

# 中國有色礦業有限公司 China Nonferrous Mining Corporation Limited

(Incorporated in Hong Kong with limited liability under the Companies Ordinance) Stock Code: 1258



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Monument for the discovery of the copper mine at Luanshya

# **CORPORATE INFORMATION**

#### REGISTERED OFFICE

Room 1201, Allied Kajima Building 138 Gloucester Road Wanchai, Hong Kong

# PRINCIPAL PLACE OF BUSINESS IN ZAMBIA

32 Enos Chomba Road Kitwe, Zambia

#### **COMPANY'S WEBSITE**

www.cnmcl.net

#### STOCK CODE

1258

#### **DIRECTORS**

#### **Executive Directors**

Mr. Tongzhou Wang (Chairman) (appointed on 30 August 2018) Mr. Xiaowei Wang (appointed on 30 August 2018)

Mr. Lin Zhang (President)

Mr. Chunlai Wang (Vice President)

Mr. Kaishou Xie (Vice President)

Mr. Xinghu Tao (Chairman) (resigned on 30 August 2018)

Mr. Wei Fan (Vice President) (resigned on 30 August 2018)

#### **Non-Executive Director**

Mr. Jinjun Zhang (Vice Chairman) (appointed on 29 March 2019) Mr. Diyong Yan (Vice Chairman) (resigned on 29 March 2019)

#### **Independent Non-Executive Directors**

Mr. Chuanyao Sun Mr. Jingwei Liu Mr. Huanfei Guan



Zambian President Lungu cut the ribbon for the trial production ceremony of Chambishi Southeast Mine

## **CORPORATE INFORMATION (CONTINUED)**

# THE COMMITTEES OF THE BOARD

#### **Audit Committee**

Mr. Jingwei Liu (Chairman)

Mr. Jinjun Zhang

(appointed on 29 March 2019)

Mr. Huanfei Guan

Mr. Diyong Yan

(resigned on 29 March 2019)

#### **Nomination Committee**

Mr. Chuanyao Sun (Chairman)

Mr. Jinjun Zhang

(appointed on 29 March 2019)

Mr. Jingwei Liu

Mr. Diyong Yan

(resigned on 29 March 2019)

#### **Remuneration Committee**

Mr. Huanfei Guan (Chairman)

Mr. Jinjun Zhang

(appointed on 29 March 2019)

Mr. Chuanyao Sun

Mr. Diyong Yan

(resigned on 29 March 2019)

#### **Compliance Committee**

Mr. Tongzhou Wang (Chairman) (appointed on 30 August 2018)

Mr. Chuanyao Sun

Mr. Huanfei Guan

Mr. Xinghu Tao (Chairman)

(resigned on 30 August 2018)

#### JOINT COMPANY SECRETARIES

Mr. Aibin Hu Ms. Man Yi Wong (appointed on 27 April 2018) Mr. Tin Wai Lee *CPA* 

(resigned on 27 April 2018)

#### **LEGAL ADVISER**

Baker & McKenzie 14/F., One Taikoo Place 979 King's Road Quarry Bay Hong Kong

#### **AUDITOR**

Deloitte Touche Tohmatsu

Certified Public Accountants

35/F., One Pacific Place

88 Queensway

Hong Kong

# HONG KONG SHARE REGISTRAR

Computershare Hong Kong
Investor Services Limited
Shops 1712–1716, 17th Floor
Hopewell Centre, 183 Queen's Road East
Wanchai, Hong Kong



# **CHAIRMAN'S STATEMENT**



#### **CHAIRMAN'S STATEMENT (CONTINUED)**

#### Dear Shareholders,

I would like to take this opportunity to extend my heartfelt gratitude to the Shareholders and all sectors of the society for their care, support and help to the Company, and to thank the management and staff for their contributions to the operation, management, reform and development of the Company.

The year 2018 was the 20th anniversary for the entering of Africa by China Nonferrous Metal Mining (Group) Co., Ltd, the holding group of the Company, and also a year when the holding group seriously implemented the spirit of the important speech delivered by President Xi Jinping at the Beijing Summit of the Forum on China-Africa Cooperation, and promoted the "Belt and Road" initiative to achieve synergy with the development in Africa by striving to work, develop and excel. During this year, the Group put forward the development strategy of "realize coordinated development of its three major businesses, driven by two main work lines in development and management, and conduct a comprehensive reform", and explicitly set forth the priority of developing international business, the "Belt and Road" and the regional business in Africa.

During this year, Zambian President Lungu visited the Chambishi Southeast Mine project owned by the Company, and attended the "Zambia-China Business Forum" held at the holding group and fully recognized the Company. During this year, the Board, the management and the staff of the Company made concerted efforts to expand the external market and strengthen internal management for enhancement of quality and efficiency. As a result, in terms of major products of the Company, the production volume of blister copper (including copper anode) and sulfuric acid remained at the same level in general as compared to last year and continued the heavy-loaded productivity, whereas the production volume of copper cathode increased by 8.8% year-on-year, resulting in a year-on-year increase of 11.7% in revenue in 2018. Profit attributable to the owners of the Company amounted to US\$146.3 million (with a basic earnings per share of US\$4.19 cents), representing an increase of US\$3.9 million as compared with the year 2017.

The world has been undergoing a slowing global economy and rising trade protectionism since last year. However, the world economy expects to gain new momentum in light of progress made in respective of the proactive negotiations on trade disputes between China and the US, as well as China's deleveraging, tax cuts and other measures for reform and stabilizing growth. Looking ahead, given the global copper products will remain at a tight balance, and demands for cobalt in the new energy sector will continue to grow, the prices of copper and cobalt remain promising in the long-term. With the rapid growth of emerging market and synchronized recovery of developed economies, the global economy is going to pick up stepwise.

In 2019, China Nonferrous Mining will further optimise its development strategies, enhance corporate governance and work intensity and increase investments in geological exploration and development on the one hand; and accelerate the progress in developing existing resources in Zambia, DRC and other key areas to increase the copper-cobalt resources in the possession of the Company through paralleled efforts in development, acquisition and cooperation. The Group will continue to improve the operational efficiency of its existing mines and smelters through optimizing the internal value chain management, promoting the integration construction of production, supply and marketing in the same region, boosting the digitalization of mines, intensifying cost control and other modern management methods, so as to continuously enhance the Group's profitability. In addition, we will exert due efforts on such major construction projects as the new construction project of Lualaba Copper Smelter, the reconstruction and expansion project of CNMC Huachin Mabende, and the mining exploration project of Kambove Mining to enlarge the existing production capacity and business scale of the Company on an ongoing basis. In particular, special priority will be given to capital operation and management and greater efforts will be devoted to information disclosure and results presentations so that the true value of the Company will stand out in the market. Moreover, industry-finance integration will be employed to speed up the development of the Company.

As a responsible corporate-citizen, China Nonferrous Mining will continue to implement the development vision of "innovation, coordination, eco-friendliness, openness and sharing". While developing resources, the Group also highly values the environmental protection and the sustainable use of resources. We will seek to ensure the safety and efficiency of production, strictly abide by various employment regulations and governance practices, improve the working environment of the staff, and properly handle concerns of stakeholders such as suppliers and communities so as to repay the shareholders with excellent performance and in turn realize win-win cooperation and harmonious development.

**Tongzhou Wang** 

Chairman of the Board China Nonferrous Mining Corporation Limited

Hong Kong, 29 March 2019

# **RESULTS HIGHLIGHTS**

#### **OPERATING RESULTS**

In 2018, the Group recorded revenue of US\$2,053.3 million, representing an increase of US\$214.6 million from US\$1,838.7 million in 2017. In 2018, the Group recorded profit attributable to owners of the Company of US\$146.3 million, increased by US\$3.9 million from US\$142.4 million in 2017.

#### **CHANGES IN PRODUCT OUTPUT**

In 2018, the Group produced 37,205 tonnes of copper contained in copper concentrate, representing an increase of 7.1% year-on-year. In 2018, the Group produced 220,479 tonnes of blister copper & copper anode, representing a decrease of 2.0% year-on-year. In 2018, the Group produced 96,870 tonnes of copper cathodes, representing an increase of 8.8% year-on-year. In 2018, the Group produced 593,983 tonnes of sulphuric acid, representing a decrease of 0.1% year-on-year. In 2018, the Group produced 1,136 tonnes of copper-cobalt alloy, representing a decrease of 6.8% year-on-year. The production systems of copper and sulfuric acid continued the heavy-loaded productivity.



Electrode workshop of Muliashi Project

# **RESULTS HIGHLIGHTS (CONTINUED)**

#### STEADY PROGRESS IN PROJECT DEVELOPMENT

The main part of the integrated exploration and construction project of the Chambishi Southeast Mine of NFCA was completed and put into use in the third quarter of 2018 and started trial production on 22 August.

The Tailings Pond Phase II Project of CCS commenced on 1 May 2017 and would last for 15 months. As of 31 December 2018, the project had been completed.

The reconstruction and expansion project of the Mwambashi Strip Mine Project of SML commenced in April 2016. As of the end of December 2018, the tail-in work of the reconstruction and expansion of the processing system was under progress with an estimated total investment amount of US\$2,892,500.

Baluba East Strip Mine project has a designed capacity of 900,000 tonnes of quality oxide ore per annum and output of 10,000 tonnes of copper cathode. The developmental stripping for the project was completed by the end of June 2018, in which US\$865,000 had been invested for 2018. As at the end of December 2018, a total amount of US\$6,528,000 had been invested in the project.

Huachin Leach copper-cobalt reconstruction and expansion project has a designed annual production capacity of 20,000 tonnes of copper cathode and 2,000 tonnes of cobalt. As at 31 December 2018, about 90% of civil engineering work has been completed and about 85% of installation work has been completed. The whole project is scheduled to be completed by 30 June 2019. In particular, the copper system has been completed and put into trial operation by the end of February 2019.

Lualaba Copper Smelter has two projects under progress, namely the Blister Copper Smelting Project and the Cobalt Recycling System Project.

- The Blister Copper Smelting Project is a copper concentrate (dry) smelting project with an annual capacity of 400,000 tonnes. As of the end of 2018, the main smelting factory had been capped and the living base construction, reinforced concrete construction of sulfuric acid circulating tank, warehouse system, main part of the office building, etc. had been basically completed
- The Cobalt Recycling System Project was a sub-system of the copper concentrate (dry) and blister copper smelting project with an annual capacity of 400,000 tonnes. Such project will be constructed along with the Blister Copper Smelting Project.

As for the Kambove Exploration Project of Kambove Mining SAS, the Group has completed the feasibility study and prepared the overall development plans for ore bodies in the mining area and medium and long term development plan for the Company.

In addition, the Group conducted research on the development of new mining exploration and mining projects in Zambia and DRC to actively expand its resource reserves and enhance its smelting production capacity, so as to secure the continuous growth of the Company.

# MANAGEMENT DISCUSSION AND ANALYSIS

#### FINANCIAL REVIEW

#### **Results of Operations**

The following table sets forth sales volume, average selling price, revenue and percentage contribution to total revenue of the products of the Group during the years indicated.

				For the year end	ded 31 December				
		2018			2017				
		Average Selling		% of Total		Average Selling		% of Total	
	Sales Volume (1), (2)	Price	Revenue	Revenue	Sales Volume(1), (2)	Price	Revenue	Revenue	
						(US\$ per			
	(Tonnes)	(US\$ per tonne)	(US\$'000)	(%)	(Tonnes)	tonne)	(US\$'000)	(%)	
Blister copper and copper									
anode	219,932	6,199	1,363,284	66.4	225,208	5,707	1,285,166	69.9	
Copper cathodes	99,293	6,013	597,006	29.1	87,860	5,626	494,288	26.9	
Copper-cobalt alloy	1,251	6,475	8,100	0.4	778	4,962	3,861	0.2	
Sulphuric acid	381,554	223	84,930	4.1	399,859	139	55,416	3.0	
Total			2,053,320	100.0			1,838,731	100.0	

#### Notes:

- (1) The sales volumes of all the products (except for sulphuric acid and copper-cobalt alloy) are on a contained-copper basis
- (2) The copper-cobalt alloy production contains approximately 376 tonnes of copper and approximately 126 tonnes of cobalt.



A general view of the interior of Chambishi Copper Smelter

#### Revenue

The revenue of the Group increased by 11.7% from US\$1,838.7 million in 2017 to US\$2,053.3 million in 2018. In 2018, the Group's revenue generated from blister copper and copper anode, copper cathode, sulphuric acid and copper-cobalt alloy accounted for 66.4%, 29.1%, 4.1% and 0.4%, respectively, of the total revenue.

The revenue from blister copper and copper anode increased by 6.1% from US\$1,285.2 million in 2017 to US\$1,363.3 million in 2018, mainly due to the increase in international copper prices.

The revenue from copper cathode increased by 20.8% from US\$494.3 million in 2017 to US\$597.0 million in 2018, mainly due to the increase in international copper prices and sales volume. Sales volume of copper cathode increased by 13.0% from 87,860 tonnes in 2017 to 99,293 tonnes in 2018.

The revenue from sulphuric acid increased by 53.2% from US\$55.4 million in 2017 to US\$84.9 million in 2018, which is mainly because the unit selling price of sulphuric acid increased by 60.4% from US\$139 per tonne in 2017 to US\$223 per tonne in 2018.

The revenue from copper-cobalt alloy increased by 107.7% from US\$3.9 million in 2017 to US\$8.1 million in 2018, mainly because sales volume increased by 60.8% from 778 tonnes in 2017 to 1,251 tonnes in 2018 driven by the increase in selling prices and sales volume.

#### Cost of sales

The following table sets forth the costs of sales, unit costs of sales, gross profits and gross profit margins of the products of the Group during the periods indicated.

		For the year ended 31 December									
		20	18		2017						
		Unit cost of		<b>Gross profit</b>		Unit cost of		Gross profit			
	Cost of sales	sales	Gross profit	margin	Cost of sales	sales	Gross profit	margin			
		(US\$ per				(US\$ per					
	(US\$'000)	tonne)	(US\$'000)	(%)	(US\$'000)	tonne)	(US\$'000)	(%)			
Blister copper and											
copper anode	1,201,823	5,464	161,461	11.8	1,117,049	4,960	168,117	13.1			
Copper cathodes	332,906	3,353	264,100	44.2	273,910	3,118	220,378	44.6			
Copper-cobalt alloy	3,959	3,165	4,140	51.1	4,282	5,503	(421)	-10.9			
Sulphuric acid	14,100	37	70,831	83.4	11,542	29	43,874	79.2			
		1		<b>V.4</b>			7 ==				
Total	1,552,788		500,532	24.4	1,406,783		431,948	23.5			

The cost of sales of the Group increased by 10.4% from US\$1,406.80 million in 2017 to US\$1,552.8 million in 2018, primarily due to the increased total costs as a result of the increased sales volume of copper cathode. In addition, the increase in copper price also led to a higher purchasing cost of copper concentrate used as raw material for the production of blister copper.

The cost of sales of blister copper and copper anode increased by 7.6% from US\$1,117.0 million in 2017 to US\$1,201.8 million in 2018, primarily due to the increase in the higher purchase price of copper concentrate attributable to the increase in international copper prices.

The cost of sales of copper cathode increased by 21.5% from US\$273.9 million in 2017 to US\$332.9 million in 2018, primarily due to an increase of 13.0% in the sales volume of copper cathode and higher external purchase costs of ores as a result of increase of copper price.

The cost of sales of sulphuric acid increased by 22.6% from US\$11.5 million in 2017 to US\$14.1 million in 2018, primarily due to the increase of 18.6% in production cost of sulphuric acid.

#### Gross profit and gross profit margin

The Group recorded a gross profit of US\$500.5 million in 2018, representing an increase of 15.9% from US\$431.9 million in 2017. The gross profit margin increased from 23.5% in 2017 to 24.4% in 2018. In particular:

The gross profit margin of blister copper and copper anode decreased from 13.1% in 2017 to 11.8% in 2018, primarily attributable to a bigger increment in unit cost of sales than that in copper price. The gross profit margin of copper cathode was broadly unchanged compared with the last year.

The gross profit margin of sulphuric acid increased from 79.2% in 2017 to 83.4% in 2018, primarily due to the increase in the average selling price of sulphuric acid.

#### Distribution and selling expenses

The distribution and selling expenses of the Group amounted to US\$46.5 million in 2018, basically flat as compared to the corresponding period last year.



Central office building of NFCA in the green bush

#### **Administrative expenses**

The administrative expenses of the Group increased by 17.4% from US\$53.4 million in 2017 to US\$62.7 million in 2018, primarily due to increased administrative expenses in response to increased production volume as a result of expanded production.

#### **Finance costs**

The finance costs of the Group increased by 6.5% from US\$23.1 million in 2017 to US\$24.6 million in 2018, primarily due to increased average interest rate.

#### Other expenses

Other expenses of the Group mainly included maintenance charges incurred by the suspension of production of the Baluba Mine of Luanshya in 2018.

#### Other gains and losses

Other gains and losses of the Group decreased by US\$63.0 million from a net gain of US\$18.1 million in 2017 to a net loss of US\$44.9 million in 2018, mainly due to the decrease in gains from change in fair value of derivatives arising from provisionally priced sales arrangements and increase in exchange loss.

#### Income tax expense

The income tax expenses of the Group decreased by US\$5.5 million from US\$85.4 million in 2017 to an expense of US\$79.9 million in 2018, mainly due to the decrease of Ireland income tax expense.

#### Profit and net profit margin attributable to owners of the Company

As a result of the foregoing, the profit attributable to owners of the Company increased by US\$3.9 million from US\$142.4 million in 2017 to a profit of US\$146.3 million in 2018. The profit margins attributable to owners of the Company (being the profit attributable to the owners of the Company as a percentage of revenue) were 7.7% in 2017 and 7.1% in 2018, respectively.



A bird view of the Muliashi Leach Plant

#### LIQUIDITY AND CAPITAL RESOURCES

#### Cash flows

The following table sets forth certain information regarding the consolidated statements of cash flows of the Group for the periods indicated:

	For the year ended 31 December			
	2018	2017		
	US\$'000	US\$'000		
NET CASH FROM OPERATING ACTIVITIES	205,729	335,782		
NET CASH USED IN INVESTING ACTIVITIES	(302,546)	(204,293)		
NET CASH (USED IN) FROM FINANCING ACTIVITIES	(252,816)	37,243		
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(349,633)	168,732		
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	854,984	685,327		
Effect of foreign exchange rate changes on the balance of				
cash held in foreign currencies	(260)	925		
CASH AND CASH EQUIVALENTS AT END OF THE YEAR				
Represented by:				
Bank balances and cash	505,091	854,984		

Net cash flows generated from operating activities

Cash inflows generated from operating activities are primarily attributable to the sales revenue of copper and sulphuric acid products and cash outflows are primarily attributable to various operating expenses. Net cash flows generated from the operating activities of the Group decreased by 38.7% from an inflow of US\$335.8 million in 2017 to an inflow of US\$205.7 million in 2018, primarily attributable to the increase in the procurement of raw materials as compared to those in the corresponding period last year.

Net cash flows used in investing activities

Cash outflows used in investing activities are mainly for the purchase of properties, plants and equipment for copper production. The net cash flows used in investing activities of the Group increased by 48.1% from an outflow of US\$204.3 million in 2017 to an outflow of US\$302.5 million in 2018, primarily attributable to increased investments in the project of the Southeast Mine of NFCA, Lualaba Copper Smelter projects and reconstruction and expansion project of Huachin Leach.

Net cash flows (used in)/generated from financing activities

The cash inflows generated from financing activities primarily consist of new bank borrowings and other borrowings. The cash outflows from financing activities primarily consist of repayments for bank borrowings, payments of dividends and interest payments. The net cash flows generated from financing activities of the Group decreased by US\$290.0 million from an inflow of US\$37.2 million in 2017 to an outflow of US\$252.8 million in 2018, primarily due to repayment of the principal and interests of bank loans and distribution of dividends to shareholders in 2018.

#### Bank balances and cash

The Group's bank balances and cash (including cash, time deposits and demand deposits) decreased by US\$349.9 million from US\$855.0 million as at 31 December 2017 to US\$505.1 million as at 31 December 2018.

#### Trade receivables/Trade receivables at amortised cost/Trade receivables at FVTPL

As at 31 December 2018, the Group recorded trade receivables at amortised cost of US\$3.0 million and trade receivables at FVTPL of US\$138.6 million. The trade receivables at FVTPL were the trade receivables arising from the sales of copper products under provisional pricing arrangements. The aggregate trade receivables amounted to US\$141.6 million, which decreased by US\$93.3 million from US\$234.9 million as at 31 December 2017, primarily attributable to the decrease in London Metal Exchange price of copper at the end of December 2018 as compared with the end of last year.

#### **Inventories**

The inventories held by the Group increased by US\$156.6 million from US\$383.6 million as at 31 December 2017 to US\$540.2 million as at 31 December 2018. In particular, raw materials and spare parts and consumables of the Group as at 31 December 2018 increased by US\$142.2 million as compared with that of 31 December 2017. The increase in raw materials was mainly due to the significant increase in stocks of copper concentrate.

Significant investments held, material acquisitions and disposals of subsidiaries and future plans for material investments or acquisition of capital asset

Saved as disclosed in this annual report, there were no other significant investments held, material acquisitions or disposals of subsidiaries during the year ended 31 December 2018. Apart from those disclosed in this annual report, there was no plan approved by the Board for other material investments or acquisition of capital assets as at the date of this annual report.

#### Charge on assets

As at 31 December 2018 and 2017, no assets of the Group were pledged.

#### Gearing ratio

As at 31 December 2018, the gearing ratio was 60.4% (as at 31 December 2017: 45.9%) which is calculated by the net debts (being bank and other borrowings minus bank balances and cash, and restricted bank balances) divided by the total equity attributable to owners of the Company.

#### **Contingent liabilities**

Other than disclosed in this annual report, there were no other material contingent liabilities.

#### Bank and other borrowings

Details of bank and other borrowings as at 31 December 2018 are included in note 24 to the audited consolidated financial statements of this annual report. The loans of the Group are made in US\$. Save for the loan from a fellow subsidiary of US\$138.0 million which has a fixed interest rate, other loans of the Group do not have fixed interest rate.

#### Trade payables/Trade payables designated at FVIPL

As at 31 December 2018, the Group recorded trade payables of US\$118.2 million and trade payables designated at FVTPL of US\$131.8 million. The trade payables designated at FVTPL were the trade payables arising from the purchase of copper concentrate under provisional pricing arrangements. The aggregate trade payables amounted to US\$250.0 million, which decreased by US\$15.7 million from US\$265.7 million as at 31 December 2017, primarily due to the decrease in balance of the copper concentrates purchase payables.



A general view of the exterior of Chambishi Copper Smelter

#### Capital expenditure

	For the year	r ended
	31 Decer	nber
	2018	2017
	(US\$'000)	(US\$'000)
Mining and ore processing facilities at Chambishi Southeast Mine of NFCA	179,847	141,731
Other mining and ore processing facilities of NFCA	39,440	48,436
Mining and ore processing facilities at Luanshya	39,770	40,400
(Baluba Center Mine)	611	7,203
	011	7,203
Mining and leaching facilities at Luanshya		001
(Muliashi Project)	_	661
Smelting facilities at CCS	7,874	12,055
Leaching facilities at SML	2,799	5,556
Leaching facilities at Huachin Leach	62,846	4,210
Mining rights and leaching facilities at CNMC		
Huachin Mabende	11,554	3,890
Smelting facilities at Lualaba Copper Smelter	93,129	4,503
Mining and the processing facilities at Kambove Mining	1,956	285
Other facilities	1,532	50
Total	401,588	228,580

The total capital expenditure of the Group increased by US\$173.0 million from US\$228.6 million in 2017 to US\$401.6 million in 2018, mainly due to the investment increases in the Southeast Mine of NFCA, Lualaba Copper Smelter and Huachin Leach projects.



Panorama of Chambishi Copper Mine processing plant

#### **Financial policies**

During the year ended 31 December 2018, the Group had in place the Financial Budget Management System, the Funds Management System, the Inventories Management System, the Fixed Assets Management System, the Financial Information Disclosure Management System, Management Measures on Approval Procedures and Permissions of Financial Income and Expenses of the Central Office and other financial policies, which aim to regulate and enhance internal control of relevant activities of the Group to ensure the safety of the Group's assets, protect investors' interests and improve operation and management level for compliance with relevant laws and regulations of Hong Kong as well as the Listing Rules.

Please also refer to note 33 to the audited consolidated financial statements contained in this annual report for the financial instruments (which include the financial risk management objectives and policies).

#### Principal risks and uncertainties

Although we have established the risk management system to identify, analyse, evaluate and respond to risks, our business activities are still subject to the following risks, which could have material effects on our strategy, operations, compliance and financial condition. We urge you to carefully consider the risks described below.

#### Copper price affects the business, cash flow and profit of the Group

The sharp fluctuation of copper price mainly reflects the change in supply and demand of copper products, the market uncertainty and other factors which are out of control of the Group, including but not limited to the overall economic situation, political unrest, armed conflicts, terrorist acts, economic condition in major copper producing countries, availability of other metals, domestic and overseas regulations of governments, natural disasters and weather conditions. Price fluctuation will have a material impact on the business, cash flow and revenue of the Group.

Low copper price may have a negative impact on the business, revenue and profit of the Group, which will lead the Group to write off reserves and other assets with relatively higher cost, or to reduce the production volume of economical copper and terminate the existing unprofitable contracts. The consistently low copper price will affect the long-term project investment strategy and operational capacity of the Group.

#### Commodity price risk

The Group's commodity price risk is mainly the exposure to fluctuations in the market price of copper since copper is the major commodities purchased, produced and sold by the Group. To mitigate this risk, the Group has entered into copper futures contracts and provisional price arrangements to manage its exposure in relation to forecasted sales of copper products, forecasted purchase of copper concentrate, inventories and the Group's commitment to sell its copper products.

