ENRC Management (UK) Limited

(Registered number: 5965190)

Annual Report and Accounts for the year ended 31 December 2018

ENRC Management (UK) Limited

The directors of ENRC Management (UK) Limited (hereinafter "Directors") present their Strategic report, their Directors' report and the Accounts for the year ended 31 December 2018.

Strategic Report

Results

The results of ENRC Management UK (the "Company") show a loss of £198 thousand for the financial year ended 31 December 2018 (2017: £270 thousand profit). The Company has total equity of £9,369 thousand as at 31 December 2018 (2017: £9,630 thousand).

Principal activities and review of the business

The Company is a corporate director for some subsidiary companies of Eurasian Resources Group S.à r.l. (hereinafter "ERG S.à r.l."). The Company also provides management services to ERG S.à r.l. The Company is reimbursed for this through a sister company, ENRC Finance Limited. The Directors do not anticipate any significant changes to the Company's principal activities in the near future.

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

Principal risks and uncertainties

From the perspective of the Company, the principal risks and uncertainties are integrated with the principal risks of ERG S.à r.l., and the Group and are not managed separately. Any inability of the Company to access commercially viable financing could undermine its ability to carry out necessary activities. Any deterioration of the Company's cash flow and profitability could adversely affect its ability to meet its existing financial obligations.

On behalf of the board:

Dmitry Melnikov
Director
Date: June 13, 2019

ENRC Management (UK) Limited

Directors' Report

Directors
The Directors of the Company who were in office during the year and up to the date of signing the Accounts are:

Felix Vulis
Dmitry Melnikov

Dividends
The Directors have not declared any dividends in 2017 and 2018. The Directors do not propose the payment of a dividend.

Qualifying third party indemnity provisions
The Company has entered into deeds of indemnity for the benefit of each Director of the Company in respect of liabilities to which they may become liable in their 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 is the responsibility of the Company and the Company's ultimate parent entity, ERG S.à r.l. There have been no significant changes to any risk exposures from the previous year and as such no changes in the processes for managing risk.

Going concern
ERG S.à r.l., the Company's ultimate parent company, has provided a letter of support for the Company, confirming their intention to provide support and assistance to enable the Company to meet its liabilities as they fall due and to carry on its business without significant curtailment of operations for the foreseeable future and not less than 12 months from the date of the approval of the Company's statutory Accounts, as long as the entity remains part of the consolidated Group. The Directors have relied on this letter in forming a conclusion on going concern.

Statement of Directors' responsibilities
The Directors are responsible for preparing the Annual Report and Accounts (the "Accounts") in accordance with applicable law and regulation.

Company law requires the Directors to prepare Accounts for each financial year. Under that law the Directors have 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 Directors must not approve the Accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Company and of the profit or loss of the Company for that period. In preparing the Accounts, the Directors are 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 Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the Accounts comply with the Companies Act 2006.

The Directors are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Disclosure of information to auditors
Each of the Directors in office at the date of approval of this report confirms that:

1) so far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and

2) 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 auditor is aware of that information.

ENRC Management (UK) Limited

Directors' Report (continued)

Disclosure of information to auditors (continued)
This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Independent auditors
The auditor, 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

Director
Date: June 13, 2019

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 2018 and of its loss 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 (the "Annual Report"), which comprise: the Balance sheet as at 31 December 2018; the Profit and loss account and the Statement of changes in equity for the year then ended; and the notes to the financial statements, 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

ISAs (UK) require us to report to you when:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of the above matters.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the Company's trade, customers, suppliers and the wider economy.

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 directors are 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 Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 December 2018 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 Directors' Report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors' responsibilities set out on page 2, the directors are 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 directors are 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 directors are responsible for assessing the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

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.

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 received 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 directors' 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.

Timothy McAllister (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
13 June 2019

ENRC Management (UK) Limited

Profit and loss account

In thousands of £	Note	Year ended 31 December 2018	2017
Revenue	3	**18,560**	14,490
Other income	4	**1,318**	772
Administrative expenses	5	**(20,076)**	(14,992)
(Loss)/profit before taxation		**(198)**	270
Tax on (loss)/profit	6	**-**	-
(Loss)/profit for the year		**(198)**	270

There is no comprehensive income attributable to the shareholders of the Company other than the (loss)/profit for the year.

ENRC Management (UK) Limited

Balance sheet

In thousands of £	Note	As at 31 December 2018	2017
Fixed assets			
Investments	7	**-**	-
Current assets			
Amounts owed by Group undertakings		**5,714**	7,811
Other debtors		**5,322**	4,804
Cash and cash equivalents		**3,671**	604
Total current assets		**14,707**	13,219
Current liabilities			
Amounts owed to Group undertakings		**53**	58
Other creditors including taxation and social security		**5,285**	3,531
Total current liabilities		**5,338**	3,589
Total assets less current liabilities		**9,369**	9,630
Net assets		**9,369**	9,630
Capital and reserves			
Called up share capital	8	**1**	1
Profit and loss account		**9,368**	9,629
Total equity		**9,369**	9,630

The notes on page 9 to 12 are an integral part of the Accounts.

The Accounts on pages 6 to 12 were approved by the Board of Directors on 13 June 2019 and were signed on its behalf by:

Dmitry Melnikov
Director

ENRC Management (UK) Limited

Registered number 5965190

ENRC Management (UK) Limited

Statement of changes in equity
for the year ended 31 December 2018

In thousands of £	Share capital	Profit and loss account	Total equity
Balance as at 1 January 2017	1	9,359	9,360
Profit for the financial year and total comprehensive income	-	270	270
Balance as at 31 December 2017	**1**	**9,629**	**9,630**
Impact of adopting IFRS 9 (refer to note 1)	-	(63)	(63)
Balance as at 1 January 2018	**1**	**9,566**	**9,567**
Loss for the financial year and total comprehensive expense	-	(198)	(198)
Balance as at 31 December 2018	**1**	**9,368**	**9,369**

1. Principal accounting policies, judgements, estimates and assumptions

General information
The Company is a private limited company, limited by shares, and is incorporated and domiciled in England, United Kingdom. The registered office of the Company is 5th Floor, 6 St. Andrew Street, London EC4A 3AE.

The principal accounting policies, judgements, estimates and assumptions of the Company are set out below.

Basis of preparation
These Accounts are for the year ended 31 December 2018.

These Accounts are prepared on a going concem basis under the historical cost convention and in accordance with the Companies Act 2006 as applicable to the companies using the Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101).

The Company is a subsidiary of ERG S.à r.l. and is included in the consolidated accounts of ERG S.à r.l., which 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, these Accounts include financial information about the Company as an individual undertaking rather than as a group.

The principal accounting policies applied in the preparation of these Accounts are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

FRS101 disclosure exemptions
The following disclosure exemptions have been adopted under the FRS 101 reduced Disclosure framework:
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
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).

The Accounts are presented in GBP and where applicable the values are rounded to the nearest pound and thousand pounds.

Critical accounting policies: use of judgements, estimates and assumptions
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.

Significant judgements and estimates: impairment / (reversal of impairment) of investments and financial assets
Determination as to whether, and how much, an investment and/or financial asset is impaired or requires reversal of impairment involves management estimates on highly uncertain matters such as the effects of inflation and deflation on operating expenses, discount rates, production profiles, reserves and resources, and future commodity prices, including the outlook for global or regional market supply-and-demand conditions for mining materials.

For financial assets, expected credit loss (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.

1. Principal accounting policies, judgements, estimates and assumptions (continued)

Changes in accounting policy and disclosures
The Company has applied IFRS 9 'Financial Instruments', effective for annual periods beginning on or after 1 January 2018, for the first time. The Company has not restated comparative information for 2017 in the scope of IFRS 9. Therefore, the comparative information for 2017 is reported under IAS39 and is not comparable to the information presented for 2018. Differences arising from the adoption of IFRS 9 have been recognised directly in retained earnings as of 1 January 2018.

The following table represents the effect of the adoption of IFRS 9 on certain items of the Accounts:

	Measurement category			Effect on profit and loss account		
In thousands of £	IAS 39	IFRS 9	Balance at 31 December 2017	Expected credit losses (ECL)	Measurement	Balance at 1 January 2018
Amounts owed by Group undertakings	Measured at amortised cost	Measured at amortised cost	7,811	(63)	-	7,748

ECLs are recognised in one stage. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL).

IFRS 15 'Revenue from Contracts with Customers' is applicable to the Company. A new requirement where revenue is variable stipulates that revenue may only be recognised to the extent that it is highly probable that significant reversal of revenue will not occur. The Company assessed the impact of IFRS 15 and determined that its application will result in no changes in its revenue recognition. The Company has a single short-term performance obligation and the revenue is not subject to pricing adjustments, therefore the new standard has no significant impact. The new standard was effective for annual periods beginning on or after 1 January 2018.

Going concern
ERG S.à r.l., has provided a letter of support for the Company, confirming their intention to provide support and assistance to enable the Company to meet its liabilities as they fall due and to carry on its business without significant curtailment of operations for the foreseeable future and not less than 12 months from the date of the approval of the Company's statutory Accounts, as long as the entity remains part of the consolidated Group. The Directors have relied on this letter in forming a conclusion on going concern.

Foreign currency
The functional and presentation currency of the Company is GBP. The functional currency is the currency of the primary economic environment in which an entity operates and is normally the currency in which the entity primarily generates and expends cash.

Investments
Investments in subsidiaries are held at cost less accumulated impairment losses.

2. Key management personnel remuneration and employee information

Key management personnel ('KMP') are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. They include the directors. For the year ending 31 December 2018, the allocation made, including amounts paid by other subsidiary undertakings of ERG S.à r.l., being short-term employee benefits, under separate employment contracts but not recharged, for KMP services provided to the Company was US$37,000 (2017: US$60,000).

The Company had no employees during the year (2017: none).

3. Revenue

The revenue generated by the Company is from sale of management services in the United Kingdom to UK companies.

ENRC Management (UK) Limited

Notes to the Accounts for the year ended 31 December 2018 (continued)

4. Other income

Other income relates to costs awarded to the Company by the court relating to litigation with Dechert LLP.

5. Administrative expenses

	Year ended 31 December	
In thousands of £	**2018**	2017
Legal, financial advisory and other consultancy services	**19,485**	14,182
Other	**591**	810
Total administrative expenses	**20,076**	14,992

Auditors' remuneration

	Year ended 31 December	
In thousands of £	**2018**	2017
Fees for the audit of the Company	**19**	19
Other non-audit services	**20**	13
Total auditors' remuneration	**39**	32

The Company also incurred audit fees on behalf of all UK based Group companies for 2018 of £65 thousand (2017: £72 thousand).

6. Tax on (loss)/profit

The tax assessed for the year differs from (2017: differs from) the (loss)/profit before taxation multiplied by the applicable rate of corporation tax in the UK of 19% pro rata (2017: 19.25%). The differences are explained below:

	Year ended 31 December	
In thousands of £	**2018**	2017
Total income tax expense for the year	**-**	-
Reconciliation of total tax charge		
(Loss)/profit before taxation	**(198)**	270
Notional tax on (loss)/profit before taxation at the standard tax rate of 19% (2017: 19.25%)	**(38)**	52
Effects of:		
Non-deductible expenses	**17**	-
Group relief for nil payment	**21**	(52)
Tax on (loss)/profit	**-**	-

The Company has realised a statutory loss of £198 thousand. Consequently, no UK corporation tax is due for the financial year 2018.

As at 31 December 2018, the Company had not recognised deferred tax assets of £55 thousand (2017: £55 thousand) in respect of tax losses on the basis of insufficient evidence of taxable profits being available against which the deferred tax asset may be utilised. The unrecognised deferred tax asset will be recognised in periods in which losses are utilised against taxable profits.

Factors affecting future tax charges

The main UK corporation tax rate was reduced to 19% with effect from 1 April 2017. The main rate of corporation tax from 1 April 2020 will be 17%. On the basis that the Company does not have any recognised deferred tax assets or liabilities at the end of reporting period date, no re-measurement of these balances is necessary.

ENRC Management (UK) Limited

Notes to the Accounts for the year ended 31 December 2018 (continued)

7. Investments

At 31 December 2018 the carrying value of investments is £nil (2017: £nil).

At 31 December 2018 the Company held the following direct investments in related undertakings and the proportion of shares held represents the amount directly held by the Company:

Company name	Principal activity	Class of shares held	Proportion of shares held	Registered address	Country of registration
ENRC Business and Technology Services (UK) Limited	Holding company	Ordinary shares	100%	5th floor, 6 ST Andrew street, London, EC4A 3AE	United Kingdom
ERG Management (South Africa) (Pty) Ltd	Administration company	Ordinary shares	100%	Lower Bulding, 1 Sturdee Ave, Rosebank, Gauteng, 2196, Johannesburg	South Africa

8. Called up share capital

At 31 December 2018 and 2017, the Company's authorised, issued and fully paid share capital is £1 thousand consisting of 1,000 shares of £1 par value each.

9. Ultimate parent company

The Company's ultimate parent company and controlling party is ERG S.à r.l. ERG S.à r.l. is the smallest and largest Group to consolidate these Accounts. ERG S.à r.l. is incorporated in Luxembourg. Copies of ERG S.à r.l.'s consolidated accounts are available from the Luxembourg Registre de Commerce et des Societes, L-2961 Luxembourg.

The immediate parent entity of the Company is Eurasian Natural Resources Corporation Limited incorporated in the United Kingdom.

Eurasian Resources Group S.à r.l.
Annual Report and Accounts 2018

THESE ACCOUNTS
FORM PART OF THE
GROUP ACCOUNTS
OF COMPANY
No. ..5965190.....

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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 income statement for the Group:

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

The information in these sections is unaudited unless otherwise stated.

Forward-looking statements
This Annual Report contains 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. Eurasian Resources Group S.à r.l. 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.

Introduction

About ERG

ERG has integrated mining, processing, energy, logistics and marketing operations focused on Kazakhstan and Africa. More broadly, we operate in 15 countries across four continents and have a global workforce of more than 69,000[1] people.

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 key supplier of iron ore, aluminium and alumina, as well as a provider of electric power distribution and railway services.

Through our assets in Africa, we are a principal producer of cobalt and copper and have further development projects focused on coal, manganese, platinum, bauxite and fluorspar. We are also developing an integrated iron ore mining and logistics project in Brazil.

Key metrics in 2018

Operational:

- +17% iron ore primary concentrate production (12.72 million tonnes – compared to 10.90 million tonnes in 2017);
- +7% total ferroalloy production (1.74 million tonnes – compared to 1.62 million tonnes in 2017);
- +5% coal production (28.72 million tonnes – compared to 27.47 million tonnes in 2017);
- First copper cathode and cobalt hydroxide produced at Metalkol RTR in the DRC.

Financial:

- -8% Underlying EBITDA (US$1,913 million – compared to US$2,090 million in 2017);
- +10% capex (US$752 million – compared to US$685 million in 2017);
- B/B (Positive) and B2 (Positive) – upgraded credit ratings by Standard & Poor's and Moody's respectively (from B-/B (Stable) and B3 (Stable)).

Sustainability:

- US$115 million community social investment spending;
- -15.9% reduction in LTIFR (employees only).

[1] Excluding contractors.

CEO Report

In 2019, we celebrate the 25th anniversary of the start of our business in Kazakhstan – a milestone in a journey that has seen both great achievements and, in some cases, challenges. Having successfully stabilised our business in recent years, we are now in a position to build our financial resilience in a more positive way, pursue profitable future growth and generate long-term value for our stakeholders.

Our efforts in this regard will be underpinned by our new, integrated 2025 Strategy, which is ultimately aimed at supporting our long-term business sustainability. The full effects of our 2025 Strategy will be increasingly felt as it is operationalised in both our corporate functions and operational Divisions – from our most senior managers to our most junior employees.

I am pleased to report that our 2018 performance, as well as the start of commissioning of our strategic Metalkol RTR cobalt and copper project, offers encouraging signs with respect to our future prospects.

Sustainable development

Focus on safety
It is with deep regret that I report the loss of five lives in 2018 (2017: 6) – one employee and four contractors. I would like to express my sincere condolences to the loved ones of those who died. These tragic events are unacceptable and we will continue to work tirelessly in pursuit of Zero Harm.

Furthermore, given recent events in the global mining sector, we are committed to ensuring the safety and integrity of our tailings storage facilities. In 2019, we completed a Group-wide assessment of the risks associated with our tailings dams. This led to the development of an action plan to guide us in the ongoing implementation of necessary controls.

For ERG, sustainability not only means operating in a responsible way and meeting the expectations of stakeholders in regard to our environmental, social and governance performance; it is also about achieving true business sustainability. Further details regarding our performance in this respect are set out below and in our 2018 Sustainable Development Report.

However, I would like to highlight two important milestones that help demonstrate our commitment to sustainable development.

The first is the 2018 launch of our Clean Cobalt Framework (page 9) at our Metalkol RTR project in the Democratic Republic of Congo (DRC). This will deliver assurance to value chain partners regarding the provenance of our responsibly-produced cobalt – whilst actively improving the lives of local people.

Secondly, I am proud to announce that in 2019 ERG became a member of the United Nations (UN) Global Compact, the world's largest voluntary corporate citizenship initiative. The Global Compact includes many leading businesses on every continent as well as hundreds of other important stakeholders. It aims to support broader UN goals and initiatives, including the Sustainable Development Goals (SDGs). We look forward to continuing to embed the Global Compact's ten principles, and to further aligning our activities and decision-making with the UN SDGs.

Revenue and Underlying EBITDA
In 2018, the Group achieved broadly positive results, reflecting improved average sales prices as well as higher production and sales volumes across most Divisions. This included a 7% increase in ferroalloy production and double-digit growth in iron ore concentrate and pellet production, whilst production at our other Divisions remained largely steady (with the notable exception of cobalt). In terms of prices, the year was split into two distinct phases with the first half delivering positive price performance for a range of our products, followed by a downwards correction in the second half. This correction was driven by global

economic and political dynamics, including US-China trade relations, US monetary policy and a stronger US dollar – plus broader global growth sentiment.

In this context, Group revenue increased by 6%, with only one of our Divisions (Other Non-Ferrous Division) experiencing a reduction. Over the same period, however, Group Underlying EBITDA fell by 8%. In part, this reflected a 12% increase in our general and administrative expenses, as well as higher operational costs in our regions.

In Kazakhstan, this related to higher prices for input materials, with the depreciation of the Kazakhstani tenge having some impact. Whilst our Iron Ore, Alumina and Aluminium and Energy Divisions achieved robust revenue growth, growth in Underlying EBITDA lagged behind in each case. Meanwhile, our Ferroalloys Division saw a moderate reduction in Underlying EBITDA – with higher coking coal prices, higher sponsorship expenses and employee pay rises having a particular impact. In Africa, our Other Non-Ferrous Division experienced a significant reduction in EBITDA, reflecting (amongst other things) one-off contractor payments, increased input consumption and higher import duties.

Addressing our costs and maximising our efficiency will be a key future area of focus.

Debt position and credit rating

Improvements in our operational and financial performance in 2017 were recognised in 2018 by Standard & Poor's and Moody's, both of which upgraded our credit ratings. Standard & Poor's gave ERG a B/B (Positive) rating (2017: B-/B (Stable)) and Moody's a B2 (Positive) rating (2017: B3 (Stable)). This marks a significant vote of confidence in ERG and its future, and is reflective of our ongoing efforts to transform our business. Key factors that drove these upgrades included improved financial performance as well as enhanced liquidity in 2017.

In 2018 we successfully refinanced US$6.9 billion of our debt, which has reduced our interest rates, extended the maturity of our loans and simplified our debt security arrangements – whilst also improving our liquidity. This debt restructuring has not only enhanced our financial resilience but will also enable us to invest in future growth.

Mr Benedikt Sobotka

Chief Executive Officer

Corporate review

Performance

Operational

In the first half of 2018, market conditions were largely favourable for the majority of our products. This changed in the second half of the year, however, when commodity prices softened due to US-China trade tensions, rising US interest rates, a stronger US dollar and signs of an economic slowdown in China and Europe. Similarly, cobalt prices fell mainly due to increased supply from major industrial and artisanal suppliers in the DRC.

Nonetheless, year-on-year average price performance was largely positive. To benefit from this dynamic, we focused on increasing production and sales volumes of high-carbon ferrochrome, iron ore concentrate/pellets, aluminium, copper, coal and electricity. At the same time, we implemented a range of efficiency initiatives to maximise our profits.

Importantly, we also saw first production at our high-profile Metalkol cobalt and copper project in the DRC, with commissioning starting in 2018. This marks a major milestone for the company and is – in the context of growing global battery demand – likely to turn us into a major player in the cobalt market.

