC		100.00	- 40.00	
Kazakhstan Aluminium Smelter JSC	Metals Processing	Kazakhstan	_	100.00	_	-
Chambishi Metals PLC	Metals Processing	Zambia		90.00	10.00	_
Eurasian Energy Corporation JSC	Power Generation	Kazakhstan		100.00	10.00	-
Bahia Mineração S/A	Mineral Exploration	Brazil	_	100.00		-
Mineração Minas Bahia SA	Mineral Exploration	Brazil	_	100.00		-
ENRC Mozambique Limitada	Mineral Exploration	Mozambique		100.00		-
ERG Manganese (Pty) Limited	Mineral Exploration	South Africa	_	74.00	26.00	_
Metalkol SA	Mineral Exploration	DRC	_	95.00	5.00	
Todal Mining (Pvt) Limited	Mineral Exploration	Zimbabwe	_	60.00	40.00	-
Société D'Exploitation Des Gisements De Kalukundi ('Swanmines') SAS	Mineral Exploration	DRC	_	75.00	25.00	
De Raidkuridi (Swariniines) SAS	Mining Contracting			75.00	23.00	
Congo Cobalt Corporation SARL	Services	DRC	-	100.00	-	-
TransCom LLP	Transportation	Kazakhstan	-	100.00		-
Sabot Management Limited	Transportation	Seychelles	-	100.00		-
ERG Sales AG	Sales & Marketing	Switzerland	-	100.00	-	
ERG Commercial Center LLP	Sales & Marketing	Kazakhstan	100	-		-
ERG Sales LLC	Sales & Marketing	Russian Federation	-	100.00		-
ERG BV	Holding Company	Netherlands	100	-	_	
KCR Holding B.V.	Holding Company	Netherlands	-	100.00		-
Bahia Minerals BV	Holding Company	Netherlands	•	100.00	-	
Enya Holding BV	Holding Company	Netherlands	-	100.00		-
ENRC NV	Holding Company	Netherlands	-	100.00		
ENRC Africa BV	Holding Company	Netherlands	-	100.00		
ERG BAMEC B.V.	Holding Company	Netherlands	-	100.00		
Camrose Resources Limited	Holding Company	British Virgin Islands	-	100.00	_	-
ENRC Limited	Holding Company	United Kingdom	-	100.00	-	-
ENRC Management (UK) Limited	Group Managing Company	United Kingdom	_	100.00		-
ENRC Finance Limited	Treasury & Holding Company	United Kingdom	_	100.00	-	_
Corporate Fund ERG Komek	Charitable Foundation	Kazakhstan	-	100.00		-
Eurasian Group LLP	Group Managing Company	Kazakhstan	100	-	_	-

32. Events after the balance sheet date

In January 2022, Kazakhstan faced extraordinary events associated with significant social unrest. The situation in all regions of the country stabilised by the end of January. The President of Kazakhstan announced political and economic reforms which are ongoing.

In February 2022, a military conflict between Ukraine and Russia commenced. A number of countries and international organisations, including the United States of America, the European Union, Switzerland and the United Kingdom imposed a series of sanctions against the Russian government, various companies, including major lenders of the Group (Sberbank of Russia and VTB Bank (PJSC)), and certain individuals. This resulted in significant disruption to financial and commodity markets. The Group continues to comply with all sanctions applicable to its business activities in accordance with adopted compliance policies.

In January and February 2022, RCB Bank Limited and CQUR Bank LLC, lenders of the Group, assigned the aggregate of US\$2,981 million borrowings to VTB Bank (PJSC). Standard & Poor's, Moody's, and Fitch withdrew credit ratings of Sberbank of Russia and VTB Bank (PJSC).

In March and April 2022, the Group renegotiated and amended applicable terms of certain financing arrangements and terminated certain transactions and activities with Sberbank of Russia, VTB Bank (PJSC), VEB and/or their subsidiaries, including the following:

- US\$218 million has been paid in connection with early termination of commodity derivative contracts:
- US\$550 million undrawn committed facility was terminated;
- US\$314 million has been paid in connection with early termination of certain financing transactions;
- principal and interest payments for up to two years were deferred resulting in estimate of finance income of up to approximately US\$160 million.

Certain trading activities of the Group with a counterparty were terminated due to concerns about the longer term stability of such counterparty in the context of the sanctions in relation to certain Russian entities and individuals. This exposed the Group to a potential further impairment risk sensitivity in respect of assets in Iron Ore division. The Group is taking proactive mitigating measures to secure alternative sales channels to ensure the risk is mitigated.

Volatility in foreign exchange markets resulted in the recognition of a US\$47 million net foreign exchange gain in the consolidated income statement and a US\$114 million currency translation difference expense in the consolidated comprehensive income statement for the four months ended 30 April 2022.

The Group acquired 1.71% non-controlling interest in Aluminium of Kazakhstan JSC for approximately US\$3 million cash consideration resulting in consolidation of 100% ordinary shares ownership.

The Group did not make a scheduled payment to an affiliate of VTB Bank (PJSC) due to sanctions. This resulted in a right of the affiliate to accelerate payment in relation to US\$382 million credit facility only. The affiliate did not exercise this right as of the date of approval of these consolidated financial statements. The decision of the affiliate to exercise its right or not may be guided by the decisions of the local regulator. The Group believes that it does not trigger the cross-default provisions in other loan facility agreements and is exploring options to resolve this matter in compliance with all applicable laws and regulations. Although certain events and conditions required for its resolution are beyond the Group's control, the Managers believe that it is unlikely that they will have a significant negative impact on the Group's liquidity during the period until 31 October 2023 and ability of the Group to continue as a going concern (note 1).