#### Foreign currency exchange risk

The Group operates business in Zambia and the DRC and most of its sales and purchases in the past were denominated in US dollar, its functional currency, while certain sales and purchases were settled in currencies other than its functional currency (mainly ZMK, Congolese Franc and RMB), which exposed the Group to foreign currency risk. To mitigate such risk, the Group engaged in foreign currency exchange hedging activities through various methods including locking the signing and settlement currency and speeding up tax rebates.

#### Interest rate risk

The Group is exposed to interest rate risk of cash flow under the impact of interest rates changes of interest-bearing financial assets and liabilities which mainly include interest-bearing restricted bank balances, bank balances and bank and other borrowings at variable interest rates. The Group currently does not have any interest rate hedging policy. However, the Directors will consider hedging significant interest rate risk should the need arise.



CNMC Huachin Mabende Office area in Lubumbashi in DRC

#### **OVERVIEW**

In 2018, the Group spared no efforts to expand markets on one hand, and focused on production and management, projects construction and cost management on the other hand. To this end, the operation quality and growth momentum have improved and the Group overfulfilled the annual objectives in operation.

During the reporting period, the production and sales volumes of the products of the Company have achieved steady growth. The revenue increased by 11.7% to US\$2,053.3 million over the last year.

During the reporting period, the profit attributable to owners of the Company amounted to US\$146.3 million, representing an increase of US\$3.9 million over the last year, which is mainly because the increase in production, sales volumes and revenue resulting from the Company's strengthened management outpaced the increase in costs and expenses and product price.

Meanwhile, along with the construction and commercialization of the planned projects including Chambishi Southeast Mine with a budgeted investment of US\$830 million, the blister copper smelting project of Lualaba Copper Smelter with a budgeted investment of US\$437.6 million and reconstruction and expansion project of Huachin Leach, a solid foundation for the Group's business growth will be laid.



A bird view of the self-propelled heap leaching technology at CNMC Luanshya

#### **BUSINESS REVIEW**

The Group is a leading, fast growing and vertically integrated copper producer focusing on mining, ore processing, leaching, smelting and sales of copper and cobalt, based in Zambia and DRC. The Group also produces copper-cobalt alloy and sulphuric acid. Sulphuric acid is the by-product generated during the blister copper smelting process. The Group has made greater efforts to develop cobalt business since 2017.

The businesses of the Group are carried out mainly through the following companies: NFCA, Luanshya, CCS and SML located in Zambia as well as Huachin Leach, CNMC Huachin Mabende, Lualaba Copper Smelter and Kambove Mining located in the DRC.

In 2018, blister copper (including copper anode) and sulphuric acid produced by the Group amounted to 220,479 tonnes and 593,983 tonnes, representing a decrease of 2.0% and 0.1% over last year, respectively. maintaining the production capacity under high-load operation. Copper cathodes produced amounted to 96,870 tonnes in total, representing an increase of 8.8% over last year. Revenue of the Group increased by 11.7% from US\$1,838.7 million in 2017 to US\$2,053.3 million in 2018.

#### **RESOURCES AND RESERVES**

#### Assumptions adopted for the annual update of resources and/or reserves

The same assumptions as those applied in the 2012 prospectus in accordance with the JORC Code were adopted for the annual update of resources and/or reserves in this report. Relevant updates were made according to our new exploration and based on the historical data used by technical consultants.

The main changes in resources and/or reserves were attributable to the adjustments arising from production wastage and intensified exploration.



Spray leaching operations in the No.1 stockpile of heap leaching system of Muliashi Project



Leach solution from spray leaching of Muliashi Project

As at 31 December 2018, the Group's mineral resources and mineral reserves reported in accordance with the JORC Code were as follows:

#### (1) Resources

Chambishi Main Mine (NFCA)

		per 2018	31 December 2017					
		Average	grade			Average	grade	
JORC		Total	Oxide			Total	Oxide	
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt
	(Mt)				(Mt)			
Measured	8.03	2.19%	-	-	8.35	2.22%	-	-
Indicated	6.68	2.33%	-	-	6.71	2.32%	-	-
Inferred	13.79	2.26%	-	-	13.83	2.26%	-	_

Note: Chambishi Main Mine produced 375,000 tonnes of ore in 2018.

Chambishi West Mine (NFCA)

		31 Decemb	er 2018	31 December 2017					
		Average	grade		Average grade				
JORC		Total	Oxide			Total	Oxide		
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt	
	(Mt)				(Mt)				
Oxide ore									
Measured	6.54	1.98%	0.83%	-	4.55	1.97%	0.90%	_	
Indicated	1.06	1.97%	0.96%	_	0.95	1.97%	0.99%	_	
Inferred	0.52	1.76%	0.79%	-	0.31	1.87%	0.93%	-	
Sulphide Ore									
Measured	14.13	2.12%		-	11.40	2.14%	-	_	
Indicated	4.59	2.17%	-	-	4.68	2.16%	-	-	
Inferred	4.44	2.05%	-	-	6.95	2.08%	-	-	

Note: Chambishi West Mine produced 1,129,000 tonnes of ore in 2018.

Chambishi Southeast Mine (NFCA)

		31 December 2017 Average grade						
JORC	Ore	Average Total	Oxide	Cobalt	Ore	Total	Oxide	Cobalt
category	(Mt)	copper	copper	Copail	(Mt)	copper	copper	Cobail
Measured	28.17	2.35%	_	0.12%	16.93	2.38%	-	0.10%
Indicated	38.66	1.84%	-	0.11%	32.34	2.03%	/-	0.11%
Inferred	73.95	1.88%	-	0.11%	96.40	1.80%	_	0.10%

Note: Chambishi Southeast Mine produced 100,000 tonnes of ore (by-product) in 2018.

Mwambashi Mine (SML)

		31 Decemb Average				er 2017 grade		
JORC		Total	Oxide			Total	Oxide	
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt
	(Mt)				(Mt)			
Measured	1.37	2.16%	1.05%	-	1.39	2.16%	1.05%	_
Indicated	4.83	1.96%	0.68%	- /	4.88	1.96%	0.68%	-
Inferred	3.28	2.06%	0.48%	-	3.31	2.06%	0.48%	-

Note: Mwambashi Mine produced 670,000 tonnes of ore in 2018.



Samba Mine (SML)

		31 Decemb Average			31 December 2017  Average grade				
JORC category	Ore	Total copper	Oxide copper	Cobalt	Ore	Total copper	Oxide copper	Cobalt	
	(Mt)	•••			(Mt)				
Measured	-	-	-	-	_	-	_	-	
Indicated	3.00	1.76%	-	-	3.00	1.76%	-	-	
Inferred	5.85	1.65%	-	-	5.85	1.65%	-	-	

Note: No mining activities were carried out at Samba Mine in 2018.

Baluba Center Mine (Luanshya)

		31 Decemb	per 2018	31 December 2017					
		Average	grade		Average grade				
JORC		Total	Oxide			Total	Oxide	Cobalt	
category	Ore	copper	copper	Cobalt	Ore	copper	copper		
	(Mt)				(Mt)				
Oxide ore									
Measured	-	-	-	-	-	-	-	-	
Indicated	6.56	1.65%	1.14%	0.12%	6.56	1.65%	1.14%	0.12%	
Inferred	1.62	1.70%	0.93%	0.10%	1.62	1.70%	0.93%	0.10%	
Sulphide Ore									
Measured	3.96	2.20%	0.08%	0.15%	4.05	2.20%	0.08%	0.16%	
Indicated	7.11	2.10%	0.08%	0.14%	7.29	2.10%	0.08%	0.14%	
Inferred	3.62	1.47%	0.06%	0.09%	3.62	1.47%	0.06%	0.09%	

Note: In 2018, Baluba Center Mine registered 197,000 tonnes of consumption of sulphide ore. No exploration or mining activities for oxide ore were carried out at Baluba Center Mine.

Muliashi North Mine (Luanshya)

		31 December 2017  Average grade						
JORC category	Ore	Total copper	Oxide copper	Cobalt	Ore	Total copper	Oxide copper	Cobalt
	(Mt)		• •		(Mt)			
Measured	13.53	1.03%	0.38%	0.02%	16.45	1.10%	0.44%	0.02%
Indicated	14.06	0.99%	0.36%	0.02%	15.25	1.01%	0.37%	0.02%
Inferred	21.12	0.98%	0.32%	0.02%	21.18	0.98%	0.32%	0.01%

Note: Muliashi North Mine registered approximately 4,160,000 tonnes of consumption of resources in 2018.

Muliashi South Mine (Luanshya)

		31 Decemb	per 2018		31 December 2017 Average grade					
		Average	grade							
JORC		Total	Oxide			Total	Oxide			
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt		
	(Mt)				(Mt)	X				
				4						
Oxide ore										
Measured	0.64	1.95%	1.01%	0.01%	0.96	2.05%	1.22%	0.01%		
Indicated	0.67	1.55%	0.58%	0.01%	0.76	1.59%	0.66%	0.01%		
Inferred	0.17	1.25%	0.46%	0.02%	0.17	1.25%	0.46%	0.02%		
Sulphide Ore										
Measured	-/	-	/-	-	-	-	-	\ \-		
Indicated	0.60	2.48%	-	-	0.60	2.48%	/-	- )		
Inferred	0.08	2.50%		-	0.08	2.50%	-	_		

Note: In 2018, Muliashi South Mine registered approximately 400,000 tonnes of consumption of oxide ore. No exploration or mining activities for sulphide ore were carried out at Muliashi South Mine.

Mashiba Mine (Luanshya)

		31 December 2017 Average grade						
JORC category	Ore <i>(Mt)</i>	Average Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Measured Indicated Inferred	3.17 5.67 4.97	1.89% 1.96% 1.67%	0.24% 0.22% 0.43%	0.02% 0.03% 0.04%	3.17 5.67 4.97	1.89% 1.96% 1.67%	0.24% 0.22% 0.43%	0.02% 0.03% 0.04%

Note: No mining activities were carried out at Mashiba Mine in 2018.

Baluba East Mine (Luanshya)

		31 Decemb Average		31 December 2017 Average grade				
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Measured	16,47	1.67%	0.68%	0.02%	18.28	1.65%	0.07%	0.02%
Indicated Inferred	2.48 1.35	1.24% 1.07%	0.19% 0.17%	0.03% 0.04%	2.60 1.35	1.26% 1.07%	0.22% 0.17%	0.03%

Note: Baluba East Mine registered approximately 740,000 tonnes of consumption of resources in 2018.

PE6307 Mine (Huachin Leach)

			31 December 2017 Average grade					
JORC		Total	Oxide			Total	Oxide	
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt
	(Mt)				(Mt)			
Measured	-	-		-/	-	-	-	_
Indicated	_	<b>&gt;</b>		/-	0.13	3.18%	-	-
Inferred	-/	-	-		-	-	-	-

PE5276-B5 Mine (CNMC Huachin Mabende)

		31 December 2018 Average grade				31 December 2017  Average grade				
JORC category		Total	Oxide			Total	Oxide copper	Cobalt		
	Ore <i>(Mt)</i>	copper	copper	Cobalt	Ore <i>(Mt)</i>	copper				
Measured	0.04	3.48%	_	_	0.04	3,26%	_	_		
Indicated	0.14	1.98%	-	-	0.14	1.86%	/_	_		
Inferred	0.04	1.91%	(1000 - 1000 <del>-</del> 1000	-	0.04	1.79%		-		

PE5276-RE Mine (CNMC Huachin Mabende)

		31 Decemb	per 2018		31 December 2017					
		Average	grade		Average grade					
JORC		Total	Oxide			Total	Oxide			
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt		
	(Mt)				(Mt)					
Measured	0.07	2.54%	-	-	-/	-	-	-		
Indicated	0.03	1.75%	-	-	/-	_	-	-		
Inferred	0.07	1.73%	-	-	-	-	-	-		

#### (2) Reserves

Chambishi Main Mine (NFCA)

	31 December 2018 Average grade				31 December 2017 Average grade				
JORC		Total	Oxide			Total	Oxide		
category	Ore	copper	copper	Cobalt	Ore	copper	copper	Cobalt	
	(Mt)				(Mt)				
Proved	4.73	1.69%	-		4.26	1.68%	-	_	
Probable	2.84	1.64%	7	-	2.88	1.61%		-	

Chambishi West Mine (NFCA)

		31 Decemb	per 2018			31 Decemb	er 2017	
		Average	grade			grade		
JORC		Total	Oxide		Ore	Total	Oxide	
category	Ore	copper	copper	Cobalt		copper	copper	Cobalt
	(Mt)				(Mt)			
Oxide ore								
Proved	3.61	1.87%	0.74%	-	2.33	1.84%	-	-
Probable	1.38	1.88%	0.82%	-	1.14	1.85%	-	-
Sulphide Ore								
Proved	4.14	2.02%	-	-	3.81	2.03%	-	-
Probable	9.73	1.95%	-	-	11.98	1.92%	-	-

#### Chambishi Southeast Mine (NFCA)

		31 Decemb Average			31 December 2017 Average grade				
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	
Proved Probable	22.44 18.53	2.00% 1.64%	- -	0.10% 0.09%	13.46 32.75	2.02% 1.76%	- / -	0.09% 0.10%	

#### Baluba Center Mine (Luanshya)

	31 December 2018 Average grade					31 December 2017  Average grade			
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	
Proved Probable	2.23 4.43	1.38% 1.26%	0.06% 0.11%	0.04% 0.09%	2.30 3.58	1.38% 1.25%	0.06% 0.11%	0.04% 0.09%	



CNMC Luanshya Muliashi Leach Plant at Night

Muliashi North Mine (Luanshya)

		31 December 2017  Average grade						
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	9.76 8.53	1.02% 0.92%	0.35% 0.35%	0.02% 0.02%	12.69 9.79	1.11% 0.96%	0.43% 0.37%	0.02% 0.02%

Muliashi South Mine (Luanshya)

		31 December 2017 Average grade						
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	0.08 0.05	2.20% 1.81%	1.60% 1.18%	0.01% 0.01%	0.38 0.14	2.22% 1.83%	1.61% 1.25%	0.02% 0.01%

#### Baluba East Mine (Luanshya)

		31 Decemb Average				31 Decemb Average		
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore (Mt)	Total copper	Oxide copper	Cobalt
Proved Probable	2.48 17.37	1.46% 1.45%	0.98% 0.93%	0.05% 0.05%	6.38 27.57	1.81% 0.73%	0.95% 0.30%	0.02% 0.03%

#### Mashiba Mine (Luanshya)

		31 Decemb Average				31 Decemb Average		
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	2.66 4.76	1.35% 1.40%	0.17% 0.16%	-	2.66 4.76	1.35% 1.40%	0.17% 0.16%	- -



Settling pond for leaching

		31 Decemb Average				31 Decemb Average (		
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	5.92 3.31	2.07% 2.06%	1.07% 0.48%	-	6.38 3.31	2.02% 2.06%	0.82% 0.48%	- -

#### Samba Mine (SML)

		31 Decemb Average				31 Decemb Average		
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	8.85 3.32	1.69% 1.57%	- -	- -	8.85 3.32	1.69% 1.57%	- -	- -

#### PE6307 Mine (Huachin Leach)

		31 Decemb Average				31 December Average (		
JORC category	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	-	- -	- -	-	- 0.74	- 3.18%	- -	- -

#### PE5276-B5 Mine (CNMC Huachin Mabende)

		31 December Average				31 Decemb Average (		
JORC category	Ore (Mt)	Total copper	Oxide copper	Cobalt	Ore <i>(Mt)</i>	Total copper	Oxide copper	Cobalt
Proved Probable	=	:	7		- 0.04	- 2.35%	- -	- -

#### PRODUCTION OVERVIEW

#### **NFCA**

NFCA mainly operates two mines, namely the Chambishi Main Mine and Chambishi West Mine, as well as the ancillary processing plant.

In 2018, copper contained in copper concentrates produced by NFCA amounted to 31,948 tonnes, representing an increase of 7.6% over the same period in the previous year. Such increase was primarily attributable to the increase in copper contained in the copper concentrates produced by another subsidiary in 2018 by 2,354 tonnes as compared with the same period last year to 4,345 tonnes.

The Chambishi Main Mine and Chambishi West Mine of NFCA produced ore of 0.375 million tonnes and 1.129 million tonnes, respectively, during 2018.



Central auxiliary shaft of Chambishi West Mine

#### Luanshya

Luanshya operates three copper mines under production, namely the Baluba Center Mine, the Muliashi North Mine, the Muliashi South Mine, and also operates Muliashi Leach Plant.

The total copper contained in copper concentrates produced by Luanshya amounted to 5,806 tonnes, representing an increase of 141.8% over the same period in the previous year. In particular, Baluba Center Mine resumed production in July 2018 and had accumulatively produced 2,227 tonnes of copper contained in copper concentrates; the total copper contained in copper concentrates produced by the Slag Copper Recovery Project amounted to 3,579 tonnes, representing a year-on-year increase of 49.1%, mainly due to the fact that in 2017 production only lasted for 9 months.

The Muliashi Project produced 41,869 tonnes of copper cathode, representing an increase of 1.4% over the same period in the previous year, mainly attributable to the stable and efficient output of the production system.

The Muliashi North Mine and the Muliashi South Mine produced ore of 4.16 million tonnes and 0.40 million tonnes respectively in 2018.

#### CCS

CCS mainly operates the Chambishi Smelting Plant.

In 2018, blister copper, copper anode and sulphuric acid produced by CCS amounted to 164,230 tonnes, 56,249 tonnes and 593,983 tonnes, basically flat with the same period in the previous year. The copper-cobalt alloy accumulatively produced amounted to 1,136 tonnes, representing a decrease of 6.8% as compared with the same period in the previous year.

#### **SML**

SML mainly operates Mwambashi Mine and the Chambishi Leach Plant.

Copper cathode produced by SML in 2018 amounted to 5,519 tonnes, flat with the same period in the previous year. Processing plants under SML produced 3,796 tonnes of copper contained in copper concentrates in 2018, representing an increase of 44.6% over the same period in the previous year, mainly attributable to the guaranteed supply of raw materials as a result of the continuous supply from Mwambashi Mine in 2018 as well as the increase in the volumes of ore processed, the grade of sulphide ore and the recovery rate of copper metal.



Panorama of SML plant

#### **CNMC Huachin Mabende**

CNMC Huachin Mabende produced 34,702 tonnes of copper cathodes, representing an increase of 14.9% over the same period in the previous year, mainly attributable to continuous enhancement of manufacturing capacity and production capacity through technological transformation and quality improvement.

#### **Huachin Leach**

Huachin Leach accumulatively produced 14,780 tonnes of copper cathodes, representing an increase of 22.6% over the same period in the previous year, mainly attributable to enhancement of solution concentration as a result of sufficient raw materials and increase in ore processing amount arising from the greater efforts on ore recovery during the year.

The table below presents the production volume of the products of the Group and the year-on-year growth for the periods indicated.

	Production volume for 2018 <sup>(1), (2)</sup> <i>(Tonnes)</i>	Production volume for 2017 <sup>(1)</sup> <i>(Tonnes)</i>	Year-on- year growth/ (decrease) (%)
Copper concentrate	37,205	34,725	7.1
Blister copper & copper anode	220,479	224,920	(2.0)
Copper cathodes	96,870	89,068	8.8
Copper- cobalt alloy	1,136	1,219	(6.8)
Sulphuric acid	593,983	594,553	(0.1)

#### Notes:

- (1) The production volumes of all the products are on a contained-copper basis, except for sulphuric acid and copper-cobalt alloy.
- (2) The copper-cobalt alloy production contains approximately 341 tonnes of copper and approximately 114 tonnes of cobalt.

# MINING EXPLORATION, MINING DEVELOPMENT AND MINING ACTIVITIES Exploration, Development, and Mining Cost of the Group

2018		NFCA	:			Luanshya	ya			SML	=		CNMHK			Kambove Mining		
Unit: Million US dollars	Chambishi Main Mine	Chambishi Chambishi Southeast Main Mine West Mine Mine	Chambishi Southeast Mine	Baluba Center Muliashi Muliashi Sulphide Mine North Mine South Mine	Muliashi Vorth Mine		Mashiba Mine	Baluba East Mine	Roan Basin	Mwambashi Mine	Huachi PE6307 Mine	Huachin Leach 6307 PE12094 Mine	CNMC Huachin Mabende PE5276-B5 PE5276-ER Mine Mine	nin Mabende PE5276-ER Mine	₩		KIBINDJI mine spot	Total
Exploration activities Drilling and analysis Others		1.27	2.03	0.16	1 1	1 1	0.27	1 1	0,40	0.20	0.16	0.21	0.26	0.40	0.38	0.23	0.11	6.08
Sub-total	•	127	2.03	0.16	0.00	0.00	0.27	0.00	0.40	0.20	0.16	0.21	0.26	0.40	0.38	0.23	0.11	6.08
Development activities (including mine construction) Purchases of assets and equipment			'	0.13	0.44	1	ı	1	ı	1	ı	2	ı	ı	1	ı	1	35.55
Civil work for construction of turnels and roads Staff cost Others	1 1 1	1.0	1 1 1	2 1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	0.80	1 1 1	1 1 1	0.34	0.41	1 1 1	1 1 1	0.80
Sub-total	'	•		0.13	0.44						0.80	2.98		1.49	1.24			7.08
Mining activities (excluding ore processing) Staff cost	(6		1	0.58	0.15	1	ı	1	1	80:0	ı	0.29	1	ı	1	1	1	1.10
Materials and equipment Fuel, electricity, water and	l	1	1	0.95	1.42	0.27	1	0.46	ı	I	ı	0.70	I	ı	ı	I	ı	3.80
others services On-site and remote system	1	I	'	1.43	1		1	ı	1	0.11	1	0.50	1	ı	1	ı	1	2.04
Non-income taxes, royalties and other government	S				ı	I	ı	ı	1	ı	ı	5	ı	I	ı	ı	į	0.0
expenses Others	1 1	1 1	1 1	2.36	13.94	0.76	1 1	1.65	1 1	0.00	1 1	0.02	1 1	1 1	1 1	1 1	1 1	18.71
Sub-contracting charges Depreciation	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	4.73 0.12	1 1	0.24	1 1	1 1	1 1	1 1	1 1	4.73
Sub-total	•		٠	5.32	15.51	1.03	٠	2.11	٠	6.53	·	1.76	٠	٠	٠	٠	٠	32.26

In 2018, Chambishi Main Mine and Chambishi West Mine produced 375,000 and 1,129,000 tonnes of ore, respectively, and Chambishi Southeast Mine produced 100,000 tonnes of ore (by-product).

In 2018, at Chambishi Main Mine, Chambishi West Mine and Chambishi Southeast Mine, 272 drilling holes in the pit were completed with 21,983.57m drilled, of which, 53 underground drilling holes were completed at Chambishi West Mine with 7,912.68m drilled at a cost of US\$870,400 and 219 drilling holes in the pit were completed at Chambishi Southeast Mine with 14,070.9m drilled at a cost of US\$1,430,300.

#### **Mining Exploration**

During the year, NFCA, Luanshya, SML, CNMC Huachin Mabende and Kambove Mining, subsidiaries of the Company, conducted mining exploration for production and exploration purposes, respectively. In particular:

At Chambishi Main Mine, Chambishi West Mine and Chambishi Southeast Mine of NFCA, 272 drilling holes in the pit were completed with 21,983.57m drilled, of which, 53 underground drilling holes were completed at Chambishi West Mine with 7,912.68m drilled and 219 drilling holes in the pit were completed at Chambishi Southeast Mine with 14,070.9m drilled.



CNMC Luanshya Processing Plant at Dusk

Luanshya conducted exploration, drilling and platform trenches. In particular, supplemental exploration was conducted at Mashiba Mine, preliminary exploration was conducted at oxide copper mine projected to surface between SS19 line and SS35 line in Roan Basinwas, goaf verification was conducted at Baluba East Mine and exploration was conducted at Musidam Tailings Pond, during which 80 surface drilling holes with the drilling footage of 4,822.62m were completed. At Muliashi North Strip Mine, Muliashi South Strip Mine and Baluba East Strip Mine, 42 platform trenches for production and exploration purposes were completed with a total length of 2,986m and a total capacity of 1,493m<sup>3</sup>.

2 drilling holes were completed at SML Mwambashi Mine B, with 731.96m drilled.

At CNMC Huachin Mabende PE5276, 13 drilling holes were completed with a total of 1,119m drilled. Intensified exploration was conducted across 5.64 square kilometer and 8 shallow shafts were constructed with a total of 45m drilled.

Assessment was made to the mineral resources in the main mineral deposit and to the mines under the plant to be constructed, and drill hole cataloguing and sampling for KIBINDJI mine spot with the drill hole core was conducted. In particular, 19 drilling holes were completed at the main mineral deposit, with 2,522.08m drilled, 6 drilling holes were completed at the plant to be constructed, with 820.01m drilled, and 68 drilling holes were completed at the KIBINDJI mine spot, with 10,548.65m drilled.

## **Mining Development**

For details of mining development please refer to "Projects Under Progress" on pages 38 to 40.



Zambian President Lungu cut the ribbon for the trial production ceremony of Chambishi Southeast Mine

## **Mining Activities**

For details of mining activities, please refer to "Production Overview" on pages 31 to 33.

## Infrastructure projects, subcontracting arrangements and procurement of equipment

During 2018, the new contracts entered into by the Group are as follows:

NFCA

The new infrastructure project contracts executed in 2018 amounted to approximately US\$35.0 million.

No subcontracting arrangements were entered into by the Group during 2018.

During 2018, contracts which amounted to approximately US\$26.5 million were entered into by the Group for purchase of equipment related to mining exploration, mining development and mining activities, including equipment for mining, transportation, processing, drainage, soil discharge, electricity, laboratory, and etc.



Surface mine of Muliashi Project

\* Subcontracting arrangement refers to an arrangement made between one party to a contract and a third party, pursuant to which the third party shall fulfill all or part of the obligation of that party under the said contract. For example, it refers to the circumstance where the Group wins a project as a contractor and then transfers the entire project or subcontracts in part the project to a third party.