In terms of key production metrics, we increased total saleable ferroalloy production by 7% to 1,742 kt (2017: 1,625 kt). This largely reflected improved efficiency at Workshop No.4 at our Aktobe Ferroalloys Plant (+78 kt of high-carbon ferrochrome), driven by our ongoing efforts to enhance operational practices there and, ultimately, achieve its full production capacity. Furthermore, additional optimisation initiatives at our other workshops also contributed to this increase (+40 kt of high-carbon ferrochrome). We also increased production of saleable iron ore concentrate and pellets by 16% to 12,292 kt (2017: 10,585 kt), in response to higher market demand. We were able to do so thanks to hitherto unused production capacity within our Iron Ore Division (which historically has the potential to produce up to 17,000 kt). Meanwhile, we increased coal extraction volumes by 5%, partially reflecting increased output at Shubarkol (+11%). This increase in production at the mine was driven by the initiation of exports of premium coal to new clients in Europe as well as our investment in new equipment.

Aluminium production remained steady at 258 kt (2017: 257 kt), reflecting our current maximum production capacity. Total saleable copper contained production also remained broadly steady, although breakdowns and disruptions linked to older machinery at Boss Mining, as well as the late appointment of a third-party mining contractor, contributed to a 2% decrease to 139.5 kt (2017: 142.7 kt).

Total saleable cobalt metal production decreased by 36% to 1.6 kt (2017: 2.5 kt). This was due to the closure of the Kakanda concentrator at Boss Mining in Q3 2018, lower mining grades and changes to our mine plans in Africa. Nonetheless, this is not anticipated to have a strategic impact on the company, particularly given the start of commissioning of our Metalkol cobalt and copper project, which is expected to transform our cobalt production levels.

Financial

2018 market context

Ferroalloys	*Significant demand growth supported by the sustained development of the* stainless steel sector.
Iron ore	Higher prices driven by Chinese demand for higher-grade ore, strong international steel markets and multiple disruptions to market supply.
Alumina and aluminium	Strong demand driven by urbanisation and a trend towards lighter vehicle construction materials and disciplined supply to support long-term prices.
Other non-ferrous	Cobalt: Electric vehicle revolution expected to bring unprecedented levels of long-term demand. Copper: Market transitioning into prolonged period of deficit as mine supply fails to keep up.
Energy	Favourable market conditions resulting in higher prices, partly driven by ongoing development in Asia, seasonal temperature variations and disruptions to market supply.
Logistics	Increased transportation of iron ore concentrate to China and Russia plus higher sales prices due to longer routes and increased use of own fleet to strengthen margins.

In 2018, our revenue increased by 6% to US$5,353 million (2017; US$5,048 million), reflecting improved average sales prices and higher sales volumes (as mentioned above).

The positive impact of increased sales volumes for ferroalloys (+US$94 million), iron ore (+US$75 million), coal (+US$17 million) and aluminium (+US$14 million) was offset by a decrease in our cobalt (-US$104 million) and copper concentrate (-US$16 million) sales.

Similarly, a 5% decrease in yearly weighted average ferroalloy sales prices (driven by a 6% decline in *the yearly average sales price of high-carbon ferroalloys) reduced our revenue by US$102 million.* Nonetheless, this was more than compensated for by higher yearly average sales prices for our other Group products (+US$194 million), resulting in a net positive impact from price changes of +US$92 million.

Our financial performance was further impacted by increased costs in multiple areas. These were driven by higher prices for a range of input materials (many of which are imported), including coking coal, graphite electrodes, electrode paste, fuel, explosives and spare parts. Increased community social investment, gradual salary increases at our assets in Kazakhstan and additional repair activity also contributed to higher costs. Such cost pressures were partially mitigated, however, by our efficiency initiatives and the depreciation of the Kazakhstani tenge against the US dollar.

In this context, our Underlying EBITDA fell by 8% to US$1,913 million (2017: US$2,090 million) – largely reflecting the impact of higher operational expenses. As such, cost management will be a key area of future focus.

Sustainable Development
In 2018, we continued to make progress in preparing our business for the future. This included the application of a range of initiatives to:

- Continue the transformation of our business, including through cultural transformation and a focus on continuous improvement;
- Develop our portfolio (including the construction of our Metalkol RTR cobalt and copper project, which will actively 'clean-up' legacy waste from previous operators in the DRC);
- Embed efficiency and innovation across our business (including through our new Digital Strategy).

We are sad to report, however, that we experienced five fatalities (2017: 6), of which four involved contractors (2017:3). We would like to express our sincere condolences to the families affected by these tragic events. As a result, we are continuing to strengthen contractor safety standards, as well as our overall safety management, to try to avoid similar events in future. Nonetheless, we did see an improvement in the number of lost time injuries (LTIs) involving employees from 86 in 2017 to 71 in 2018.[2] This was reflected in an improved lost time injury frequency rate (LTIFR) of 0.58 (2017: 0.69).

Our community social investment (CSI) increased to US$115 million (2017: US$111 million). This was driven by, amongst other things, moderate increases in spending in Kazakhstan and Africa (including in relation to Metalkol RTR).

Our global greenhouse gas emissions increased slightly to 24.7 million tonnes (2017: 24.1 million tonnes), reflecting an increase of around 657,000 tonnes in our direct emissions. This reflected an increase in electricity generation at EEC.

In terms of economic value, we distributed a total of US$4,381[3] million to our stakeholders, including suppliers, employees, providers of capital, government and communities (2017: US$3,943 million).

Beyond these more immediate measures of performance, our new 2025 Strategy marked a major milestone in our journey towards long-term business sustainability. This includes the application of well-defined Group strategic goals to support each strategic priority (ranging from balanced portfolio growth to the sustainable development of our host regions), as well as planned key performance indicators to support their achievement at all levels of our business. Over time, this will play an important role in improving our performance across all areas of Sustainable Development.

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2 Employees only. This includes the reported employee fatalities.

3 This figure includes operating costs/payments to suppliers, employee wages and benefits, payments to providers of capital, payments to government and community investment spending.

Key initiatives and events in 2018

Upgrading of credit ratings – reflecting improved performance
In 2018, our credit ratings were upgraded by Standard & Poor's (from B-/B (Stable) to B/B (Positive)) and Moody's (from B3 (Stable) to B2 (Positive)). This reflected continuing improvements in our financial and operational performance based on our 2017 results, including restructuring of our debt, improved financial metrics (including EBITDA) and higher levels of liquidity.

Other factors cited included our competitive cost structures, operational and product diversification and strong customer base. Both rating agencies have indicated a high likelihood of further improvements in our credit profile in the next 12 to 18 months, due to the commissioning of our Metalkol RTR project, amongst other factors.

Major debt restructuring resulting in enhanced liquidity
In Q3 2018, we refinanced US$6.9 billion of our debt portfolio, entering into new facility agreements with Sberbank of Russia (as well as one of its subsidiaries), VTB Bank and The Development Bank of Kazakhstan. Amongst other things, the refinancing has:

- Reduced the interest payable on our facilities from 6.30%-7.50% to 5.95%–6.90%;
- Extended the maturity of our loans to up to eight years;
- Simplified our debt security arrangements.

Importantly, it has also enhanced our liquidity position and will support our ability to develop our investment projects now and in the future.

Launch of the Metalkol RTR cobalt and copper project
Our Metalkol RTR project in the DRC comprises a hydrometallurgical facility to reprocess historic cobalt and copper tailings from previous mining operators. In Q4 2018, the project produced its first copper cathode and cobalt hydroxide. It is on course to increase its production volumes, with commissioning having started in 2018.

We aim for Metalkol RTR to reach initial annualised production volumes of up to 15 kt of cobalt and 77 kt of copper annually. The project could be a significant contributor to Group EBITDA. Indeed, once it achieves its full designed capacity of 20 kt of cobalt and 105 kt of copper per year, Metalkol RTR is anticipated to become one of the world's leading cobalt producers.

Launch of the Clean Cobalt Framework at Metalkol RTR
We launched our Clean Cobalt Framework at Metalkol RTR in the DRC to deliver assurance to our existing and potential customers regarding the nature and impacts of our responsibly-produced cobalt – and to improve conditions for local people. Amongst other things, the Clean Cobalt Framework includes a commitment to comply with and go beyond the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals – and to ensure our cobalt is traceable, is free from child labour and does not come from artisanal sources.

New long-term Air Emissions Strategy in Kazakhstan
Our new long-term Air Emissions Strategy aims to bring our assets in Kazakhstan closer in line with EU air quality standards, with particular emphasis on particulate matter. This will pre-empt an anticipated tightening of air quality standards in Kazakhstan. The Strategy includes a focus on improving the performance of our operations in the Pavlodar region, which contribute to collective local air quality impacts.

2025 Strategy

Development
In 2018, ERG reached an important milestone by developing our 2025 Strategy, which has been approved by our Group 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, with a primary focus on natural resources	• 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 wellness and health • 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 • 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 and asset level	• 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 decent level of dividend yield for shareholders • Maintain high returns on invested capital • Achieve and maintain acceptable leverage • Maintain high levels of liquidity to support resilience in the face of changing market conditions

Implementation

Following approval of the 2025 Strategy by our Board of Managers in June 2018, we have initiated the development of range of functional sub-strategies. As a result, each strategic goal will be supported by specific initiatives, KPIs and implementation roadmaps, which will be monitored on a regular basis by the dedicated team.

Functional sub-strategies currently under development include those for:

- Production and operational efficiency
- Procurement
- Maintenance
- Large capital projects
- Investment planning
- Finance
- IT
- Human Resources
- HSE and social management

Once developed, these will be supplemented by additional sub-strategies across other parts of the business – including a portfolio strategy for our existing assets. This approach will underpin the concrete implementation of our 2025 Strategy in practice.

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 key markets 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. Our advantageous position on the global cost curve for ferrochrome means our sales are driven less by market demand than our ability to increase production (i.e. subject to limited exceptions relating to the formation/reduction of our stocks, we sell everything that we produce). This dynamic is further supported by the fact that despite our status as one of the industry leaders, we have a relatively small market share. This helps ensure we do not face challenges with respect to the market placement of our output.

Our Ferroalloys Division is vertically integrated, using its own chrome and manganese ore mines to feed its ferroalloy production plants. Furthermore, the Division benefits from its own gas-fired power plant at Aktobe, competitively priced power supplied by our Energy Division (20) and transportation services supplied by our Logistics Division (22).

2018 highlights

- +7% ferroalloy production (1.74 million tonnes – compared to 1.62 million tonnes in 2017).

Market context in 2018

- The first half of 2018 saw above-average ferrochrome prices in all key markets compared to recent years, most notably in China, the European Union (EU) and the United States.
- The second half of 2018 saw a decline in ferrochrome prices reflecting – amongst other things – the weakening of the South African rand and yuan against the US dollar, growing reserves of chrome ore in Chinese ports and increasing contract competition in the EU and the US.
- Ferrochrome demand continued to increase over the year, however, driven by the stainless steel industry.

Key Facts		2018	2017	% change
Third-party Sales Volumes				
High-carbon ferrochrome	'000t	**1,395**	1,278	*9.2%*
Medium-carbon ferrochrome	'000t	**11**	16	*(31.3)%*
Low-carbon ferrochrome	'000t	**47**	49	*(4.1)%*
Ferrosilicochrome	'000t	**49**	53	*(7.5)%*
Ferrosilicomanganese	'000t	**58**	54	*7.4%*
Ferrosilicon	'000t	**32**	35	*(8.6)%*
Total Ferroalloys	'000t	**1,592**	1,485	*7.2%*
Chrome ore	'000t	**474**	471	*0.6%*
Manganese concentrate	'000t	**1**	67	*(98.5)%*
Production				
Chrome ore	'000t	**4,339**	4,061	*6.8%*
Manganese ore concentrate	'000t	**146**	102	*43.1%*
Ferroalloys total gross	'000t	**1,742**	1,625	*7.2%*
Ferroalloys total net	'000t	**1,613**	1,496	*7.8%*
High-carbon ferrochrome gross	'000t	**1,482**	1,363	*8.7%*
High-carbon ferrochrome net	'000t	**1,424**	1,294	*10.0%*

Results

In millions of US$	2018	2017	% change
Revenue	**2,216**	2,170	*2.1%*
Underlying EBITDA	**1,040**	1,148	*(9.4)%*

Performance in 2018

The Ferroalloys Division contributed US$1,040 million or 54% to the Group's Underlying EBITDA (2017: US$1,148 million or 55%). The positive impact of increased sales of high-carbon ferrochrome was offset by increased operating expenses. These increased operating expenses were partly driven by higher prices for coking coal (+US$27million), social responsibility expenses (+US$26 million), planned employee pay rises (+US$18 million), higher prices for graphite electrodes and electrode paste (+US$16 million), as well as higher repair and maintenance expenses, including for spare parts (+US$14 million). Higher coking coal prices reflected the impact of a market deficit at the end of 2017, linked to weather-related export disruption in Australia and the Chinese government's closure of production capacity in China on environmental grounds. Increased coking coal prices also drove up graphite electrode and electrode paste prices, as coking coal is used in their manufacture.

In 2018, we exceeded our planned production volumes, with output reaching 1,742 kt (2017: 1,625 kt). The key driver for this was the ongoing 'fine-tuning' of our operational practices and processes at Workshop No. 4 – in the context of our broader efforts to achieve its designed capacity. This follows past challenges in ramping up production at the workshop and resulted in an additional 78 kt of high-carbon ferrochrome production. In addition, targeted optimisation initiatives at our other ferroalloys plants (including improved technological processes, the more productive targeting of mineral reserves, and debottlenecking) contributed an additional 40 kt of high-carbon ferrochrome production.

Planning for 2019 and beyond

Consensus industry forecasts suggest continuing growth of the stainless steel market over the coming years, with average growth rates projected to exceed global growth in GDP. This reflects positive demand fundamentals such as:

- Ongoing urbanisation;
- Exponential growth in the number of households;
- Increasing living standards.

If correct, this may require significant increases in global chrome ore and ferrochrome production. In this context, we are exploring:

- Potential opportunities to improve productivity at our Aktobe Ferroalloys Plant and further raise production capacity from its current rate of approximately 330 ktpa. This would involve major work on its feeding, electrical and water treatment systems, as well as the commissioning of new drying equipment and a third conveyor line. We are also investigating a potential furnace relining programme (a process required every five years for each furnace) to support the long-term sustainability of Workshop No. 4;
- The possible advancement of Phase 2 of our 10th Anniversary mine development to support the supply of chrome ore to our ferroalloys plants. Depending on the outcome of an ongoing feasibility study, this could potentially include the application of high volume, high productivity block-cave mining;
- In addition, we plan to complete the rebuilding of workshop No.6 of Aksu Ferroalloy Plant, which is expected to improve productivity at the facility.

Iron Ore Division

Our Iron Ore Division consists of producing assets in Kazakhstan and exploration and development assets in Brazil. We are a major exporter of iron ore products from Kazakhstan, and primarily sell iron ore concentrate and pellets to steel producers in Russia, China and Kazakhstan.

2018 highlights

- +17% saleable iron ore concentrate production (7.7 million tonnes – compared to 6.6 million tonnes in 2017).
- +15% pellet production (4.6 million tonnes – compared to 4.0 million tonnes in 2017).

Market context in 2018

- The Iron Ore Benchmark Price outperformed expectations, staying above US$65 per tonne throughout much of 2018. This reflected:
  - Higher demand for mid- and high-grade ore compared to 2017, driven by: a) strong steel markets in key importing regions such as China and the EU, as well as Japan, South Korea and Taiwan; and b) China's attempts to control air pollution and greenhouse gas emissions;
  - International supply disruptions and declining domestic concentrate output in China that kept the seaborne market broadly in balance – with relatively low price volatility between March and October;
  - Considerable price volatility took place in Q4 2018, however, reflecting stricter environmental regulation in China, dynamic US-China trade relations and uncertainty around the outlook for Chinese steel demand;
- Although prices dropped by 16% over the second half of November, they recovered towards the year end, reaching more than US$70 per tonne amid discussions of a potential economic stimulus package in China.

Key Facts		2018	2017	% change
Third-party Sales Volumes				
Iron ore concentrate	'000t	**7,560**	6,585	*14.8%*
Iron ore pellets	'000t	**4,441**	3,824	*16.1%*
Production				
Iron ore mined	'000t	**30,848**	27,473	*12.3%*
Iron ore primary concentrate	'000t	**12,717**	10,902	*16.6%*
Iron ore concentrate	'000t	**7,723**	6,615	*16.7%*
Iron ore pellets	'000t	**4,569**	3,970	*15.1%*

Results

In millions of US$	2018	2017	% change
Revenue	**821**	715	*14.8%*
Underlying EBITDA	**212**	196	*8.2%*

Performance in 2018
Our Iron Ore Division contributed US$212 million or 11% to the Group's Underlying EBITDA (2017: US$196 million or 9%). This increase in EBITDA – as well as an increase in revenue to US$821 million (2017: US$715 million) – reflected higher sales volumes of iron ore concentrate (+US$55 million) and iron ore pellets (+US$50 million), driven by new contracts with Chinese clients. In addition, the Division enjoyed higher pellet prices (+US$7 million), which were only partially offset by lower concentrate prices (-US$2 million). Higher pellet prices reflected a general increase in Chinese demand for value-added pellet products.

Higher EBITDA was further supported by the completion of successful negotiations with our existing customers to increase sales volumes for higher margin products such as iron ore pellets.

Revenue growth was partially offset, however, by higher operating expenses, reflecting:

- Higher input prices (+US$19 million), including fuel (+US$10 million) and tires (+US $3 million);
- Increased contractor costs due to increased stripping activity to support future production (+US$15 million);
- Increased repairs and maintenance (+US$17 million), including railroad cranes and lifting mechanisms (+US$8 million), mining trucks and transportation equipment (+US$7 million) and engines (+US$2 million).

Planning for 2019 and beyond
We are exploring opportunities to increase iron ore production (and, by extension, concentrate and pellet production). This includes potential capital expenditure on new equipment to:

- Support higher production volumes;
- Increase stripping volumes and prepare our reserves for mining.

Alumina and Aluminium Division

Our Division is the only producer of alumina and aluminium in Kazakhstan. We sell alumina to third-party aluminium producers and also use it to produce our own aluminium.

The majority of aluminium that we produce is sold to customers in Europe and the CIS.

2018 highlights

- Kazakhstan Aluminium Smelter achieved record production of 258 kt. This reflected a range of technological improvements (including increased amperage during electro winning) to safely take the smelter beyond its original designed capacity.
- Kazakhstan Aluminium Smelter extended its aluminium sales contract with VTB Capital until 2024.
- Aluminium of Kazakhstan expanded its alumina customer base (including in China and Tajikistan), helping mitigate risks related to the imposition of US sanctions on Russian clients.
- We introduced a new mine plan at Aluminium of Kazakhstan, based on the accelerated development and mining of a single open pit – rather than the simultaneous development of multiple open pits. This has helped secure its reserve base and will sustain future production.

Market context in 2018

- The market saw strong price increases in Q1 and Q2 of 2018.
- The LME cash aluminium price rallied from a nine-month low to an eleven-year high at around US$2,500 per tonne in April after US sanctions were imposed on a major Russian aluminium producer (the second largest producer globally). US tariffs on aluminium imports, issues related to the Alunorte alumina refinery in Brazil and soaring alumina prices added to supply concerns.
- In Q3 and Q4 of 2018, growing aluminium exports from China, deteriorating Chinese consumer demand and continued US-China trade tensions put downward pressure on the global market.
- Aluminium prices fell below US$2,000 per tonne in October, leading to the closure of ~2 mtpa of loss-making smelters in China and helping prompt the Chinese authorities to unveil measures to support consumer spending – with a focus on cars and household appliances.

Key Facts		2018	2017	% change
Third-party Sales Volumes				
Alumina	'000t	**985**	1,016	*(3.0)%*
Aluminium	'000t	**259**	247	*4.8%*
Production				
Bauxite mined	'000t	**4,953**	4,846	*2.2%*
Alumina produced	'000t	**1,481**	1,509	*(1.9)%*
Aluminium produced	'000t	**258**	257	*0.4%*

Results

In millions of US$	2018	2017	% change
Revenue	**948**	864	*9.7%*
Underlying EBITDA	**387**	362	*6.9%*

Performance in 2018

The Division contributed US$387 million or 20% to the Group's Underlying EBITDA (2017: US$362 million or 17%). This increase in EBITDA – and more particularly the increase in revenue to US$948 million (2017: US$864 million) – was supported by higher sales prices for alumina (+US$30 million) and aluminium (+US$37 million), reflecting favourable market conditions (see above). These gains were partially offset, however, by lower sales volumes of alumina (-US$10 million) reflecting lower alumina production volumes (see below).

Gains from derivatives helped mitigate higher operational expenses linked to costlier raw materials, consumables and services. These inputs included fuel (+US$11.7 million for mazut, reflecting higher Brent oil prices, shifts in the US dollar and changed pricing approaches in 2018), caustic soda (+US$6.2 million, reflecting higher levels of demand within the market), calcined soda (+US$4.7 million, reflecting the higher LME price for aluminium, to which our soda purchase prices are fixed, as well as shifts in the US dollar), consumables and services.

During the year, we increased stripping volumes substantially, from 32,999 kcubm to 43,289 kcubm. This helped to support a slight increase in subsequent bauxite mining, which reached 5,630 kt (2017:4,853 kt). Nonetheless, alumina production decreased slightly (-2%) due to the breakdown of our steam generator at the heating plant in Q4 2018. However, this did not negatively impact our aluminium production, which increased by 1%. This reflected the application of effective mitigation actions (including repair) following the breakdown of the steam generator – as well as the application of increased amperage during the electro winning process. Indeed, we were not only able to meet customer demand but also increased sales by 5% compared to 2017.

Planning for 2019 and beyond

Global aluminium demand is expected to grow by 3% in 2019, driven by:

- Growing demand for electric vehicles;
- An overall trend towards lightweight construction in the automotive industry;
- Sustained demand from construction, packaging and other industries.

In this context, we have initiated a feasibility study for the possible expansion of the Kazakhstan Aluminium Smelter (the KAS-2 project), including the potential commissioning of new electro winning facilities.

We are also exploring the commissioning of new open pits at our Krasno-Oktyabrskoye operations. These could potentially compensate for falling mining volumes at our Turgay operation as it nears the end of its life of mine.

Other Non-ferrous Division

Our Other Non-ferrous Division is primarily focused on the DRC, where we mine and process copper and cobalt. We also own and operate the Chambishi copper and cobalt refinery in Zambia.

In addition, we have a number of exploration and development assets – primarily in the DRC, Mozambique, South Africa, Mali and Zimbabwe.

2018 highlights

- In Q4 2018 Metalkol RTR produced its first copper cathode and cobalt hydroxide, and is gradually ramping up its production volumes.
- During the year, we also initiated construction of Phase 2 of the Metalkol RTR project, which will aim to increase its cobalt and copper production volumes in 2020.

Market context in 2018

- The first half of 2018 saw the LME cash copper price hold well above US$6,500 per tonne, underpinned by disruption in global scrap flows, expectations of mine disruptions and signs of robust demand.
- As the market transitioned into the second half of the year, investor attention turned towards escalating global trade tensions. This culminated in a sell-off, driving prices down to a one-year low in August. For the remainder of the year, prices were constrained within a narrow band of US$5,714-US$6,355 per tonne, with movements primarily guided by geopolitical and macroeconomic developments.
- Cobalt prices continued to rally in Q1 2018, peaking at US$95,500 per tonne on 21 March, amid strong investment support and stock building amongst buyers – as well as positive market sentiment focused on the electric vehicle boom.
- From Q2 2018, it became clear that prices had overshot near-term market fundamentals and they drifted lower over the remainder of the year. While the LME cobalt price averaged US$72,745 per tonne in 2018 (up 30% year-on-year from US$55,923 per tonne in 2017), prices fell considerably from April to December, ending the year at US$55,500 per tonne.
- This price drop was mainly driven by increased cobalt supply from major industrial and artisanal suppliers in the DRC, combined with destocking by buyers.

Key Facts		2018	2017	% change
Third-party Sales Volumes				
Copper metal	'000t	**75.82**	71.86	*5.5%*
Copper concentrate (Frontier)	'000t	**66.13**	69.50	*(4.8)%*
Total cobalt contained	'000t	**1.35**	2.98	*(54.7)%*
Production				
Saleable copper metal	'000t	**73.60**	73.08	*0.7%*
Saleable copper concentrate (Frontier)	'000t	**102.06**	103.69	*(1.6)%*
Saleable cobalt contained	'000t	**1.61**	2.52	*(36.1)%*

Results

In millions of US$	**2018**	2017	% change
Revenue	**1,035**	1,040	*(0.5)%*
Underlying EBITDA	**90**	203	*(55.7)%*

Performance in 2018

Our Other Non-ferrous Division contributed US$90 million or 5% to the Group's Underlying EBITDA (2017: US$203 million or 10%). Revenue remained steady at US$1,035 million (2017: US$1,040 million). However, EBITDA was negatively impacted by higher sales costs, including those linked to close out payments made to a mining contractor at our Frontier Mine; higher levels of acid consumption at Boss Mining due to the need to neutralise the pH of extra tailings volumes and higher import duties as a result of changes to local legislation. Collectively these factors resulted in a higher operating loss of US$123 million (2017: US$87 million).

Our cobalt metal output fell considerably, reflecting reduced cobalt concentrate production at Boss Mining. This reduced production was due to the closure of the Kakanda concentrator in Q3 2018, as well as lower mining grades. In addition, it reflected disruption caused by our switch (in the context of limited equipment availability) from the development of the Mukondo pit to the development of the Kakanda East pit (which has lower cobalt grades but requires less stripping).

Lower than expected cobalt metal output led to a corresponding drop in volumes of cobalt metal sold. In addition, unfavourable prices in the second half of 2018 (driven by market oversupply, weak demand and lower prices in the Chinese market) amplified the impact of decreased cobalt metal sales.

Planning for 2019 and beyond

Increasing demand for electric vehicle batteries is expected to drive long-term demand for cobalt. On the other hand, additional third-party supply streams are expected to enter the market in 2019 and beyond – putting downward pressure on prices in the medium-term.

We are focusing on ramping up production at our Metalkol RTR project, with the aim of achieving initial production of up to 12 kt of cobalt and up to 67kt of copper in 2019. In the longer term, Metalkol RTR will further increase its production to reach its plant-designed capacity.

In addition, we are continuing to advance our Cut 3 and Cut 4 Projects, which (once completed) will expand the open pit at our Frontier operation and is expected to increase its life of mine.

As part of our optimisation programme in Africa, we are putting our Boss Mining operation into care and maintenance in 2019. This is with the aim of developing the best option to unlock its long-term value for the Group.

Energy Division

Our Energy Division is one of the largest electricity generators in Kazakhstan, producing 18% of electricity in the country in 2018. It sells the majority of the electricity it produces (84%) to our other entities and the remainder (16%) 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 also sold both to our other entities and to third-parties. Our Shubarkol Original brand of coal is regarded as one of the best in the region, due to its low ash, high calorie characteristics.

2018 highlights

- +5% coal production (28.72 million tonnes – compared to 27.47 million tonnes in 2017).
- +9% coal sales (14.9 million tonnes – compared to 13.7 million tonnes in 2017).
- Acquisition of JSC 3-Energoortalyk in April 2018, adding extra electricity generation capacity.

Market context in 2018

- Thermal coal prices continued on their upward trend in 2018. For example:
  - The average EU benchmark price was US$92 per tonne – 10% higher than the 2017 average and 53% higher than the 2016 average;
  - The price of Australian coal (6,000kcal) on the Asian market also increased (+22% in 2018 to US$107 per tonne).
- Global thermal coal demand remained solid due to sustained growth in the developing Asian economies, generally positive global economic trends, and material deviations from seasonal average temperatures.
- On the supply side, production disruptions in several key producing countries kept the market in deficit.

Key Facts		**2018**	2017	% change
Third-party Sales Volumes				
Coal Eurasian Energy Corporation JSC	'000t	**4,580**	4,420	*3.6%*
Coal Shubarkol Komir JSC	'000t	**10,286**	9,237	*11.4%*
Semi-coke	'000t	**4**	3	*33.3%*
Electricity	GWh	**1,933**	2,224	*(13.1)%*
Consumption				
Coal consumed in the production of electricity	'000t	**8,736**	8,643	*1.1%*
Electricity produced and consumed for own use	GWh	**1,011**	1,006	*0.5%*
Production				
Coal Eurasian Energy Corporation JSC	'000t	**17,126**	17,017	*0.6%*
Coal Shubarkol Komir JSC	'000t	**11,598**	10,455	*10.9%*
Semi-coke	'000t	**186**	206	*(9.7)%*
Electricity	GWh	**15,332**	14,646	*4.7%*

Results

In millions of US$	2018	2017	% change
Revenue	**583**	522	*11.7%*
Underlying EBITDA	**255**	248	*2.8%*

Performance in 2018
The Energy Division contributed US$255 million or 13% to the Group's Underlying EBITDA (2017: US$248 million or 12%). This slight increase in EBITDA was largely driven by favourable coal prices. The positive impact of these price dynamics was accentuated by our decision to increase coal production at our existing assets. This enabled us to benefit from a global supply deficit, with China and India struggling to produce planned volumes and heavy rain causing production constraints in Colombia. Our external sales of electricity fell markedly, however, as we prioritised output for use by our Group entities as they delivered higher production levels.

The impact of higher sales prices and (internal) sales volumes was partially offset by increased operating costs. Such costs were driven by amongst other things:

- Higher fuel prices (+US$4 million);
- Planned pay rises for production personnel, as well as bonuses and medical insurance (+US$4 million);
- Higher taxes and duties (+US$4 million) due to increased coal exports.

Our acquisition of JSC 3-Energoortalyk *in April 2018 added extra electricity generating capacity to the* Division (267GWh *in 2018, with additional capacity planned for 2019*). This will support our future efforts to help mitigate a scarcity of capacity on the South Kazakhstan regional grid.

Planning for 2019 and beyond
We plan to:

- Target further production increases, including through the commissioning of the reconstructed Power Unit No.5 at the Aksu Power Plant;
- Pursue increased semi-coke production at our Shubarkol operation to further stabilise quality and *improve reductant costs for Group ferroalloys production;*
- Further increase intragroup consumption.

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.

2018 highlights

- Leasing acquisition of 1,650 open-top rail wagons and the purchase of 54 dump cars to replace older stock.
- Increase in tonnage transported in our own fleet, reflecting the substitution of open-top rail wagons belonging to state rail operator Kazakhstan Temir Trans (KTT).

Market context in 2018

- The national rail company Kazakhstan Temir Zholy (KTZh) granted a permit for the potential use of higher capacity open-top rail wagons on Kazakhstan's railway network.

Key Facts		**2018**	2017	% change
Transportation				
Total tonnage transported by rail	'000t	**57,605**	55,358	*4.1%*
Sales Volumes				
Third-party freight forwarding	'000t	**18,377**	18,306	*0.4%*

Results

In millions of US$	**2018**	**2017**	% change
Revenue	**137**	92	*48.9%*
Underlying EBITDA	**75**	39	*92.3%*

Performance in 2018

The Logistics Division contributed US$75 million or 4% to the Group's Underlying EBITDA (2017: US$39 million or 2%). Revenue increased by US$45 million to US$137 million (2017: US$92 million). This reflects higher tonnages transported using our own fleet (including increased sales by our Iron Ore Division and the transportation of iron ore concentrate to China and Russia).

In addition, the Division achieved higher sales prices due to changes in transportation routes and increased levels of transportation using our own fleet of open-top rail wagons. These sales prices grew faster than our unit costs, contributing to the significant increase in Underlying EBITDA.

Planning for 2019 and beyond

The priority of the Division is to provide our other entities with transportation and logistics services. The Division expects a potential increase in the volume of iron ore concentrate, iron ore pellets, ferroalloys and alumina it transports on behalf of the Group in 2019 and beyond. This reflects our broader plans to increase production across multiple Divisions.

We are considering the gradual replacement of our existing open-top rail wagons with higher capacity models. In addition, it is anticipated that state regulation of prices for locomotive services will be discontinued from 2020, which could result in a shortage of national rail company KTZh locomotives. In this context, we are considering the acquisition of our own locomotives to ensure cost predictability and guarantee the timely transportation of our cargo.

Financial review

Key 2018 highlights

- +6% revenue (US$5,353 million – compared to US$5,048 million in 2017).
- +10% capex (US$752 million compared – to US$685 million in 2017).
- B/B (Positive) and B2 (Positive) upgraded credit ratings by Standard & Poor's and Moody's respectively (from B-/B (Stable) and B3 (Stable)).

Group performance

Underlying EBITDA and cost of sales

Underlying EBITDA decreased by 8% to US$1,913 million (2017: US$2,090 million) due to higher operational expenses. This reflected, in turn, higher prices for raw materials and consumables, repairs and maintenance, services and general and administrative expenses. Indeed, cost of sales rose by 13% to US$3,042 million (2017: US$ 2,681 million).

In part, this reflected higher prices for purchased input materials, mainly at our Ferroalloys Division and Alumina and Aluminium Division in Kazakhstan. This included Chinese coke (partly due to the impact of environmental legislation in China), graphite electrodes (partly as a result of competition from other sectors) and increased fuel costs in Kazakhstan (driven by the depreciation of the Kazakhstani tenge). In this context, we increased purchases of domestically-produced coke and plan to produce our own semi-coke at our Shubarkol mine (through the modernisation of its existing furnace). Beyond this, we aim to increase the proportion of materials we purchase from within Kazakhstan to mitigate the impact of any further depreciation of the Kazakhstani tenge against the US dollar.

Other factors contributing to our higher operational costs included:

- Additional costs (US$94 million) associated with increased sales of high-carbon ferrochrome, iron ore product and copper;
- Increased costs linked to changes in production processes in Africa (including higher consumption of acid and lime, as well as customs duties on imported acid), plus the payment of compensation to a sub-contractor working for our Other Non-ferrous Division;
- Higher stripping volumes in Africa due to the development of new pits at Boss Mining, as well as pre-stripping at our Frontier Mine to prepare its reserves for future mining;
- The start of operations at our new Metalkol RTR cobalt and copper project in the DRC.

Similarly, our general and administrative expenses totalled US$838 million (2017: US$750 million) – reflecting (amongst other things):

- Higher staff costs of US$367 million, largely driven by salary, bonus and head count increases (2017: US$294 million);
- Increased spending on professional and other services of US$151 million (2017: US$109 million), partly driven by our employment of third-party support in a range of legal and regulatory matters;
- Increased community social investment (CSI) amounting to US$115 million (2017: US$111 million), reflecting increased spending in both Kazakhstan and in Africa (in the latter case in support of Metalkol RTR).

Capital expenditure

In 2018, we spent US$752 million on capital expenditure (2017: US$685 million). Meanwhile, our overall capital additions rose markedly to US$1,312 million (2017: US$879 million). This largely reflected borrowing to support the completion of Phase 1 of our Metalkol RTR cobalt and copper project in the DRC. This is expected to make a significant contribution to Group EBITDA once production ramps up.

In addition, we made a range of sustaining capital investments to maintain production capacity and reduce future costs at our existing assets (see Development of our portfolio on page 27). Key elements included:

- The renovation of Workshop No.6 at the Aksu Ferroalloys Plant;
- Reconstruction of power unit No.5 at our Aksu Power Station;
- Development of our 10th Anniversary mine Phase 2 project;
- Development of the Cut 3 Project at our Frontier mine.

Furthermore, we focused capital expenditure on new capital investments, including:

- Acquisition of JSC 3-Energoortalyk, a large-scale heating and electricity generation business in southern Kazakhstan, at a cost of US$41 million[4] (with the potential for adding additional electricity generation capacity at this site);
- The purchase, at a cost of US$50 million, of additional licences for cobalt- and copper-bearing tailings dumps in the DRC, for reprocessing at Metalkol RTR.

Dividends
For the year ended 31 December 2018, we declared an interim dividend of US$120 million at US$1,548 per share (2017: US$60 million at US$774 per share). A proportion of 2018 dividend payments to Class A shareholders were deferred.

Cash flow

Net cash generated from operating activities
We generated US$641 million of net cash from our operating activities (2017: US$1,161 million). This 45% reduction was driven by (amongst other factors) higher:

- Interest expenses, reflecting our decision to repay all deferred interest expenses in advance;
- Cost of sales, reflecting higher prices for purchased materials, gradual increases in salaries and increased sales volumes of our main products;
- General and administrative expenses, reflecting increased salaries in Kazakhstan, increased sponsorship expenses in Kazakhstan and higher legal expenses linked to the Serious Fraud Office (SFO) Process (page 33).

Net cash used for investing activities
During the year, we used a net total of US$773 million in cash for investing activities (2017: US$658 million) – most of which was focused on capital expenditure (page 23).

To take advantage of relatively favourable market conditions in 2018, several of our Divisions increased their production volumes, in a trend that we plan to continue in 2019. This requires ongoing capital expenditure, with the most significant areas of expenditure in 2018 being our expansionary programme at Kazchrome (including development of our 10th Anniversary mine and renovation of Workshop No.6, as well as measures to improve productivity at Workshop No.4), our Cut 3 development project at our Frontier mine in the DRC and our acquisition of JSC 3-Energoortalyk in Kazakhstan.

Net cash generated from/used for financing activities
In 2018, net cash inflow from financing activities was US$238 million – compared to a net cash outflow of US$262 million in 2017.

In 2018, we restructured our debt portfolio (see below). The amount drawn from various credit facilities totalled US$7,275 million - compared to US$708 million in the previous year, less a repayment of

4 Plus a contingent payment of US$60 million that could become payable during a four year period.

borrowings of US$6,891 million (2017: US$828 million) and payment of arrangement fees of US$25 million (2017: US$6 million). The cash outflow largely reflects our dividend payment to our shareholders, including those with non-controlling interests, which totalled US$117 million (2017: US$79 million).

Tax
The Group's income tax expense for 2018 was US$231 million (2017: US$336 million), with an Effective Tax Rate of 106.9% (2017: 46.3%). This largely reflected the negative impact of accumulated tax losses in Africa and Europe.

Key events in 2018

Debt restructuring
In Q3 2018, the Group completed the refinancing of US$6.9 billion of its debt portfolio to extend average maturity and improve certain commercial terms. In addition, we aimed to lower our credit risk, ensure our financial stability and secure opportunities to implement strategic Group projects such as KAS-2 and Phase 2 of the Metalkol RTR project, amongst others.

In this context, we entered into new facility agreements with:

- Sberbank of Russia (for the amount of US$3,310 million);
- VTB Bank (for the amount of US$3,100 million);
- The Development Bank of Kazakhstan (for the amount of US$360 million);
- A subsidiary bank of Sberbank of Russia (for the amount of US$80 million).

As of 31 December 2018, all of the facilities were utilised with the exception of the Development Bank of Kazakhstan (US$37.9 million undrawn) VTB Prepayment (US$198 million undrawn), and Gerald Metals (US$50 million undrawn).

The refinancing has improved our debt profile by:

- Reducing the number and aggregate volume of guarantees, share pledges and other forms of security;
- Decreasing interest on our facilities from 6.30%-7.50% to 5.95%-6.95%;
- Extending the maturity of our credit facilities for up to 8 years.

In addition, the financing has further improved the Group's liquidity and supports ERG's ability to continue developing investment projects in our operating regions.

ERG rating status
In 2018, we achieved upgraded credit ratings of B/B (Positive) from Standard & Poor's and B2 (Positive) from Moody's. This compares to previous ratings of B-/B (Stable) and B3 (Stable), respectively.

According to releases issued by both rating agencies in June/August 2018, the upgrades were awarded on the basis of ERG's robust financial and operational performance in 2017, including:

- 'Standalone credit strength' as a result of improved leverage and interest coverage metrics;
- EBITDA driven by relatively supportive commodity prices and operational improvements;
- Adequate levels of liquidity.

The rating agencies noted a number of other contributing factors for the upgrades, including our:

- Access to high-quality mining assets;
- Competitive cost structures;
- Strong operational and product diversification;
- Solid market position in Europe, the Middle East and Africa for ferrochrome, iron ore and aluminium;

- Revenue profile, with 90% being accounted for by exports;
- Strong and diverse customer base.

Standard & Poor's and Moody's also mentioned the possibility of further credit rating upgrades, prompted by reductions in our total debt, further improvements in our financial metrics, positive free cash flow and the maintenance of healthy levels of liquidity. In this context, we are hopeful that Metalkol RTR will make a significant contribution to Group EBITDA and cash flow in coming years.

Tax environment
The Group is strongly committed to complying with all applicable laws, rules and regulations. In 2018, the Board approved our updated Group Tax Policy, which further commits us to taking account of both the spirit and the letter of relevant tax laws and regulations. Under the policy, we will conduct intragroup transactions on an arm's length basis and will apply the principles outlined in the OECD Transfer Pricing Guidelines and/or local transfer pricing laws. See page 32 for further details.

The complexity, lack of predictability, and manner of implementation of tax laws, rules and regulations may give rise to a degree of inherent uncertainty. Relevant tax changes that affected ERG included the following:

New DRC Mining Code
In 2018, the new DRC Mining Code (2018 Code) was published. Some of the provisions of the 2018 Code will be subject to the interpretation of the relevant authorities in the DRC, and their impact may, therefore, vary materially.

Given the apparent decision of the DRC authorities to ignore the stability clauses in the 2002 Mining Code, we are remitting certain taxes imposed at revised rates under the 2018 Code and are considering how to best mitigate their impact.

Tax changes in the Republic of Zambia
In September 2018, the Government of Zambia announced a number of changes to its tax law in 2019. This introduces, amongst other things, new mining import duties and increased royalties.

Sustainable Development Review

This section provides an overview of our Sustainable Development performance in 2018. Further information is available in our Sustainable Development Report 2018.

Our approach to Sustainable Development

Sustainable Development is integral to our business model – and increasingly integrated into our core business processes. This is best demonstrated by our 2025 Strategy (page 10), which ultimately aims to help us build a sustainable business.