## PROJECTS UNDER PROGRESS

## **NFCA**

The Integrating Exploration and Construction Project of the Chambishi Southeast Mine

This project is currently under development and is one of the key development mine projects of the Company with a designed ore processing capacity of 3,300,000 tonnes per annum. Its aggregate planned investments amounted to US\$832 million. In 2018, underground and overground constructions of the project have fully commenced and progressed smoothly. Since the commencement of construction, its accumulative drilling volume of wells and tunnels was 822,000m³/870,000m³ by the end of 2018. During 2018, it drilled 219 holes in the pit with the drilling depth of 14,071m. The drilling footage of the southern and northern mining areas was 39,046m in total since the commencement of construction. In 2018, the completed investments for the year amounted to US\$217.78 million. As at the end of 2018, an accumulative project investment of US\$736.32 million was made representing approximately 88% of the total planned investment. The main part was completed and put into use in the third quarter of 2018 and started trial production on 22 August.

## CCS

Tailings Pond Phase II Project

The tailings pond project phase II will be used to support a smelting project phase II with an output of 250,000 tonnes. With a total planned investment of US\$10.00 million, such project commenced on 1 May 2017 and would last for 15 months. Three rolled earth-rock dams would be built on three sides with the eastern dam being shared with the tailings pond phase I. The dam top elevation and highest dam height was 1,250m and 20m, respectively. It covered an area of 350,000m<sup>2</sup> with a capacity of 3,000,000m<sup>3</sup>, which was sufficient for stockpiling for a period of 10 years. As of 31 December 2018, the project had been completed.

## **SML**

Mwambashi Strip Mine project

This project comprises a strip mine with designed capacity of 600,000 tonnes of ores per annum and a processing plant with a daily capacity of 2,000 tonnes. The strip mine, with designed annual capacity of 600,000 tonnes of ores, has completed construction and commenced formal production at the end of June 2016. In line with the strip mine with an annual capacity of 600,000 tonnes of ores, a processing plant with a daily capacity of 2,000 tonnes will be built by reconstructing and expanding the original processing plant with a daily capacity of 1,000 tonnes with a total planned investment amount of US\$8.80 million. As of the end of December 2018, the tail-in work of the reconstruction and expansion of the processing system was under progress and the total investment amounted to US\$2,892,500.

## Luanshya

Baluba East Strip Mine project

Baluba East Strip Mine project has a designed capacity of 900,000 tonnes of quality oxide ore per annum and output of 10,000 tonnes of copper cathode. The developmental stripping for the project was completed by the end of June 2018, in which US\$865,000 had been invested for 2018. As at the end of December 2018, a total amount of US\$6,528,000 had been invested in the project. Baluba East Strip Mine has become a good supplement to Muliashi North Strip Mine in terms of ore resource in the later stage of mining, ensuring the supply of raw material for Muliashi Leach Plant.

## **Huachin Leach**

Huachin Leach copper-cobalt reconstruction and expansion project

Huachin Leach copper-cobalt reconstruction and expansion project has a designed annual production capacity of 20,000 tonnes of copper cathode and 2,000 tonnes of cobalt, with a total planned investment of US\$52,412,000. As at 31 December 2018, about 90% of civil engineering work has been completed and about 85% of installation work has been completed. Part of self-developed systems (such as the new extraction system) have been put into operation, contributing to the production capacity. The project is scheduled to be completed by 30 June 2019.

## **Lualaba Copper Smelter**

Blister Copper Smelting Project

A copper concentrate (dry) smelting project with an annual capacity of 400,000 tonnes would be constructed to produce approximately 118,000 tonnes of blister copper per annum. With an investment budget of US\$437.60 million, the construction of such project commenced on 28 March 2018 and would last for two years. As of the end of 2018, the main smelting factory had been capped and the living base construction, reinforced concrete construction of sulfuric acid circulating tank, warehouse system, main part of the office building, etc. had been basically completed; the external electricity project had been fully launched; and the concentrate store had been capped. Important construction milestones and engineering construction had been completed as scheduled and the accumulated investment completed amounted to US\$93 million.

Cobalt Recycling System Project

This project was a sub-system of the copper concentrate (dry) and blister copper smelting project with an annual capacity of 400,000 tonnes. It would produce 10,000 tonnes of copper-cobalt alloy per annum and had an investment budget of US\$33.10 million. Such project will be constructed along with the blister copper smelting project.

## **Kambove Mining**

The Integrating Exploration and Construction Project of Kambove

The main ore body exploration of the project has been completed for two phases. The negotiation on supplementary operating agreements and the preparations prior to commencement of construction are in orderly progress. The Group has prepared the overall development plans for ore bodies in the mining area and medium and long term development plan for the Company.

In addition, the Group conducted research on the development of new mining exploration and mining projects in the Zambia and DRC to actively expand its resource reserves and enhance its smelting production capacity, so as to secure the continuous growth of the Company.

## **HUMAN RESOURCES**

As of 31 December 2018, the Group employed a total of 6,575 employees (as of 31 December 2017: 5,612 employees), which comprised 686 foreign and 5,889 local employees in Zambia and the DRC. Employees' remuneration was determined by the Group based on their performance, experience and the prevailing market practice. For the year ended 31 December 2018, the total cost of employees reflected in the consolidated statement of profit or loss and other comprehensive income amounted to approximately US\$86.4 million (2017: US\$71.3 million).

## **2019 OUTLOOK**

2018 saw a slowing global economy, rising trade protectionism and increasing regional disputes and uncertainties associated with trade frictions between China and the US. However, the world economy expects to gain new momentum as the two sides hold talks to deescalate their trade war and China pushes forward with its deleveraging and tax cuts to stabilize growth. Meanwhile, given a tight supply-demand balance of copper products worldwide and the growing demand from new energy sectors for cobalt, the prices of copper and cobalt remain promising in the long-term.

In 2019, the Group will continue to follow its own development strategy. It will keep increasing investments in geological exploration and development, pay high attention to and more efforts in expanding the exploration areas, as well as exploring the surrounding areas and in the depth of the existing mines, especially in the region of Kambove, DRC. Meanwhile, the Group will continue to identify suitable acquisition targets in regions with rich copper resources such as Zambia and the DRC, with an aim to increase the Group's resources.

The Group will continue to improve the operational efficiency of its existing mines and smelters through optimizing the internal value chain management, promoting the integration construction of production, supply and marketing in the same region, intensifying cost control and other modern management methods, so as to continuously enhance the Group's profitability. The Group will continue to pay due efforts in its mining activities in underground mines (including Chambishi Main Mine, Chambishi West Mine and Chambishi Southeast Mine in Zambia) and the Muliashi Strip Mine and Mwambashi Strip Mine Project in Zambia and Silver Back Resources (SBR) Strip Mine in DRC, so as to increase the production volume of copper concentrate and oxide ore from its own mines. Great efforts will be put in the management of the technology of smelting in CCS and leaching in Muliashi Leach Plant, SML in Zambia and Huachin Leach and CNMC Huachin Mabende in DRC so as to improve the output and quality of blister copper, copper cathode, sulphuric acid, copper-cobalt alloy and cobaltous hydroxide, with a view to further increasing the operating efficiency and profit from the existing production capacity.

The Group will keep its emphasis on the construction of key projects, continue to expedite the construction of Blister Copper Smelting Project of Lualaba Copper Smelter in DRC, and promote the standardized production in Chambishi Southeast Mine and the reconstruction and expansion project of Huachin Leach. It will also concentrate on the project exploration of Kambove Mining and commence its construction as soon as possible, in hope of enhancing efficiency and providing new production sources for the Company.

# DIRECTORS AND SENIOR MANAGEMENT BIOGRAPHIES

## **BOARD OF DIRECTORS**

Our Board of Directors is responsible for the management and conduct of our business and consists of nine Directors, including five executive Directors, one non-executive Director and three independent non-executive Directors. The table below sets forth certain information in respect of the members of the Board of Directors:

Name	Age	Position/Title
Tongzhou Wang (appointed on 30 August 2018)	53	Chairman and Executive Director
Xinghu Tao (Note) (resigned on 30 August 2018)	61	Chairman and Executive Director
Jinjun Zhang (appointed on 29 March 2019)	50	Vice Chairman and Non-executive Director
Diyong Yan (Note) (resigned on 29 March 2019)	54	Vice Chairman and Non-executive Director
Xiaowei Wang (appointed on 30 August 2018)	56	Executive Director
Lin Zhang	56	Executive Director and President
Chunlai Wang	58	Executive Director and Vice President
Kaishou Xie	63	Executive Director and Vice President
Wei Fan (Note) (resigned on 30 August 2018)	44	Executive Director and Vice President
Chuanyao Sun	74	Independent Non-executive Director
Jingwei Liu	51	Independent Non-executive Director
Huanfei Guan	61	Independent Non-executive Director

Note: For the details of Xinghu Tao and Diyong Yan's biography, please refer to the section headed "Directors and Senior Management Biographies" in 2017 annual report. For the details of Wei Fan's biography, please refer to the section headed "Senior Management" in this annual report.

**Tongzhou Wang (王彤宙)**, aged 53, is the Chairman and executive Director of our Company and was appointed to our Board on 30 August 2018. Mr. Tongzhou obtained a bachelor's degree in statistics from the Department of Statistics of Dongbei University of Finance & Economics in 1988. He obtained a doctoral degree in Political Economics from the School of Economics of the Southwestern University of Finance and Economics in 2009. Mr. Tongzhou has been the chairman, the secretary of the Party committee and the general manager of China Nonferrous Metal Mining (Group) Co., Ltd.\* (中國有色礦業集團有限公司), a controlling shareholder of the Company since June 2018. He successively held management positions such as the deputy general manager and general manager in China State Construction Engineering Corporation, Sinohydro Corporation, Power Construction Corporation of China, China Energy Conservation and Environmental Protection Group. Mr. Tongzhou has over 28 years of experience in corporate management.

<sup>\*</sup> Translation of Chinese terms for reference purposes only

**Jinjun Zhang (張晉軍)**, aged 50, is the Vice Chairman and non-executive Director of our Company and was appointed to our Board on 29 March 2019. Mr. Jinjun obtained a master degree in mining engineering from University of Science and Technology Beijing in 2015. Mr. Jinjun joined NFCA (中色非洲礦業), a subsidiary of China Nonferrous Metal Mining (Group) Co., Ltd\* (中國有色礦業集團有限公司) ("CNMC"), in October 2006, and worked as manager of production technology department, vice general manager and executive vice general manager in succession. He served as the general manager of NFCA from March 2016 to December 2018, and has been the vice general manager of CNMC since December 2018. Mr. Jinjun has over 28 years of experience in nonferrous metals and mining and has extensive practical experience in the operations of conglomerates.

Xiaowei Wang (王小衛), aged 56, is an executive Director of our Company and was appointed to our Board on 30 August 2018. Mr. Xiaowei currently also serves as a director of China Nonferrous Mining Hong Kong Holdings Limited and Kingsail Limited. Mr. Xiaowei obtained a bachelor's degree of engineering in mining from the Mining Department of Xi'an Institute of Metallurgy and Construction Engineering\* in 1982. Mr. Xiaowei joined China Nonferrous Metal Mining (Group) Co., Ltd.\* (中國有色礦業集團有限公司), a controlling shareholder of the Company, in August 2002 and served as the principal of Myanmar project department as well as the president and general manager of CNMC Nickel Co., Ltd.\*. He has been the assistant to general manager of China Nonferrous Metal Mining (Group) Co., Ltd.\* since November 2007. He served as the deputy director, director and vice dean of the Mining Division of Jinchuan Nickel and Cobalt Research and Design Institute\*, deputy head and head of Longshou Mine of Jinchuan Non-Ferrous Metals Company\*, head of Mine No. 2 of Jinchuan Group Ltd.\* and deputy general manager of NFCA (中色非洲礦業). Mr. Xiaowei has over 37 years of experience in nonferrous metals industry and years of overseas work experience.

**Lin Zhang (張麟)**, aged 56, is an executive Director and president of the Company and joined the Board upon appointment on 19 May 2017. Mr. Zhang currently also serves as a director of China Nonferrous Mining Holdings Limited, China Nonferrous Mining Hong Kong Investment Limited and Lualaba Copper Smelter. Mr. Zhang obtained a bachelor's degree in ore processing engineering from Central South University of Technology in 1986 and a master's degree in mining engineering in 2003 and a doctorate degree in mineral processing engineering in 2008 from the Central South University (中南大學). Mr. Zhang was accredited as a senior engineer in mineral processing by the Employees Reform Office of Hubei Province in April 2004. Mr. Zhang served as the chairman and an executive director of China Daye Non-Ferrous Metals Mining Limited (a company listed on The Stock Exchange of Hong Kong Limited, Stock Code: 00661) from March 2012 to May 2017. Mr. Zhang has 32 years of experience in mining and has extensive and practical experience in the operation of listed group companies.



Chairman Tongzhou Wang presided over Zambia-China Business Forum held on 2 September 2018

<sup>\*</sup> Translation of English and Chinese terms for reference purposes only

**Chunlai Wang (王春來)**, aged 58, is an executive Director and a vice president of our Company primarily in charge of Luanshya. He was appointed to our Board on 12 April 2012. Mr. Wang has 37 years of experience in the mining industry. He currently is the general manager of Luanshya. He served as the deputy general manager of NFCA from 2005 to 2009 and became its executive director in 2007. He was transferred from the managing director of NFCA to the managing director of Luanshya on 24 March 2016. From 1981 to 2005, Mr. Wang worked in the Dongguashan Copper Mine of Tongling Nonferrous Metals Group Co., Ltd. (銅陵有色金屬集團股份有限公司) (a company listed on the Shenzhen Stock Exchange, SZ000630) as a mining engineer, assistant to the mine manager, deputy mine manager and mine manager. Mr. Wang graduated from Anhui Metallurgy College (安徽冶金專科學校) in 1981 majoring in mining and obtained a Master of Business Administration degree from the School of Business of Nanjing University (南京大學工商管理學院) in 2005. Mr. Wang was recognised as a State Council Special Allowance Expert in 2002 and was recognised as a Senior Mining Engineer (professor level) in 2007.

Kaishou Xie (謝開壽), aged 63, is an executive Director and a vice president of the Company primarily in charge of Kambove Mining. He was appointed to the Board on 12 April 2012 and concurrently serves as the chairman of the board of Kambove Mining. Mr. Xie served as the general manager of SML and Chambishi Sulphuric Acid Plant Zambia Limited (贊比亞謙比希硫磺制酸公司\*) since 2006 and 2008 respectively. He served as an executive director and the general manager of SML and Chambishi Sulphuric Acid Plant Zambia Limited from 2008 to 2012, and the chairman of the boards of directors in Huachin Leach and CNMC Huachin Mabende from 2012 to 2016. On 24 March 2016, Mr. Xie resigned as a director and the general manager of SML to serve as a director and the general manager of CNMC DRC Company and China Nonferrous Mining Hong Kong Holdings Limited. Mr. Xie resigned as a director and the general manager of China Nonferrous Mining Hong Kong Holdings Limited on 21 March 2017 and as the chairman of the boards of directors of Huachin Leach and CNMC Huachin Mabende on 14 April 2017. He served as a director and the general manager of Kunming Jinsharen Chemical Co., Ltd. (昆明金沙人化工有限公司) from 2003 to 2006, the workshop director, assistant to the factory director, vice factory director and chief engineer of Dongchuan Aluminum Factory (東川鋁廠) from 1991 to 1998, and the deputy general manager of Dongchuan Aluminum Co., Ltd. (東川鋁業有限公司) from 1998 to 2003. He worked in the Tangdan Mine of Dongchuan Copper Mines Administration (東川礦務局) from 1972 to 1991. Mr. Xie graduated from the Southwest University of Science and Technology (西南科技大學) with a degree in Law.



Photo of President Lungu with guests

<sup>\*</sup> Translation of English terms for reference purposes only

Chuanyao Sun (孫傳堯), aged 74, is an independent non-executive Director of the Company, the chairman of the Nomination Committee and a member of each of the Compliance Committee and the Remuneration Committee and was appointed to join the Board on 27 April 2012. He has 49 years of experience in the mining industry. Mr. Sun resigned on 1 March 2018, 27 February 2018 and 6 March 2018 as an independent non-executive director of Jiamusi Electric Machine Company Limited (哈爾濱電氣集團佳木斯電機股份有限公 司) (a company listed on the Shenzhen Stock Exchange, SZ000922), China Aluminum International Engineering Corporation Limited (中鋁國際工程股份有限公司) (a company listed on the Hong Kong Stock Exchange, HK02068) and Jiangxi Copper Company Limited (HK00358), respectively. Mr. Sun joined the Beijing General Research Institute of Mining and Metallurgy (北京礦冶研究總院) ("BGRIMM") in 1981 and served as its dean from February 1988 to February 2007. He worked at the Xinjiang Keketuohai Ore Processing Plant (新疆可 可托海礦業選礦廠) from December 1968 and became its deputy factory director in October 1976. Mr. Sun graduated from Northeastern Institute of Technology (東北工學院) (currently known as Northeastern University (東北大學)) in 1968 and was awarded a master degree in BGRIMM (北京礦冶研究總院) with a major in ore processing in 1981. Mr. Sun is an fellow of Chinese Academy of Engineering (中國工程院) and St Petersburg Academy of Engineering and Science in Russia (俄羅斯聖彼德堡工程科學院), a deputy director of Committee of Experts of China Nonferrous Metal Industry Association (中國有色金屬工業協會專家委員會), the director of the Ore Processing Academic Committee of the Nonferrous Metals Society of China (中國有色金屬學會選礦學術委 員會) and the director of Key Laboratory of Mineral Processing of the State (國家礦物加工重點實驗室).

Jingwei Liu (劉景偉), aged 51, is an independent non-executive Director of our Company, the chairman of the Audit Committee and a member of the Nomination Committee, and was appointed to our Board on 27 April 2012. He is a senior partner of Shinewing Certified Public Accountants (信永中和會計師事務所). He currently serves as a non-executive director of Shougang Concord International Enterprises Company Limited (首長國際企業有限公司) (a company listed on the Main Board of Hong Kong Stock Exchange, HK00697), an independent director of Shanghai Yaohua Pilkington Glass Group Co., Ltd. (上海耀皮玻璃集團股份有限公司) (a company listed on the Shanghai Stock Exchange (the "SSE"), SH600819), and an independent director of Guiyang Longmaster Information & Technology Co., Ltd. (貴陽朗瑪信息技術股份有限公司) (a company listed on the Shenzhen Stock Exchange (the "SZSE"), SZ300288). Mr. Liu previously served as an independent director of Xuzhou Kerong Environmental Resources Co., Ltd. (a company listed on the SZSE, SZ300152). Mr. Liu graduated from the School of Economics of Beijing Forestry University (北京林業大學經濟管理學院) in 1989 and from Shanghai Advanced Institute of Finance with a master's degree in 2016. He is a PRC Certified Public Accountants.



President Lungu and Chairman Tongzhou Wang unveiled a plaque to mark the commercial production of Southeast Mine

Huanfei Guan (關浣非), aged 61, is an independent non-executive Director of our Company, chairman of the Remuneration Committee, a member of each of the Audit Committee and the Compliance Committee, and was appointed to our Board on 28 August 2014. Mr. Guan has been a part-time researcher of the Insurance Research Centre of Fudan University since 2004. He has also been appointed as a part-time lecturer of professional degree of Fudan University since 2013. Mr. Guan has extensive experience in the finance and insurance industry in Hong Kong and the Mainland China. He served various senior managerial positions in People's Insurance Company of China (Jilin Branch) (中國人民保險公司吉林省分公司), Hong Kong and Macao Regional Office of China Insurance Group (中國保險港澳管理處), Ming An Insurance Company (Hong Kong) Limited (香港民安保險有限公司) and China Pacific Insurance Co., (HK) Ltd. (中國太平洋保險 (香港) 有限公 司). Mr. Guan also held offices at the Bank of Communications, including the deputy chairman of the risk asset management committee (風險資產管理委員會副主任委員), deputy chairman of credit asset management committee (信貸資產管理委員會副主任委員), chairman of loan verification committee (貸款審查委員會主任 委員), deputy general manager of the Bank of Communications Hong Kong Branch, the director of Bank of Communications Trustee Limited (交通銀行信託有限公司), the chairman and chief executive of China BOCOM Insurance Co., Ltd. (中國交銀保險有限公司) and an executive director and general manager of BoCommLife Insurance Company Limited. Mr. Guan is also an economic and technical consultant of Jilin Provincial Government (吉林省人民政府經濟技術顧問). Mr. Guan is now an independent non-executive director of Sunwah Kingsway Capital Holdings Limited and HongDa Financial Holding Limited, and an independent nonexecutive director and a member of the audit committee of China Shandong Hi-Speed Financial Group Limited, and a non-executive director of Ping An Securities Group (Holdings) Limited (shares of those companies are listed on the main board of the Hong Kong Stock Exchange). He has been appointed as the chairman emeritus of Culturecom Holdings Limited (a company listed in Hong Kong) and the chairman of the board of directors of UCAN.COM Group Limited, a subsidiary of Culturecom Holdings Limited, since July 2013. Mr. Guan currently also serves as a director of Wing Lung Insurance Company Limited and K & R International Limited. Mr. Guan was an independent non-executive director of Silver Base Group Holdings Limited (the shares of which are listed on the main board of the Hong Kong Stock Exchange) for the period from March 2008 to January 2011. He was re-designated as an executive director and president of that company from January 2011 to December 2012. He has been engaged as a senior consultant of that company since January 2013. Mr. Guan was an executive director of CCT Land Holdings Limited (the shares of which are listed on the main board of the Hong Kong Stock Exchange) for the period from May 2015 to September 2017. Mr. Guan obtained a doctor's degree in Economics in 2000 from Wuhan University and was a post-doctoral researcher in Theoretical Economics in Fudan University from 2000 to 2002.



President Lungu visited the site of Chambishi Southeast Mine

## SENIOR MANAGEMENT

**Tongzhou Wang (王形宙)** is the chairman of our Company. Please refer to the paragraph headed "Board of Directors" for his biographical background.

**Xiaowei Wang (王小衛)** is an executive director of our Company. Please refer to the paragraph headed "Board of Directors" for his biographical background.

**Lin Zhang (張麟)** is the president of our Company. Please refer to the paragraph headed "Board of Directors" for his biographical background.

**Chunlai Wang (王春來)** is a vice president of our Company primarily in charge of Luanshya. Please refer to the paragraph headed "Board of Directors" for his biographical background.

Kaishou Xie (謝開壽) is a vice president of our Company primarily in charge of Kambove Mining. Please refer to the paragraph headed "Board of Directors" for his biographical background.

Wei Fan (范巍), aged 44, is a vice president of our Company primarily in charge of CCS and Lualaba Copper Smelter. He was an executive director of the Company from July 2015 to August 2018. Mr. Fan concurrently serves as a director and the general manager of both CCS and Lualaba Copper Smelter. From June 2006 to February 2012, Mr. Fan successively served as an assistant to general manager and as deputy general manager in CCS. From April 2011 to December 2014, Mr. Fan served as deputy officer of production department in 雲南銅業集團有限公司 (Yunnan Copper Industry (Group) Co., Ltd\*), a substantial shareholder of CCS and the holding company of Yunnan Copper). From October 2001 to June 2006 and from April 2013 to July 2015, Mr. Fan also successively served as senior engineer, officer and manager of Sale & Operation Management Department of 雲南銅業股份有限公司 (Yunnan Copper Industry Co., Ltd\*) ("Yunnan Copper", a company listed on the Shenzhen Stock Exchange, Stock code: SZ00878). Mr. Fan has more than 18 years of experience in the metal industry. He has extensive and practical experience in the operation of listed group companies. Mr. Fan obtained a master's degree in business administration from Kunming University of Science and Technology in 2007.

Peiwen Zhang (張培文), aged 51, is a vice president of the Company who is in charge of SML. He was appointed and joined the senior management of the Company on 24 March 2016 and currently acts as a director and the general manager of SML. He resigned as a director of CNMC Huachin Mabende in June 2017. Mr. Zhang has 28 years of experience in the mining industry and acted as the vice general manager of SML from 2005 to 2016. In 2004, he was appointed as the technology director of Kunming Rui Yuan Ju Corporation (昆明瑞源巨公司), the 2,000-tonne hydrometallurgical plant of Yunnan Jinsha Corporation (雲南金沙公司). From 2001 to 2004, he acted as the vice director of the scientific research institute of Yunnan Jinsha Mining Co., Ltd. From 1995 to 2000, he has successively acted as the vice director, director, the assistant to the head of and deputy head of the metallurgical research institute under the scientific research institute of former Yunnan Dongchuan Copper Mines Administration (雲南東川礦務局) and the director of 500-tonne hydrometallurgical plant. Mr. Zhang graduated from Changsha Non-ferrous College (長沙有色金屬專科學校) in 1989 with a major in non-ferrous metal metallurgy and was recognised as a metallurgical engineer in 1998.

<sup>\*</sup> Translation of Chinese terms for reference purposes only

Aibin Hu (胡愛斌), aged 50, is the chief compliance officer and joint company secretary of our Company with over 21 years of experience in the mining industry. He currently serves as a director of CNMHKI. He was appointed and joined the senior management of the Company on 27 April 2012. Mr. Hu joined Luanshya in November 2009 and served as the board secretary and assistant to the general manager of Luanshya. He served as the deputy manager of the Administrative Department of NFCA from January 2007 to October 2009. Mr. Hu served as the office secretary of Tongling Nonferrous Metals Group Holdings Co., Ltd. (安徽銅陵有色金屬集團控股公司) from June 2001 to October 2003 and was seconded to the reorganisation group of the SASAC from November 2003 to December 2006. Mr. Hu graduated from Anhui Normal University (安徽師範大學) with a bachelor's degree in science in 1994 and received a Master of Business Administration degree from Beijing Jiaotong University (北京交通大學) in 2008. Mr. Hu is a qualified enterprise legal adviser in the PRC and a senior economist and concurrently serves as the enterprise legal adviser.