Preparing our business for the future

Under our 2025 Strategy, we have made financial stability a Group priority. This will be partly determined by two further Group strategic priorities – balanced portfolio growth and efficiency in all that we do.

Key issues and initiatives

Transformation
We are continuing to transform our business through the application of international standard management systems, practices and organisational structures.

Key initiatives carried out in 2018 included:

- **2025 Strategy**: Development and implementation of our clearly articulated Group Strategy (page 10), as well as the initiation of the development of supporting functional sub-strategies;
- **ERG Academy**: Mobilisation of the ERG Academy to help drive strategic cultural change across our operations in Kazakhstan;
- **Continuous improvement management systems:** Development of the ERG Production System and ERG Business System in Kazakhstan to promote continuous improvement in our operational and business practices;
- **Functional transformation programmes**: Targeted programmes to enhance our Capex, Finance, Maintenance, Procurement and Risk functions.

Development of our portfolio
In line with our 2025 Strategy, we are focused on developing our portfolio. To support our ambitions, we developed a new Capital Expenditure Governance Policy to optimise our investment decisions and established a dedicated entity in Kazakhstan – ERG Capital Projects to enhance project management.

Key activities in 2018 included:

- **Metalkol RTR**: First production of copper cathode and cobalt hydroxide at our project in the DRC. The project is now in the commissioning and ramp-up stage, with the aim of producing 15 kt of cobalt and 77 kt of copper annually (with additional production to be added by Phase 2 of the project);
- **Frontier Cut 3 Project**: Continued expansion of the open-pit at our Frontier copper mine in the DRC. This includes waste stripping to support the production of more than 364 kt of copper contained in concentrate over the life of the Cut 3 Project;
- **Aluminium of Kazakhstan**: The decision to maintain alumina production at 1.5 mtpa – rather than allowing a planned production drop to 1.023 mtpa by 2021. The decision was driven by expected future demand from China, as well as our own KAS-2 Project;
- **KAS-2**: Initiation of bankable feasibility studies for a US$1.5 billion project to more than double capacity at our Kazakhstan Aluminium Smelter and pursue downstream integration opportunities. The feasibility studies are due for completion in 2019;

- **10th Anniversary mine Phase 2**: Continued development to address an anticipated reduction in production at other mines supplying chrome ore to Kazchrome. Phase 2 will replace these volumes and support plans to increase Kazchrome's production volumes;
- **Aksu Ferroalloys Plant**: Continued re-building of Aksu Ferroalloy Plant's smelter furnace No.64 as part of Phase 1 of the broader Workshop No.6 Renovation project;
- **BAMIN**: Continued focus on our strategic BAMIN mine, railway and port project in Brazil. This included the strengthening of our project team and the initiation of the development of a new strategic plan and management model to support the upcoming construction phase.

Efficiency and innovation
We continued to apply our existing Operational Efficiency programmes in Kazakhstan, whilst introducing new measures generated by our managers and employees through our Ideas Factory and Innovators' Forum initiatives. In 2018, such efforts delivered total cost savings of US$91.7 million (2017: US$114.5 million).

We also placed significant emphasis on digitalisation, supported by a new, Group-level Digital Strategy. Examples of measures taken during the year include:

- Support for a new 'start-up' entity (BTS Digital) to help us build an ecosystem of digital applications and services for use within ERG and in our local communities;
- Pilot implementation (at Donskoy GOK, Kazchrome) of a Manufacturing Execution System to collect and harmonise operational data into a 'data lake'. This will help deliver big data insight and support our production processes.

Helping our people thrive

Under our 2025 Strategy, we have made the maintenance of a happy and professional team a Group priority. This includes the development of employees' competencies and the maintenance of their safety and well-being – both in and outside of the workplace.

Key issues and initiatives

Health and safety
In Kazakhstan, our dedicated Industrial and Occupational Safety Committee is made up of senior regional management and the General Directors of our production entities. Amongst other things, it defines our health and safety strategy and reviews relevant policies, procedures and initiatives.

In Africa, our Safety, Health and Sustainability (SHS) performance is reported on a monthly basis to regional Executive Committee members.

We are fully committed to the achievement of Zero Harm. In support of this, we took a number of steps to drive the continuous improvement of our safety performance. This included:

- **Enhanced safety management system:** The commissioning of an independent third-party to audit our existing safety management system in Kazakhstan. The results will help inform the development of a long-term safety strategy, as well as an integrated, risk-based occupational and process safety management system. This work is planned to commence in 2019 and will include a diagnostic of our existing system, as well as the piloting of an enhanced risk assessment process at our Aktobe Ferroalloys Plant and EEC;
- **Motivation, competencies and awareness:** Continued evolution and strengthening of our safety culture through the implementation of a range of training, awareness raising and enhanced communications initiatives;

- **Contractor management**: We took several steps in Kazakhstan and Africa to strengthen contractor engagement, controls and safety standards. Tragically, fatalities involving contractors demonstrate why enhanced safety management in this area remains a priority.

In Africa, we also continued to enhance our integrated SHS management system. This included the integration of fatal risk protocols into performance management for senior staff, as well as the rollout of enhanced employee health and occupational hygiene procedures and related audit protocols.

Skills, capabilities and development
In line with our strategic priorities, we focus on the development of our employees' strategic skills and competencies, as well as our high-potential individuals and leadership pipeline. In 2018, this included:

- **Holistic talent management**: The ongoing development of our skills pipeline through targeted training, development and recruitment focused on schools, colleges and higher education institutions, as well as both young and experienced professionals within ERG;
- **Strategic 'talent pools'**: The establishment of talent pools made up of high-potential individuals in Kazakhstan (identified through competency-based assessment);
- **ERG Academy**: Use of the ERG Academy to support the implementation of our 2025 Strategy, including through cultural change (amongst other strategic training elements).

Initiatives in Africa included the implementation of employee skills assessments at Metalkol RTR to inform targeted training programmes – and to support the project's transition from construction to commissioning.

Labour relations
Under our 2025 Strategy we are focused on improving ERG's employee proposition, as well as its status as an employer – including through the delivery of improved employee benefits. To this end, in Kazakhstan we implemented:

- **Employee motivation**: A new employee motivation system covering selected management-level employees. This includes both annual bonuses and other forms of reward;
- **Salary benchmarking**: Analysis of employee salaries across each entity (as well as external peer benchmarking) to inform differentiated pay rises for all production employees.

In 2018, we continued to invest in a range of initiatives to support the well-being of our employees both in and outside of the workplace. In Kazakhstan, this included:

- **Standardisation of workplace conditions**: Efforts to standardise onsite facilities (from canteens to dormitories), catering standards and medical provision. In addition, we continued to invest in a programme to modernise ERG-owned and contracted employee transportation;
- **Raising of living standards**: Delivery of our Affordable Housing Programme for employees, as well as the development of sports and social infrastructure – amongst other initiatives.

Some of our operations in Africa faced restructuring and/or significant operational change, however, with implications for employees – including retrenchment. This included Boss Mining, Comide, CCC and Chambishi Metals.

Performance
We regret to report that five fatalities took place during 2018 (2017: 6). Of these, one involved an employee (2017: 3) and four involved contractors (2017: 3). Each incident was subject to comprehensive investigation, followed by the implementation of appropriate prevention measures.

In addition, we experienced 71 lost time injuries (LTIs) involving employees (2017: 86), resulting in a lost time injury frequency rate (LTIFR) of 0.58 (2017: 0.69)[5]. Whilst this represents improved performance, we recognise there is still significant work to be done in order to achieve our goal of Zero Harm.

Community development and well-being

Our 2025 Strategy has made the sustainable development of our host regions a Group priority. As well as supporting the prosperity of our communities, we promote entrepreneurship and the development of the business environment. We are also committed to actively managing our impacts on local communities – and delivering related assurance to our value-chain partners.

Key issues and initiatives

Community investment
In 2018, key areas of focus in Kazakhstan included:

- **Community living standards**: Continued investment (including through our existing annual strategic partnerships with regional governments) to improve living standards across our operating regions – with a focus on housing, utilities, education, healthcare and sports/culture. We also finalised a new regional development strategy that we plan to roll out in 2019;
- **Student Entrepreneurship Ecosystem**: Continued support for a programme that aims to transform regional universities into hubs of entrepreneurial excellence, with the long-term goal of helping develop new start-up businesses throughout our operating regions.

Key community investment initiatives in Africa included:

- **Sustainable Agriculture Programme**: A programme to support food security and income-generating opportunities near our Frontier, Comide and Boss Mining operations in the DRC;
- **Potable water distribution**: Completion of the first phase of our clean water programme in the DRC, which provides community members near our Metalkol RTR project with access to potable water.

Our approach to artisanal and small-scale mining
Artisanal and small-scale mining (ASM) activity is present in the vicinity of all our DRC sites, with the exception of Frontier. None of our cobalt or copper production comes from ASM – and our Clean Cobalt Framework at Metalkol RTR pursues a goal of ensuring there is no ASM sourced material in our product.

Nonetheless, we acknowledge the important role that ASM plays in supporting much-needed livelihoods in the DRC, as well as the potential dangers illegal ASM activity can entail for those participating in it and for communities living nearby. In this context, we support a range of external community social investment (CSI) initiatives focused on addressing the socio-economic drivers behind, and negative impacts of, illegal ASM, including the use of child labour in particular. We also support advocacy for the achievement of responsible external value chains for cobalt (i.e. outside of our own production).

Responsible Supply Chains: Our Clean Cobalt Framework
Metalkol RTR is poised to become a major global source of cobalt and to play a key role in supporting the electric vehicle revolution. There is concern amongst value chain actors, however, about the potential social and environmental risks associated with artisanally-produced cobalt from the DRC.

In this context, our new Clean Cobalt Framework will help us embed responsible business practices and deliver assurance regarding our own responsibly-produced cobalt (including with respect to its traceability, the fact it does not come from artisanal sources and the fact that it is free from child labour) – whilst also improving conditions for local people. Furthermore, it will support our ongoing commitment to comply with

5 This includes the reported employee fatalities.

(and go beyond) the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Performance

CSI contributions by region

Region	2018	2017
Kazakhstan	US$107.9 million	US$105.5 million
Africa	US$6.9 million[6]	US$5.5 million
Brazil	US$0.3 million	US$0.2 million

In 2018, ERG's worldwide CSI contributions were US$115 million (2017: US$111 million). This included investment of US$20.4 million to fund social partnership projects (or 'memoranda of understanding') with regional governments in Kazakhstan. We also continued to support national-level social investment projects. Most notably, this included a donation of US$59 million to the Foundation of the First President of the Republic of Kazakhstan – Elbasy (the Foundation) (2017: US$61 million), which was primarily used for educational, cultural and recreational projects.

Environmental stewardship

Under our 2025 Strategy, we have prioritised the sustainable development of our host regions. This involves the application of international environmental standards – including those relating to pollution, climate change and waste management.

Key issues and initiatives

Pollution prevention
Key initiatives to improve the management of our pollution impacts in 2018 included:

- **Long-term Air Emissions Strategy**: Development of a new long-term strategy to bring our assets in Kazakhstan closer in line with EU air quality standards relating to particulate matter. This includes:
  - The introduction of advanced gas treatment technologies;
  - The conversion of coal-fired generation plants to use natural gas (where possible).
- **Advanced emissions monitoring**: Implementation of automated, real-time atmospheric monitoring at Aluminium of Kazakhstan (Pavlodar), using remote monitoring stations. This enables us to adjust our production activity accordingly to minimise the risk of excessive emissions. We also began applying a high-tech mass spectrometer across our operations in Kazakhstan to deliver in-depth insight into our emissions to air.

Energy and climate change
The total installed capacity of our power plants in the Pavlodar, Kostanay and Aktobe regions is 3,262 MW (2017: 3,202 MW) – or about 17.1% of all electricity in Kazakhstan. Of this, 83% is generated using coal, meaning we are continuing to seek ways to manage our greenhouse gas emissions.

In 2018, this included:

- **Energy efficiency**: The application of 122 energy saving measures in Kazakhstan under our 2016-2020 Energy Efficiency Programme – reducing our consumption by 2,021 terajoules;
- **Renewable energy**: The launch of wind monitoring in Kazakhstan to determine the suitability of two potential sites for wind farms in the Aktobe and Pavlodar regions.

6 The significant increase in CSI spending in Africa between 2017 and 2018 reflects investment in a range of new and ongoing initiatives at Metalkol RTR in the DRC including the launch of our Clean Cobalt Framework (page 9).

Waste management
In 2019, we completed an assessment of the risks associated with our tailings dams at all Group-wide entities. We have since defined an action plan, which includes the engagement of third-party expertise to support our risk management efforts.

We recycle and reprocess large volumes of our waste in Kazakhstan. This includes:
- The selling of marketable waste – from coke dust to carbon foam – to third parties
- A range of reprocessing programmes to ensure we maximise the value we capture from our input materials, by-products and waste

Our Metalkol RTR project in the DRC is designed to reprocess third-party legacy tailings in and around the Musonoi river valley. In doing so, it will actively remediate decades-worth of legacy pollution and land-degradation that took place prior to our ownership.

Performance

Greenhouse gas emissions (tonnes CO2e)

	2018	**2017**	**2016**
Direct emissions[7]	24,672,108	24,014,808	23,768,926
Indirect emissions[8]	59,026	55,572	365,746
Total (Direct and Indirect)	24,731,134	24,070,380	24,134,672

Our relationship with broader society

Our generation and distribution of economic value represents one of the most important benefits we deliver to our host societies. It is in this context that we have made financial stability a Group priority under our 2025 Strategy. We have also prioritised the sustainable development of our host regions, including our contributions to their socio-economic development and well-being. In this context, we are committed to fulfilling our obligations towards our partners – including our host governments – and to nurturing relations based on trust and respect with others.

Key issues and initiatives

Value generation and distribution
In terms of direct value distribution, the most significant impact we have is through the wages we pay, the goods and services we buy, the payments we make to finance providers, CSI and, importantly, the taxes and royalties we pay to government.

In 2018, the Board approved our updated Group Tax Policy. It has been developed in the context of ongoing international scrutiny of base erosion and profit shifting (BEPS), and other international tax trends. Amongst other things, the Policy commits us to:
- Taking account of both the spirit and the letter of relevant tax laws and regulations;
- In the context of transfer pricing: (a) Conducting all transactions between Group companies on an arm's length basis; and (b) Determining pricing in accordance with the nature of the economic functions performed by each company (including the use of capital) following the pricing methods and principles outlined in the OECD Transfer Pricing Guidelines and/or local laws.

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7 i.e. GHG emissions that result from the consumption of direct energy for generation of electricity, heat/steam, used in mining, production, and for ERG controlled transportation activities.
8 i.e. GHG emissions that result from the consumption of indirect energy purchased from third parties not owned or controlled by ERG. Based on operational control of assets.

Compliance
ERG is committed to conducting its activities in accordance with all applicable laws and regulations, as well as high ethical standards of business conduct. Furthermore, we are opposed to all forms of bribery and corruption, and do not engage in or tolerate their occurrence in any circumstances.

Key areas of Compliance focus include anti-corruption, relationships with third parties, international sanctions and human rights.

Our compliance efforts are overseen by our Board of Manager's Compliance Committee. At an executive level, we established a dedicated Risk and Compliance Committee in 2016 and this commenced operation in 2017.

Risk-based management sits at the heart of our Group Compliance Programme. This includes:

- Regular compliance risk assessments at Group-and Regional-level;
- Maintenance of a Compliance Risk Register (an integral part of the Group Risk Register);
- The addressing of any control gaps through remediation or new controls;
- Application of an embedded compliance testing and monitoring programme.

SFO Investigation into ENRC
The Serious Fraud Office's (SFO) investigation into ENRC (the Company) commenced on 25 April 2013. The focus of the investigation is stated, by the SFO, to be allegations of fraud, bribery and corruption relating to the acquisition of mineral assets in Africa. On 14 May 2015, the SFO confirmed that it was not 'actively investigating' the Company's Kazakh operations, and on 23 October 2018 confirmed again that they were not part of its investigation. During the course of the investigation the Company has complied with all statutory requests made by the SFO in addition to voluntarily providing a large volume of material at the request of the SFO.

It is common for the SFO to investigate cases for a number of years due to their complexity. There are a number of possible outcomes to an SFO investigation, one of which is the investigation coming to an end with no charge being brought against any party. At this stage, it is hard to predict exactly how long the SFO's investigation into ENRC will last, nor is it possible to say what the result of the investigation will be.

Government relations and policy
Our host governments (including the Government of the Republic of Kazakhstan, which has a 40% shareholding in ERG) count amongst our most important stakeholders.

Key areas of interaction with our host (and other) governments in 2018 include:

- **Kazakhstan**: Our implementation of corporate programmes that are aligned with/support the public policy agenda (ranging from digitalisation, the 'Green Economy' concept and, regional development,– through to China's Belt and Road Initiative (BRI));
- **DRC**: Engagement (through a multilateral body) with the government over the implementation of the new Mining Code. In addition, we concluded an agreement with state mining company Gécamines to increase its interest in Boss Mining;
- **China**: Active participation in China's BRI, with Chinese financing and technical capabilities supporting the development of our portfolio.

Risk management

Our risk management framework defines the oversight responsibilities of the Board and the Executive Committee. They are supported in this role by our Risk and Compliance Management Committee, as well as our Group Risk and Group Internal Audit teams.

In 2018, we advanced our management of risk through the:

- Revision and update of our Risk Management Policy, Risk Management Manual and Guidelines and Capital Project Risk Management Guide and Guidelines;
- Development of a Group Internal Control Policy and methodology, which was approved in early 2019;
- Definition of our Group risk appetite with respect to multiple functional process areas, ranging from Compliance through to Security.

Principal risks and mitigation actions relevant to Sustainable Development

Principal risk areas	Key mitigation actions
1. Political risks	
There are varying degrees of political stability in our host countries. We conduct our business in complex environments, which are characterized by ever-changing political dynamics. As such our financial performance may be undermined by unpredictable shifts in government policy.	1. Monitoring of potential legislative and regulatory changes in our host countries. 2. Development and implementation of government negotiation strategies.
2. Regulatory risks	
There are a number of factors that could undermine our regulatory context, i.e.: • The introduction of new laws and regulations by our host governments; • The risk of increased official imposts on natural market monopolies, such as railways.	1. Monitoring of potential legislative and regulatory changes in our host countries. 2. Participation in professional bodies/ associations to enhance the representation of our interests. 3. Monitoring of our licence and permit obligations. 4. Strict compliance with our licence and permit obligations.
3. Price risks	
A substantial decline in – or volatility around – commodity prices could materially affect our business, including our financial results, the value of our assets and our cash flow.	1. Monitoring of the macroeconomic and market environment, including price indices, benchmarks, etc. Maintenance of long-term sales contracts. 2. Application of formula pricing to key sales contracts. 3. Hedging of commodity prices. 4. Use of 'natural hedging' (i.e. the linking of products and purchased input materials to relevant benchmarks).