Xinghua Liu (劉興華), aged 50, is the chief financial officer of our Company. He currently serves as a director of CNMHKI. He has 26 years of experience in financial management. Mr. Liu joined China 15th Metallurgical Construction Group Company Limited ("15th MCC") (中國十五冶金建設有限公司) (a subsidiary of CNMC) in 1992 and once served as the financial manager of the Fuzhou management team of the 15th MCC. He joined NFC Africa Mining PLC (a subsidiary of our Company) in 2002 and had successively served as the chief accountant, the deputy manager and the manager of its Financial Department, the deputy chief accountant and assistant to general manager. He joined our Company in 2016 and has served as chief financial officer ever since. Mr. Liu graduated from North China University of Technology with a bachelor degree in accounting in 1992, and obtained a master degree of engineering from University of Science and Technology Beijing in 2016. He also obtained the title of senior accountant in 2002.

Note: Jinjun Zhang (張晉軍) resigned as the vice president of the Company on 29 March 2019, and being appointed as the vice chairman and non-executive director of the Company on the same day.

## JOINT COMPANY SECRETARIES

Aibin Hu (胡愛斌), aged 50, is a joint company secretary and chief compliance officer of our Company. Please refer to the paragraph headed "Senior Management" above for his biographical background.

Man Yi Wong (黃敏儀), aged 43, has been appointed as a joint company secretary of the Company with effect from 27 April 2018. Ms. Wong has over 10 years of experience in company secretarial services industry. She is the company secretary of Hao Wen Holdings Limited (shares of which are listed on GEM operated by the Hong Kong Stock Exchange) since March 2015. Ms. Wong was previously a joint company secretary of the Company for the period from June 2012 to December 2013. Ms. Wong graduated from City University of Hong Kong with a Bachelor degree of Business Administration (Honours) in Business Management in 2006 and a Master of Science degree in Professional Accounting and Corporate Governance in 2009. Ms. Wong is an associate member of The Hong Kong Institute of Chartered Secretaries, The Institute of Chartered Secretaries and Administrators and The Taxation Institute of Hong Kong. She is a Certified Tax Adviser of Hong Kong.

Note: Tin Wai Lee (李天維), the former joint company secretary of our Company who had resigned on 27 April 2018, and Man Yi Wong (黃敏儀) was appointed as a joint company secretary of the Company on the same day.

# CORPORATE GOVERNANCE REPORT

## CORPORATE GOVERNANCE PRACTICES

The Board of Directors and the management of the Group are committed to achieving and maintaining high standards of corporate governance, which they consider to be critical in safeguarding the integrity of the Company's operations and maintaining investors' trust in the Company. None of the Directors is aware of any information which would reasonably indicate that the Company has not, for the year ended 31 December 2018, complied with the code provisions as set out in the CG Code.

The Company has applied the principles of the CG Code to its corporate governance structure.

# CODE OF CONDUCT REGARDING SECURITIES TRANSACTIONS BY DIRECTORS

The Company has adopted a code of conduct regarding securities transactions by directors on terms no less exacting than the required standard of dealings as set out in the Model Code for Securities Transactions by Directors of Listed Issuers as contained in Appendix 10 of the Listing Rules.

The Company had made specific enquiry to all the Directors and confirmed that all of them complied with the Model Code for the year ended 31 December 2018.

## **BOARD OF DIRECTORS**

As at 31 December 2018, the Board comprised five executive Directors, namely Mr. Tongzhou Wang, Mr. Xiaowei Wang, Mr. Lin Zhang, Mr. Chunlai Wang and Mr. Kaishou Xie; one non-executive Director, namely Mr. Diyong Yan; and three independent non-executive Directors, namely Mr. Chuanyao Sun, Mr. Jingwei Liu and Mr. Huanfei Guan. Mr. Tongzhou Wang is the chairman of the Board.

After the year ended 31 December 2018, with effect from 29 March 2019: (1) Mr. Diyong Yan has resigned as a non-executive Director, the vice chairman and (2) Mr. Jinjun Zhang has been appointed as a non-executive Director, the vice chairman, a member of each of the Audit Committee, the Nomination Committee and the Remuneration Committee of the Company.

Save as disclosed in this annual report, to the best knowledge of the Company, there are no financial, business, family or other material relationships among members of the Board.



ISA furnace of copper smelting company

For the year ended 31 December 2018, all the members of the Board and board committees actively attended relevant meetings. The attendances at the meetings of the Board and its committees and the annual general meeting held in person or through other electronic means of communication are as follows:

	Number of meetings held for the year ended 31 December 2018					
	Audit Nomination Remuneration Compliance					
	Board	Committee	Committee	Committee	Committee	AGM
Mr. Tongzhou Wang						
(appointed on 30 August 2018)	3/3	N/A	N/A	N/A	1/1	N/A
Mr. Xiaowei Wang						
(appointed on 30 August 2018)	3/3	N/A	N/A	N/A	N/A	N/A
Mr. Xinghu Tao						
(resigned on 30 August 2018)	2/2	N/A	N/A	N/A	1/1	1/1
Mr. Diyong Yan	5/5	2/2	2/2	1/1	N/A	1/1
Mr. Lin Zhang	5/5	N/A	N/A	N/A	N/A	1/1
Mr. Chunlai Wang	5/5	N/A	N/A	N/A	N/A	1/1
Mr. Wei Fan						
(resigned on 30 August 2018)	2/2	N/A	N/A	N/A	N/A	1/1
Mr. Kaishou Xie	5/5	N/A	N/A	N/A	N/A	1/1
Mr. Chuanyao Sun	4/5	N/A	1/2	1/1	1/2	1/1
Mr. Jingwei Liu	4/5	2/2	2/2	N/A	N/A	1/1
Mr. Huanfei Guan	5/5	2/2	N/A	1/1	2/2	1/1

The Board shall meet at least four times a year at approximately quarterly intervals. The Audit Committee shall meet not less than twice a year to review and discuss the interim and annual consolidated financial statements. The Compliance Committee shall meet at least two times a year to review the Company's internal control policies and corporate management. Both of the Nomination Committee and the Remuneration Committee shall meet at least once a year. In addition, the chairman of the Board shall meet with non-executive Directors (including independent non-executive Directors) without the attendance of executive Directors at least once a year. The Company was in compliance with all the requirements in respect of meetings of Board committee throughout the year of 2018.



CCS successfully poured the first anode plate

The Board is responsible for leading, supervising and managing the Company. Its main duties include but are not limited to: (i) formulating and reviewing the corporate governance policies and practice of the Company; (ii) reviewing and inspecting trainings and continuing development of Directors and senior management; (iii) reviewing and monitoring relevant policies and rules of the Company in relation to compliance with laws and regulations; (iv) developing, reviewing and monitoring the code of conduct and compliance manual applicable to employees and Directors; and (v) reviewing the Company's compliance with Corporate Governance Code and the disclosure of relevant information in the Corporate Governance Report. The Board supervises the business, strategy and decision making as well as performance of the Group, in a bid to achieve sound growth momentum to improve shareholder value. Each Director executes his duties in good faith and make objective decisions in compliance with requirements of applicable laws and regulations. The Board delegates day-to-day operations of the Company to the management of the Group and also instructs the management to implement the Board's decisions and resolutions. The delegated functions are periodically reviewed. Approval has to be obtained from the Board prior to any significant transaction being entered into. Non-executive Directors and independent non-executive Directors actively participated in the meetings of the Board and its committees to exercise their independent judgment on issues of strategy, policy, performance, accountability, resources, key appointments and standards of conduct of the Company. All of the non-executive Directors and independent non-executive Directors made positive contributions to the strategy and policies of the Company's development through independent, constructive and informed comments. In addition, the Board has also delegated various responsibilities to the Audit Committee, the Nomination Committee, the Remuneration Committee and the Compliance Committee.

The Board also has a balance of skills and experience appropriate for the requirements of the Company's business and it ensures that changes to its composition can be managed without undue disruption. There is a sufficient number of non-executive Directors for their views to carry weight. As not less than one-third of the Board shall be made up of independent non-executive Directors, there is also a strong independent element on the Board, which facilitates the exercise of independent judgment by the Board. One of the independent non-executive Directors, Mr. Jingwei Liu, holds the appropriate professional qualifications as required under Rule 3.10(2) of the Listing Rules.

Directors are provided in a timely manner with appropriate information in the form and quality to enable them to make an informed decision and perform their duties and responsibilities.

Each newly appointed Director receives formal, comprehensive and tailored induction on the first occasion of his appointment, so as to ensure that he understands the business and operations of the Company and that he is fully aware of his responsibilities and obligations under the Listing Rules and other relevant regulatory requirements.

The Directors are continually provided with information relating to the developments in the legal and regulatory regime and the business and market environments to facilitate the execution of their responsibilities. Continuing briefings and professional development training for the Directors were arranged by the Company and its professional advisers.

During the year ended 31 December 2018, all the Directors have taken continuous professional development trainings in order to refresh their knowledge and skills and have provided relevant records to the Company.

The types of trainings in which all Directors participated in during the Year are as follows:

	Type of Trainings
Executive Directors	
Mr. Tongzhou Wang (appointed on 30 August 2018)	А, В
Mr. Xiaowei Wang (appointed on 30 August 2018)	A, B
Mr. Xinghu Tao (resigned on 30 August 2018)	A, B
Mr. Lin Zhang	A, B
Mr. Chunlai Wang	А, В
Mr. Wei Fan (resigned on 30 August 2018)	A, B
Mr. Kaishou Xie	A, B
Non-Executive Director	
Mr. Diyong Yan	A, B
Independent Non-Executive Directors	
Mr. Chuanyao Sun	А
Mr. Jingwei Liu	А
Mr. Huanfei Guan	Α
A: attending seminars, conferences and/or expert briefings relevant to the business or directors	s' duties
B: paying visits to the Group's local management and facilities	

Pursuant to Rule 3.13 of the Listing Rules, the Company has received written annual confirmation from each independent non-executive Director for his independence and considers that all independent non-executive Directors are independent in accordance with the guidelines set out in the Listing Rules.

The Company has arranged appropriate insurance cover in respect of legal action against all the Directors.



## CHAIRMAN AND CHIEF EXECUTIVE

Code provision A.2.1 of the Corporate Governance Code provides that the roles of chairman and chief executive should be separate and should not be performed by the same individual. The division of responsibilities between the chairman and chief executive should be clearly established and set out in writing. The chairman provides leadership and is responsible for the effective functioning and leadership of the Board. The chief executive focuses on the Company's business development and daily management and operations generally. At 31 December 2018, Mr. Tongzhou Wang is the chairman and Mr. Lin Zhang is the president. The Company had complied with code provision A.2.1 of the CG Code throughout the Year.

## APPOINTMENT AND RETIREMENT OF DIRECTORS

In accordance with the article 102 of the Articles of Association, at each annual general meeting, one-third of the Directors or, if their number is not three (3) or a multiple of three (3), the number which is nearest to and is at least one-third, shall retire from office by rotation at least once every three (3) years. A retiring Director shall be eligible for re-election. Pursuant to article 103 of the Articles of Association, the directors to retire by rotation shall be those who have been longest in office since their last appointment or reappointment, but as between persons who became or were last reappointed directors on the same day those to retire shall (unless they otherwise agree among themselves) be determined by lot. According to articles 102 and 103, Mr. Kaishou Xie and Mr. Jingwei Liu, shall retire at the forthcoming annual general meeting. They are eligible for re-election and will offer themselves for re-election. Pursuant to the article 107 of the Articles of Association, a Director appointed by the Board to fill a vacancy or as an additional Director shall retire at the next following annual general meeting and shall then be eligible for re-election. Mr. Tongzhou Wang, Mr. Xiaowei Wang and Mr. Jinjun Zhang being appointed by the Board after the last annual general meeting of the Company, shall retire at the forthcoming annual general meeting and, being eligible, will offer themselves for re-election.

The Nomination Committee is responsible for reviewing the Board composition, developing and formulating the relevant procedures for nomination and appointment of Directors, monitoring the appointment and succession planning of Directors and assessing the independence of independent non-executive Directors.

Each of the executive Directors has signed a service agreement and a supplemental service agreement with the Company for an initial term of three years and to renew for 3 years automatically (subject to termination in certain circumstances as stipulated in the relevant service agreement). Each of the non-executive Directors (including three independent non-executive Directors) has signed a letter of appointment and a supplemental letter of appointment with the Company for an initial term of three years and to renew for 3 years automatically (subject to termination in certain circumstances as stipulated in the relevant letters of appointment).

Save as disclosed herein, none of the Directors has or is proposed to have entered into any service agreement or letter of appointment with any member of the Group (excluding agreements expiring or determinable by any member of the Group within one year without the payment of compensation other than statutory compensation).

## PRACTICES OF BOARD MEETINGS

Notices of regular Board meetings are given to all the Directors at least 14 days before the meetings. Schedules and agenda of each meeting are made available to the Directors in advance. All the Directors are given an opportunity to include matters in the agenda for regular Board meetings. For other Board and committee meetings, notices are given within reasonable time in advance. Minutes of all Board meetings and committee meetings are kept by the joint company secretaries and open for the Directors' inspection. Draft and final version of minutes are circulated to the Directors for their comments and records within a reasonable time after the Board meeting is held. Minutes of the meetings of the Board and Committees recorded sufficient details of the matters considered and decisions reached at relevant meetings, including any concerns raised by Directors or dissenting views expressed.

The Directors, upon reasonable request, will be provided with independent professional advice, at the Company's expense, to assist them to perform their duties. They may also have access to the senior management whenever necessary. Senior management would attend all regular Board meetings as and whenever necessary to report and advise the Board on business developments, financial and accounting matters, statutory and regulatory compliance, corporate governance and other major aspects of the Company. All Directors are entitled to have access to Board papers and related materials. The Company shall provide prompt and full responses to queries raised by the Directors as soon as it possibly can.

Pursuant to the provision of the Company's Articles of Association, a Director shall not vote nor be counted in the quorum at the Board meeting on any resolution approving any contract or arrangement or concerning a matter in which he or any of his associate(s) has, directly or indirectly, a material interest (other than an interest in shares, debentures or other securities of, or otherwise in or through, the Company) unless his interest arises because of specified matters set out in the Articles.

## **BOARD COMMITTEES**

The Board has established the Audit Committee, the Nomination Committee, the Remuneration Committee and the Compliance Committee to oversee particular aspects of the affairs of the Company. Each of these committees is set up with specific written terms of reference and the same has been published on the website of Hong Kong Stock Exchange. Each committee is delegated with authorities and duties within its terms of reference. The agenda of Board committees and relevant documents will be sent to all Directors at least three days before the intended date of relevant meetings. Each committee shall report to the Board according to its terms of reference.

## **AUDIT COMMITTEE**

The Company has an audit committee which was established with written terms of reference in compliance with Rule 3.22 of the Listing Rules and paragraph C3 of the CG Code of the Listing Rules. The primary duties of the Audit Committee are to supervise the financial reporting process and internal control and risk management systems of the Group. As at the date of this report, the Audit Committee consists of three members, being Mr. Jinjun Zhang (non-executive Director), Mr. Jingwei Liu (independent non-executive Director) and Mr. Huanfei Guan (independent non-executive Director). The chairman of the Audit Committee is Mr. Jingwei Liu. The Group's financial statements for the year ended 31 December 2018 have been reviewed by the Audit Committee, who was of the opinion that such statements complied with the applicable accounting standards, the Listing Rules and legal requirements, and that adequate disclosures had been made.

## Note:

Mr. Jinjun Zhang has become a non-executive Director, a member of each of the Audit Committee, Remuneration Committee and Compliance Committee with effect from 29 March 2019. At the time when the Group's financial statements for the year ended 31 December 2018 was reviewed and approved, the Audit Committee consisted of Mr. Jingwei Liu, Mr. Huanfei Guan, and Mr. Diyong Yan (who was a non-executive Director and a member of the Audit Committee prior to the appointment of Mr. Jinjun Zhang with effect from 29 March 2019).

The Audit Committee is also responsible for overseeing and monitoring the risk management and internal control systems of the Company on an ongoing basis and review with our external auditors and management periodically, not less than once a year, the scope, adequacy and effectiveness of the Company's corporate accounting and financial controls, risk management and internal control systems and any related significant findings regarding risks or disclosure, and consider recommendations for improvement of such controls. The review should cover all material controls, including financial, operational and compliance controls. In conducting annual review, the Audit Committee should, in particular, consider the factors including (a) the changes, since the last annual review, in the nature and extent of significant risks, and the issuer's ability to respond to changes in its business and the external environment; (b) the scope and quality of management's ongoing monitoring of risks and of the internal control systems, and where applicable, the work of its internal audit function and other assurance providers; (c) the extent and frequency of communication of monitoring results to the board which enables it to assess control of the issuer and the effectiveness of risk management; (d) significant control failings or weaknesses that have been identified during the period. Also, the extent to which they have resulted in unforeseen outcomes or contingencies that have had, could have had, or may in the future have, a material impact on the issuer's financial performance or condition; and (e) the effectiveness of the issuer's processes for financial reporting and Listing Rule compliance.

The Audit Committee is also responsible for reviewing the Company's internal audit function, ensuring co-ordination within the Group and between the Company's internal and external auditors, and ensuring that the internal audit function is adequately resourced and has appropriate standing within the Company and to review and monitor its effectiveness.

The Audit Committee had reviewed the Group's unaudited financial statements for the six months ended 30 June 2018, the announcements on interim results and annual results, the interim report and annual report subject to the approval of the Board. It had advised the Directors on the audit report, accounting policies and comments.

The Company's and the Group's audited financial statements for the year ended 31 December 2018 have also been reviewed by the Audit Committee, who was of the opinion that these statements complied with the applicable accounting standards, the Listing Rules and the legal requirements, and that adequate disclosures had been made.

For the Year, the Audit Committee held two meetings and the attendance records of individual members are set out below:

# Mr. Jingwei Liu Mr. Diyong Yan Mr. Huanfei Guan Number of meetings attended/held 2/2 2/2 2/2

## NOMINATION COMMITTEE

The Nomination Committee consists of three members. As at 31 December 2018, the Nomination Committee members are Mr. Chuanyao Sun and Mr. Jingwei Liu, being independent non-executive Directors, and Mr. Diyong Yan, being a non-executive Director. The chairman of the Nomination Committee is Mr. Chuanyao Sun, an independent non-executive Director. The Company has adopted the board diversity policy on 30 August 2013. The primary functions of the Nomination Committee include, but are not limited to, reviewing the structure, size, diversity (including but not limited to gender, age, culture and educational background), and composition of the Board of Directors, assessing the independence of independent non-executive Directors and making recommendations to the Board on matters relating to the appointment of Directors. The Nomination Committee is authorised by the Directors to obtain advice from external counsel or other independent professional consultants if necessary. It may invite external individuals with relevant experience and professional knowledge to attend the meeting when needed. The Nomination Committee will be provided adequate resources to perform its duties.

The Nomination Committee has fulfilled the primary duties mentioned above. At the meeting held by the Nomination Committee in 2018, it reviewed the structure, size, composition and diversity of the Board to ensure that the Board has a balance of expertise, skills and experience appropriate for the business of the Company, and assessed the independence of the independent non-executive Directors. The Nomination Committee reviewed the appointment of each Director prior to that Director seeking re-election at the forthcoming annual general meeting and was pleased to recommend the re-election of all the three eligible Directors to the Board.

For the Year, the Nomination Committee held two meetings and the attendance records of individual members are set out below:

# Mr. Chuanyao Sun Mr. Diyong Yan Mr. Jingwei Liu Number of meetings attended/held 2/2

## **Nomination Process**

The Nomination Committee shall assess whether any vacancy on the Board has been created or is expected on a regular basis or as required.

The Nomination Committee utilizes various methods for identifying director candidates, including recommendations from Board members, management, and professional search firms. All Director candidates, including incumbents and candidates nominated by Shareholders are evaluated by the Nomination Committee based upon the Director qualifications. While Director candidates will be evaluated on the same criteria through review of resume, personal interview and performance of background checks. The Nomination Committee retains the discretion to establish the relative weighting of such criteria, which may vary based on the composition, skill sets, age, gender and experiences of the collective Board rather than on the individual candidate for the purpose of diversity perspectives appropriate to the requirement of the Company's business.

## **Selection Criteria**

The Nomination Committee will take into account whether a candidate has the qualifications, skills, experience and gender diversity that add to and complement the range of skills, experience and background of existing Directors by considering the highest personal and professional ethics and integrity of the director candidates, proven achievement and competence in the nominee's field and the ability to exercise sound business judgment, skills that are complementary to those of the existing Board, the ability to assist and support management and make significant contributions to the Company's success and such other factors as it may deem are in the best interests of the Company and the Shareholders.

## **Board Diversity Policy**

The composition of the Board is reviewed on an annual basis by the Nomination Committee to ensure that the Board has the appropriate mix of expertise and experience, and collectively possesses the necessary core competence for informed decision-making and effective functioning. The Company adopted its own board diversity policy and recognises the benefits of having diversity in the composition of the Board.

The Company noted that that people from different background and with different professional and life experience are likely to approach problems in different ways and accordingly, members of the Board with diverse background will bring different concerns and questions to the table, and allow the Board to consider a wider range of options and solutions when deciding on corporate issues and formulating policies for the Group. In determining the Board's composition and selection of candidates to the Board, the Nomination Committee will consider factors including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, industry knowledge and length of service.

All Board appointments will be based on meritocracy, and candidates will be considered against the selection criteria, having regard for the benefits of diversity on the Board, the business model and specific needs of the Group. The ultimate decision will be based on merit and contribution that the selected candidates will bring to the Board.

## **Composition of the Diversified Board**

As at the date of this annual report, the Board comprises nine Directors. The following table further illustrate the composition and diversity of the Board in terms of age and length of service with the Group, educational background and professional experience as of the date of this annual report:

	Age	Age Group		of Service
			less than	more than
Name of Director	50 to 59	60 or above	3 years	3 years
Mr. Tongzhou Wang	✓ /		✓	
Mr. Jinjun Zhang	✓/			1
Mr. Xiaowei Wang	1		<b>✓</b>	
Mr. Lin Zhang	1		✓	
Mr. Chunlai Wang				✓
Mr. Kaishou Xie		<b>✓</b>		1
Mr. Chuanyao Sun		/		1
Mr. Jingwei Liu	<b>213</b>	// M = 5		<b>✓</b>
Mr. Huanfei Guan		植植物		/
		Title of		
				SADALASA

	Educational Background		Professional Experience		rience		
					Accounting		
Name of Director	Economics	Mining	Accountancy	Law	Mining	and Finance	Management
Mr. Tongzhou Wang	✓						✓
Mr. Jinjun Zhang		✓			✓		✓
Mr. Xiaowei Wang		✓			✓		✓
Mr. Lin Zhang		✓			✓		✓
Mr. Chunlai Wang		✓			✓		✓
Mr. Kaishou Xie				✓	✓		✓
Mr. Chuanyao Sun		✓			✓		
Mr. Jingwei Liu			✓			✓	✓
Mr. Huanfei Guan	✓					✓	✓

## REMUNERATION COMMITTEE

The Remuneration Committee consists of three members. As at 31 December 2018, the Remuneration Committee members are, Mr. Huanfei Guan and Mr. Chuanyao Sun, being independent non-executive Directors, and Mr. Diyong Yan, being a non-executive Director. The Remuneration Committee is chaired by Mr. Huanfei Guan, an independent non-executive Director. The primary duties of the Remuneration Committee include, but are not limited to, the following: (i) making recommendations to the Board on the Company's policy and structure for all remuneration of the Directors (including executive Directors) and senior management and on the establishment of a formal and transparent procedure for development policy on such remuneration; (ii) reviewing and approving performance-based remuneration by reference to corporate goals and objectives resolved by the Board from time to time; (iii) evaluating the performance of executive Directors; and (iv) approving the terms of executive Directors' service contracts. The Remuneration Committee is authorised by the Directors to obtain advice from external counsel or other independent professional consultants if necessary. It may invite external individuals with relevant experience and professional knowledge to attend the meeting when needed. The Remuneration Committee is provided with adequate resources to perform its duties.

The remuneration payable to each of the directors is determined by the Remuneration Committee with reference to his contribution of time, effort and expertise on the Company's matters.

The Remuneration Committee of the Company has performed the primary duties mentioned above.

For the remuneration of the Directors for the year ended 31 December 2018, please refer to note 13 to the audited consolidated financial statements of this annual report.

Please see below for the remuneration of the senior management of the Company by band for the year ended 31 December 2018:

## Number of senior management

HK\$0 to HK\$500,000	4
HK\$500,001 to HK\$1,000,000	3
HK\$1,000,001 to HK\$1,500,000	4

For the Year, the Remuneration Committee held one meeting and the attendance records of individual members are set out below:

## Name of Directors

## Number of meetings attended/held

Mr. Huanfei Guan	1/1
Mr. Diyong Yan	1/1
Mr. Chuanyao Sun	1/1

## **COMPLIANCE COMMITTEE**

The Compliance Committee consists of three members. As at 31 December 2018, the Compliance Committee members are Mr. Tongzhou Wang, an executive Director, Mr. Chuanyao Sun and Mr. Huanfei Guan, being independent non-executive Directors. The chairman of the Compliance Committee is Mr. Tongzhou Wang, an executive Director. The primary functions of the Compliance Committee include, but are not limited to, overseeing and monitoring the compliance status of the Company's business and operations based on the applicable legal and regulatory requirements as well as the Company's own internal control policies and procedures; reviewing regular and special reports submitted by the compliance principal in each subsidiary and requiring such compliance principals to prepare specific reports dealing with particular internal control or compliance issues for review; holding regular meeting to discuss, investigate and make plans for the legal and compliance matters; formulating and reviewing the Company's policies and practice on corporate government and making recommendations to the Board; and reviewing the Company's compliance with the Corporate Governance Code set out in the Listing Rules and disclosure in the Corporate Governance Report section of the Company's annual report.

The Compliance Committee has performed the primary duties mentioned above.