4. Production and operational risks The failure of sophisticated technological processes, extreme weather conditions, power interruptions and non-compliance with operational procedures represent key risks that have the potential to result in serious safety incidents (including fatalities), environmental harm and business interruption.	1. Implementation of risk-based reliability planning and maintenance. 2. Independent external checks of the technical condition of equipment and machinery. 3. Development of a resilient power supply system and signing of long-term contracts with reliable electricity suppliers. 4. Control of input materials (quality and specification). 5. Monitoring of compliance with operational procedures. 6. Implementation of business continuity management processes. 7. Maintenance of insurance policies to cover potential damage and business interruption.
5. Supply chain and logistics risks We aim to mitigate risks relating to: • Supplier non-compliance with the terms of our supply contracts in relation to input materials, goods, equipment and machinery; • Non-delivery of requisite input materials, goods, equipment and machinery (quantity, quality and specification); • Changes in prices for purchased input materials, goods, equipment and machinery; • Shortage of transportation capacity for the carriage of goods.	1. Improved planning and control systems covering the delivery of input materials, goods, equipment and machinery. 2. Control of input materials, goods, equipment and machinery (quality and specification). 3. Formula pricing for the purchase of input materials 4. Signing of long-term contracts for the purchase of key input materials. 5. Purchase of additional locomotives and railway wagons to increase our carrying capacity. 6. Signing of long-term wagon rental contracts.
6. Capital project execution risks The Group continues to implement a range of major capital projects. A failure to deliver such projects within planned timeframes, budgets and quality criteria could negatively affect our long-term profitability and reputation (including our ability to attract future financing). We have established a dedicated ERG Capital Projects company within our Group, to consolidate and enhance our approach towards the planning and execution of capital projects.	1. Application of a systematic, transparent and phased project implementation process. 2. Application of an enhanced project due diligence and mine planning process (including third-party expert input). 3. Implementation of risk management standards for large capital projects across the Group. 4. Application of robust project financing arrangements, including the signing of offtake agreements – plus the effective structuring of contracts with suppliers. 5. Close monitoring and control of project deadlines, budgets and other parameters. 6. Procurement of insurance policies for major capital projects (e.g. construction all risks insurance and delay in start-up insurance).
7. Financial risks Any inability of the Group to access commercially viable external financing could undermine our ability to carry out necessary operating and investment activities. Also, any deterioration of our cash flow and profitability could adversely affect our ability to meet our existing financial obligations, including debt repayments. The majority of our production costs are denominated in Kazakhstani tenge and US dollars	1. Ongoing enhancement of our relationships with potential finance providers to broaden the Group's base of lenders. In addition, we work closely with existing lenders to restructure our existing debt portfolio. 2. Introduction of a formal process to monitor compliance with our covenants. We maintain constant communication with our lenders and seek waivers as necessary.

while the majority of our sales are denominated in US dollars. As such, we include foreign exchange risk in our key financial risks category.	3. Maintenance and regular updating of detailed cash flow budgets and forecasts – to deliver accurate insight into the Group's liquidity requirements. 4. Development, updating and application of financial policies and procedures aimed at reducing and controlling foreign exchange risk, liquidity risk, interest rate risk and credit risk.
8. Personnel management risks The fact we operate in remote locations poses risks in terms of: • Our ability to attract and /or retain personnel with the necessary skills and experience to support our operations. • The outflow of qualified personnel from the countries and regions in which we operate.	1. Offering of competitive remuneration packages, including salaries, bonuses and non-cash benefits. 2. Development and implementation of personnel training and development programmes to maintain the pipeline of qualified personnel needed to support our business. 3. Application of enhanced recruitment procedures, as well as the implementation of measures to reduce staff turnover and promote employee development. 4. Implementation of social programmes in our host regions, specifically aimed at improving the quality of life of employees and their families.
9. Social risks Our business activities may negatively affect nearby communities. There is a risk that this could undermine our political and social licence to operate – potentially undermining our operations and projects.	1. Provision of competitive social packages and social benefits to our employees (who can make up a significant proportion of our local communities). 2. Application of community social investment and other measures to support community development and well-being. 3. Analysis of staff satisfaction and attitudes, plus the processing of employee complaints and requests. 4. Monitoring of social attitudes within our host regions, including engagement with community leaders.
10. Health, safety and security risks The nature and location of our operations mean they have, in absence of appropriate controls, the potential to undermine the physical well-being and health of our employees, contractors and community members. We comply with all local health and safety laws and apply 'beyond compliance' international occupational health and safety management standards.	1. Application of OHSAS 18001-certified and/or aligned occupational health and safety management systems. 2. Development and implementation of supplementary regional programs to support a safety-first culture. 3. Application of a zero tolerance approach towards critical health and safety risks and the prioritisation of resources to manage them. 4. Compliance with local safety regulations.
11. Environmental and climate change risks The nature of our activities and processes mean they have, in the absence of appropriate controls, the potential to harm the environment (including in ecologically sensitive areas) – and, by extension, to harm the well-being of our communities. Furthermore, our substantial greenhouse gas emissions mean we face direct and indirect risks in relation to future regulatory attempts to limit	1. Application of policies and procedures to ensure compliance with regulatory limits on the discharge of harmful substances to air, land and water (including monitoring). 2. Integration of environmental criteria into decision making around project approval (i.e. integrated stage-gates). 3. Implementation of renewable energy projects 4. Application of carbon footprint analysis

organisations' emissions, including through fiscal controls, cap and trade schemes, and other means. In addition, like our peers, we face future operational risks relating to long-term climate change, including those relating to shifting and/or extreme weather patterns.	5. Application of ISO 14001-certified and/or aligned environmental management systems 6. Application of ISO 50001- certified energy management systems in Kazakhstan
12.Compliance risks The Group has a presence/does business in locations that are considered to pose higher levels of legal compliance risks in terms of: • Bribery and corruption • Sanctions • Human rights • Personal data protection • Anti-money laundering and counter-financing of terrorism • Fraud-prevention	1. Development and application of Group compliance policies and regular reporting of performance to senior management. 2. Continuous operation of a dedicated 24 hour hotline that is anonymous, confidential and operated by a third-party. 3. Monitoring of adherence to international human rights standards. 4. Application of a proactive programme to support compliance with the EU General Data Protection Regulation (GDPR). 5. Ongoing monitoring of applicable international sanctions, as well events, issues and dynamics that could trigger the application of new international sanctions. 6. Application of comprehensive counter-party due diligence.
13. Informational Technology (IT) and information security risks Given our ongoing efforts to use IT and digitalisation to help drive our business, we recognize that this exposes us to potential risks in relation to: • Loss of access to IT infrastructure, including servers, cloud solutions, etc; • Breaks in critical business processes as a result of technical outages; • Internal and/or external information theft • Data leakage; • Non-compliance with information security legislation and regulation; • The violation of software licence agreements.	1. Development and application of information security policies. 2. Auditing of IT systems. 3. Prompt responses to IT failures. 4. Implementation of a continuity plan for critical IT processes. 5. Monitoring of compliance with the terms of software licence agreements.

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. Our ongoing efforts to identify and manage risks is therefore critical for the successful achievement of our objectives.

Our key risks are regularly reviewed by our Risk and Compliance Management Committee and our Board of Managers to ensure visibility of our overall risk exposure and to support the prioritisation of our mitigation actions.

The risk management function helps to implement these actions in a timely manner, thus ensuring the proactive mitigation and reduction of our key risks.

Consolidated management report

The Managers present their report and the audited Consolidated financial statements for the year ended 31 December 2018.

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, and the DRC. The Group has six operating Divisions: Ferroalloys, Iron Ore, Alumina and Aluminium, Energy, Logistics, 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 Article 68 of the Luxemburg Accounting Law, information required to be disclosed in this regard has been presented in the report as follows:

- CEO Report *on pages 4 to 5;*
- Corporate review on pages 6 to 11 which includes information on financial and operational performance, key initiatives and events in 2018 and 2025 Strategy;
- Divisional review on pages 12 to 22;
- Financial review on pages 23 to 26;
- Sustainable Development review on pages 27 to 33; and
- Risk management on pages 34 to 37.

All of the above form part of the management report required by the Luxembourg Accounting Law.

Managers

The Managers who held office during the financial year ended 31 December 2018 and up to the date of signing the Consolidated financial statements are those listed below:

Manager	Occupation	Domicile	Date of appointment
Mr Bakyt Sultanov	Class A Manager	Kazakhstan	17/06/2013
Mr Alexander Machkevitch	Class B Manager	Israel	17/06/2013
Mr Alijan Ibragimov	Class B Manager	Switzerland	17/06/2013
Mr Patokh Chodiev	Class B Manager	Switzerland	17/06/2013
Mr Beibut Atamkulov	Class A Manager	Kazakhstan	20/06/2013

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

Delegate	Position	Date of appointment	Date of Resignation
Mr Benedikt Sobotka	Chief Executive Officer	15/01/2014	
Mr Paul Aggleton	Chief Financial Officer	01/06/2015	01/04/2018
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	
Manager	**31 December 2018**	31 December 2017
Mr Alexander Machkevitch	**16,059**	16,059
Mr Alijan Ibragimov	**16,051**	16,051
Mr Patokh Chodiev	**14,390**	14,390

Events after the balance sheet date
Details of events after the balance sheet date have been disclosed in note 31 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 25 to the Consolidated financial statements.

Research and development activities

The Group has a research and development centre which is in charge of 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$3.9 million (2017: US$3.8 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 43 to 98 were approved by the Board of Managers on 22 June 2019 and signed on its behalf by:

Mr Alexander Machkevitch
Chairman
22 June 2019

Mr Benedikt Sobotka
Chief Executive Officer
22 June 2019

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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 2018, 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 balance sheet as at 31 December 2018;
- the consolidated income statement for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated cash flow 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 Ethics Standards Board for Accountants' Code of Ethics for Professional 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;

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- 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

Marc Minet

Luxembourg, 27 June 2019

Consolidated income statement

In millions of US$	Note	Years ended 31 December 2018	2017
Revenue	3	**5,353**	5,048
Cost of sales	6	**(3,042)**	(2,681)
Gross profit		**2,311**	2,367
Distribution costs	7	**(191)**	(172)
General and administrative expenses	8	**(838)**	(750)
Exploration costs		**(19)**	(17)
Impairments		**(13)**	(45)
Net other operating income/(expense)	9	**30**	(170)
Operating profit		**1,280**	1,213
Finance income	11	**288**	130
Finance cost	12	**(1,352)**	(618)
Profit before income tax		**216**	725
Income tax expense	13	**(231)**	(336)
(Loss)/profit for the year		**(15)**	389
Profit/(loss) attributable to:			
Owners of the Company		**35**	397
Non-controlling interests		**(50)**	(8)

The above Consolidated income statement should be read in conjunction with the accompanying notes on pages 48 to 98.

Consolidated statement of comprehensive income

In millions of US$	Years ended 31 December 2018	2017
(Loss)/profit for the year	**(15)**	389
Other comprehensive (expense)/income, net of income taxes:		
Items that may be subsequently reclassified to profit or loss:		
Currency translation differences	**(472)**	(72)
Cash flow hedges	**33**	(7)
Remeasurement of employee benefit obligations	**–**	1
Total comprehensive (expense)/income for the year	**(454)**	311
Total comprehensive (expense)/income attributable to:		
Owners of the Company	**(426)**	298
Non-controlling interests	**(28)**	13
	(454)	311

The above Consolidated statement of comprehensive income should be read in conjunction with the accompanying notes on pages 48 to 98.

Consolidated balance sheet

In millions of US$	Note	At 31 December 2018	2017
Assets			
Non-current assets			
Property, plant and equipment	14	**10,310**	10,515
Intangible assets	15	**143**	131
Other financial assets		**103**	97
Deferred tax assets	13	**29**	37
Other		**176**	163
Total non-current assets		**10,761**	10,943
Current assets			
Inventories	16	**871**	824
Trade and other receivables	17	**742**	684
Cash and cash equivalents	18	**734**	612
Total current assets		**2,347**	2,120
Total assets		**13,108**	13,063
Equity			
Capital reserve	20	**3,159**	3,159
Reserves		**(1,194)**	(197)
Attributable to owners of the Company		**1,965**	2,962
Non-controlling interests		**216**	(226)
Total equity		**2,181**	2,736
Liabilities			
Non-current liabilities			
Borrowings	21	**7,670**	6,959
Deferred tax liabilities	13	**1,394**	1,560
Asset retirement obligations	22	**103**	90
Employee benefit obligations	23	**43**	46
Other		**53**	128
Total non-current liabilities		**9,263**	8,783
Current liabilities			
Borrowings	21	**709**	734
Trade and other payables	24	**826**	657
Income tax liabilities		**28**	31
Other taxes payable		**101**	122
Total current liabilities		**1,664**	1,544
Total liabilities		**10,927**	10,327
Total liabilities and equity		**13,108**	13,063

The above Consolidated balance sheet should be read in conjunction with the accompanying notes on pages 48 to 98.

These Consolidated financial statements and the accompanying notes were approved for issue by the Board of Managers on 27 June 2019 and were signed on its behalf by:

Mr Alexander Machkevitch
Chairman

Mr Benedikt Sobotka
Chief Executive Officer

Consolidated cash flow statement

In millions of US$	Note	Years ended 31 December 2018	2017
Cash generated from operating activities	19	**1,632**	1,916
Interest and other similar expenses paid		**(739)**	(364)
Interest received		**17**	12
Income tax paid		**(269)**	(403)
Net cash generated from operating activities		**641**	1,161
Cash flow from investing activities			
Purchase of property, plant and equipment		**(745)**	(667)
Proceeds from sales of property, plant and equipment		**4**	5
Purchase of intangible assets		**(7)**	(18)
Proceeds from sales of subsidiaries		**23**	23
Acquisition of subsidiary		**(41)**	–
Loans and deposits granted		**(8)**	(3)
Proceeds from repayment of loans and deposits		**1**	2
Net cash used for investing activities		**(773)**	(658)
Cash flow from financing activities			
Borrowings – proceeds		**7,275**	708
Borrowings – repayments		**(6,891)**	(828)
Payment of arrangement fees		**(25)**	(6)
Purchase of non-controlling interests	30	**(4)**	(57)
Dividends paid to owners of the Company		**(74)**	(60)
Dividends paid to non-controlling interests		**(43)**	(19)
Net cash generated from/(used for) financing activities		**238**	(262)
Net change in cash and cash equivalents		**106**	241
Cash and cash equivalents at the beginning of the year		**612**	357
Foreign exchange gain on cash and cash equivalents		**16**	14
Cash and cash equivalents at the end of the year	18	**734**	612

Purchase of property, plant and equipment includes US$48 million of capitalised borrowing costs (2017: US$80 million).

The above Consolidated cash flow statement should be read in conjunction with the accompanying notes on pages 48 to 98.

Consolidated statement of changes in equity

In millions of US$	Share capital	Capital reserve	Retained earnings	Translation reserve	Hedge reserve	Other reserve	Total	Non-controlling interests	Total equity
	Attributable to owners of the Company								
Balance at 1 January 2017	–	3,159	6,178	(6,625)	–	1	2,713	(196)	2,517
Profit/(loss) for the year	–	–	397	–	–	–	397	(8)	389
Other comprehensive (expense)/ income	–	–	–	(93)	(7)	1	(99)	21	(78)
Total comprehensive income/ (expense)	**–**	**–**	**397**	**(93)**	**(7)**	**1**	**298**	**13**	**311**
Dividends	–	–	(60)	–	–	–	(60)	(25)	(85)
Other changes in non-controlling interests	–	–	11	–	–	–	11	(18)	(7)
Balance at 31 December 2017	**–**	**3,159**	**6,526**	**(6,718)**	**(7)**	**2**	**2,962**	**(226)**	**2,736**
Impact of IFRS 9 (note 1)	–	–	(9)	–	–	(4)	(13)	(1)	(14)
Balance at 1 January 2018	**–**	**3,159**	**6,517**	**(6,718)**	**(7)**	**(2)**	**2,949**	**(227)**	**2,722**
Profit/(loss) for the year	–	–	35	–	–	–	35	(50)	(15)
Other comprehensive (expense)/ income	–	–	–	(494)	22	11	(461)	22	(439)
Total comprehensive income/ (expense)	**–**	**–**	**35**	**(494)**	**22**	**11**	**(426)**	**(28)**	**(454)**
Dividends	–	–	(120)	–	–	–	(120)	(54)	(174)
Other changes in non-controlling interests (note 30)	–	–	(438)	–	–	–	(438)	525	87
Balance at 31 December 2018	**–**	**3,159**	**5,994**	**(7,212)**	**15**	**9**	**1,965**	**216**	**2,181**

The above Consolidated statement of changes in equity should be read in conjunction with the accompanying notes on pages 48 to 98.

Notes to Consolidated financial statements

1. Basis of preparation and principal accounting policies

General information
Eurasian Resources Group S.à r.l. (the 'Company') was incorporated on 13 May 2013 and 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 office 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 2018 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 Other Non-ferrous.

Basis of preparation
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 2017, except where new policies have been applied. New accounting policies and pronouncements and the effects of these policies have been outlined below.

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 also 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
The Board of Managers has reviewed the liquidity available for the period until 30 June 2020. Throughout the period under review the Group generates sufficient cash flow to maintain a position above minimum working capital requirements. During 2018, commodity prices continued to improve considerably which has given the Group additional headroom when considering its liquidity.

On 27 June 2018, Standard & Poor's upgraded the Group's credit rating to B/B with positive outlook from B-/B with stable outlook. On 3 August 2018, the Moody's upgraded the Group's credit rating to B2 with positive outlook from B3 with stable outlook.

The Group's credit facility agreements include a considerable number of various financial and non-financial covenants. As of 31 December 2018, the Group complied with covenants.

1. Basis of preparation and principal accounting policies (continued)

The Group appreciates the dependence of liquidity on commodity prices in our key markets and ability to raise additional funding when required (refer to note 21). 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 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 and accordingly the Group will be able to realise its assets and discharge its liabilities in the normal course of business.

Changes in accounting policies and disclosures

New standards adopted for 2018
IFRS 9 'Financial instruments' sets out the requirements for recognising and measuring financial assets, financial liabilities and certain contracts to buy or sell non-financial items. The standard facilitates use of hedge accounting. The adoption of IFRS 9 'Financial instruments' resulted in a decrease of US$14 million in equity at 1 January 2018, representing the recognition of loss on debt modification, and a reclassification within equity between other reserves and retained earnings, representing deferred cost of hedging. Changing the measurement basis from amortised cost to fair value for certain financial assets did not result in impact on equity at 1 January 2018.

IFRS 15 'Revenue from contracts with customers' provides a single model of accounting for revenue arising from contracts with customers-based on the identification and satisfaction of performance obligations, and revenue from contracts with customers that is distinguished from other sources. The adoption of IFRS 15 did not result in impact on equity at 1 January 2018.

Changes to IFRS not yet adopted
IFRS 16 'Leases' (issued on 13 January 2016; endorsed by the EU with effective date of 1 January 2019). The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases. All leases result in the lessee obtaining the right to use an asset at the start of the lease and, if lease payments are made over time, also obtaining financing. Accordingly, IFRS 16 'Leases' eliminates the classification of leases as either operating leases or finance leases as is required by IAS 17 'Leases' and, instead, introduces a single lessee accounting model. Lessees will be required to recognise: (a) assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value; and (b) depreciation of lease assets separately from interest on lease liabilities in the income statement. IFRS 16 'Leases' substantially carries forward the lessor accounting requirements in IAS 17 'Leases'. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

The Group envisages adopting the modified retrospective approach, through which the cumulative effect of the initial application is recognised at 1 January 2019 without any restatement of comparative information. The adoption of IFRS 16 'Leases' is expected to result in increase of borrowings and property, plant, and equipment in a range of up to approximately US$30 million.

1. Basis of preparation and principal accounting policies (continued)

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 2018.

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.

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 significant operating entities is the Kazakhstani tenge (KZT). For the Sales and Marketing entities and significant African operations, the functional currency is the US dollar (US$). The functional currency of the Company is the US$.

1. Basis of preparation and principal accounting policies (continued)

The following table shows, for the years indicated, the principal rates of exchange per US$1.00.

	As at 31 December		Average	
	2018	2017	**2018**	2017
British pound (GBP)	**0.79**	0.74	**0.79**	0.78
Kazakhstani tenge (KZT)	**384.20**	332.33	**344.71**	326.00
Russian rouble (RUB)	**69.60**	57.60	**67.48**	58.32
Brazilian real (BRL)	**3.87**	3.31	**3.65**	3.19
South African rand (ZAR)	**14.42**	12.29	**14.23**	13.31
Congolese franc (CDF)	**1,620.44**	1,597.75	**1,612.76**	1,478.34

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 acquisition.

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.

1. Basis of preparation and principal accounting policies (continued)

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' and therefore the IFRS 15 'Revenue' rules on variable consideration do not apply. Such adjustments therefore represent revenue from sources other than contracts with customers. In 2017 the Group applied requirements of IAS 18 'Revenue'.

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.

1. Basis of preparation and principal accounting policies (continued)

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. Judgment is applied by management in determining whether general borrowings include or exclude borrowings used to finance specific assets that are non-qualifying assets. Management has determined that borrowings related to the acquisition of the Group itself at the time of Group reorganisation and acquisition should be excluded from the general borrowings pool which is eligible for capitalisation. For general borrowings which are not excluded from the general borrowings pool 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. Excess profit tax ('EPT'), being a tax on income, forms part of the income tax expense.
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.

1. Basis of preparation and principal accounting policies (continued)

Deferred tax assets are recognised for all deductible temporary differences, carried forward are 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.

In accordance with applicable tax legislation, EPT is payable in respect of each subsurface use contract at varying rates when ratio of annual income to annual allowed deductions under a contract exceeds certain level.

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.

1. Basis of preparation and principal accounting policies (continued)

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.

1. Basis of preparation and principal accounting policies (continued)

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.

1. Basis of preparation and principal accounting policies (continued)

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 amount obtainable from the sale of an asset or CGU in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. 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 aggregate of the consideration transferred and the fair value of non-controlling interest over the Group's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities of the acquiree, 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.

1. Basis of preparation and principal accounting policies (continued)

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. In 2017 the Group applied requirements of IAS 39 'Financial instruments: Recognition and measurement'.

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 and other than provisionally priced 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 of the change in cash flows to be received relating to highly probable forecast transactions.

1. Basis of preparation and principal accounting policies (continued)

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 profit or loss only when the hedged transactions occurs.

Gains and losses on derivative contracts not qualifying and 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 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.

1. Basis of preparation and principal accounting policies (continued)

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 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 borrowings 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 of the change in cash flows to be received relating to highly probable forecast transactions.

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.

1. Basis of preparation and principal accounting policies (continued)

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 profit or loss. 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. The Group does not accrue interest on non-current prepayment accounted for as non-financial liabilities.

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 against profits 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.

Leases
Operating lease payments are recognised as an expense in the Consolidated income statement on a straight-line basis over the lease term.

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 on dividends.

1. Basis of preparation and principal accounting policies (continued)

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 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.