For the Year, the Compliance Committee held two meetings and the attendance records of individual members are set out below:

# Mr. Tongzhou Wang (appointed on 30 August 2018) Mr. Xinghu Tao (resigned on 30 August 2018) Mr. Chuanyao Sun Mr. Huanfei Guan

## INDEPENDENT AUDITOR

The Group's independent external auditor is Deloitte Touche Tohmatsu ("Deloitte"). Deloitte is responsible for presenting independent opinions on the consolidated financial statements of the Group in accordance with the results of their auditing work, and reporting to the Shareholders on the same. Apart from the statutory audit of the annual consolidated financial statements, Deloitte was also engaged to perform a review of the interim consolidated financial statements of the Group for the six months ended 30 June 2018 and to provide assurance service on continuing connected transactions.

The remuneration paid to Deloitte and its affiliates in respect of audit services and other non-auditing services (those are, review of the interim consolidated financial statements of the Group, tax consulting services for subsidiaries located in Zambia and Ireland and consulting services in respect of risk management and internal control) for the year ended 31 December 2018 amounted to US\$875,000 (RMB3,080,000 and US\$410,000) and US\$313,000 (RMB1,610,000, HK\$290,000 and US\$33,000) respectively.

## **COMPANY SECRETARIES**

Mr. Aibin Hu and Ms. Man Yi Wong are the joint company secretaries of the Company.

Ms. Man Yi Wong's primary corporate contact person at the Company is Mr. Aibin Hu. The joint company secretaries have taken no less than 15 hours of relevant professional training during the Year. Joint secretaries of the Company shall report to chairman of the Board and/or chief executive.

## FINANCIAL REPORTING

The Directors acknowledge their responsibility for preparing the consolidated financial statements of the Group, which were prepared in accordance with statutory requirements and applicable accounting standards. The management has provided detailed explanation and information to the Board, which will enable the Board to make informed assessment on the financial and other information put before the Board for approval. Updated information has been provided by the management to members of the Board on a monthly basis, containing fair and understandable assessment on performance, financial condition and prospect of the Group.

The auditor's report for the consolidated financial statements for the year ended 31 December 2018 is set out on pages 121 to 125 of this annual report.

## RISK MANAGEMENT AND INTERNAL CONTROL

The Group is dedicated to maintaining and establishing quality corporate governance. Pursuant to code provisions of the Corporate Governance Code set out in Appendix 14 of Listing Rules, basic standards, guidelines for evaluation as well as other requirements under relevant laws and regulations, the Group has conducted self-evaluation on the effectiveness of its internal control in respect of design and operation. As at 31 December 2018, the internal control for businesses and matters involved in self-evaluation has been established and has operated effectively. Thus the internal control objective of the Group was achieved and the internal control of the Group was sound and effective.

The Board recognises its responsibility for maintaining an adequate and sound internal control system and assesses its effectiveness of internal control on a regular basis. Through the Audit Committee, the Compliance Committee and an external firm of qualified accountants providing internal control services, the Board conducts reviews on the effectiveness of these systems at least once a year, covering all material controls, including financial, operational and compliance controls, and risk management functions. In addition, the review also considers the adequacy of resources, staff qualifications and experience, training programmes and budget of the Group's accounting and financial reporting function.

We note that risk management and internal control shall be in line with the Group's operation scale, business scope, competition and risk level, and shall be adjusted in a timely manner according to changes in circumstances. During the year: 1) we further set up the comprehensive management system and mechanism for statutory and compliant works; 2) we engaged Deloitte Touche Tohmatsu CPA Ltd. and China Energy Conservation Environmental Advisory Group Co., Ltd. to organize and conduct two special programs, namely "Risk Management and Internal Control System" and "Environmental, Social and Corporate Governance", being an independent assessment of risk management, internal control system, environmental, social and corporate governance of the Group, thus laying a solid foundation for the improvement of governance structure and level of the Group; 3) we strengthened training to improve management level. In 2018, the Board has reviewed the risk management and internal control of the Group. The Compliance Committee held two meetings to study and arrange statutory and compliance management works. In addition to the training provided by Baker McKenzie to Directors, senior management and compliance management personnel, in relation to risk management, internal control, environmental, social and corporate governance, the company secretary and other compliance management personnel also attended the various professional trainings provided by the Hong Kong Institute of Chartered Secretaries and Beijing Corporate Counsel Association (北京市法律顧問協會), with an aim to continuously improve the awareness for compliance and prevention of legal risks and operational capabilities of themselves and the compliance staff involved in legal matters of the Company.

## RISK MANAGEMENT AND INTERNAL CONTROL REPORT

## I. Responsibilities

The Board of the Company is fully responsible for maintaining sound and effective risk management and internal control system, while the management is responsible for the design and implementation of the risk management and internal control system to manage the risks. The Board further clarifies that a sound and effective risk management and internal control system is designed to identify and manage the risk of failure to achieve business objectives, and only makes reasonable, but not absolute, rather than eliminate, assurance against material misstatement or loss.

## II. Risk Management and Internal Control Structure of the Company

The Board is responsible for the Company's risk management and internal control system and reviews its effectiveness periodically. The Audit Committee and the Compliance Committee assist the Board in monitoring the Company's risk tolerance level, the designs of the risk management and internal control system and their operational effectiveness.

The Company strictly complies with the requirements of the Listing Rules and relevant laws and regulations on inside information management, and strictly supervises the dealing and publishing of inside information to keep such information in confidentiality before being disclosed, and be disclosed in an accurate and timely manner.

The Audit Committee will continuously supervise and monitor the Company's risk management and internal control system, and will review with external auditors and senior management of the Company in a certain scope on a regular basis (at least once a year) the scope, adequacy and effectiveness of the Company's accounting and financial monitoring, risk management and internal control systems, as well as any relevant significant findings related to risks or disclosure, and consider making recommendations for improvement of such controls. The matters that the Audit Committee is responsible for include, but are not limited to, the following:

- (a) discussing the changes, since the last annual review, in the nature and extent of significant risks, and the Company's ability to respond to changes in its business and the external environment;
- (b) the scope and quality of the continuous monitoring of risk management and internal control system by senior management, as well as (where applicable) internal audit functions and works of other assurance providers;

- (c) reporting on the extent and frequency of communication of monitoring results to the Board to enable the Audit Committee to assess control of the Company and the effectiveness of risk management;
- (d) significant control failings or weaknesses that have been identified during the reporting period and the extent to which they have resulted in unforeseen outcomes or contingencies that have had, may have or may in the future have, a material impact on the Company's financial performance;
- (e) the effectiveness of the Company's procedures on financial reporting and the compliance of the Listing Rules;
- (f) discussing the risk management and internal control system with senior management in order to ensure the proper establishment and maintenance of effective systems by senior management in the performance of its duties. The discussion should include the adequacy of resources, staff qualifications and experience, training programmes and budget of the Company's accounting, internal control and financial reporting functions;
- (g) considering major findings from investigation on risk management and internal control matters as delegated by the Board or on its own initiative and considering management's response to these findings;
- (h) reviewing the internal audit function, to ensure co-ordination between the internal and external auditors of the Company, to ensure that the internal audit function is adequately resourced and has appropriate standing within the Company, and to review and monitor its effectiveness;
- (i) reporting to the Board of any actions that have been noted and which, depending on their severity, should be brought to the attention of the Board in respect of any alleged fraud, non-compliance, failure of risk management and internal control system, or alleged violations and irregularities, and to review the internal investigation findings of any alleged fraud, non-compliance, failure of risk management and internal control system, or alleged violations and irregularities in financial reporting;





(j) reporting to the shareholders in the Corporate Governance Report its annual review of the effectiveness of risk management, internal control system and internal audit functions, or whether additional internal audit functions are required and explain why this function is not available (as the case may be), in order to make sure that the Company has complied with the disclosure requirements under the code provisions on risk management and internal control in the Corporate Governance Code and Corporate Governance Report under the Listing Rules.

The responsibilities of the Compliance Committee in risk management and internal control shall include, but are not limited to:

- (a) devising mechanisms and procedures and making recommendations on improving the internal control system;
- (b) improving and reviewing the effectiveness of the Company's risk management and internal control policies and making recommendations on their improvement;
- (c) overseeing and monitoring the compliance of the Company's business and operations in accordance with applicable legal and regulatory requirements as well as with the risk management and internal control policies and procedures;
- (d) fostering a conducive compliance and risk culture within the Company and considering key risk and compliance issues in relation to the Company's commercial activities.

## **Risk Management Structure of the Company**

	Board	Audit Compliance Committee		
Top-down: monitor, identify, assess and control the risks at corporate level	<ul> <li>Fully responsible for the Company's risk management and internal control system</li> <li>Set up strategic objectives to review the effectiveness of the Company's risk management and internal control system</li> <li>Assess and define the nature and extent of the risks</li> <li>Provide guidance on the importance of risk management and promote the risk management culture</li> </ul>	Continuously monitor the Company's risk management and internal control system and regularly review the scope, adequacy and effectiveness of the Company's accounting and financial monitoring, and risk management and internal control system      Assist the Board in improving and checking the effectiveness of the Company's risk management and internal control policies and make recommendations for their improvement		
	Management	Internal audit		
Bottom-up: identify, assess and control the risks of business	<ul> <li>Design, implement and monitor risk management and internal control system</li> <li>Assess the risks to the Company and its control measures</li> </ul>	Assist the Audit Committee in reviewing the effectiveness of the Company's risk management and internal control system		
units at operations level	Business units at	operations level		
	Identify, evaluate and manage business risks	Implement risk management procedures and internal control measures within each operational and functional scope		



## III. Risk Management and Internal Control Model

The risk management and internal control model of the Company is based on the model set down by the Committee of Sponsoring Organisations of the U.S. Treadway Commission ("COSO"), and has five components, namely: internal environment, risk assessment, control activities, information and communication, and internal supervision. In developing our internal control model based on the internal control model set by COSO, the Company has taken into consideration its organisation structure and nature of business activities.

Internal Environment –This creates suitable conditions for the risk management and internal control of the Company. The Company formed a management style focusing on corporate governance, and built a corporate culture with good professional ethics and accountability. The Company has formulated the Code on Corporate Governance Practices and promoted it to all employees. The Internal Control Management Manual of the Company has full coverage of the organisational structure, development strategies, human resources, social responsibility, corporate culture and other internal environment aspects, aims to build risk awareness and internal control responsibility into our culture and is regarded as the foundation of the Company's internal controls system.

**Risk Assessment** –The Company formed a risk management system for risk identification, risk analysis, risk assessment and risk response. The Board, management and all employees work together for continuing promotion of risk management. A law and compliance department was established by the Company to regularly follow up on risk management work, to prepare a compliance report every month so as to track the risk situation of the enterprise and to integrate the risk management function into the daily management work and the scope of business operation and functions of each enterprise. Meanwhile, the Company proactively conducted identification and assessment of key risks and analyzed and coped with risks in a timely manner.

**Control Activities** –The Company's core businesses of mining, ore processing, smelting and sales of copper and cobalt have all established mature operational processes. The Company and its investees have formed a sound system covering every production and business activity at the business and financial level. Besides, the Company has strengthened its information automation program to effectively set restrictions on power and implement the separation of duties.

**Information and Communication** –The Company established a sound information communication mechanism, for example, it promulgated the "Management System of Information Disclosure of China Nonferrous Mining Corporation Limited" and the "Management System of Financial Information Disclosure of China Nonferrous Mining Corporation Limited", set up a periodic reporting mechanism of monthly compliance information including statutory matters, internal control system, legal cases and related party transactions, and the Company continuously supervises and controls the financial information and compliance information of its investees.

Internal Supervision –The supervision procedure is organised by the Board, the Audit Committee and the Compliance Committee, and performed by the Legal and Compliance Department and the internal auditor. The Audit Committee and the Compliance Committee shall hold at least two meetings a year, to continuously monitor the risk management and internal control system. At management level, the Company has a complaint channel to carry out anti-fraud monitoring work, and the Legal and Compliance Department will arrange reviews on the risk management and internal control system annually.

## IV. Review on the Effectiveness of the Risk Management and Internal Control System in 2018

The Company has organised an overall review on the risk management and internal control system in 2018. As of 31 December 2018, as confirmed by the management, the Board considered that the risk management and internal control system is effective and sufficient and did not identify any significant issues that may affect the Company's financial monitoring, operational monitoring, compliance monitoring and risk management functions.

During the course of review, the Board considered that the resources available to, qualifications of and experience of staff responsible for the Company's accounting, internal audit and financial reporting, training and budget were sufficient.



Main and service shaft of Chambishi Southeast Mine

## V. Further Reinforce the Company's Risk Management and Internal Control System

The Company has further reinforced its risk management and internal control system, with focus on the following:

Internal Environment - Strengthen strategic guidance

Through the introduction of medium and long-term strategic plans, the Company further clarified its development goals and paths. Guided by strategy, the Company studied, judged and analyzed the management functions improvement plan and explored the future development direction of the Company. The continuous improvement of the Company's system provided a good environment for standardizing operations and basic guarantees for strategic implementation.

Risk Assessment – Reinforce Key Risk Prevention and Control

In order to further reinforce the monitoring of significant and potential risks, the Board took the lead on, and the management identified and followed up on, the distribution of risks. In daily operation and management, the chief executive officer discuss the risk management status, including strategic risk, operational risk, financial risk, market risk and legal risk, with various departments through executive office meetings. The Company promptly conducted risk warnings on high-risk areas including financial business, human resources and tax management. Lualaba Copper Smelter organized legal professionals to carry out identification of and analysis on various risk points during the production and operation of the project and proactively assess and cope with the risks in the external business environment of the enterprise.

Control Activities - Continuous Optimization of Business Management

In response to the external environment and operation risk, the Company continuously advanced the optimization of the management system and re-establishment of the procedure and intensified the level of production management, financial control, compliance monitoring and public relationship management. While improving industrial development, operation and management, the Company consolidated asset operation management and resolved liquidity risks.

Information and Communication - Integration and Promotion of Informationization Management

The Company and its investees proactively promoted informationization management and collaboratively updated the investees' financial management systems to strengthen the integration of business and finance and improve the efficiency and effectiveness of data connection and transmission. NFCA continuously and orderly promoted the digitalization of the mines, in a view to realizing the application of information technology to large equipment for excavation, unmanned operation and remote realtime monitoring of production dispatching system. The digitalization of mines and process automation reduced structural waste and improved decision-making level.

Internal Supervision -Fully Implementation of Evaluation on Internal Control System

On the basis of the conventional annual internal control evaluation, the law and compliance department organised a special evaluation on risk management and internal control system in 2018 to carry out a thorough and holistic evaluation of the risk management and internal control system of the Company and its investees.

### VI. **Future Development**

Developing a risk management system that will be used by each operating unit to manage and control risks is an ongoing process. The Company will continue to enhance its risk management and control capabilities, improve its internal control structure, and strive to integrate risk management and internal control into its business processes.



## VII. Risk Factors of the Company

As a basis for the risk management policy, the Company should be aware of the risk factors and risk changes it is currently exposed to. The following table sets out the nature and risk changes of some of the significant risks to the Company.

Risks	Description of risks change	Risks change in 2018
Political environment	The orderly rotation of the DRC government still has many uncertainties. There still exist uncertain political factors which would affect the operation of the Company.	
Operating environment	<ul> <li>The changes in the mining tax policies of Zambia and DRC have adversely affected the Company's operations and management.</li> </ul>	
Product price	<ul> <li>The copper price in 2018 stabilized after a downward trend, and continued to fluctuate, which had certain impact on the Company's operating benefits.</li> </ul>	
Sales management	<ul> <li>The Company proactively responded to market changes and stabilized sales management. CCS adapted to market demand changes by propelling the shift of its main product from blister copper to anode plate. For the trend of sulfuric acid price changes, a corresponding sales strategy was developed.</li> </ul>	
Production management	<ul> <li>Southeast Mine of NFCA completed the ceremony for commencement of production in August. Through trial production, the raw ore processing capacity was gradually improved.</li> </ul>	
	Baluba cooper mine of Luanshya resumed production in July.	
	<ul> <li>The Company continued to improve quality and efficiency and implement strict budget management and cost assessment, resulting in effective control of production costs.</li> </ul>	

Risks	Description of risks change	Risks change in 2018
Asset management	<ul> <li>The Southeast Mine, Lualaba Copper Smelte and other new projects were continuousl advanced, putting certain pressure on project management and asset management.</li> </ul>	У
Foreign exchange management	<ul> <li>The exchange rate of ZMK against the US dollar dropped in the second half of 2018. The change in exchange rate had adverse impact of the production and operation of the Company.</li> </ul>	Э
Legal litigation	The cases still exist but are well-managed.	Maintained

## COMMUNICATION WITH SHAREHOLDERS AND INVESTORS

The Group emphasises the importance of maintaining good communication with the Shareholders and investors, so as to increase the Group's transparency and facilitate the performance of undertaking by the Shareholders. The annual general meeting provides a useful forum for Shareholders to exchange views with the Board. The chairman of the Board will attend and invite the chairmen of the Audit Committee, the Remuneration Committee and the Nomination Committee to attend the annual general meetings. The members of the Board are pleased to answer Shareholders' questions. To foster two-way communication amongst the Group, its Shareholders and potential investors, the Group has assigned personnel in respect of investor relations to respond to enquiries from Shareholders and the public. In the event that a Shareholder wishes to put forward a proposal to the Board, he may put forth his enquiry in writing to the investor relations personnel who will handle the same accordingly. The Group is also willing to maintain communication with shareholders and investors on a continuous basis through individual and group meetings. In addition, the Group is committed to maximising the use of its website as a channel to provide updated information in a timely manner and strengthen the communication with both the Shareholders and the public.



Outstanding Listed Company Award granted by IFAPC in 2013



President's Award granted by the Community Chest of Hong Kong

## **CORPORATE GOVERNANCE REPORT (CONTINUED)**

Pursuant to code provision E.1.3 of CG Code, the Company shall arrange for the notice to shareholders to be sent for annual general meetings at least 20 clear business days before the meeting and to be sent at least 10 clear business days for all other general meetings.

Pursuant to Articles of Association, any extraordinary general meeting at which the passing of a special resolution is to be considered shall be called by notice of not less than 21 clear days. All other extraordinary general meetings may be called by notice of not less than 14 clear days but if permitted by the Articles of Association, a general meeting may be called by shorter notice.

In addition, in accordance with the provisions of the Articles of Association, an extraordinary general meeting may be convened on requisition as provided by the Companies Ordinance. According to the Companies Ordinance, the directors are required to call a general meeting if the company has received requests to do so from shareholders of the company representing at least 5% of the total voting rights of all the shareholders having a right to vote at general meetings. Such meeting must be held on a date not more than 28 days after the date of the notice convening the meeting. The directors also have a duty to circulate a resolution proposed as a written resolution by a shareholder (together with any statement of not more than 1,000 words on the subject of the resolution proposed by the shareholder) if the company has received such requests from the shareholders of the company representing not less than 5% of the total voting rights of all the shareholders entitled to vote on the resolution.

Shareholders may at any time send their enquiries and concerns to the Board in writing at Room 1201, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong. Sufficient contact details are available to enable these enquiries to be properly attended to.

All resolutions put forward at a general meeting will be taken by poll pursuant to the Listing Rules except where the chairman, in good faith, decides to allow a resolution which relates purely to a procedural or administrative matter to be voted on by a show of hands. In addition, the poll results will be posted on the websites of the Company and the Hong Kong Stock Exchange after the relevant shareholders' meeting. Sufficient contact details are available for shareholders to send their advice.

#### **Dividend Policy**

The Company adopted a policy on payment of dividends (the "Dividend Policy") in March 2019, which establishes an appropriate procedure on declaring and recommending the dividend payment of the Company.

The Company will declare and/or recommend the payment of dividends to the Shareholders after considering the Company's ability to pay dividends, which will depend on a number of factors, including but not limited to:

- (i) the Group's actual and expected financial performance;
- (ii) the Group's expected working capital requirements, capital expenditure requirements and future expansion plans;

## **CORPORATE GOVERNANCE REPORT (CONTINUED)**

- (iii) retained earnings and distributable reserves of the Company and each of the members of the Group;
- (iv) the Group's liquidity position;
- (v) the general economic conditions and other internal or external factors that may have an impact on the business or financial performance and position of the Group; and
- (vi) any other factors that the Board deems relevant.

The Board has complete discretion on whether to pay a dividend, subject to Shareholders' approval, where applicable. Even if the Board decides to recommend and pay dividends, the form, frequency and amount will depend upon the operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors of and affecting the Group. The Board may also consider declaring interim dividends from time to time.

The Company shall review and reassess the Dividend Policy and its effectiveness on a regular basis or as required.

#### **INVESTOR RELATIONS**

There has been no changes to the Company's Articles of Association during the year ended 31 December 2018.

The Group strongly believes that investor relations are an integral part of maintaining good corporate governance of a listed company. During the reporting period, the Group has been actively maintaining contact with investors and keeping them abreast of the latest industry updates, corporate communications and business development in a timely manner, so as to establish a platform for fair, open and transparent information disclosure. One of the joint company secretaries, Mr. Aibin Hu, is responsible for the investor relations of the Group with the full support from the Board and the senior management. Mr. Hu can be contacted by email at huab@cnmc.com.cn, by telephone at +86 10 8442 6886 and by fax at +86 10 8442 6376, Ms. Nuo Xu, the deputy manager of general affairs department, can be contacted by email at xun@cnmc. com.cn and by telephone at +86 10 8442 6082. During the Year, the Group actively participated in various investor relations activities and provided on-time information to investors through its company website.





Awards of Exemplary Organization for Promoting China-Zambia Friendship and Excellent Chinese Enterprise in Zambia granted to NFCA and Luanshya by the Chinese Embassy in Zambia

## **CORPORATE GOVERNANCE REPORT (CONTINUED)**

#### CONTINUOUS IMPROVEMENT OF INVESTOR RELATIONS

The Group published interim and annual results and disclosed discloseable inside information promptly in strict compliance with guidelines of Securities and Futures Commission and Hong Kong Stock Exchange, to provide financial performance, operating strategies and future prospects of the Company to the public in an accurate and effective manner.

The Group maintained close relationships with certain institutions including professional media outlets and investment banks, in a view to learn about the market recognition and expectation to the Group through various channels such as the media and analysts. In the meantime, the Group provided updates to the public in a bid to increase the Group's publicity.

The Company's website is considered to be one of the quickest means to communicate with investors. Through on-going information dissemination, the Group's website (www.cnmcl.net) serves as a platform to communicate with the public. The Group regularly updates the website contents, disseminates the latest updates, so as to enable the public to obtain such information in a timely manner. In 2018, the Group has published 36 announcements and 58 articles on company dynamics on its website. In addition, the Group also swiftly responds to different enquiries made by the Shareholders, investors, analysts and media by means of email, facsimile and telephone. The Group also published announcements, press releases and other latest updates on the development of the Group, so as to strengthen the effectiveness of information dissemination.



Compliance Taxpaying Cup granted to SML by Zambia Revenue Authority



Award of Advanced Central Enterprise to CCS granted by the Ministry of Human Resources and Social Security of the People's Republic of China and the State-owned Assets Supervision and Administration Commission of the State Council

# **ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT**

#### ABOUT THIS REPORT

#### Overview

As a mining enterprise that proactively assumes responsibility for the environment and society, China Nonferrous Mining Corporation Limited ("CNMC", "the Group", or "We") has released the Environmental, Social and Governance Report every year since 2016. This report is the third Environmental, Social and Governance Report issued by CNMC, which describes our performance in respect of environmental, social and governance ("ESG") sustainability in 2018, to let relevant stakeholders have a more comprehensive understanding of the Group's sustainable development philosophy, policy and performance.

#### **Scope of Reporting**

This Report covers the head office of the Group and its subsidiaries including NFCA, Luanshya, CCS, SML, Huachin Leach and CNMC Huachin Mabende, as well as the sales of copper and sulfuric acid products, the main source of revenue of the Group, in relation to ESG in the period from 1 January 2018 to 31 December 2018 (the "Reporting Period") unless otherwise stated. LUALABA COPPERSMELTER SAS and KAMBOVE MINING SAS, being subsidiaries of the Group, are not disclosed in this report as both are still under construction and have not commenced formal production.

#### **Reporting Standards**

This report has been prepared in compliance with the ESG Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Long Limited (the "Stock Exchange") published by the Stock Exchange and follows the principles of materiality, quantitative, balance and consistency and the "comply or explain" provisions under the ESG Reporting Guide, striving to fully reflect the Group's environmental and social management policies, strategies and relevant importance and goals.

In addition, the Group also made reference to the Global Reporting Initiative Standards (GRI Standards) of the Global Reporting Initiative (GRI) in the process of stakeholder surveys and report preparation in order to demonstrate our performance in respect of ESG sustainability in a more comprehensive way.



#### **Reliability Assurance**

The Board of Directors of the Group is responsible for formulating ESG strategies and for the contents of this report. The information and cases disclosed in this report are from the Group's internal documents, statistical reports or relevant public information. The Group assures that the contents of this report, for which the Company accepts full responsibility for its truthfulness, accuracy and completeness, are free of any false statements, misleading representations or material omissions.

#### Access and Feedback to this Report

This report is published in the Group's 2018 annual report. The electronic copy of this report is available on the HKEx news website (www.hkexnews.hk) or the Group's official website (http://www.cnmcl.net/).

#### **Feedback**

Your valuable feedback is critical to our continuous improvement. If you have any enquiries and suggestions, please call 8610-84426886.

#### MATERIAL ISSUES

#### Communication with Stakeholders

The trust and proactive participation of stakeholders is an important foundation for the Group's sustainable development. We always maintain full communication with our stakeholders to help the Group correctly evaluate its own decisions, truly understand the concerns of stakeholders, respond to demands in a timely manner, and adjust the Group's sustainable development direction in a timely manner.

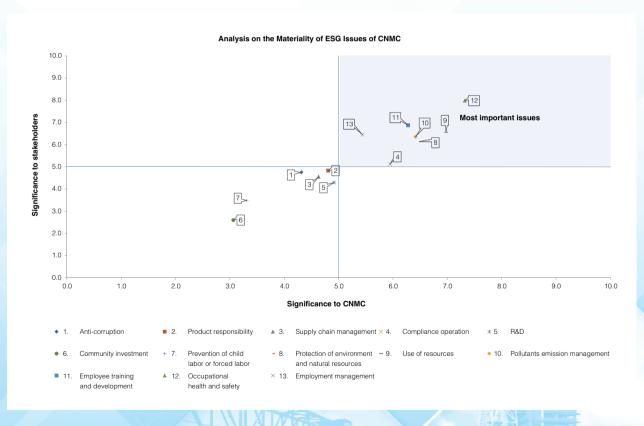
#### **Survey on Material Issues**

In order to identify the major ESG risks and opportunities of the Group, we conducted a comprehensive survey and assessment of material issues in the form of questionnaires during the reporting period to better understand the stakeholders' emphasis on the Group's sustainable development issues and help us develop and improve our sustainable development policy.

The selection of potential issues was conducted with reference to suggestions from the management of the Group, analysis and suggestion from internal and external experts, media analysis and benchmarking study by domestic and international peer companies as well as the ESG Reporting Guide of the Hong Kong Stock Exchange and the GRI Standards, so as to identify the potential material issues that can reflect the effects of the business of CNMC on the environment and society and influence stakeholders' assessment and decision on CNMC.

Upon initial screening of the issues, the Group's material issues were selected after consideration from a number of perspectives including contribution to sustainable development, the general concerns of stakeholders and the degree of compliance with the Group's strategic development needs. The Group has developed a stakeholder communication plan and conducted a questionnaire survey, to understand and sort the issues concerned by various stakeholders, and a matrix of material issues has been formed.

In 2018, the Group invited a third-party advisory body to design a questionnaire to conduct a questionnaire survey with the internal and external stakeholders at the headquarters in Beijing and six subsidiaries in Africa. The questionnaire covered 13 sustainable development issues. We successfully received 414 responses to the questionnaire. Through the statistics and analysis of questionnaire, we learned the importance of various stakeholders for relevant ESG issues and feedback from stakeholders, and formed a matrix of material issues. After statistical analysis, the issues at the top right of the matrix are the most important issues. The survey on the material issues and the results of the importance matrix will serve as an important basis for the future decision of the Board of Directors of the Group on the direction of sustainable development and also the reference basis for our preparation of this ESG Report.



### MANAGEMENT EXCELLENCE

#### **Compliance Operation**

The principal operations of CNMC are located in Republic of Zambia ("Zambia") and the Democratic Republic of the Congo ("DRC") in Africa. Following the value idea of "development of resources, harmonious development", we have been developing resources in the principle of operating in accordance with laws and regulations, and have strictly abided by the laws and regulations of the PRC, Zambia and the DRC, consistently improved our operation and management system, optimized our corporate governance structure, followed market rules and business ethics and paid highly attention to the stakeholders' concerns to promote the harmonious development of the local society and economy.

In terms of corporate governance, the Group has developed a series of systematic management systems including the Rules of Procedure of General Meetings, and the meetings of the Board of Directors and the President Office of China Nonferrous Mining Corporation Limited (《中國有色礦業有限公司股東大會、董事會暨總裁辦公會議事規則》), the Administrative Rules of General Meetings and the Board of Directors of Investees of China Nonferrous Mining Corporation Limited (《中國有色礦業有限公司出資企業股東會、董事會管理規則》), the Internal Control Management Manual of China Nonferrous Mining Corporation Limited (《中國有色礦業有限公司內部控制管理手冊》), and the Guidelines on Legal and Compliance Management of China Nonferrous Mining Corporation Limited (《中國有色礦業有限公司法律與合規管理工作指引》) in accordance with the relevant laws and regulations including the Hong Kong Companies Ordinance and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and in compliance with the Articles of Association, to clarify the implementation rules for corporate governance.

In accordance with relevant laws and regulations, we have also established the Board of Directors, and its Compliance Committee, Audit Committee, Nomination Committee and Remuneration Committee as well as the management. With a clear organizational structure of the Company and the provision of responsibilities of each position in the management system, the decision-making, supervision and management powers are clarified to ensure that the operations of the Group are compliant, legal, orderly, and efficient.

In light of the overseas operation scale of the Group, in order to better adapt to the different legal system of different countries and regions, we have set up the chief compliance officer, compliance officers and the legal and compliance department to ensure the legal compliance of the overseas production and operation activities of subsidiaries.

#### **Anti-corruption**

The Group believes that ensuring employees' professional ethics and clean work style is an important cornerstone for the sustainable development strategy of CNMC. The Group strictly abides by the Anti-Unfair Competition Law of the People's Republic of China, the Anti-Corruption Act of 2012 of Zambia as well as Corruption, Illegal income, Influence Peddling and Misconduct of Civil Servant (section 7 under chapter 9 of part 2 of the Criminal Code of the DRC) and other relevant laws and regulations. In order to prevent corruption and effectively promote anti-corruption, we have further formulated the CNMC Related Party Transaction Management Rules, CNMC Reporting and Complaints Management Rules, Anti-fraud Regulations of CNMC Luanshya Copper Mines PLC, the Implementation Measures for Corruption Risk Prevention and Control of China Nonferrous Mining Hong Kong Holdings Limited and other internal management rules while strictly observing relevant local laws. In addition to continuously improving the anti-corruption management system and integrity-based governance rules, the Group clearly defined the responsibilities and authorities of staff at all levels, expanded channels for anonymous supervision and reporting and standardized investigation process and judgement basis to proceed, thus enabling anti-corruption work to be done in a standard, systematic and normalized way.

In addition, we have made special provisions on integrity in supply chain management. In the Measures for Bidding Supervision of China Nonferrous Metal Mining (Group) Co., Ltd., the Group has developed clear provisions on supervision over the corruption problems that may arise in the bidding process in accordance with the Tendering and Bidding Law of the People's Republic of China and the Anti-Corruption Act of 2012 of Zambia to reduce the probability of corruption.

In order to further promote anti-corruption, the Group also raised employees' awareness of integrity and self-discipline by regularly organizing middle- and high-level employees to learn anti-corruption policies and documents, integrity education, and admonishing talks.

During the Reporting Period, there was no litigation against or corresponding penalty imposed on the Group due to corruption, embezzlement and bribery.

#### **Product Responsibility**

Taking "sustainable utilization of resources" and "realization of high-quality development" as its objects and the enhancement of quality, benefits and core competitiveness as its focus, the Group solidly advances its product quality and improves resources utilization rate to reduce impact on the environment, so as to provide customers with high quality products and proactively discharges the environmental and social responsibilities of the Group.

In order to systematically improve and control product quality, the Group is committed to establishing a modern enterprise management system suitable for the Group and formulated relevant supporting policies and systems. We have formulated the Measures for Quality Management of Strip Mine Project (《露天礦工程質量管理辦法》) and the System for Quality Control of Quality Inspection Center (《質檢中心質量控制制度》) with reference to the ISO 9001 quality management system for refined and standardized management of the whole process including product procurement, production, sales and enterprise operation, to comprehensively improve the product quality and benefits. The Group has analyzed the quality of copper cathodes and copper concentrate and conducted the quality control thereof based on national standards GB/T467-2010 and GB/T3884.1-3884.10-2000, respectively.

The Group strictly abides by the Advertising Law of the People's Republic of China, the Personal Data (Privacy) Ordinance of Hong Kong and other relevant laws and regulations in the business operations and protection of the privacy of the partners, and proactively fulfils the responsibility of products and services, striving to protect the lawful rights and interests of stakeholders. During the operations, we strictly keep material non-public information confidential to prevent disclosure and loss of confidential information.

During the reporting period, the Group did not receive any complaints or legal proceedings regarding violations in terms of health and safety, advertising, labeling and privacy.

#### **Technological Innovation**

In addition to focusing on product quality, we also value technological innovation and R&D and expect more efficient use of resources and improving quality. Production and management personnel are most familiar with quality control and various production processes. The Group and its subsidiaries proactively encourage production and management personnel to spontaneously propose constructive suggestions on optimization and improvement of processes for the vulnerable aspects of production processes including quality control and high energy consumption and conduct continuous innovation. In order to further encourage employees to carry out technological innovation and patent protection, the Group has constantly invested manpower, resources and funds. We have formulated the 2018 Work Plan on Technological Innovation of China Nonferrous Mining Hong Kong Holdings Limited, Interim Measures for Patent Application Process and Awards of China Nonferrous Mining Hong Kong Holdings Limited and (Interim) Measures for Protection in accordance with the Intellectual Property Law of CNMC Luanshya Copper Mines PLC according to the Patent Law of the People's Republic of China, to detail standard process for patent application and awards, encourage employees to engage in R&D and innovation and enhance the corporate core competitiveness.

#### **Win-win Cooperation**

The Group insists on achieving mutual benefits, harmony and win-win results with partners. Following the principles of fairness, openness and impartiality and the code of conduct of being high-efficient, the Group has consistently enhanced supply chain management, optimised complementary advantages with partners and continuously deepened cooperation to achieve all-win results.

The Group intensified supplier management and prepared detailed standards for supplier screening and management. When selecting suppliers, we take into consideration the compliance procedures, the quality of products supplied, the delivery period, product prices, after-sale services and other factors to evaluate potential suppliers following the principles of transparency and justice. The extent to which suppliers fulfil their environmental and social responsibilities is also an important criterion for us to evaluate suppliers. In the process of selecting suppliers, we have included the suppliers' sustainable development management strategy, labour standards, environmental management system, etc. in the scoring system for strict investigation. Subsidiaries conduct site visits to suppliers from time to time and implements dynamic management. If a supplier is involved in any violation of supplier management standards, environmental pollution, employment of child labour or forced labour, the Group will issue warnings to the supplier or cancel the qualification of the supplier based on the degree of violation.

We pay attention to cooperation with the community when selecting suppliers, to promote local economic development and employment and achieve win-win cooperation. We continuously increase localised procurement and expand the scope of localised procurement when local suppliers at the places where our operations are located meet our selection standards. The Group's procurement principle is to prioritize local suppliers and establish long-term and stable cooperative relationships.

We believe that improving the management level of our suppliers and the quality of our products and services will also contribute to the Group's business development. Therefore, while cooperating with local suppliers, the Group also helps suppliers improve their management level and quality of products and services. Through technical and commercial cooperation with suppliers and by virtue of its own influence, suppliers are urged to fulfil their environmental and social responsibilities and seek the sustainable development of the Group, to promote the development of the local economy and society and achieve mutual benefit and a win-win situation.

#### SAFE OPERATION AND OCCUPATIONAL HEALTH

The Group believes that ensuring safe and stable operation is an important foundation for our sustainable development. Following the philosophy that "production safety underpins the existence of an enterprise", the Group gives priority to safety and focuses on prevention of safety risks. To this end, it has consistently enhanced its safety management system, strengthened operation safety and created a healthy and safe working environment, endeavouring to achieve the target of "zero injury", protect the physical and mental health of employees and set a good corporate image.



Health professionals from China are performing cataract operation for local people at the Sino-Zambia Friendship Hospital

The Group strictly abides by safety-related laws and regulations at the place of production and operation including the Mines and Minerals Development Act No.11 of 2005, the Factories Act Chapter 441 of the Laws of Zambia, the Mining Code of the DRC (Law No. 007/2002). On the basis of compliance with local laws on safety production, the Group and its subsidiaries have also developed a series of safety management systems based on their own conditions including Safety Production Responsibility System of Chambishi Copper Smelter Limited, the Measures for Safety Production Management of CNMC Luanshya Copper Mines PLC, the Measures for Safety Production Management of China Nonferrous Mining Hong Kong Holdings Limited, the Measures for Appraisal of Safety Production and the Rules for Report, Investigation and Handling of Production Safety Accidents, etc.

#### **Safe Operation**

The Group firmly follows the business philosophy of "safe and green development" and the principle of "safety first, prevention first, comprehensive governance". Risk identification and risk management are intensified in terms of production safety and contractor safety to avoid accidents in production and lay a solid foundation for a safe and stable operating environment.

The Group attaches high importance to safety operation and management. It adopts advanced, mature and reliable process and equipment and formulates targeted standard operating procedures on process and equipment. It sets eye-catching safety signs for the areas and equipment prone to accidents or endangering the safety and health of personnel to avoid safety accidents in an all-round way. Safety management and shift responsible persons hold a meeting before changing shift every day to explain key potential risk points before each operation and conduct operation protection. For special operation, safety management will check special operation files, operators' qualification and on-site equipment safety on time.

As the Group's business scope involves the storage and handling of hazardous chemicals (e.g. storage of concentrated sulfuric acid and diesel extraction). In addition to the publication of safety regulations, we have also issued the 10 Bans on Safety Production of the Company which prohibits potential high-risk issues and clarifies penalty rules.

In addition to protection of the safety of employees, the Group also pays attention to safety management on contractors. It requires contractors abiding by local laws and regulations as well as relevant safety rules of the Group. Prior to the construction of projects, we assist contractors in preparing the risks assessment report to clarify their safety responsibilities and safety protection measures. During the construction of projects, we regularly or irregularly visit contractors' site and conduct safety quality check for critical sections. After the construction of projects, we conduct completion acceptance and overall assessment on contractors covering their safety performance.

#### Safety Management System

We are committed to constantly improving the safety management system and promoting systematic, normalized, standard and scientific safety management through safety management organization, safety performance assessment, safety inspection and rectification, safety emergency management, safety education and training and occupational health protection.

### Safety management organization

•The Group arranges responsible persons in charge of production safety based on position levels, with general manager as the primary person in charge of production safety and the responsibilities of persons in charge of production safety at all levels being clearly defined. It establishes a safety and environmental protection department as special safety management function and allocates a reasonable number of full-time safety management personnel to form a safety management system covering the general manager, the safety and environmental protection department, workshops and grass-root teams to guarantee production safety.

#### Safety performance assessment

 The Group establishes the production safety performance system and assessment mechanism for persons in charge of units at all levels and conducts overall appraisal on safety management system, safety accident performance, potential hazards inspection and rectification as well as education and training on safety to increasingly improve safety management performance.

### Safety inspection and rectification

•The Group follows the principle of "potential hazards amount to accidents" and pays continuous attention to safety inspection and rectification. It actively conducts identification, assessment and control on sources of danger and forms a safety inspection and rectification management model with self-inspection of departments and monitoring and inspection by the safety and environmental protection department. It will also publish the contents of safety inspection and the rectification results to promote monitoring and management, discover and eliminate potential hazards in time and prevent and reduce safety accidents.

### Safety emergency management

•Based on the characteristics of production and operation, the Group establishes a mine rescue team, formulates various emergency plans and proactively conducts exercises, effectively improving the capability of the rescue team and relevant departments to cope with safety incidents.

### Safety education and training

•The Group establishes a "three-tier" safety training system consisting of enterprise, workshop and shift to provide staff with induction training, routine safety training and special operation training. It also conducts regular qualification inspection, assessment and issuance of certificate for special operation personnel. In addition, the Group regularly conducts the "safety promotion month" and safety skills competitions to enhance staff' s safety awareness and skills.

### **Occupational** health protection

•In addition to ensure its plants conforming to local occupational health standards, the Group consistently improves working conditions and environment of its overseas operations. It also regularly assesses risk factors relating to occupational diseases and provides appropriate labour protection articles and occupational health examination to staff exposed to occupational disease risks to prevent them from occupational diseases.

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#### **Occupational Health and Safety**

The Group is committed to enhancing the health and safety management of its employees and reducing occupational safety risks by providing a safe and comfortable working environment. According to the scope of business and the type of work, we have compiled a series of occupational health and safety regulations and emergency plans including the Regulations on Emergency Management of Production Safety of Leach Company, the Muliashi Open Pit Safety Procedure of 2010), the Road Safety Rules, the Procedure for Emergency Response- Chemical Spillage, etc., and have carefully implemented the management work regarding employees' occupational health during production and operation process, which include warning and notification of occupational disease hazards, occupational disease prevention education, maintenance of protective equipment and facilities, monitoring and evaluation of hazards, reporting of hazard incidents and emergency rescue, and so on.

The Group has provided employees with complete and professional labor protective supplies such as helmets, safety goggles, earplugs, anti-high temperature protective shoes, insulated shoes and gloves, acid-resistant gloves, dust masks and gas masks and strictly supervises the use of protective supplies and the operation and protective functions of protective devices. For example, those entering production workshops or construction sites without wearing helmets will be suspended working for two days and the labor contracts with those smoking in combustible and explosive areas will be rescinded immediately.

To further guarantee the professional health and safety of employees, we have also purchased social insurance, medical insurance and other commercial insurance for eligible staff and regularly offer health examinations every year to create a safe, healthy and comfortable working environment for employees and guarantee their physical and mental health.

#### **Health and Safety Training**

We believe that enhancement of employees' health and safety awareness and integration of the concept of occupational health and safety into daily operations are the best measures to protect employees' health and safety. Before and after joining the Company, we provide safety education and training to employees from time to time to enhance safety awareness. In the on-the-job safety training, we introduce the "three major regulations and five provisions" on safety, i.e. Engineering Safety and Hygiene Regulations, Technical Regulations on Construction Installation Safety, Regulations on Report of Workers' Casualties, safety production responsibility system, labour protection plan, safety production education, regular inspection of safety production, and investigation and handling of casualties, to the new employees.

In safety training, we introduce the characteristics of various hazardous chemicals, hazardous goods and high-risk work processes as well as corresponding emergency response measures to employees, striving to enhance employees' prevention awareness and response and disposal capabilities. The Group stipulates that a professional training shall be organized for emergency management personnel and part-time rescue team at least one every six months and each training shall not be less than 8 hours; the emergency knowledge education and training shall be organised for all employees at least once a year and each training time shall not be less than 4 hours. In order to further enhance employees' awareness of safety precaution, each subsidiary organizes employees to participate in first aid skill competitions, safety knowledge contests and fire emergency drills.

#### CCS successfully holds 2018 First Aid Skills Competition

To improve the emergency rescue ability and the first aid level of employees, in the morning of 9 June 2018, CCS held the 2018 first aid skills competition which received positive response and high attention from employees throughout the company. A total of 4 teams participated in the competition. In the nearly three-hour fierce competition, all teams successfully demonstrated their own style and exquisite skills. This first-aid skill competition further improved employees' understanding of the importance of emergency rescue, strengthened the awareness of first-aid, standardized the rescue process, and tested the first-aid cooperation among the players in the competition, achieving the purpose of training teams and enhancing the overall first aid level.



First-aid competition site



Group photo of participants and management of CCS



#### NFCA holds the ninth Safety Quiz Competition

On 29 June 2018, NFCA held the 9th NFCA Safety Quiz Competition at the Training School. There were 12 teams from the departments and outsourcing units. Mr. Zhou Liang, the then deputy general manager of NFCA, delivered a speech before the competition. He reviewed the safety situation of NFCA in the first half of the year, emphasized the goals set at the beginning of the year, provided opinions on the omission in work, and expounded the importance of popularizing safety knowledge to ensure that everyone took responsibility for safety. After rounds of intense competition, all participants were believed to have gained a wealth of safety knowledge in the competition. Mr. Sinyinza, deputy manager of the security and environmental protection department, made a closing speech to express congratulations to all the winners and expectations that the participants would spread the safety knowledge they learned among the employees and use such knowledge.



Safety quiz competition site at the fire emergency drill



Photos of the champion team at the fire emergency drill

#### **GATHERING OF TALENTS**

#### **Talent Strategy**

Excellent talents are the foundation for the sustainable development of CNMC and the cornerstone of our success. The Group adheres to the talent idea of "people-oriented, harmonious advancement, and joint development", guarantees the legitimate interests of all staff through recruitment of excellent talents in a fair and just way and creates an excellent working environment and career development platform for the staff to promote progress and development of the staff together with the enterprise and effectively support the overseas development strategies of the enterprise.

#### **Employment Management**

In terms of employees, the Group strictly abides by laws and regulations relating to employment in the PRC, Zambia and the DRC and actively implements the "talents internationalization and localization" strategy, and is committed to a fair and just recruitment and dismissal process. Superior treatment and welfare will attract more talents for the future development of CNMC. The Group has approved the establishment of a labor union and also strengthens the communication with local labor unions and gives play to their active roles to guarantee that every staff is reasonably treated and earnestly safeguard the legitimate interests of Chinese and foreign staff.

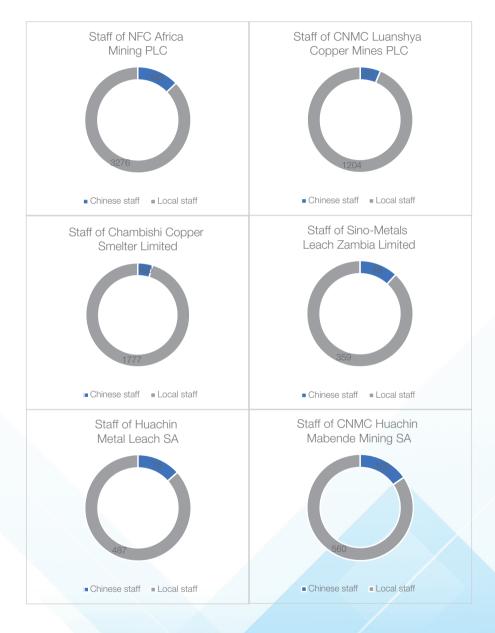
For all employees, the Group follows the equal, diversified and non-discriminatory principle and gives equal treatment for staff of different nationalities, races and genders. It treats staff with sincerity and respects the culture, custom and personality of foreign staff. In order to promote local economic development and achieve a win-win situation with the local community, we give priority to providing employment opportunities to local employees of Zambia and DRC, to improve the localization rate of the Group's employees. During the Reporting Period, the Group had no material violation of employment-related laws and regulations.

In the recruitment process, the Group strictly abides by the Employment Ordinance of Hong Kong, the Labor Contract Law of the People's Republic of China, the Industrial and Labour Relations Act of 1993, the Minimum Wages and Conditions of Employment Act of 2012, the Employment Act Chapter 268 of the Laws of Zambia, the CODE DU TRAVAIL of 2002, the Occupational Health and Safety Act No.36 of 2010, the Workers Compensation Act No.10 of 1999 of the DRC and other laws and regulations. In compliance with relevant laws, the Group and its subsidiaries have formulated a series of employment management measures including Administrative Measures for Labor Contracts with Employees, Administrative Measures for Recruitment of Employees, Administrative Measures for Resignation of Employees, Certain Provisions on Personnel Management of China Nonferrous Mining Hong Kong Holdings Limited, etc., adhere to the principle of legal compliance, openness, equality, competition, and merit-based enrolment for recruitment of outstanding talents.

In terms of compensation and performance appraisal, the Group has formulated the Wage Management Measures, Interim Measures for Wage Management of China Nonferrous Mining Hong Kong Holdings Limited, Measures for the Management of Employee Performance, and Administrative Measures for the Selection and Appointment of Cadres of the Leach Company and Administrative Measures for the Career Path of Employees, etc., endeavouring to provide employees with attractive salary and fair promotion opportunities based on their work performance, experience, workplace and industry averages and establish a comprehensive compensation system.

In order to protect employees' holiday benefits, the Group strictly abides by the Employment Ordinance of Hong Kong, the Labor Law of the People's Republic of China, the Industrial and Labour Relations Act of Zambia and the CODE DU TRAVAIL of DRC and other relevant laws to ensure employees' holidays and rest periods. For example, according to the Industrial and Labour Relations Act, the Group shall guarantee that employees' working hours shall not exceed the statutory working hours. In addition to statutory holidays, we also provide employees with paid holidays including annual leave, sick leave, maternity leave, marriage leave and bereavement leave to further protect the legitimate rights and interests of employees and ensure work-life balance, to enhance their work efficiency and further improve employees' welfare and satisfaction.

During the reporting period, the number of staff of the subsidiaries of the Group is as shown in the figures below:



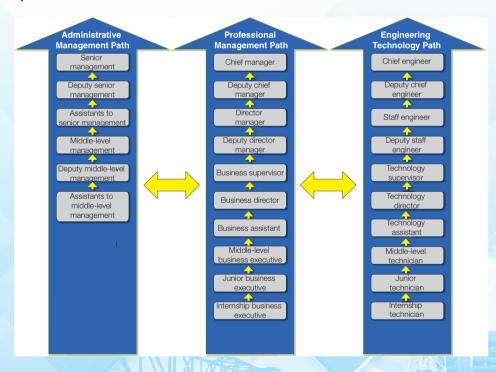
#### **Legal Labor**

According to relevant local labor laws, we sign a labor contract with each employee who has passed the open and equal recruitment process, to protect their legitimate rights and interests.

The Group strictly prohibits child labor or forced labor, and implements relevant procedures in the recruitment process in accordance with the Employment Ordinance of Hong Kong, the Labor Contract Law of the People's Republic of China, the Industrial and Labour Relations Act of Zambia and the CODE DU TRAVAIL of 2002 of Democratic Republic of Congo. In recruitment, we conduct a comprehensive background investigation to ensure that employees reach the legal age for employment and are eligible for employment. In addition, the Group's policy on strict prohibition of child labor or forced labor also applies to all suppliers of the Group to completely eliminate illegal labor. In case of any child labor or forced labor found under any circumstances, the Group will immediately dismiss the relevant person and hold the recruiter accountable.

During the reporting period, the Group's employee labor contract signing rate was 100%, and there was no violation of any employment law or relevant complaint.

#### **Career Development**



The Group is committed to developing the strategy of "bolstering enterprise with talents" and prepares training and development management systems suitable for its staff. It spares no efforts to provide diversified training courses to meet the demands of staff at different positions, proactively encourage employees to exert their potential, to expand the career development channel of staff, improve the professional and ethical quality of staff and enhance their sense of pride and accomplishment.