Borrowings classification

In preparing the Consolidated financial statements for the year ended 31 December 2017, the Managers considered that because of the strategic nature of the Group for the Republic of Kazakhstan and the potential damage which might result from such an action, any acceleration by Samruk-Kazyna would have been subject to other laws in Kazakhstan and therefore subject to Governmental approvals.

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

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 22 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 1.9% - 6.3% as at 31 December 2018 being the estimates of the rate of inflation over the mine lives. The discount rates currently applied in the calculation are 5.4% - 15.0% as at 31 December 2018 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, 2018 impairment reviews have been performed on the basis of FVLCD 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 2018 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.

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

As at 31 December 2018, 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' long-term 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 1.9% per annum and a long-term Kazakhstani inflation rate average of 5.1%, in line with external forecasts;
- in determining the discount rate to be applied to the future cash flows, the Group used the post-tax Weighted Average Cost of Capital ('WACC'), adjusted for the country risk premium for each CGU accordingly. The rates used were in the range of 7.50% - 11.50%; and
- KZT/US$ long term exchange rate used is KZT366.50/US$.

The impairment test for Eurasian Energy Corporation Power CGU was particularly sensitive to changes in electricity tariff. The Ministry of Energy of the Republic of Kazakhstan enacted new marginal tariffs for electricity in December 2018. For the purpose of the impairment test, the Group adjusted applicable regulatory electricity tariff to reflect strategic nature of the Group for the Republic of Kazakhstan. Whilst Management remains confident in the assumptions used in the recoverable amount computation, application of enacted electricity tariff without relevant adjustment to reflect strategic nature of the Group for the Republic of Kazakhstan would have resulted in an impairment equaling the carrying amount.

As a result of the annual impairment testing, Management does not believe that the carrying value of long-term non-financial assets was impaired at 31 December 2018.

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 (see 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.

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

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 13 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 new remuneration plan with some key management personnel. As part of this new 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 must be achieved before the end of 2019 with an option to extend until the end of 2021.

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

If these incentives were to crystallise then amounts payable by the Company under these schemes may represent a material amount for 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's best estimation as of 31 December 2018 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.

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 (refer to note 29) includes items directly attributable to the operating division, as well as those that can be allocated on a reasonable basis.

The Group is organised on the basis of six (2017: 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;
- 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 2017.

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

3. Divisional information (continued)

Year ended 31 December 2018 In millions of US$	Ferroalloys Division	Iron Ore Division	Alumina and Aluminium Division	Other Non-ferrous Division	Energy Division	Logistics Division	Corporate	Intra Group Eliminations	Total
Revenue[1]	2,213	813	930	1,035	308	54	–	–	**5,353**
Inter-division revenue	3	8	18	–	275	83	–	(387)	**–**
Divisional revenue	**2,216**	**821**	**948**	**1,035**	**583**	**137**	**–**	**(387)**	**5,353**
Divisional operating profit/(loss)	**892**	**93**	**402**	**(123)**	**141**	**62**	**(187)**	**–**	**1,280**
Finance income									**288**
Finance cost									**(1,352)**
Profit before income tax									**216**
Income tax expense									**(231)**
Loss for the year									**(15)**
Depreciation and amortisation	(168)	(122)	(54)	(183)	(95)	(14)	(5)	–	**(641)**
Unrealised gain on derivatives	–	1	61	33	–	–	–	–	**95**
Net operating foreign exchange gain/(loss)	20	10	8	(10)	(8)	1	6	–	**27**
Professional fees and other exceptional litigation costs	(3)	–	–	–	–	–	(42)	–	**(45)**
Restructuring costs	–	–	–	(14)	–	–	–	–	**(14)**
Impairments	–	(8)	–	(4)	(1)	–	–	–	**(13)**
Other	3	–	–	(35)	(10)	–	–	–	**(42)**
Underlying EBITDA (note 29)	**1,040**	**212**	**387**	**90**	**255**	**75**	**(146)**	**–**	**1,913**
Average number of employees, total	**20,028**	**18,400**	**12,858**	**7,072**	**9,142**	**857**	**1,614**	**–**	**69,971**

Year ended 31 December 2017 In millions of US$	Ferroalloys Division	Iron Ore Division	Alumina and Aluminium Division	Other Non-ferrous Division	Energy Division	Logistics Division	Corporate	Intra Group Eliminations	Total
Revenue[1]	2,167	708	852	1,040	244	37	–	–	**5,048**
Inter-division revenue	3	7	12	–	278	55	–	(355)	**–**
Divisional revenue	**2,170**	**715**	**864**	**1,040**	**522**	**92**	**–**	**(355)**	**5,048**
Divisional operating profit/(loss)	**967**	**37**	**259**	**(87)**	**152**	**26**	**(141)**	**–**	**1,213**
Finance income									**130**
Finance cost									**(618)**
Profit before income tax									**725**
Income tax expense									**(336)**
Profit for the year									**389**
Depreciation and amortisation	(171)	(126)	(44)	(174)	(95)	(13)	(4)	–	**(627)**
Unrealised loss on derivatives	–	–	(58)	(29)	–	–	–	–	**(87)**
Impairments	–	(32)	–	(13)	–	–	–	–	**(45)**
Net operating foreign exchange loss	(10)	(1)	(1)	(25)	(1)	–	(1)	–	**(39)**
Professional fees and other exceptional litigation costs	–	–	–	–	–	–	(30)	–	**(30)**
Restructuring costs	–	–	–	(1)	–	–	–	–	**(1)**
Other	–	–	–	(48)	–	–	–	–	**(48)**
Underlying EBITDA (note 29)	**1,148**	**196**	**362**	**203**	**248**	**39**	**(106)**	**–**	**2,090**
Average number of employees, total	**19,937**	**18,773**	**12,806**	**7,031**	**8,962**	**911**	**1,144**	**–**	**69,564**

[1] Revenue for the year ended 31 December 2018 consists of sales of goods recognised at a point in time - 97% (2017: 97%). Revenue includes US$75 million charge from sources other than from contracts with customers.

4. Balances and transactions with related parties

Transactions incurred in the ordinary course of business with related parties in the years ended 31 December 2018 and 31 December 2017 were as follows:

In millions of US$[3]	Sales	Purchases[2]	Net finance income	Other financial assets	Trade and other receivables	Trade and other payables	Cash and cash equivalents
Class B Managers[1]							
2018	1	(85)	5	32	10	(83)	424
2017	1	(82)	8	30	5	(13)	325
Other							
2018	-	(8)	-	-	-	(3)	-
2017	-	(5)	-	-	-	(3)	-

[1] Class B Managers and all entities under their control.
[2] Purchases under 'Class B Managers' category include business travel expenses for representation of the Group and reputation costs.
[3] The above table excludes transactions and balances with the DRC and the Republic of Kazakhstan Governments. 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 Alijan Ibragimov, and Mr Patokh Chodiev.

Transactions and balances with Governments
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 that amounted to US$91 million in 2018 (2017: US$90 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$219 million in 2018 (2017: US$163 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 and Joint Stock Company 'Sovereign Wealth Fund 'Samruk-Kazyna' (refer to note 21).

The DRC Government and related entities are related parties of the Group as a result of the Government's shareholding in the Group's certain subsidiaries. La Générale des Carrières et des Mines ('Gécamines'), the representative entity of the DRC Government, holds 25% interest in Swanmines SAS and, since December 2018, 49% interest in Boss Mining SAS (refer to note 30). The DRC Government holds 5% interest in both Frontier SA and Metalkol SA. The Group has a number of transactions with the DRC Government and related entities, including but not limited to services received in relation to supply of electricity, taxation and similar payments (including royalties) in accordance with the tax legislation of the DRC.

In 2018, the Group settled a dispute with Gécamines that resulted in US$10 million payment to Gecamines, the recapitalisation of debt payable by Boss Mining SAS to the Group (with non-dilution of Gécamines), and the transfer of 19% interest in Boss Mining SAS to Gécamines.

4. Balances and transactions with related parties (continued)

Acquisition

In March 2018, the Group acquired 93.9% interest in 3-Energoortalyk JSC from a vendor for cash consideration of US$41 million. Subject to certain conditions, contingent consideration of US$60 million could become payable during a four year period. The vendor is a related party of the Group as a result of Class B Managers being the controlling related party through indirect interests in that vendor. Refer to note 5.

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. In 2018, members of key management personnel were reassessed to reflect changes in their roles and responsibilities resulted from continued developments in the Group's governing structure and related policies.

Compensation for key management personnel (excluding Managers of the Company) is set out in the table below:

	Years ended 31 December	
In millions of US$	**2018**	2017
Salary and other short-term benefits	**50**	60
Long-term benefits	**42**	31
Total	**92**	91

Balances outstanding with key management arising from key management compensation and representing accrued but unpaid bonuses and personal income taxes were US$76 million as at 31 December 2018 (2017: US$22 million). No amounts were paid in respect of long-term benefits.

Board Compensation

Compensation payable to Managers of the Company is for services performed for the Group. No compensation was paid or payable to Managers for the year ended 31 December 2018 (2017: US$nil).

Long-term incentive plan

In 2017 the Company entered into a new remuneration plan with certain key management personnel. No remuneration was paid or payable for the year ended 31 December 2018, as explained in note 2.

5. Business combination

Acquisition of 3-Energoortalyk JSC

In March 2018, the Group acquired 93.9% interest in 3-Energoortalyk JSC, a power plant, from a related party for cash consideration of US$41 million. Subject to certain conditions, contingent consideration of US$60 million could become payable during a four year period.

3-Energoortalyk JSC is a large industrial company with a combined production of heat power and electricity. The main types of services provided by the company are the production and supply of electric power, electric heat and transit of electricity. This acquisition strengthens the Group's integrated business model through securing a reliable and cost effective supply of electrical power, and enhances the Group's position as a low cost producer. This is a related party transaction as disclosed in note 4.

The fair values of the identifiable assets and liabilities of 3-Energoortalyk JSC as at the acquisition date are set below:

In millions of US$	**Fair values at acquisition**
Property, plant and equipment	10
Other	4
Total assets	**14**
Borrowings	(17)
Other	(2)
Total liabilities	**(19)**
Net liabilities	(5)
Goodwill	59
Net attributable assets	**54**
Consideration:	
Purchase consideration settled in cash	41
Fair value of contingent consideration	13
Total consideration	**54**

Goodwill on acquisition is attributable to cost saving synergy benefits as electric power is used extensively in the operating activities of the Group. None of the recognised goodwill is expected to be deductible for income tax.

The Group has chosen to recognise the non-controlling interest for this acquisition based on the proportionate share of the fair value of the identifiable net liabilities of the acquiree.

The acquired business contributed US$11 million to revenue and US$1 million to profit after income tax from the date of acquisition to 31 December 2018. If the acquisition had taken place at the beginning of the year, there would have been additional US$11 million impact to revenue and additional US$1 million impact to profit after income tax in the Consolidated income statement.

6. Cost of sales

In millions of US$	Years ended 31 December 2018	2017
Materials and components used	**(1,052)**	(909)
Depreciation and amortisation	**(593)**	(595)
Staff costs	**(518)**	(497)
Mining services	**(229)**	(157)
Mineral extraction taxes, royalties and other taxes	**(223)**	(220)
Power and energy	**(155)**	(129)
Repairs and maintenance	**(107)**	(77)
Insurance	**(38)**	(40)
Transportation costs	**(30)**	(24)
Restructuring costs	**(10)**	–
Changes in inventories	**67**	80
Other	**(154)**	(113)
Total cost of sales	**(3,042)**	(2,681)

7. Distribution costs

In millions of US$	Years ended 31 December 2018	2017
Transportation costs	**(101)**	(99)
Agency and commission fees	**(31)**	(31)
Taxes and duties	**(21)**	(3)
Staff costs	**(8)**	(6)
Packing and handling materials	**(3)**	(4)
Depreciation and amortisation	**(1)**	(2)
Other	**(26)**	(27)
Total distribution costs	**(191)**	(172)

8. General and administrative expenses

In millions of US$	Years ended 31 December 2018	2017
Staff costs	**(367)**	(294)
Professional and other services	**(151)**	(109)
Sponsorship and donations	**(123)**	(111)
Business travel	**(44)**	(36)
Depreciation and amortisation	**(33)**	(24)
Taxes and duties	**(16)**	(22)
Allowance for receivables	**(6)**	(72)
Restructuring costs	**(4)**	(1)
Other	**(94)**	(81)
Total general and administrative expenses	**(838)**	(750)

Contributions to a number of different non-recurring individual social development infrastructure projects at the national level in Kazakhstan amounted to US$77 million (2017: US$77 million), and primarily related to healthcare, education, cultural and recreation projects.

9. Net other operating income/(expense)

In millions of US$	Years ended 31 December 2018	2017
Foreign exchange gains	**124**	50
Unrealised gain on derivatives	**95**	–
Realised gain on derivatives	**11**	6
Other	**58**	20
Total other operating income	**288**	76
Foreign exchange losses	**(97)**	(89)
Realised loss on derivatives	**(42)**	(26)
Depreciation and amortisation	**(12)**	(5)
Unrealised loss on derivatives	**–**	(87)
Other	**(107)**	(39)
Total other operating expense	**(258)**	(246)
Total net other operating income/(expense)	**30**	(170)

10. Employee benefit expense

In millions of US$	Years ended 31 December 2018	2017
Wages and salaries	**(849)**	(743)
Compulsory social security costs	**(53)**	(49)
Contributions to defined contribution plans	**(4)**	(5)
Expense related to employee benefit plans	**(4)**	(6)
Total employee benefit expense	**(910)**	(803)

11. Finance income

In millions of US$	Years ended 31 December 2018	2017
Gain on modification of borrowings	**182**	–
Foreign exchange gains	**83**	101
Interest income	**17**	12
Other	**6**	17
Total finance income	**288**	130

Foreign exchange gains and foreign exchange losses are netted on a legal entity basis. The amount of gross foreign exchange gains for the year ended 31 December 2018 is US$837 million (2017: US$1,175 million).

Gain on modification of borrowings resulted from revision of certain credit facility agreements. Under the revised terms, the aggregate interest rates were reduced. These facilities were repaid in 2018.

12. Finance cost

In millions of US$	Years ended 31 December 2018	2017
Interest expense on borrowings	**(548)**	(549)
Foreign exchange losses	**(501)**	(51)
Accelerated unwinding of debt discount	**(152)**	–
Unwinding of discount on financial instruments	**(110)**	(18)
Accelerated unwinding of debt issue costs	**(70)**	–
Amortisation of arrangement fees on credit facilities	**(21)**	(15)
Unwinding of discount on asset retirement obligations	**(9)**	(7)
Unwinding of discount on employee benefits obligations	**(2)**	(3)
Change in fair value of financial instruments	**18**	(46)
Other	**(22)**	(12)
Finance cost	**(1,417)**	(701)
Less: amounts capitalised on qualifying assets	**65**	83
Total finance cost	**(1,352)**	(618)

Foreign exchange gains and foreign exchange losses are netted on a legal entity basis. The amount of gross foreign exchange losses for the year ended 31 December 2018 is US$1,255 million (2017: US$1,125 million).

Accelerated unwinding of debt issue costs and discount resulted from certain debt settlement by way of refinancing.

13. Income taxes

In millions of US$	Years ended 31 December 2018	2017
Current income tax expense	**(277)**	(366)
Deferred income tax benefit	**46**	30
Total income tax expense	**(231)**	(336)

Future tax charges are affected by changes to the applicable laws and regulations in, as well as profit mix from, the jurisdictions in which the Group operates. Given that the Group had been subject to excess profit tax in Kazakhstan until 1 January 2018, income tax charges were also affected by product prices and profitability levels achieved on subsurface use contracts in Kazakhstan.

A reconciliation between the actual income tax expense and the expected income tax benefit for the year at the applicable tax rate of 20% in Kazakhstan, where the majority of the Group's operations are located, is provided below:

In millions of US$	Years ended 31 December 2018	2017
Profit before income tax	**216**	725
Notional tax charge at 20%	**(43)**	(145)
Excess profit tax	**–**	7
Withholding taxes	**(2)**	–
Effect of different tax rates in other countries	**27**	(5)
Items non-deductible for tax purposes	**(66)**	(25)
Net unrecognised tax losses	**(133)**	(134)
Prior period adjustments - current income tax	**2**	(4)
Prior period adjustments - deferred income tax	**(3)**	(14)
Other	**(13)**	(16)
Income tax expense	**(231)**	(336)

13. Income taxes (continued)

In millions of US$	Mineral rights	Accelerated capital allowances	Tax losses	Other	Total
At 1 January 2018	**(1,240)**	**(395)**	**47**	**72**	**(1,516)**
Business combination (note 5)	–	(2)	1	–	**(1)**
Credited/(charged) to profit	7	61	(11)	(11)	**46**
Charged to other comprehensive expense	–	–	–	(8)	**(8)**
Exchange differences	70	55	(3)	(8)	**114**
At 31 December 2018	**(1,163)**	**(281)**	**34**	**45**	**(1,365)**
Represented by:					
Deferred tax assets					**29**
Deferred tax liabilities					**(1,394)**
Net deferred tax liabilities					**(1,365)**
At 1 January 2017	(1,281)	(390)	116	5	(1,550)
Credited/(charged) to profit	44	(4)	(69)	59	30
Credited to other comprehensive expense	–	–	–	1	1
Exchange differences	(3)	(1)	–	–	(4)
At 31 December 2017	(1,240)	(395)	47	65	(1,523)
Impact of IFRS 9 (note 1)	–	–	–	7	7
At 1 January 2018	(1,240)	(395)	47	72	(1,516)
Represented by:					
Deferred tax assets					37
Deferred tax liabilities					(1,553)
Net deferred tax liabilities					(1,516)

US$29 *million deferred tax assets* (2017: US$37 *million) have been recognised on the basis of future* taxable profit forecasts.

As at 31 December 2018, the Group has taxable temporary differences associated with its investments in subsidiaries in the amount of US$1,207 million (2017: US$1,354 million), for which deferred income tax is not provided.

The Group has the following unrecognised deferred tax assets:

	At 31 December	
In millions of US$	**2018**	2017
Tax losses which expire within 10 years	**462**	502
Tax losses with no expiry date	**787**	633
Deductible temporary differences	**108**	84
Total unrecognised deferred tax assets	**1,357**	1,219

14. Property, plant and equipment

In millions of US$	Freehold land	Buildings and mining assets	Mineral rights	Plant and equipment	Vehicles	Assets under construction	Total
Cost:							
At 1 January 2017	37	2,015	5,001	2,439	615	1,785	11,892
Additions	–	18	26	41	81	713	879
Change in asset retirement costs (note 22)	–	16	–	1	–	3	20
Transfers	–	186	–	349	53	(588)	–
Net transfers from/(to) current assets	–	1	–	(1)	(1)	5	4
Disposals	–	(15)	–	(91)	(21)	(6)	(133)
Exchange differences	–	2	4	3	3	3	15
At 31 December 2017	37	2,223	5,031	2,741	730	1,915	12,677
Additions	**1**	**70**	**98**	**90**	**127**	**926**	**1,312**
Additions on business combination (note 5)	**–**	**2**	**–**	**8**	**–**	**–**	**10**
Change in asset retirement costs (note 22)	**–**	**11**	**–**	**(4)**	**–**	**2**	**9**
Transfers	**–**	**55**	**–**	**179**	**48**	**(282)**	**–**
Net transfers from/(to) current assets	**–**	**5**	**–**	**(9)**	**6**	**(2)**	**–**
Disposals	**(1)**	**(32)**	**–**	**(45)**	**(17)**	**(9)**	**(104)**
Exchange differences	**(5)**	**(229)**	**(326)**	**(312)**	**(108)**	**(148)**	**(1,128)**
At 31 December 2018	**32**	**2,105**	**4,803**	**2,648**	**786**	**2,402**	**12,776**
Accumulated depreciation and impairment:							
At 1 January 2017	–	(535)	(216)	(665)	(181)	(30)	(1,627)
Disposals	–	6	–	83	21	5	115
Depreciation charge	–	(209)	(56)	(275)	(70)	–	(610)
Impairment charge	–	(2)	–	(14)	–	(29)	(45)
Exchange differences	–	1	1	2	–	1	5
At 31 December 2017	–	(739)	(271)	(869)	(230)	(53)	(2,162)
Disposals	**–**	**30**	**–**	**44**	**16**	**6**	**96**
Depreciation charge	**–**	**(196)**	**(53)**	**(289)**	**(87)**	**–**	**(625)**
Transfers	**–**	**(14)**	**–**	**13**	**(3)**	**4**	**–**
Impairment charge	**–**	**–**	**–**	**(5)**	**–**	**(8)**	**(13)**
Exchange differences	**–**	**61**	**23**	**115**	**33**	**6**	**238**
At 31 December 2018	**–**	**(858)**	**(301)**	**(991)**	**(271)**	**(45)**	**(2,466)**
Carrying value:							
At 31 December 2018	**32**	**1,247**	**4,502**	**1,657**	**515**	**2,357**	**10,310**
At 31 December 2017	37	1,484	4,760	1,872	500	1,862	10,515

14. Property, plant and equipment (continued)

Additions to assets under construction included US$65 million of capitalised borrowing costs (2017: US$83 million). The average capitalisation rate for the year ended 31 December 2018 was 7% (2017: 8%).