In order to meet the development demands of the Group and its staff, we continue to improve and enhance the staff training mechanism and gradually establish a cultivation system covering professional knowledge and skills on administration, technology, quality, environmental protection, safety and language to increase efforts on staff training with a view to improving staff in a number of aspects in a targeted way.

Through the formulation of the Administrative Measures for Career Path of Employees, the Administrative Measures for the Selection and Appointment of Cadres and other systemic talent promotion management standards, we have clarified three career paths, i.e. administrative management, professional management and engineering technology, according to the different career paths and job characteristics of employees. The Group adopts scientific, feasible, fair and just staff assessment methods which focus on promoting staff with good professional ethics and strong competence to replenish the high-end talent team and make local staff an integral part of human resources of the enterprise.

#### NFCA provides training for operators of trackless equipment of Southeast Mine

The training for operators of trackless equipment of Southeast Mine was held on 8 January 2018. In light of the launching of large-scale, trackless and digitized equipment in the construction of Southeast Mine, the relevant operators are required to be equipped with strong professional skills. This training was totally benefiting 48 operators. In order to ensure that new employees can integrate into NFCA as soon as possible, intensive training was arranged for new employees on the contents including: company profile, corporate culture, rules and regulations, safety production regulations, work attitude education, mining engineering basics, application of OptiMine in production organization, introduction to hydraulic systems, etc. The training was conducted in combination of theory and practice in small groups. New employees proactively spoke at the training. They interacted enthusiastically and had confidence in and enthusiasm for future work.





Trackless Equipment Training for Operators

#### SML holds a training course on tax law of Zambia

From 12 May to 25 May 2018, SML held a training course on tax law of Zambia. For the training, experts from Zambia Revenue Authority were specially invited to give in-depth and meticulous lectures on the tax law of Zambia.





Tax Law Knowledge Training Site

#### Overseas training course on the development and application of nonferrous metals in Zambia

In July 2018, the Ministry of Commerce of China commissioned Hunan International Business Vocational College to undertake the 2018 overseas training course on the development and application of nonferrous metals in Zambia. Such training course was as one of the activities of the Ministry of Commerce to implement the national "Belt and Road" Initiative and also a specific measure to assist CNMC to cultivate practical and skilled talents for Zambia.



Training Site

Photo of the Training Team

#### Care for Staff

The Group is committed to providing all employees with various benefits and activities on staff caring, to safeguard the physical and psychological health of employees, enhance employees' happiness and improve employee satisfaction, to create a harmonious and enjoyable corporate environment.

We provide staff with pension, medical, housing, transportation and other welfare and subsidies and offers medical services to family members of registered staff with a view to sharing development results of the enterprise with its employees and enjoying a comfortable living and working environment overseas. Due to high incidence of epidemic diseases including malaria, dengue and AIDS in certain regions in Africa, the Group proactively participates in the local disease control programs and improves medical guarantee and invests abundant resources in intensification of publicity, prevention, monitoring and treatment. It also conducts regular sterilization and disinfection for workplaces and arranges regular physical examination for the staff to guarantee their physical health to the hilt.

In order to enrich the spare time of the staff and enhance their physical fitness, the Group establishes sports facilities such as basketball courts and football fields and provides sports equipment for the staff. The subsidiaries organize various activities including basketball games, badminton games, tug-of-war and other activities to enhance mutual understanding and friendship among the Chinese and foreign employees and the corporate cohesiveness and sense of belonging.

#### CCS successfully holds the outreach activity to celebrate the "New Year's Day"

In order to invigorate the physical and mental health of employees, enrich employees' life, improve their overall quality and enhance the sense of teamwork colleagues, on the eve of the New Year's Day, CCS successfully held a series of quality development activities within the company for employees including the tug-of-war competition, marathon and talent show. On the court, every contestant was full of passion and competed with each other. The players worked hard to compete in terms of skill, teamwork and perseverance and showed their real strength in each contest.



Tug-of-war Competition



Folk Dance

Fan Wei, general manager of CCS, attended the awards ceremony. He expressed his wishes to all the employees of the company, and his heartfelt gratitude to the employees of Zambia for their contributions to the company in the past year. In addition, he summarized the company's production and operation in 2018 and encouraged employees. He hoped that employees would continue to make contributions at their respective positions, to provide more impetus for the company's development.

#### **ENVIRONMENTAL PROTECTION**

Due to the characteristics of the Group's principal business, we attach great importance to the environmental and ecological protection of the place of our operations. Adhering to the principles of "protection priority, prevention first, comprehensive governance, public participation, accountability for damage" and the environmental protection concept of "cherishing the Earth, valuing responsibility" and with the aim of "environmental protection and long-term development", the Group has established the environmental protection mechanism featured by "protection priority, prevention first, comprehensive governance" in accordance with the Environmental Protection and Pollution Control Act, Solid Waste Regulation and Management Act of 2008, Water Pollution Control Regulations of 1993, Mines and Minerals Development Act No.11 of 2005, and The Mines and Minerals Act of 2015 of Zambia, the Law No.007/2002 the Mining Code of DRC, and other relevant laws and regulations to continuously improve the environmental management work of the Group and carry out environment and resources management, to achieve environmental sustainability.

Subject to strict compliance with the laws, the Group has strictly implemented a series of environmental management measures formulated by China Nonferrous Metal Mining (Group) Co., Ltd. (the holding group) including Administrative Measures for Protection of the External Investment and Cooperation Environment of China Nonferrous Metal Mining (Group) Co., Ltd., General Principles of the Environmental Protection and Risk Control System of China Nonferrous Metal Mining (Group) Co., Ltd. and Emergency Plan for Environmental Emergencies of China Nonferrous Metal Mining (Group) Co., Ltd., and meanwhile, based on its own business conditions, the Group has formulated such system as Administrative Measures for Environmental Protection, which sets out detailed systematic guidance on environmental protection management and environmental assessment goals and clarify management responsibilities and assessment rules, and has also developed a comprehensive plan for environmental emergencies.

We have established a Safety and Environmental Protection Department within the Group to be responsible for daily management and supervision. Led by the production safety committee and mine manager, the department assigns responsibilities to designated personnel in key areas to ensure full coverage of supervision and management. At the same time, we divide the environmental emergencies into three different levels, and make different emergency plans and provide training for each level, to ensure timely response in the event of an emergency, effectively control the situation, and minimize the negative impact. In addition, the Group also intensified environment inspection efforts, placed the focus of supervision on operation of pollution prevention and treatment facilities and carried out and followed up the rectification for environmental problems.

For new development projects, we strictly abide by local laws to conduct environmental impact assessment for development of new projects and strictly implement environmental and ecological protection measures during project construction. Professional teams will prepare mine field plan and consider plan on ecological restoration after mine closure according to the geological conditions of mine to effectively control the environmental effects in the whole life cycle from mining to completion and build an ecological restoration and conservation model to maintain the ecological system of mine; We also regularly engage professional institutions to conduct survey and detection for the ecological environment surrounding operation projects to get aware of project effects and provide basis for improvement of processes and enhancement of environmental performance.



#### **Emission Management**

Our environmental protection management system provides detailed regulations on exhausts, sewage and solid waste management and ecological environment construction for the production of the Company and clarifies practical measures.

In terms of control of exhaust emissions, we proactively strengthened control of copper smelting production process and stabilized the conditions of smelting furnace to control smoke emission; we also strengthened control over preparation of strong sulphuric acid to enhance sulfur utilization ratio and monitored the emissions of pollutants, resulting in compliance with the requirements on emission indicators of the environmental protection authorities of Zambia and DRC; in addition, we strengthened dust control by sweeping, watering, coverage and other means to effectively reduce dust in mining, vehicle transportation, storage on stock ground and other operations.

As production activities involve the treatment and discharge of sewage, the Group adopts the principle of recycling as much as possible. For copper leaching process, we cover the tailings pond with high density polyethylene (HDPE) film and have built an integrated sewage recycling system to fully recycle the metallurgical sewage generated in production, thus saving water resources and achieving "zero" emission; for copper smelting process, most production sewage enters the slag flotation workshop before ultimate evaporation in the tailings pond; the Group and its subsidiaries conduct regular sampling and submission for inspection for the water bodies surrounding the plants and in underground water monitoring wells, conduct comparison and analysis with reference to the standards of the places of project operation, issue analysis reports and propose suggestions.

For the solid waste generated in the production process, we insist on the practice of "minimizing waste during work, cleaning tools used, and site clearing after completion". Materials are used in a rational way according to site conditions to minimize the generation of solid waste. Solid wastes are divided into hazardous and non-hazardous wastes. In particular, the hazardous wastes are stored in sealed containers according to local laws and then are handed over to qualified units as approved by the government for treatment to prevent secondary pollution. Non-hazardous wastes are classified as recyclable and non-recyclable wastes and treated properly. The Group advocates comprehensive utilization of solid wastes, e.g. recycling available materials including gypsum residue, using mining mullock for direct filling of goaf areas, proper storage of ores temporarily idle for future use; delivering unavailable materials to special companies for treatment.

During the reporting period, the Group did not have any violations in terms of environment or pollutant discharge, nor received any complaints on environmental protection.



Muliashi tailings dam

#### Table of Emission Data in 2018

Type of emission	Unit	Value
Total emissions of SO <sub>2</sub>	Tonne	3,426.6
Total emissions of NO <sub>X</sub>	Tonne	31.7
Total emissions of dust	Tonne	87.3
Total amount of sewage	0'000 Tonnes	2,565.5
Intensity of sewage <sup>1</sup>	Tonne/US\$'000	12.5
Total amount of hazardous wastes	0'000 Tonnes	476.7
Intensity of hazardous wastes	Tonne/US\$'000	2.3
Treatment ratio of hazardous wastes	%	100
Total amount of non-hazardous wastes <sup>2</sup>	0'000 Tonnes	2,249.4
Intensity of non-hazardous wastes	Tonne/US\$'000	11
Treatment ratio of non-hazardous wastes	%	100
Total emissions of greenhouse gases <sup>3</sup>	Tonne	129,244.68
Intensity of greenhouse gases	Kg/US\$'000	62.9

#### Waste recycling in a stone plant

To achieve the comprehensive utilization of waste and reduce the waste emission, NFCA invested in construction of a stone plant. The raw materials for the stone plant are barren rock generated in underground copper mining and exploitation. After treatment with crushing equipment in the stone plant, the crushed barren rock can be used for construction of roads in wells and tailings pond in the mine lot, and can be sold to other companies, which is beneficial to energy saving and environmental protection and creates certain economic value. In 2018, the stone plant crushed 220,000 tonnes of barren rock, accounting for 47.3% of the barren rock transported to the ground surface, and made a profit of approximately USD2.70 million. In the past, the barren rock was transported to the ground surface and piled at a designated site, resulting in environmental pollution, flying dust and environmental problems. Turning waste into wealth not only solved various environmental issues but also brought economic benefits.

In 2017, the intensity unit of the ESG report was RMB0'000. In order to be consistent with the unit of financial figures of the annual report, the intensity unit of the 2018 annual report was changed to US\$'000. The total revenue of the Group for 2018 amounted to US\$2,053.3 million.

After review and recalculation, the total amount of non-hazardous wastes in the 2017 annual report was revised to 18.86 million tonnes.

During the reporting period, the Group continuously improved its environmental management system, added the statistics of the consumption data of acetylene and liquefied petroleum gas and incorporated them into the data of total emissions of greenhouse gases, thereby resulting in an increase in the total emissions of greenhouse gases.

#### Barren rock filling without transporting to the ground surface

NFCA's major waste is the barren rock mined and transported to the ground surface. To reduce waste generation, the technology department of NFCA increased direct filling of goaf areas with mining mullock without transporting them to the ground surface. In 2018, 59,500m³ of barren rock were filled, accounting for 12.8% of the total mining mullock. The filling with mining mullock significantly reduced the amount of the barren rock transported to the ground surface and indirectly reduced power consumption and the energy consumption and emission by transportation vehicles on the ground surface, which achieved green construction in a practical way.

#### Southeast Mine of NFCA established buried wastewater treatment station

The Southeast Mine of NFCA invested over US\$310,000 in the establishment of a wastewater treatment station, which commenced construction in August 2018 with a treatment capacity of 10t/h. Test results on treated water meet the requirements and the treated water can be recycled in the filling station.



#### **Resources Management**

As a metallurgical and mining enterprise actively performing social responsibilities, the Group shoulders the corporate mission of "development of resources, contributions to the society" and consistently explores in mining, ore processing and smelting through innovation to reduce the use of energy and water resources to reduce the use of energy and water resources, improve the utilization ratio of resources and achieve comprehensive sustainable development of environment, enterprise, industry and society.

In order to further improve the energy utilization ratio, the Group formulated series of management measures, including the Measures for Appraisal on Load Utilization, the Measures for Appraisal on Consumption of Ancillary Vehicles of the Company, the Measures for Management of Energy Utilization, the System for Management of Energy Saving and Emission Reduction and the Measures for Management of Energy Saving. It strives to reduce energy use in production, life and office processes and regularly sets targets on energy saving and emission reduction. For example, Huachin Leach replaced the triangular copper contact rod and the insulation rubber pad under the concave bracket and required the workshop strengthening routine management on the cells to prevent the connection between the contact copper bar and wood beams. As a result, the current efficiency was improved from 85% to 91%, saving the electricity by 120kWh for each tonne of copper.

Thoroughly sorting through underground recoverable reserves by areas in the production, the Group draws up production plan outline, and comprehensively utilizes of waste ore to enhance ore recovery and effectively prolong the life time of mine, we prepared production technology transformation plan and improved production processes, equipment and facilities to reduce the energy consumption of high energy-consumption equipment including ball mill and pump and improve the operational stability of waste heat power station, Isasmelt furnace and other critical equipment. For water use, the Group and its subsidiaries have stable water supply without any difficulties in obtaining water resources. Due to the operation scope of the Group, we have not produced any packaging materials.

The energy use efficiency in the office environment is also highly concerned. The Group conducted transformation of energy saving LED lights for mine lots and premises and installation of light-operated switches, time switches and other intelligent switches. It adopted natural lighting for production workshops, used natural light for office lighting wherever possible, and made sure that lights stay off when no one is around in the offices with poor natural light to eliminate the phenomena of empty office with lights and air conditioners on. The Group also conducted publicity and education on energy saving and posting labels on energy conservation and emission reduction.

#### **Energy Consumption Data in 2018**

Type of resource	Unit	Value	
Diesel	Litre	17,919,583.4	
Gasoline	Litre	175,184.08	
Coal	Tonne	8,294.5	
Coke	Tonne	742.2	
Acetylene <sup>4</sup>	Kg	19,807.7	
Liquefied petroleum gas <sup>5</sup>	Kg	17,625.0	
Purchased electricity	MWh	1,038,592.8	
Total comprehensive energy consumption equivalent to	Tonne of standard coal		
standard coal		154,262.2	
Intensity of comprehensive energy consumption	Kg standard coal/USD'000	75.1	
Total consumption of fresh water	0'000 Tonnes	1,052.6	
Consumption intensity of fresh water	Tonne/USD'000	5.1	

During the reporting period, the statistics and disclosure in respect of the consumption data of acetylene was added by the Group.

During the reporting period, the statistics and disclosure in respect of the consumption data of liquefied petroleum gas was added by the Group.

#### **COMMUNITY ENGAGEMENT**

#### **Community Communications**

As a metallurgical and mining enterprise with sustainable development strategies, we deeply know that our achievements are attributed to the hardworking of our staff and the understanding and support of local community where we operation and the public. Following the principle of "making progress together to achieve common development" with the community, we have been devoted to promoting cultural transmission in community, economic development and environmental protection. We conduct deep cultural exchange and economic cooperation with local government and residents.

In order to promote the communication with the operation region, the Group encourages Chinese staff to learn local language and understand local culture and religions to achieve common development. The Group has established various communication channels to communicate with local government, suppliers, residents and other stakeholders to build a harmonious relationship for common development. The Group has a special public relations department in place to deal with public relations between the enterprises and local places. By means of visit, press conference, invitation to visit, daily report, etc., the Group proactively strengthens communication and contact with the local government departments, regulators, social service agencies, community members and other stakeholders to understand their requirements and appeals and strives to create value for the community and make its contributions to the development.

#### **Community Contribution**

To return the long-term support and help to the Group from local community and residents in the areas where we operate, we practically discharge our corporate social responsibilities and share corporate development achievements with surrounding communities to achieve sustainable development through recruitment, business cooperation, donation and charitable activities as well as other means.

The Group lays emphasis on improvement of local infrastructure, medical and health conditions, etc. we vigorously support and participate in local hygiene and disease control programs and provide assistance or aid in construction of hospitals. We purchased advanced medical equipment and introduced exquisite medical technologies to improve medical and health conditions. Energetic efforts were also exerted on prevention of Aids, malaria and other diseases. To be specific, investments were made for development of power supply facilities and all subsidiaries construct power supply facilities in accordance with standards. Such facilities will be handed over to local power supply enterprises upon recovery of investment by way of tariff to improve regional power supply conditions; the Group proactively builds highways to improve local travelling conditions and facilitate the transportation of personnel and materials to shorten the time for transportation and logistics. Furthermore, the Group also actively supports the development of local medium and small sized enterprises and associated ore projects and fosters local businesses with the capacity for independent business operation to further promote regional economic and commercial development.

During the reporting period, the Group made significant contributions to creating employment, improving the infrastructure, education and medical treatment and people's livelihood in the areas where it operates. It has donated materials and cash equivalent to over USD819,000 direct and indirectly.

#### Celebration for inauguration of the Southeast Mine of NFCA and the donation ceremony

On 22 August 2018, NFCA was immersed in the festive joy on the site, for a grand inauguration ceremony was underway. In the company of Li Jie, Chinese ambassador to Zambia, and Tongzhou Wang, chairman of the Board of the Company, Chairman and general manager of China Nonferrous Metal Mining (Group) Co., Ltd.\*, Edgar Lungu, President of Zambia, together with senior officials of Zambian government, attended the inauguration and donation ceremony on the day.

At the ceremony, President Lungu pointed out in his speech that the Zambian government paid special attention to the development of NFCA in Zambia and recognized that the company provided a number of stable jobs for the local residents and contributed greatly to the taxation of the government on the one hand; and brought along benefits to local people through proactive fulfillment of social responsibilities on the other hand. As such, he was looking forward to attracting more Chinese enterprises to conduct business in Zambia by virtue of the model effect of NFCA among Chinese enterprises.

Chairman Tongzhou Wang indicated in the speech that commencement of production of the Southeast Mine is the latest results of CNMC in its development in Zambia for 20 years as well as the best gift to the forthcoming Beijing Summit of the Forum on China-Africa Cooperation. CNMC will host the China-Zambia Economic and Trade Cooperation Forum during the Beijing Summit of the Forum on China-Africa Cooperation to facilitate more Chinese enterprises to invest in businesses in Zambia. Chairman Tongzhou Wang made donations to the local government on behalf of the Company and wished win-win and mutual development of both sides after delivering the speech.



NFCA will strive to build sample automatic and digital mines in Africa to return its shareholders with better results and flourish local economy. The Company will always follow the concept of "China- Zambia cooperation for common development", actively perform social responsibilities and participate in public activities to benefit local people.

# Communication with local residents through assistance – Luanshya donated fertilizers and seeds to local poverty-stricken farmers

On 1 December 2018, Luanshya held a ceremony for the significant donation of agricultural materials in front of the office building. Nearly 40 people, including the mayor of Luanshya, district commissioners (DC) and members of the parliament (M.P.) of the region, regional agricultural coordinators, farmer representatives of the region, the management of Luanshya and media, attended the annual "Luanshya agricultural materials donation ceremony". Fertilizers and seeds with a total value of ZMK53,000 were donated to poverty-stricken farmers at the ceremony. Despite significant breakthroughs made by local government in subsidising fertilizers and other programs, the region cannot meet the demand for the development of local agriculture with the expanding the farmers group and the increasing material demands. In view of the above conditions, Luanshya initiated the annual charitable donation in 2009 to help local farmers, small farmers in the region in particular. It donates seeds and fertilizers to local small farmers in the farming season each year to help them get rid of poverty.





Donation ceremony

#### Luanshya assisted local government in repairing emergency construction passageway

Due to days of heavy rain, the water in Luanshya River surged. Surrounding projects were under construction. The only bridge on the road connecting the urban areas and local towns was damaged and vehicles cannot pass it. The work and life of tens of thousands of residents in the two towns were seriously affected. Luanshya contacted the municipal government and expressed its willingness to assist the government in repairing the road. Mr. Wang Jingjun, the general manager of the company, and relevant construction staff arrived at the construction site with machinery and equipment. After days of emergency repairing, a construction passageway was repaired, which guaranteed the normal travelling of local residents and restored the production and operation of local enterprises and merchants.





Mr. Wang Jingjun, the general manager of Luanshya, discusses with Luanshya mayor on the construction plan



# CNMC Huachin Mabende and Huachin Metal Leach SA Contributing to the Development of Infrastructure

During the reporting period, the Group input lots of manpower, material resources and funds to improve the well-being and develop infrastructure for employees, schools, governments and people in places where we operate. In particular, CNMC Huachin Mabende and Huachin Metal Leach SA set up water supply points to help solve the drinking water shortages of local people; assisted local power companies to repair the power lines to ensure the normal power supply for surrounding areas during rainy season; provided funds to lay down roads from the site area to arterial street, offering convenient transportation conditions for local residents along the roads; and donated funds to local schools, children and sports teams to support local education. The Group has implemented multiple initiatives to give back to the local community and strived to improve local people's livelihood, enhancing the friendship and communication between Chinese enterprises and people of DRC.



Solving the Water Problem of Local Residents



Water from the well drilled for the villagers, free of charge



Singing and dancing villagers

# REPORT OF DIRECTORS

The Directors present the annual report and the audited consolidated financial statements of the Group for the year ended 31 December 2018.

#### PRINCIPAL ACTIVITIES

The Company is an investment holding company. The Company's subsidiaries are principally engaged in exploration, mining, ore processing, leaching, smelting and sale of copper cathodes, blister copper and sulphuric acid. There has been no significant change in the Group's principal activities for the year ended 31 December 2018.

The Group started to produce copper-cobalt alloy in 2017 and will produce cobalt hydroxide in 2019.

#### USE OF PROCEEDS FROM THE GLOBAL OFFERING

The Company was listed on the Hong Kong Stock Exchange on 29 June 2012. Net proceeds from the Global Offering have been and will continue to be used by the Group for the operations in Zambia, such as exploration and development of mines, construction of smelting plants, repayment of bank loans and replenishment of working capital, which are in compliance with the intended use of proceeds as disclosed in the section headed "Future Plans and Use of Proceeds" in the Prospectus.

In accordance with the intended usages as set out in the section headed "Future Plans and Use of Proceeds" in the Prospectus, the application of such proceeds up to 31 December 2018 was as follows:

	Net Proceeds (US\$'000)		
Items	Available	Utilised	Unutilised
Exploration and development of			
the Chambishi Southeast Mine	72,000	72,000	_
Expansion of the Chambishi Copper Smelter	48,000	48,000	
The Muliashi Project	12,000	12,000	
Development of the Mwambashi Project	12,000	12,000	_
Acquisitions of companies with existing			
exploration rights and additional mining assets	37,000	(- n.n.	37,000
Repayment of certain existing loans	36,000	36,000	_
Working capital and other general corporate			
purposes	30,770	30,770	-
Total	247,770	210,770	37,000

### **RESULTS**

The Group's operating results for the year ended 31 December 2018 and the financial position of the Group as at 31 December 2018 are set out on pages 126 to 232 in the audited consolidated financial statements contained in this annual report.

#### **DIVIDENDS**

The Board proposes a payment of final dividends of US \$\circ\$ 0.8384 per share for the year ended 31 December 2018. The proposed final dividend will be paid on Tuesday, 18 June 2019 after approval at the AGM of the Company on 31 May 2019.

#### SUMMARY OF FINANCIAL INFORMATION

A summary of the consolidated results, assets and liabilities of the Group for the last five financial years, as extracted from the audited consolidated financial statements of the Group, is set out on page 233 in this annual report.

#### **BUSINESS REVIEW**

#### Overview and Performance of the Year

A review of the business of the Group and analysis of the Group's performance using financial key performance indicators is provided in the Results Highlights and the Management Discussion and Analysis sections on pages 6 to 7 and pages 8 to 40 of this annual report.

#### **Environmental Policies and Performance**

The Group attaches great importance to environmental protection. Under the guidance of "environmental protection and sustainable development", the Group proactively promotes environmental management and resources utilization and carries out environmental protection activities to build a "green enterprise making contributions to clear water and blue sky". During the reporting period, there was no material event causing litigation or corresponding punishment against the Group due to violation of laws in respect of environment.

Particulars in relation to the Group's environmental policies and performance are set out on pages 75 to 102 in the "Environmental, Social and Governance Report" section in this annual report.

#### Compliance with relevant Laws and Regulations

Relevant laws and regulations that have a significant impact on the Group mainly include:

- (1) Mines and Minerals Development Act No. 11 of 2005 of the Laws of Zambia;
- (2) Environmental Management Act No. 12 of 2011 of the Laws of Zambia;
- (3) Employment Act Chapter 268 of the Laws of Zambia;
- (4) Explosives Act Chapter 115 of the Laws of Zambia and Explosives Regulations;
- (5) Factories Act Chapter 441 of the Laws of Zambia;
- (6) Occupational Health and Safety Act No. 36 of 2010 of the Laws of Zambia;
- (7) Workers Compensation Act No. 10 of 1999 of the Laws of Zambia;
- (8) Acte Uniforme Relatif au Droit des Societes Commerciales et du Groupement D'Intereteconomique of the Laws of DRC;
- (9) Law No. 001/2018, the Mining Code of the Laws of DRC; and
- (10) Decree No. 18/24, the Mining Regulation of the DRC.

The Group has established and improved the manual for internal control in relation to overall business chains and management processes with subsequent monthly and annual supervision and review to ensure compliance with the relevant laws and regulations. For the year ended 31 December 2018, the Group had complied with relevant laws and regulations which had significant impact on the businesses and operations of the Group in all material aspects. During the year ended 31 December 2018, the Group has not been subject to any penalty due to violation of the aforesaid laws, regulations and other public policies.