As of 31 December 2018, plant and equipment and vehicles included assets under finance lease with a carrying value of US$26 million (2017: US$15 million) and US$131 million (2017: US$61 million) respectively.

In November 2018, the Group acquired from Mr Elie Berros 51% of the share capital of Evelyne Investissement SAU, which holds the mining rights to explore and operate certain mining tailings owned by Gécamines in accordance with a mineral lease agreement entered between Evelyne Investissement SAU and Gécamines on 7 November 2018 (the 'Lease'). The transfer of 51% interest in Evelyne Investissement SAU was approved by Gécamines in accordance with the Lease terms. Moreover, the Lease was approved by the Board of Directors of Gécamines on 19 November 2018. The consideration for these shares was US$50 million.

As part of the negotiation process and in accordance with the Lease terms, Evelyne Investissement SAU made an advance of US$10 million in respect of the 'Pas de Porte' payment (which is an obligation payable if and when the reserves accessible under this lease agreement become certified).

The main terms of the mineral lease agreement are as follows:

- Lease charge: US$39,000 payable yearly;
- Royalties: 2.5% of the gross turnover;
- Pas de Porte: on the certification of the results of the exploration in accordance with JORC standards as approved by Gécamines, a payment of a Pas de Porte calculated on the basis of US$125/tonne of copper contained, of which US$10 million has already been paid as an advance as noted above.

Initial ERG internal estimates are that the reserves may have copper equivalent potential of approximately 2 million tonnes.

15. Intangible assets

In millions of US$		2018	2017
Carrying value at 1 January		**131**	138
Addition on business combination	5	**59**	–
Additions		**7**	20
Amortisation		**(28)**	(27)
Exchange differences		**(26)**	–
Carrying value at 31 December		**143**	131

Goodwill of US$40 million, US$30 million, and US$13 million is attributed to iron ore, ferroalloys, and alumina and aluminium divisions, respectively, at 31 December 2018 (2017: US$41 million – iron ore division).

16. Inventories

In millions of US$	At 31 December 2018	2017
Consumable stores	**265**	245
Raw materials	**211**	208
Finished goods	**197**	182
Work-in-progress	**176**	170
Other	**136**	109
Less write-down for obsolete and slow-moving inventory	**(114)**	(90)
Total inventories	**871**	824

Inventory write-downs recognised in the Consolidated income statement during the year amounted to US$39 million (2017: US$21 million). Based on the nature of the inventory, write-down of US$32 million (2017: write-down of US$23 million) is included within cost of sales, and write-down of US$7 million (2017: reversal US$2 million) within other operating expense.

17. Trade and other receivables

In millions of US$	At 31 December 2018	2017
Trade receivables	**381**	388
Other receivables	**42**	41
Deferred consideration	**22**	22
Other	**43**	10
Less impairment loss provision	**(9)**	(22)
Total financial assets	**479**	439
Other taxes	**161**	136
Advances to suppliers	**60**	48
Prepaid expenses	**29**	39
Income tax receivable	**14**	22
Less impairment loss provision	**(1)**	–
Total non-financial assets	**263**	245
Total trade and other receivables	**742**	684

Impairment provision:

			At 31 December	
			2018	2017
In millions of US$	Gross amount	Loss allowance	Net amount	Net amount
Current and not past due	**282**	–	**282**	375
Less than 3 months overdue	10	–	10	58
Between 3 to 6 months overdue	6	–	6	5
Between 6 to 12 months overdue	5	–	5	1
Over 12 months overdue	11	(5)	6	–
Total past due	**32**	**(5)**	**27**	64
Current and past due	**314**	**(5)**	**309**	439
Individually determined to be impaired	4	(4)	–	–
Total individually impaired	**4**	**(4)**	**–**	–
Total trade and other receivables (financial assets)	**318**	**(9)**	**309**	439

17. Trade and other receivables (continued)

Movements of the impairment provision of trade and other receivables (financial assets) during the year are as follows:

In millions of US$	2018	2017
Balance at 1 January	**22**	18
Impairment loss recognised in Consolidated income statement	**5**	1
Amounts determined as uncollectable (written off)/reversed	**(14)**	6
Unused amounts reversed	**(3)**	(3)
Exchange differences	**(1)**	–
Balance at 31 December	**9**	22

18. Cash and cash equivalents

	At 31 December	
In millions of US$	2018	2017
Short-term deposits	**439**	449
Cash at bank and on hand	**295**	163
Total cash and cash equivalents	**734**	612
Bank overdrafts	**(15)**	(12)
Net cash and cash equivalents	**719**	600

19. Cash flow from operating activities

		Years ended 31 December	
In millions of US$	Note	2018	2017
Cash flow from operating activities			
Profit before income tax for the year		**216**	725
Adjustments for:			
Depreciation and amortisation		**641**	627
Impairments		**13**	45
Write-down of inventories		**39**	21
Allowance for receivables		**6**	72
Net finance cost	12, 11	**1,064**	488
Net operating foreign exchange (gain)/loss		**(27)**	39
Other		**(1)**	9
Cash generated from operating activities before working capital and other adjustments		**1,951**	2,026
Changes in inventories		**(156)**	(173)
Changes in trade and other receivables		**(196)**	(98)
Changes in trade and other payables		**42**	126
Changes in asset retirement obligations		**4**	5
Changes in employee benefit obligations		**(2)**	2
Changes in other taxes payable		**(11)**	28
Cash generated from operating activities		**1,632**	1,916

20. Capital and dividends

Share capital

	Par value of each share	Number (issued and fully paid)	Ordinary shares US$'000
At 31 December 2018	**$1**	**77,500**	**78**
At 31 December 2017	$1	77,500	78

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

Capital reserve

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

Dividends

The Company declared dividends as set out below:

	2018		2017	
	US$ per share	**In millions of US$**	US$ per share	In millions of US$
Dividends	**1,548**	**120**	774	60

21. Borrowings

In millions of US$	At 31 December **2018**	2017
Non-current		
Bank borrowings	**6,576**	5,703
Promissory notes	**327**	169
Term borrowings	**133**	90
Finance lease	**130**	61
Non-current borrowings – third party	**7,166**	6,023
Bank borrowings	**504**	461
Term borrowings	**–**	475
Non-current borrowings – related party	**504**	936
Total non-current borrowings	**7,670**	6,959
Current		
Bank borrowings	**338**	452
Promissory notes	**178**	–
Term borrowings	**47**	100
Finance lease	**26**	14
Bank overdrafts	**15**	12
Current borrowings – third party	**604**	578
Bank borrowings	**105**	145
Term borrowings	**–**	11
Current borrowings – related party	**105**	156
Total current borrowings	**709**	734
Total borrowings	**8,379**	7,693

21. Borrowings (continued)

In millions of US$	Currency	Maturity	Interest rate	At 31 December 2018	2017
Third party					
Bank borrowings (a)	US$	2025	6.50%	**3,212**	–
Bank borrowings (a)	US$	2023	5.95% - 6.90%	**3,034**	–
Promissory notes (b)	US$	2019-2021	4.70%	**327**	169
Bank borrowings	EUR	2022	5.50% - 6.50%	**235**	351
Term borrowings	US$	2020-2022	LIBOR + 7.00%	**133**	90
Finance lease	KZT	2019-2028	2.00% - 10.00%	**130**	61
Bank borrowings	US$	2022	6.00%	**95**	95
Bank borrowings (a)	US$	2022	6.50% - 7.20%	–	2,741
Bank borrowings (a)	US$	2022	6.50% - 8.80%	–	2,516
Total third party				**7,166**	6,023
Related party					
Bank borrowings (a)	US$	2026	6.30% - 6.72%	**321**	–
Bank borrowings	US$	2025	4.00%	**183**	200
Term borrowings (a)	US$	2020	7.50%	–	475
Bank borrowings (a)	US$	2021	6.95%	–	261
Total related party				**504**	936
Total non-current				**7,670**	6,959
Third party					
Promissory notes (b)	US$	2019-2021	4.70%	**178**	–
Bank borrowings (a)	US$	2025	6.50%	**175**	–
Bank borrowings	EUR	2022	5.50% - 6.50%	**103**	78
Bank borrowings (a)	US$	2023	5.95% - 6.90%	**55**	–
Term borrowings	US$	2019	-	**47**	100
Finance lease	KZT	2019-2028	2.00% - 10.00%	**26**	14
Bank overdrafts	US$	2019	9.00%	**15**	12
Bank borrowings	EUR	2019	EURIBOR + 0.50%	**5**	8
Bank borrowings (a)	US$	2022	6.50% - 7.20%	–	194
Bank borrowings (a)	US$	2022	6.50% - 8.80%	–	172
Total third party				**604**	578
Related party					
Bank borrowings	US$	2019	9.00%	**70**	70
Bank borrowings	US$	2025	4.00%	**35**	43
Bank borrowings (a)	US$	2021	6.95%	–	25
Term borrowings (a)	US$	2020	7.50%	–	11
Bank borrowings	KZT	2018	6.00%	–	7
Total related party				**105**	156
Total current				**709**	734
Total borrowings				**8,379**	7,693

21. Borrowings (continued)

a) Refinancing of borrowings

During the second half of 2018, the Group continued working on a major refinancing of its debt portfolio with the aim to extend average maturity and improve certain commercial terms. The Group entered into new facility agreements of US$3,100 million with VTB Bank (PJSC), the aggregate of US$3,310 million with Sberbank of Russia, US$360 million with the Development Bank of Kazakhstan, and US$80 million with a subsidiary bank of Sberbank of Russia. The security and guarantee terms have improved due to significant reduction of the number and aggregate volume of guarantees, share pledges and other security. In 2018, interest rates under new facilities were in a range of 5.95% - 6.90% per annum. In October and November 2018 the aggregate of US$1,280 million was reassigned from VTB Bank (PJSC) to RCB Bank Ltd.

As a result of the refinancing the Group repaid outstanding debt under up to US$3,014 million facility and up to US$375 million pre-export facility with VTB Bank (PJSC), up to US$2,902 million facility with Sberbank of Russia, US$500 million facility with Joint Stock Company 'Sovereign Wealth Fund 'Samruk-Kazyna', US$350 million facility with the Development Bank of Kazakhstan, and US$170 million and US$12 million facilities with a subsidiary bank of Sberbank of Russia.

b) Promissory notes

In February 2017, NFC China and NFC DRC started working under an Engineering, Procurement and Construction (RTR Phase 1 EPC) contract for the construction of Phase 1 of Metalkol RTR Project. US$505 million (2017: US$169 million) was incurred under the EPC contract through the *acknowledgment of debt by issuance of promissory notes. The maturity of the promissory notes is two* years from the date of issuance with an option of further extension for one year, subject to certain conditions. Advance payments made under the RTR Phase 1 EPC contract are being utilised for the works performed. The carrying value of advances as at 31 December 2018 amounted to US$92 million (2017: US$87 million).

	Carrying values		Fair values	
In millions of US$	**2018**	2017	**2018**	2017
Bank borrowings	**7,523**	6,761	**7,478**	6,901
Promissory notes	**505**	169	**493**	162
Term borrowings	**180**	676	**164**	701
Finance lease	**156**	75	**149**	74
Bank overdrafts	**15**	12	**15**	12
Total borrowings	**8,379**	7,693	**8,299**	7,850

In millions of US$	**2018**	2017
At 1 January	**(7,693)**	(7,363)
Cash movements	**415**	558
Fair value movements	**18**	(51)
Other non-cash movements	**(1,168)**	(792)
Exchange gains/(losses)	**49**	(45)
At 31 December	**(8,379)**	(7,693)

The Group's credit facility agreements include a considerable number of various financial and non-financial covenants. As of 31 December 2018, the Group complied with applicable covenants. As of 31 December 2017, the outstanding breaches under key Group credit facilities have been waived or otherwise remedied. As at 31 December 2018, the Group has US$286 million of undrawn committed facilities (2017: US$nil).

22. 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.

In millions of US$	At 31 December 2018	2017
Current provision for asset retirement obligations	**4**	7
Non-current provision for asset retirement obligations	**103**	90
Total provision for asset retirement obligations	**107**	97

Movements in asset retirement obligations are as follows:

In millions of US$	Asset decommissioning costs	Site restoration and re-vegetation	Total
At 1 January 2017	30	41	71
Capitalisation	6	14	20
Production costs	–	3	3
Unwinding of discount	2	5	7
Utilisation	(1)	(2)	(3)
Exchange differences	–	(1)	(1)
At 1 January 2018	**37**	**60**	**97**
Capitalisation	**(2)**	**11**	**9**
Production costs	**1**	**7**	**8**
Unwinding of discount	**4**	**5**	**9**
Utilisation	**(2)**	**(2)**	**(4)**
Exchange differences	**(3)**	**(9)**	**(12)**
At 31 December 2018	**35**	**72**	**107**

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:

	At 31 December 2018		2017	
	Kazakhstani entities	**African entities**	Kazakhstani entities	African entities
Discount rate	**5.4% - 8.7%**	**8.0% - 15.0%**	7.5%-10.0%	8.0% - 15.0%
Inflation rate	**5.1% - 6.3%**	**1.9% - 5.0%**	5.4% - 6.6%	2.8% - 8.0%

23. Employee benefit obligations

Defined benefit obligations relate to lump sum payments upon retirement and other payments to pensioners. Movements in the present value of defined benefit obligations are as follows:

In millions of US$	**2018**	2017
Present value at 1 January	**31**	26
Interest cost	**1**	1
Benefits paid	**(3)**	(1)
Current service cost	**2**	5
Past service cost	**1**	2
Actuarial gains arising from changes in demographic assumptions	**(1)**	(2)
Actuarial losses arising from changes in financial assumptions	**1**	–
Reclassifications	**(1)**	–
Exchange differences	**(2)**	–
Present value at 31 December	**29**	31

The weighted average maturity of defined benefit obligations is 28 years (2017: 29 years).

Other actuarial employee benefit obligations relate to non-pensioners and include lump sum payments for anniversaries, injuries and other financial aid. Movements in the present value of other actuarial employee benefit obligations are as follows:

In millions of US$	**2018**	2017
Present value at 1 January	**15**	15
Interest cost	**1**	2
Past service cost	**–**	(1)
Actuarial gains	**1**	–
Reclassification	**(1)**	(1)
Exchange differences	**(2)**	–
Present value at 31 December	**14**	15

The current service cost, past service cost and actuarial gains for the year ended 31 December 2018 are recognised in cost of sales and general and administrative expenses in the amount of US$3 million (2017: US$5 million) and US$1 million (2017: US$1 million), respectively, refer to note 10.

Principal actuarial assumptions used at the balance sheet date are as follows:

	At 31 December			
	2018		2017	
	Defined benefit obligations	**Other actuarial employee benefit obligations**	Defined benefit obligations	Other actuarial employee benefit obligations
Discount rate	**8.4%**	**8.4%**	8.7%	8.8%
Future salary increase	**7.0%**	**9.9%**	6.2%	7.7%
Average labour turnover rate of production personnel	**6.8%**	**9.1%**	7.5%	9.9%
Average labour turnover rate of administrative personnel	**6.3%**	**7.4%**	6.1%	6.3%

23. Employee benefit obligations (continued)

Assumptions regarding future mortality are based upon advice in accordance with published statistics and experience.

The future average life expectancy in years of a pensioner retiring at age 65, is as follows:

		At 31 December			
		2018		2017	
		Defined benefit obligations	**Other actuarial employee benefit obligations**	Defined benefit obligations	Other actuarial employee benefit obligations
On the balance sheet date	Male	**12**	**13**	13	12
	Female	**13**	**16**	14	15
20 years after the balance sheet date	Male	**12**	**13**	12	11
	Female	**13**	**16**	14	15

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

	At 31 December 2018		
		Impact on defined benefit obligation	
	Change in assumptions	Increase in assumptions	Decrease in assumptions
Discount rate	**3.0%**	Decrease by **17%**	Increase by **31%**
Salary growth rate/minimum *calculation index*	**3.0%**	Increase by **30.1%**	Decrease by **18%**
Average labour turnover	**3.0%**	Decrease by **15.8%**	Increase by **31.5%**

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the *projected unit credit method at the end of the reporting period) has been applied as when calculating the* pension liability recognised within the Consolidated balance sheet.

24. Trade and other payables

	At 31 December	
In millions of US$	**2018**	2017
Trade payables	**499**	367
Other	**69**	106
Total financial liabilities	**568**	473
Accruals relating to employee entitlements	**156**	108
Advances received from customers	**23**	23
Asset retirement obligations	**4**	7
Other	**75**	46
Total non-financial liabilities	**258**	184
Total trade and other payables	**826**	657

25. Financial risk management

The Group's activities expose it to a variety of financial risks: credit risk, liquidity risk, foreign exchange risk, interest rate risk, and commodity price risk. The Group may use derivative financial instruments to hedge foreign exchange and interest rate exposures in order to offset negative fluctuations.

Financial risk management is the responsibility of the treasury function which identifies, evaluates and manages financial risks in close cooperation with the Group's operating divisions.

Credit risk

Generally, the Group does not require collateral in respect of its trade receivables. The credit risk of the majority of the Group sales is covered by letters of credit or cash prepayments against documents.

The Group undertakes rigorous credit control procedures which are closely monitored by Management. These procedures are regularly reviewed in light of the limited availability of credit insurance.

The Group's policy is to invest surplus funds with highly rated banks and highly rated liquidity funds. When placing investments and deposits the Group assigns individual counterparty exposure limits based on published credit ratings. Monitoring of these counterparties is carried out on a regular basis to ensure all credit exposures are quantified, and when required, appropriate actions are taken to prevent risk. In areas where the Group operates it is necessary to deal with counterparties that do not necessarily meet the credit requirements of the Group. These cases are managed in accordance with the Group's Financing and Treasury policy, including setting of individual credit limits.

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

The Group considers its maximum exposure to credit risk related to the uncollateralised balances to be as follows:

		At 31 December	
In millions of US$	Note	**2018**	2017
Cash and cash equivalents	18	**734**	612
Trade and other receivables	17	**479**	439
Other financial assets		**103**	97
Total maximum credit risk exposure		**1,316**	1,148

25. Financial risk management (continued)

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:

				At 31 December 2018
In millions of US$	Cash and cash equivalents	Trade and other receivables	Other financial assets	Total
Eurasia	**553**	**213**	**63**	**829**
Europe and Middle East	**136**	**93**	**7**	**236**
Africa	**29**	**72**	**12**	**113**
Asia Pacific	**2**	**92**	**14**	**108**
Rest of the World	**14**	**9**	**7**	**30**
Total	**734**	**479**	**103**	**1,316**

				At 31 December 2017
In millions of US$	Cash and cash equivalents	Trade and other receivables	Other financial assets	Total
Eurasia	399	205	70	674
Europe and Middle East	168	87	6	261
Africa	29	51	12	92
Asia Pacific	–	84	–	84
Rest of the World	16	12	9	37
Total	612	439	97	1,148

In 2018, the top 10 customers as a proportion of the outstanding balance of the Group's trade receivables accounted for 76% (2017: 78%).

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 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 including debt, cash generation by 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 forecasts. The Group's going concern status is discussed further 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.

25. Financial risk management (continued)

Non-derivative financial assets and liabilities

		At 31 December 2018							
In millions of US$	Note	Carrying amount	Total contractual cash flows	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	After 5 years
Borrowings	21	**(8,379)**	**(10,863)**	**(1,215)**	**(1,370)**	**(1,062)**	**(1,232)**	**(3,111)**	**(2,873)**
Trade and other payables	24	**(568)**	**(568)**	**(568)**	–	–	–	–	–
Other non-current liabilities		**(31)**	**(72)**	–	**(7)**	**(1)**	**(60)**	–	**(4)**
Cash and cash equivalents	18	**734**	**734**	**734**	–	–	–	–	–
Trade and other receivables	17	**456**	**456**	**456**	–	–	–	–	–
Other financial assets		**30**	**33**	–	**11**	**1**	**1**	**8**	**12**
Net position		**(7,758)**	**(10,280)**	**(593)**	**(1,366)**	**(1,062)**	**(1,291)**	**(3,103)**	**(2,865)**

		At 31 December 2017							
In millions of US$	Note	Carrying amount	Total contractual cash flows	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	After 5 years
Borrowings	21	(7,693)	(10,063)	(1,117)	(1,203)	(1,744)	(1,193)	(4,613)	(193)
Trade and other payables	24	(386)	(386)	(386)	–	–	–	–	–
Other non-current liabilities		(54)	(57)	–	(48)	(6)	–	–	(3)
Cash and cash equivalents	18	612	612	612	–	–	–	–	–
Trade and other receivables	17	439	439	439	–	–	–	–	–
Other financial assets		56	65	–	29	15	2	10	9
Net position		(7,026)	(9,390)	(452)	(1,222)	(1,735)	(1,191)	(4,603)	(187)

Derivative financial assets and liabilities

	At 31 December 2018					At 31 December 2017				
In millions of US$	**Carrying amount**	**Total contractual cash flows**	**Cash flow less than 1 year**	**1-2 years**	**2-3 years**	Carrying amount	Total contractual cash flows	Cash flow less than 1 year	1-2 years	2-3 years
Commodity derivatives	**30**	–	–	–	–	(106)	–	–	–	–
Outflow	–	–	–	–	–	–	(101)	(83)	(15)	(3)
Inflow	–	**31**	**22**	**9**	–	–	–	–	–	–
Net position	**30**	**31**	**22**	**9**	–	(106)	(101)	(83)	(15)	(3)

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.

25. Financial risk management (continued)

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.

In millions of US$	KZT	US$	RUB	EUR	GBP	ZAR	Other
At 31 December 2018							
Kazakhstani entities (KZT)	**n/a**	**(1,502)**	**(69)**	**(272)**	**–**	**–**	**4**
Marketing and holding entities (US$)	**–**	**n/a**	**–**	**(29)**	**58**	**4**	**–**
UK management entities (GBP)	**–**	**8**	**–**	**–**	**n/a**	**–**	**–**
African entities (primarily US$)[1]	**–**	**(625)**	**–**	**–**	**(51)**	**(60)**	**5**
Brazilian entities (BRL)	**–**	**(353)**	**–**	**–**	**–**	**–**	**–**
Net monetary (liability)/asset position	**–**	**(2,472)**	**(69)**	**(301)**	**7**	**(56)**	**9**
At 31 December 2017							
Kazakhstani entities (KZT)	n/a	557	(8)	(338)	–	–	8
Marketing and holding entities (US$)	(63)	n/a	–	(128)	58	4	–
Marketing Russian entities (RUB)	–	23	n/a	–	–	–	–
UK management entities (GBP)	–	(12)	–	–	n/a	–	–
African entities (primarily US$)[1]	–	(313)	–	7	(7)	15	17
Brazilian entities (BRL)	–	(329)	–	–	–	–	–
Net monetary (liability)/asset position	(63)	(74)	(8)	(459)	51	19	25

[1] *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 2018, 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$376 million higher and US$250 million lower (2017: US$103 million higher and US$155 million lower 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.

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.

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 objective of interest rate risk management is to manage and control interest rate risk exposures within acceptable parameters. The Group's policy is to maintain a balance between fixed and floating interest rate risks. This is principally achieved by using a mix of fixed and floating interest rate borrowings.

25. Financial risk management (continued)

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

	At 31 December 2018		At 31 December 2017	
In millions of US$	Fixed rate	Floating rate	Fixed rate	Floating rate
Cash and cash equivalents	**566**	**13**	473	4
Trade and other receivables	**36**	**–**	4	–
Other financial assets	**48**	**13**	50	–
Borrowings	**(8,217)**	**(105)**	(7,495)	(108)
Net position	**(7,567)**	**(79)**	(6,968)	(104)
Effect of a 1% increase in interest rates on profit before income tax	**n/a**	**(1)**	n/a	(1)

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

As shown above, the impact on profit before income tax of a 1% increase in interest rates would be a US$1 million decrease in profit before income tax (2017: US$1 million decrease) with an equal but opposite effect if interest rates decreased by 1%. The US$1 million profit before income tax decrease (2017: US$1 million decrease) is entirely attributable to cash flow risk (floating rate interest) as the Group does not re-measure fixed rate financial assets and liabilities to fair value.

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's commodity derivatives are exposed to the risk of fluctuations in prevailing market commodity prices. A ten percent increase in aluminum market prices would decrease profit before tax by US$nil (2017: US$36 million decrease), and would decrease equity by US$24 million (2017: US$57 million decrease). A ten percent decrease in prices would increase profit before tax by US$nil (2017: US$35 million increase) and would increase equity by US$29 million (2017: US$55 million increase). A ten percent increase in copper market prices would decrease profit before tax by US$1 million (2017: US$30 million decrease), and a ten percent decrease in prices would increase profit before tax by US$1 million (2017: US$23 million increase), with no additional impact on equity. This analysis assumes that all other variables remain constant.

The Group's commodity derivatives embedded in borrowings are exposed to the risk of fluctuations in prevailing market commodity prices. A ten percent increase in commodity market prices would decrease profit before tax by US$5 million (2017: US$12 million decrease), and a ten percent decrease in prices would increase profit before tax by US$1 million (2017: US$9 million increase), 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).

25. Financial risk management (continued)

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:

In millions of US$	Note	At 31 December 2018	2017
Borrowings	21	**8,379**	7,693
Capital reserve		**3,159**	3,159
Reserves		**(1,194)**	(197)
Total capital		**10,344**	10,655

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 B2 with a positive outlook with Moody's (2017: B3 with a stable outlook) and B/B with a positive outlook with Standard & Poor's (2017: B-/B with a stable outlook).

Fair value of financial instruments

In determining fair value of financial instruments the Group uses its judgment to select a variety of methods and to verify assumptions that are mainly based on market conditions existing at each balance sheet date, as well as obtaining fair value measurements from other parties. As at 31 December 2018 and 31 December 2017, the Group did not hold financial instruments that are included in level 1 or 3 of the hierarchy.

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

The fair value of borrowings is level 2 measurement and is set out in note 21. The fair values of trade and other receivables, cash and cash equivalents, trade and other payables, and other financial assets approximate their carrying values. The fair value of financial instruments carried at amortised cost is based on expected cash flows discounted at prevailing interest rates for new instruments with similar credit risk and maturity.

The fair value of contingent consideration liability is level 3 measurement derived from a probability-based assessment of US$60 million contingent consideration, which could become payable during a four year period, adjusted for time value of money. US$10 million charge was recognised within other operating expense resulting in US$23 million fair value of contingent consideration liability at 31 December 2018.

26. Auditor's remuneration

During the year, the Company (including its subsidiaries) obtained the following services from the Company's external auditor as detailed below:

In millions of US$	Years ended 31 December 2018	2017
Fees payable to the Company's auditor for the audit of the Parent Company and Consolidated financial statements	**2.0**	2.0
Audit of the Company's subsidiaries	**4.0**	3.0
Taxation advisory services	**1.0**	1.0
Other assurance services	**1.0**	–
All other non-audit services	**3.0**	2.0
Total	**11.0**	8.0

27. Commitments

Capital expenditure commitments

In millions of US$	At 31 December 2018	2017
Property, plant and equipment	**458**	725

Decrease in capital expenditure commitments is primarily attributable to Metalkol RTR project.

Operating leases

The table below sets out minimum payments for aggregate future non-cancellable minimum lease payments:

In millions of US$	At 31 December 2018	2017
Less than 1 year	**5**	6
Between 1 and 5 years	**7**	13
After 5 years	**33**	39
Total	**45**	58

Rental expenses relating to the operating leases of mining facilities and administrative facilities are recognised in cost of sales and general and administrative expenses respectively within the Consolidated income statement. For the year ended 31 December 2018, the expenses incurred amounted to US$22 million (2017: US$13 million).

28. Contingencies

Regulatory matters

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 2019. ENRC is represented by specialist external counsel.

Tax audits and assessments

As at 31 December 2018, the Group had uncertainties 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 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 as at the end of 2018 is not likely to have any material impact on these Consolidated financial statements.

29. Reconciliation of non-GAAP measures

Underlying EBITDA

		Years ended 31 December	
In millions of US$	Note	**2018**	2017
(Loss)/profit for the year		**(15)**	389
Adjustments for:			
Finance cost	12	**1,352**	618
Depreciation and amortisation		**641**	627
Income tax expense	13	**231**	336
Professional fees and other exceptional litigation costs		**45**	30
Restructuring costs		**14**	1
Impairments		**13**	45
Net operating foreign exchange (gain)/loss	9	**(27)**	39
Unrealised (gain)/loss on derivatives	9	**(95)**	87
Finance income	11	**(288)**	(130)
Other		**42**	48
Underlying EBITDA		**1,913**	2,090

30. Non-controlling interests and principal subsidiaries

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

						At 31 December 2018
Subsidiary	**Principal activity**	**Country of incorporation**	**Proportion of equity interest held by the Parent Company (%)**	**Effective proportion of ordinary shares/ equity interest held by the Group (%)**	**Effective proportion of ordinary shares/ equity interest held by non-controlling interests (%)**	**Proportion of preference shares held by the Group (%)**
SSMPU JSC	Mining and processing	Kazakhstan	-	100.00	-	81.56
Shubarkol Komir JSC	Mining and processing	Kazakhstan	-	100.00	-	-
TNC Kazchrome JSC	Mining and processing	Kazakhstan	-	99.99	0.01	92.97
Aluminium of Kazakhstan JSC	Mining and processing	Kazakhstan	-	99.88	0.12	82.81
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	-	-
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	-	76.67
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	-
Congo Cobalt Corporation SARL	Mining Contracting 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 Sales Africa AG	Sales & Marketing	Switzerland	-	100.00	-	-
ERG Commercial Center LLP	Sales & Marketing	Kazakhstan	100.00	-	-	-
ERG Sales LLC	Sales & Marketing	Russian Federation	-	100.00	-	-
Africo Resources Limited	Holding Company	Canada	-	100.00	-	-
Bahia Minerals BV	Holding Company	Netherlands	-	100.00	-	-
Sabot Management Holdings Limited	Holding Company	British Virgin Islands	-	100.00	-	-
Camrose Resources Limited	Holding Company	British Virgin Islands	-	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	-	-
ENRC Limited	Holding Company	United Kingdom	-	100.00	-	-
ENRC Management (UK) Limited	Group Managing Company	United Kingdom	-	100.00	-	-
Corporate Fund ERG Komek	Charitable Foundation	Kazakhstan	-	100.00	-	-
ENRC Finance Limited	Treasury & Holding Company	United Kingdom	-	100.00	-	-
Eurasian Group LLP	Group Managing Company	Kazakhstan	100.00	-	-	-
ERG BV	Holding Company	Netherlands	100.00	-	-	-

30. Non-controlling interests and principal subsidiaries (continued)

Transactions with non-controlling interests in 2018:

- acquisition of non-controlling interest of 0.04% in TNC Kazchrome JSC;
- acquisition of non-controlling interest of 30% in Enya Holding B.V.;
- non-cash transfer of 19% interest in Boss Mining SAS to non-controlling shareholder.

In millions of US$	Non-controlling interests	Cash paid	Non cash movement	Retained earnings
Boss Mining SAS	(499)	–	(23)	(476)
Chambishi Metals PLC	(54)	–	–	(54)
Enya Holding BV	26	–	(17)	43
TNC Kazchrome JSC	31	3	–	28
Other	(29)	42	(92)	21
	(525)	**45**	**(132)**	**(438)**

Financial information of subsidiaries that have material non-controlling interests is provided below.

Proportion of equity held by non-controlling interests (%)

		At 31 December	
Subsidiary	Country of incorporation	**2018**	2017
Frontier SA	DRC	**5.00**	5.00
Boss Mining SAS	DRC	**49.00**	30.00
Metalkol SA	DRC	**5.00**	5.00
Swanmines SAS	DRC	**25.00**	25.00
Aluminium of Kazakhstan JSC	Kazakhstan	**1.71**	3.30
TNC Kazchrome JSC	Kazakhstan	**0.65**	1.41
SSMPU JSC	Kazakhstan	**1.84**	1.84
Eurasian Energy Corporation JSC	Kazakhstan	**1.59**	1.59
Shubarkol Komir JSC	Kazakhstan	**4.04**	4.73
Chambishi Metals PLC[1]	Zambia	**10.00**	37.00
Todal Mining (Pvt) Limited	Zimbabwe	**40.00**	40.00

[1] Enya Holding BV owns 90% of Chambishi Metals PLC.

30. Non-controlling interests and principal subsidiaries (continued)

Accumulated balances of material non-controlling interest in net assets/(liabilities)

In millions of US$	At 31 December 2018	2017
Frontier SA	**8**	8
Boss Mining SAS	**57**	(382)
Metalkol SA	**55**	58
Swanmines SAS	**6**	7
Aluminium of Kazakhstan JSC	**1**	–
TNC Kazchrome JSC	**19**	93
SSMPU JSC	**56**	71
Eurasian Energy Corporation JSC	**19**	21
Shubarkol Komir JSC	**36**	34
Chambishi Metals PLC	**(20)**	(76)
Todal Mining (Pvt) Limited	**(44)**	(44)

(Loss)/profit allocated to material non-controlling interest

In millions of US$	Years ended 31 December 2018	2017
Frontier SA	**–**	(2)
Boss Mining SAS	**(60)**	(29)
Metalkol SA	**(3)**	(1)
Swanmines SAS	**(1)**	–
Aluminium of Kazakhstan JSC	**4**	4
TNC Kazchrome JSC	**7**	13
SSMPU JSC	**(2)**	1
Eurasian Energy Corporation JSC	**–**	1
Shubarkol Komir JSC	**4**	2
Chambishi Metals PLC	**2**	4
Todal Mining (Pvt) Limited	**(1)**	(1)

30. Non-controlling interests and principal subsidiaries (continued)

The summarised financial information of these subsidiaries is provided below. This information is based on amounts before intercompany eliminations.

Summarised balance sheet

						At 31 December 2018	
In millions of US$	Current assets	Current liabilities	*Total* current net assets/ (liabilities)	Non-current assets	Non-current liabilities	*Total non-*current net assets/ (liabilities)	Net assets/ (liabilities)
Frontier SA	**112**	**(95)**	**17**	**591**	**(333)**	**258**	**275**
Boss Mining SAS	**101**	**(108)**	**(7)**	**154**	**(32)**	**122**	**115**
Metalkol SA	**31**	**(229)**	**(198)**	**3,522**	**(2,106)**	**1,416**	**1,218**
Swanmines SAS	**1**	**(1)**	**–**	**94**	**(83)**	**11**	**11**
Aluminium of Kazakhstan JSC	**559**	**(303)**	**256**	**288**	**(301)**	**(13)**	**243**
TNC Kazchrome JSC	**1,371**	**(210)**	**1,161**	**1,906**	**(2,100)**	**(194)**	**967**
SSMPU JSC	**269**	**(429)**	**(160)**	**1,301**	**(711)**	**590**	**430**
Eurasian Energy Corporation JSC	**48**	**(45)**	**3**	**720**	**(500)**	**220**	**223**
Shubarkol Komir JSC	**440**	**(54)**	**386**	**427**	**(497)**	**(70)**	**316**
Chambishi Metals PLC	**80**	**(36)**	**44**	**25**	**(280)**	**(255)**	**(211)**
Todal Mining (Pvt) Limited	**1**	**–**	**1**	**60**	**(18)**	**42**	**43**

						At 31 December 2017	
In millions of US$	Current *assets*	Current *liabilities*	Total current net assets/ *(liabilities)*	Non-current *assets*	Non-current *liabilities*	Total non-current net assets/ *(liabilities)*	Net assets/ *(liabilities)*
Frontier SA	119	(97)	22	643	(380)	263	285
Boss Mining SAS	129	(62)	67	178	(1,507)	(1,329)	(1,262)
Metalkol SA	10	(29)	(19)	3,055	(1,756)	1,299	1,280
Swanmines SAS	1	(54)	(53)	95	(29)	66	13
Aluminium of Kazakhstan JSC	318	(277)	41	227	(110)	117	158
TNC Kazchrome JSC	3,582	(314)	3,268	2,155	(2,550)	(395)	2,873
SSMPU JSC	1,194	(157)	1,037	1,470	(1,269)	201	1,238
Eurasian Energy Corporation JSC	298	(85)	213	807	(746)	61	274
Shubarkol Komir JSC	328	(200)	128	501	(351)	150	278
Chambishi Metals PLC	104	(78)	26	53	(283)	(230)	(204)
Todal Mining (Pvt) Limited	1	(2)	(1)	60	(16)	44	43

30. Non-controlling interests and principal subsidiaries (continued)

Summarised income statement

In millions of US$	Revenue	(Loss)/ profit before income tax	Income tax (expense)/ benefit	Post-tax (loss)/profit from continuing operations	Other comprehensive (expense)/ income	Total comprehensive (expense)/ income	Total comprehensive (expense)/ income allocated to non-controlling interests
	Year ended 31 December 2018						
Frontier SA	**493**	**(1)**	**(8)**	**(9)**	**–**	**(9)**	**–**
Boss Mining SAS	**292**	**(175)**	**(3)**	**(178)**	**–**	**(178)**	**(60)**
Metalkol SA	**21**	**(86)**	**24**	**(62)**	**–**	**(62)**	**(3)**
Swanmines SAS	**–**	**(3)**	**–**	**(3)**	**–**	**(3)**	**(1)**
Aluminium of Kazakhstan JSC	**504**	**150**	**(31)**	**119**	**(34)**	**85**	**3**
TNC Kazchrome JSC	**2,190**	**550**	**(101)**	**449**	**(657)**	**(208)**	**2**
SSMPU JSC	**733**	**(100)**	**12**	**(88)**	**(63)**	**(151)**	**(3)**
Eurasian Energy Corporation JSC	**307**	**(6)**	**(1)**	**(7)**	**(38)**	**(45)**	**(1)**
Shubarkol Komir JSC	**211**	**105**	**(19)**	**86**	**99**	**185**	**8**
Chambishi Metals PLC	**348**	**8**	**(15)**	**(7)**	**–**	**(7)**	**2**
Todal Mining (Pvt) Limited	**–**	**(1)**	**–**	**(1)**	**–**	**(1)**	**(1)**

In millions of US$	Revenue	(Loss)/ profit before income tax	Income tax (expense)/ benefit	Post-tax (loss)/profit from continuing operations	Other comprehensive (expense)/ income	Total comprehensive (expense)/ income	Total comprehensive (expense)/ income allocated to non-controlling interests
	Year ended 31 December 2017						
Frontier SA	483	(19)	(23)	(42)	–	(42)	(2)
Boss Mining SAS	351	(88)	(7)	(95)	–	(95)	(29)
Metalkol SA	–	(33)	9	(24)	–	(24)	(1)
Swanmines SAS	–	(1)	–	(1)	–	(1)	–
Aluminium of Kazakhstan JSC	483	155	(34)	121	(2)	119	4
TNC Kazchrome JSC	2,162	1,131	(205)	926	(26)	900	13
SSMPU JSC	661	52	(24)	28	21	49	1
Eurasian Energy Corporation JSC	313	60	(13)	47	–	47	1
Shubarkol Komir JSC	163	41	(6)	35	1	36	2
Chambishi Metals PLC	363	14	(3)	11	–	11	4
Todal Mining (Pvt) Limited	–	(3)	–	(3)	–	(3)	(1)

30. Non-controlling interests and principal subsidiaries (continued)

Summarised cash flows

	Year ended 31 December 2018				Year ended 31 December 2017			
In millions of US$	**Operating**	**Investing**	**Financing**	**Net (decrease)/ increase in cash and cash equivalents**	Operating	Investing	Financing	Net increase/ (decrease) in cash and cash equivalents
Frontier SA	**128**	**(71)**	**(64)**	**(7)**	170	(35)	(116)	19
Boss Mining SAS	**(29)**	**(3)**	**30**	**(2)**	(36)	(23)	65	6
Metalkol SA	**154**	**(261)**	**122**	**15**	2	(119)	120	3
Swanmines SAS	**(1)**	**–**	**1**	**–**	(2)	–	2	–
Aluminium of Kazakhstan JSC	**71**	**(319)**	**210**	**(38)**	44	(35)	27	36
TNC Kazchrome JSC	**755**	**2,559**	**(3,276)**	**38**	1,006	(18)	(998)	(10)
SSMPU JSC	**97**	**795**	**(884)**	**8**	188	518	(703)	3
Eurasian Energy Corporation JSC	**74**	**195**	**(264)**	**5**	108	(323)	220	5
Shubarkol Komir JSC	**80**	**(145)**	**68**	**3**	111	(87)	(11)	13
Chambishi Metals PLC	**(4)**	**(2)**	**–**	**(6)**	12	(1)	–	11
Todal Mining (Pvt) Limited	**–**	**–**	**–**	**–**	(3)	–	3	–

Dividends paid to non-controlling interests amounted to US$32 million in Kazchrome and US$11 million in SSMPU (2017: US$8 million and US$10 million, respectively).

31. Events after the balance sheet date

The Euro equivalent of US$198 million was drawn down under the up to US$550 million (in Euro equivalent) existing prepayment facility agreement with affiliates of VTB Bank (PJSC) following amendment and restatement of the existing prepayment facility agreement to reflect, among other things, base interest rate of 5.80% per annum and maturity in 2024 for all outstanding advances thereunder.

Boss Mining SAS was placed in care and maintenance. Restructuring provision could be estimated in a range of US$55 million.

Uncertainty related to contingent purchase consideration of arising from the business combination was resolved. This resulted in US$25 million increase of contingent consideration liability fair value up to US$48 million as of 30 April 2019, which reflects US$60 million payable, adjusted for time value of money.