The Group has complied with the requirements under the Companies Ordinance, the Listing Rules, the SFO and the CG Code for, among other things, the disclosure of information and corporate governance. The Group has adopted the Model Code.

#### **Key Relationships with Stakeholders**

The support and trust of our stakeholders is integral to the Group's growth and success. Our stakeholders include shareholders and creditors, employees and employee organisations, governments and regulatory authorities, the public communities, charities and non-government organisations (NGOs) and clients. We place emphasis on communications with our stakeholders and have established an open and transparent communication channel for each category of stakeholders to understand their expectations and requests.

We continued to strengthen the quality and effectiveness of information disclosure, comply with applicable laws and regulations, and actively participate in public welfare activities, with the purpose of achieving mutual development and value sharing with our stakeholders. We have also formulated key indicators based on the focuses and concerns of different stakeholders to reflect our management performance on the above subject matters. Some of our key indicators include return on equity and payout ratio for shareholders and creditors; employee training frequency and turnover rate for employees and employee organisations; violations of laws and regulations and safety and environment performance concerned by the government; public opinion and corporate image concerned by the public; response rate on enquiries for charities and NGOs; satisfactory reports for clients etc.. Going forward, we will endeavor to improve our current policies, strive to maximise our stakeholders' value and achieve a mutually beneficial outcome.

#### **Key Risks and Uncertainties**

A description of principal risks and uncertainties that the Group may be facing is provided on pages 16 to 17 in the "Management Discussion and Analysis" and "Corporate Governance Report" sections of this annual report.

#### **Prospects**

Please refer to the Chairman's Statement on pages 4 to 5 and page 40 in the "Management Discussion and Analysis" section of this annual report.

#### Subsequent Event after the end of Financial Year

With effect from 29 March 2019: (1) Mr. Diyong Yan has resigned as a non-executive Director, the vice chairman, a member of each of the Audit Committee, the Nomination Committee and the Remuneration Committee of the Company; (2) Mr. Jinjun Zhang has been appointed as a non-executive Director, the vice chairman, a member of each of the Audit Committee, the Nomination Committee and the Remuneration Committee of the Company. On the same date, Mr. Jinjun Zhang resigned as the vice president of the Company.

#### BANK AND OTHER BORROWINGS

Details of bank borrowings of the Group as at 31 December 2018 are set out in note 24 to the consolidated financial statements.

### CHARITABLE DONATIONS

Charitable donations made by the Group during the year ended 31 December 2018 amounted to US\$819,000. In addition, the Group subsidised schools and hospitals, provided financial aid for the construction and maintenance of public sports facilities such as football fields and swimming pools, and participated in programs to fight against malaria, AIDS and cholera, thereby earnestly fulfilling its social responsibility.



Donation of food to the infants of the local area by Luanshya



Donation of the waiting hall of Kitwe



Donation of children's entertainment facilities in Chambishi Village

## PROPERTY, PLANT AND EQUIPMENT

Details of movements in the property, plant and equipment of the Group during the year ended 31 December 2018 are set out in note 16 to the consolidated financial statements.

As at 31 December 2018, the Group did not own any properties for investment purposes or held for development and/or sale where one or more percentage ratios (as defined under Rule 14.04(9) of the Listing Rules) exceed 5%.

#### **RESERVES**

Details of change in the reserves of the Group during the year ended 31 December 2018 are set out in the consolidated statement of changes in equity.

#### DISTRIBUTABLE RESERVES

As at 31 December 2018, the Company had distributable reserves amounting to US\$70,691,000.

#### SHARE CAPITAL

There was no change in the share capital of the Company during the year ended 31 December 2018.

#### PRE-EMPTIVE RIGHTS

There is no provision for pre-emptive rights under the Articles of Association and there is no restriction against such rights which would oblige the Company to offer new Shares on a pro-rata basis to existing Shareholders.

# PURCHASE, REDEMPTION OR SALE OF LISTED SECURITIES OF THE COMPANY

Neither the Company nor any of its subsidiaries purchased, redeemed or sold any of the Company's listed securities during the year ended 31 December 2018.

#### MAJOR CUSTOMERS AND SUPPLIERS

During the year ended 31 December 2018, sales to the Group's five largest customers accounted for 87.6% of the Group's total sales, and sales to its largest customer, being the Retained Group, accounted for 44.5% of the Group's total sales. The second largest customer was Yunnan Copper Group.

During the year ended 31 December 2018, purchases from the Group's five largest suppliers in aggregate accounted for approximately 58.6% of the total purchases, and purchases from the largest supplier accounted for approximately 22.6% of total purchases. The second largest supplier was the Retained Group.

Save as disclosed above, none of the Directors, their associates or any shareholders of the Company (which, to the best knowledge of the Directors, own more than 5% of the Company's issued share capital) had any interest in the Group's five largest customers and suppliers during the year ended 31 December 2018.

#### SIGNIFICANT CONTRACT

Save as disclosed in "Connected Transactions", no other significant contract was entered into between the Company or any of its subsidiaries, and a controlling shareholder or any of its subsidiaries during the year ended 31 December 2018.

#### MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the year ended 31 December 2018.

#### **DIRECTORS**

The Directors during the Year and up to the date of this report were as follows:

#### **Executive Directors**

Mr. Tongzhou Wang (appointed on 30 August 2018)

Mr. Xiaowei Wang (appointed on 30 August 2018)

Mr. Lin Zhang

Mr. Chunlai Wang

Mr. Kaishou Xie

Mr. Xinghu Tao (resigned on 30 August 2018)

Mr. Wei Fan (resigned on 30 August 2018)

#### **Non-Executive Director**

Mr. Jinjun Zhang (appointed in 29 March 2019)

Mr. Diyong Yan (resigned on 29 March 2019)

#### **Independent Non-Executive Directors**

Mr. Chuanyao Sun

Mr. Jingwei Liu

Mr. Huanfei Guan

In accordance with article 102 of the Articles of Association, at each annual general meeting, one-third of the directors or, if their number is not three (3) or a multiple of three (3), the number which is nearest to and is at least one-third, shall retire from office by rotation at least once every three (3) years. A retiring director shall be eligible for re-election. Pursuant to article 103 of the Articles of Association, the directors to retire by rotation shall be those who have been longest in office since their last appointment or reappointment, but as between persons who became or were last reappointed directors on the same day, those to retire shall (unless they otherwise agree among themselves) be determined by lot. In compliance with the provisions of the Articles, Mr. Kaishou Xie and Mr. Jingwei Liu shall retire at the forthcoming annual general meeting and, being eligible, will

offer themselves for re-election. Pursuant to the article 107 of the Articles of Association, a director appointed by the Board to fill a vacancy or as an additional director shall retire at the next following general meeting and shall then be eligible for re-election. Mr. Tongzhou Wang, Mr. Jinjun Zhang and Mr. Xiaowei Wang, being appointed by the Board after the last annual general meeting of the Company, shall retire at the forthcoming annual general meeting and, being eligible, will offer themselves for re-election.

The Company has received annual confirmation of independence from the three independent non-executive Directors in accordance with Rule 3.13 of the Listing Rules and considers them to be independent.

The names of all directors who have served on the boards of the subsidiaries of the Company during the year ended 31 December 2018 or during the period from 1 January 2019 to 29 March 2019 are set out below and those marked with an asterisk\* are directors as at 29 March 2019:

Jinjun Zhang\* Jiangiang Wu\* Xiaowei Wang\* Xinghu Tao Guoping Liu\* Lin Zhang\* Jinghe Zhu\* Yan Wang He Yang\* Xi Yi\* Chunlai Wang\* Kaishou Xie\* Jingjun Wang\* Wei Fan\* Guobin Hu\* Xiliang Xu\* Peiwen Zhang\* Nanshan Shen\* Jianming Zhu\* Donghong Zhang\* Rongting Li Siukam Ng\* Aibin Hu\* Xinghua Liu\* Wenyan Xu\* Yaolin Li Anne Flood\* Xuemin Zheng\* Zhanyan Li\* Chengguo Li\* Bing Zhang\* Liang Zhou Mufingwe Ng'ambi\*

Luke Chenjelani Mbewe\* Yuanyuan Liu\* Fawu Shi\*

Chunguang Pang\* Lisheng Yang\* Tamara S Ngoma\*

Cosmas V Mwananshiku\* Matilda Lyama Tian Wang\* Gang Qu\* Yun Deng\* Weimin Xu\*

Jian Guo\* Chengyi Fang\* Chebib Moukachar\*

Qujian Lin Xingrong Du\* Siuhong Ng\*

Simon Tsibangu Ngoy\* Daniel Mbiyavanga Markuta Maku\* Gaetan Tshibangu Luabeya\*

Note: The list is in no particular order.

#### DIRECTORS AND SENIOR MANAGEMENT

The biographies of the Directors and senior management are set out on pages 41 to 47 in this annual report.

# DIRECTORS' INTERESTS IN TRANSACTION, ARRANGEMENT AND CONTRACT OF SIGNIFICANCE

No Directors and their connected entities had an interest, either directly or indirectly, in any transactions, arrangements or contract of significance to the business of the Group to which the Company, or any of its holding companies, subsidiaries or fellow subsidiaries was a party during the year ended 31 December 2018.

None of the Directors proposed for re-election at the forthcoming annual general meeting has a service contract with the Company which is not terminable by the Company within one year without payment of compensation, other than statutory compensation.

#### DIRECTOR'S PERMITTED INDEMNITY PROVISION

Pursuant to the Company's Articles of Association, every Director or other office of the Company shall be entitled to be indemnified out of the assets of the Company against all costs, charges, expenses, losses and liabilities which he may sustain or incur in or about the execution of the duties of his office or otherwise in relation thereto. The Company has arranged appropriate directors' and officers' liability insurance coverage for the Directors and officers of the Group during the year ended 31 December 2018, and such coverage remained in full force as of the date of this report.

#### **DIRECTOR'S INTERESTS IN COMPETING BUSINESS**

None of the Directors of the Company had engaged in any business or had any interest in business which competes or may constitutes competition directly or indirectly (within the meaning of the Listing Rules) with the business of the Group during the year ended 31 December 2018.

#### DIRECTORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

The Company or any of its subsidiaries did not have any arrangement in place at any time during the period whereby the Directors or their respective spouse or children under 18 years of age can obtain benefit by acquiring shares of the Company or other body corporate.

# DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

As at 31 December 2018, none of the Directors or chief executive had any interests or short positions in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV the SFO) which would fall to be disclosed to the Company or the Hong Kong Stock Exchange pursuant to Division 7 and 8 at the Part XV of the SFO; or interest or short positions required to be recorded in the register kept by the Company pursuant to Section 352 of the SFO; or interests or short positions which fall to be disclosed to the Company and the Hong Kong Stock Exchange pursuant to the Model Code.

# EMOLUMENTS OF THE DIRECTORS, SENIOR MANAGEMENT AND THE FIVE HIGHEST PAID INDIVIDUALS

Please refer to notes 13 and 35(3) to the consolidated financial statements for details of the emoluments of the Directors, senior management and the five highest paid individuals of the Company.

# SUBSTANTIAL SHAREHOLDERS' AND OTHER PERSONS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

As of 31 December 2018, so far as it is known to the Director and chief executive of the Company, interests or short positions which would fall to be disclosed to the Company and the Hong Kong Stock Exchange pursuant to the provisions of Division 2 and 3 under the Part XV of the SFO is as follows:

Substantial shareholder	Capacity/Nature of interest	Long/short position	Number of shares	Approximate percentage of shareholdings
CNMD (Note) CNMC	Registered owner Interest in a controlled corporation	Long position Long position	2,600,000,000 2,600,000,000	74.52% 74.52%

Note: CNMD is a wholly-owned subsidiary of CNMC and therefore, by virtue of the SFO, CNMC is deemed or taken to be interested in all the shares which are owned by CNMD.

As at 31 December 2018, each of the following entities were directly or indirectly interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at the general meeting of any other members of the Group:

Member of the Group	Entity with 10% or more interest (other than member of the Group)	Percentage of that entity's interest
NFCA	ZCCM-IH	15%
Luanshya	ZCCM-IH	20%
CCS	Yunnan Copper Group	40%
SML	Hong Kong Zhongfei	30%
Huachin Leach	Huachin SARL	32.5%
CNMC Huachin Mabende	Huachin SARL	35%
CNMHK	Hong Kong Zhongfei	30%
Kambove Mining	La Generale Des Carrieres	45%
	Et Des Mines SA	
Lualaba Copper Smelter	YH Metal	38%
Kingsail	YH Metal	40%

Save as disclosed above, as at 31 December 2018, no person had registered an interest or short position in the shares or underlying shares of the Company that was required to be recorded pursuant to Section 336 of the SFO.

#### RETIREMENT BENEFIT SCHEMES

Details of the retirement benefit schemes of the Group are set out in note 36 to the consolidated financial statements.

#### SHARE OPTION SCHEME

The Group has not adopted any share option scheme.

#### **EQUITY-LINKED AGREEMENT**

Save as disclosed in this annual report, there was no equity-linked agreement entered into by the Company during the year ended 31 December 2018.

#### CONNECTED TRANSACTIONS

#### **Non-exempted Continuing Connected Transactions**

During the Year, the Group carried out the following transactions which constituted continuing connected transactions under Chapter 14A of the Listing Rules and were subject to annual review.



#### 1. CNMC Copper Supply Framework Agreement

On 18 November 2014, the Company entered into the CNMC Copper Supply Framework Agreement ("2014 CNMC Copper Supply Framework Agreement") with CNMC pursuant to which the Company agreed to sell, or procure its subsidiaries to sell, copper products including blister copper and copper cathode to the Retained Group, subject to the approval of the Independent Shareholders. The Independent Shareholders approved the 2014 CNMC Copper Supply Framework Agreement and the proposed annual caps at the extraordinary general meeting of the Company ("EGM") held on 29 December 2014. The duration of 2014 CNMC Copper Supply Framework Agreement lasts from 1 January 2015 to 31 December 2017. Details of the 2014 CNMC Copper Supply Framework Agreement were disclosed in the announcement and circular of the Company dated 18 November 2014 and 8 December 2014 respectively.

The 2014 CNMC Copper Supply Framework Agreement expired on 31 December 2017. As the Company had the intention to continue to enter into transactions of a similar nature from time to time after 31 December 2017, on 18 April 2017, the Company entered into the CNMC Copper Supply Framework Agreement ("2017 CNMC Copper Supply Framework Agreement") with CNMC, the nature of which is similar to that of the transactions under the 2014 CNMC Copper Supply Framework Agreement for a term of three years from 1 January 2018 to 31 December 2020, subject to the approval of the Independent Shareholders. The Independent Shareholders approved the 2017 CNMC Copper Supply Framework Agreement and the proposed annual caps at the EGM held on 31 May 2017. Details of the 2017 CNMC Copper Supply Framework Agreement were disclosed in the announcement and circular of the Company dated 18 April 2017 and 15 May 2017 respectively.

On 23 April 2018, the Company revised the annual caps under the 2017 CNMC Copper Supply Framework Agreement and obtained the approval of the Independent Shareholders at the AGM held on 28 June 2018. Details of the revision were disclosed in the announcement and circular of the Company dated 23 April 2018 and 13 June 2018 respectively.

During the year ended 31 December 2018, the revenue and gains from the sale of copper products (including loss on change in fair value) to the Retained Group amounted to US\$878,246,000, which is below the annual cap amount of US\$2,115,600,000.

CNMC held 100% and 74.52% of the Company's issued share capital before and after the Listing, respectively. The Retained Group consists of CNMC and its subsidiaries, excluding the Group. Both CNMC and the Retained Group constitute connected persons of the Company under the Listing Rules.

#### 2. Yunnan Copper Supply Framework Agreement

On 18 November 2014, the Company entered into the Yunnan Copper Supply Framework Agreement ("2014 Yunnan Copper Supply Framework Agreement") with Yunnan Copper Group pursuant to which the Company agreed to sell, or procure its subsidiaries to sell, copper products including blister copper and copper cathode to the Yunnan Copper Group and its subsidiaries. The duration of 2014 Yunnan Copper Supply Framework Agreement lasts from 1 January 2015 to 31 December 2017. Details of the 2014 Yunnan Copper Supply Framework Agreement were disclosed in the announcement of the Company dated 18 November 2014.

The 2014 Yunnan Copper Supply Framework Agreement expired on 31 December 2017. As the Company intends to continue to enter into transactions of a similar nature from time to time after 31 December 2017, on 18 April 2017, the Company entered into the Yunnan Copper Supply Framework Agreement ("2017 Yunnan Copper Supply Framework Agreement") with Yunnan Copper Group, the nature of which is similar to that of the transactions under the 2014 Yunnan Copper Supply Framework Agreement for a term of three years from 1 January 2018 to 31 December 2020. Details of the 2017 Yunnan Copper Supply Framework Agreement were disclosed in the announcement of the Company dated 18 April 2017.

On 23 April 2018, the Company revised the annual caps under the 2017 Yunnan Copper Supply Framework Agreement. Details of the revision were disclosed in the announcement of the Company dated 23 April 2018.

During the year ended 31 December 2018, the revenue and gains from the sale of copper products (including loss on change in fair value) to Yunnan Copper Group and its subsidiaries amounted to US\$333,268,000, which is below the annual cap amount of US\$820,000,000.

Yunnan Copper Group is a substantial shareholder of CCS holding 40% of the issued share capital of CCS. Yunnan Copper Group and its subsidiaries constitute connected persons of the Company under the Listing Rules.

#### 3. Huachin Ore Supply Framework Agreement

On 18 November 2014, the Company entered into the Huachin Ore Supply Framework Agreement ("2014 Huachin Ore Supply Framework Agreement") with Mabende Mining pursuant to which the Company agreed to buy, or procure its subsidiaries to buy, copper ores mined by Mabende Mining. The duration of 2014 Huachin Ore Supply Framework Agreement lasts from 1 January 2015 to 31 December 2017. Details of the 2014 Huachin Ore Supply Framework Agreement were disclosed in the announcement of the Company dated 18 November 2014.

The 2014 Huachin Ore Supply Framework Agreement expired on 31 December 2017. As the Company intends to continue to enter into transactions of a similar nature from time to time after 31 December 2017, on 18 April 2017, the Company entered into the Huachin Ore Supply Framework Agreement ("2017 Huachin Ore Supply Framework Agreement") with Mabende Mining, the nature of which is similar to that of the transactions under the 2014 Huachin Ore Supply Framework Agreement for a term of three years from 1 January 2018 to 31 December 2020. Details of the 2017 Huachin Ore Supply Framework Agreement were disclosed in the announcement of the Company dated 18 April 2017.

On 23 April 2018, the Company revised the annual caps under the 2017 Huachin Ore Supply Framework Agreement. Details of the revision were disclosed in the announcement of the Company dated 23 April 2018.

During the year ended 31 December 2018, the Group purchased ores amounting to US\$14,126,000 from Mabende Mining, which is below the annual cap amount of US\$80,000,000.

Huachin Leach and CNMC Huachin Mabende are 32.5% and 35%, respectively, indirectly owned by Mr. Ng Siu Kam, who also owns 70% interest in Mabende Mining. Mabende Mining constitutes a connected person of the Company under the Listing Rules.

#### 4. Mutual Supply Framework Agreement

On 18 November 2014, the Company entered into the Mutual Supply Framework Agreement ("2014 Mutual Supply Framework Agreement") with CNMC (as supplemented by a supplemental agreement dated 4 December 2014) pursuant to which both parties agreed to provide, or procure their respective subsidiaries to provide certain raw materials, products and services to each other, and CNMC agreed to provide, or procure its subsidiaries to provide transportation and logistics services to the Group, subject to the approval of the Independent Shareholders. The Independent Shareholders approved the 2014 Mutual Supply Framework Agreement and the proposed annual caps at the EGM held on 29 December 2014. The duration of 2014 Mutual Supply Framework Agreement lasts from 1 January 2015 to 31 December 2017. Details of the 2014 Mutual Supply Framework Agreement were disclosed in the announcement and circular of the Company dated 18 November 2014 and 8 December 2014 respectively.

The 2014 Mutual Supply Framework Agreement expired on 31 December 2017. As the Company intends to continue to enter into transactions of a similar nature from time to time after 31 December 2017, on 18 April 2017, the Company entered into the Mutual Supply Framework Agreement ("2017 Mutual Supply Framework Agreement") with CNMC, the nature of which is similar to that of the transactions under the 2014 Mutual Supply Framework Agreement for a term of three years from 1 January 2018 to 31 December 2020, subject to the approval of the Independent Shareholders. The Independent Shareholders approved the 2017 Mutual Supply Framework Agreement and the proposed annual caps at the EGM held on 31 May 2017. Details of the 2017 Mutual Supply Framework Agreement were disclosed in the announcement and circular of the Company dated 18 April 2017 and 15 May 2017 respectively.

On 23 April 2018, the Company revised the annual caps under the 2017 Mutual Supply Framework Agreement and obtained the approval of the Independent Shareholders at the AGM held on 28 June 2018. Details of the revision were disclosed in the announcement and circular of the Company dated 23 April 2018 and 13 June 2018 respectively.

During the year ended 31 December 2018, the amount paid by the Group for the provision of raw materials, products and services provided by the Retained Group amounted to US\$346,995,000, and the revenue from the provision of raw materials, products and services to the Retained Group amounted to US\$15,912,000, both of which are below the annual caps of US\$608,560,000 and US\$101,040,000, respectively.

#### 5. Properties Leasing Framework Agreement

On 18 November 2014, the Company entered into the Properties Leasing Framework Agreement ("2014 Properties Leasing Framework Agreement") with CNMC pursuant to which CNMC has agreed to lease the Leased Properties to the Group for general business and ancillary purposes. The duration of 2014 Properties Leasing Framework Agreement lasts from 1 January 2015 to 31 December 2017. Details of the 2014 Properties Leasing Framework Agreement were disclosed in the announcement of the Company dated 18 November 2014.

The 2014 Properties Leasing Framework Agreement expired on 31 December 2017. As the Company intends to continue to enter into transactions of a similar nature from time to time after 31 December 2017, on 18 April 2017, the Company entered into the Properties Leasing Framework Agreement ("2017 Properties Leasing Framework Agreement") with CNMC, the nature of which is similar to that of the transactions under the 2014 Properties Leasing Framework Agreement for a term of three years from 1 January 2018 to 31 December 2020. Details of the 2017 Properties Leasing Framework Agreement were disclosed in the announcement of the Company dated 18 April 2017.

During the year ended 31 December 2018, the rentals paid to the Retained Group amounted to US\$5,780,000, which is below the annual cap amount of US\$9,530,000.

#### 6. NFC Copper Purchase Framework Agreement

On 19 April 2017, CCS entered into the NFC Copper Purchase Framework Agreement with NFC Metal Pte. Ltd. ("NFC Metal") pursuant to which CCS agreed to buy copper concentrate from NFC Metal. The duration of NFC Copper Purchase Framework Agreement lasts from 1 June 2017 to 31 December 2019. Details of the NFC Copper Purchase Framework Agreement were disclosed in the announcement of the Company dated 19 April 2017.

During the year ended 31 December 2018, CCS purchased copper concentrate amounting to US\$167,726,000 from NFC Metal, which is below the annual cap amount of US\$200,910,000.

NFC Metal is wholly-owned by China Nonferrous Metal Industry's Foreign Engineering and Construction Co., Ltd ("NFC"), and CNMC in turn holds 33.75% of the issued share capital of NFC. NFC Metal constitutes a connected person of the Company under the Listing Rules.

Details of related party transactions of the Company for the year ended 31 December 2018 are set out in note 35 to the consolidated financial statements. Save for the related party transactions as set out under item (3) in respect of remuneration of key management personnel, all the related party transactions set out in note 35 constitute connected transactions under Chapter 14A of the Listing Rules. The Company confirms that all such related party transactions complied with the applicable requirements under Chapter 14A of the Listing Rules.



The independent non-executive Directors have reviewed the nature and process of the business transactions, discussed the pricing policies of those transactions, and have confirmed that these continuing connected transactions of the Group have been entered into: (i) in the ordinary and usual course of business of the Group; (ii) on normal commercial terms; and (iii) in accordance with the relevant agreements governing them on terms that are fair and reasonable and in the interests of the Shareholders of the Company as a whole.

The Company has designated the Compliance Committee to continuously monitor the continuing connected transactions with the abovementioned connected persons. The Compliance Committee continuously traces and regularly monitors the progress of the continuing connected transactions and reports to management of the Company. The Compliance Committee reviews the continuing connected transactions with the finance department to ensure that annual caps are not exceeded. The heads of different departments of the Company will also be informed on a periodic basis in relation to the terms and pricing policies of the continuing connected transactions. The Compliance Committee will communicate with the Audit Committee, management and the Board of Directors, monthly or as needed, to report the progress of the continuing connected transactions, and request for approval of new changes of existing transaction terms. The Audit Committee and the Compliance Committee have also assigned the independent internal audit team the task to ensure that the Company's internal control measures in respect of the continuing connected transactions remain effective and complete. With these measures, the independent non-executive Directors could therefore assess and give the confirmations in the preceding paragraph.

The Company's auditor has been engaged to report on the continuing connected transactions of the Group in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued its letter containing its findings and conclusions, in respect of the above-mentioned continuing connected transactions disclosed by the Company in this annual report in accordance with Rule 14A.56 of the Listing Rules.

In respect of the continuing connected transactions disclosed (the "Disclosed Continuing Connected Transactions"), the Company's auditor confirmed that:

- a. nothing has come to their attention that causes them to believe that the Disclosed Continuing Connected Transactions have not been approved by the Company's board of directors;
- b. for transactions involving the provision of goods or services by the Group, nothing has come to their attention that causes them to believe that the transactions were not, in all material respects, in accordance with the pricing policies of the Group;
- c. nothing has come to their attention that causes them to believe that the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions;

d. with respect to the aggregate amount of each of the continuing connected transactions set out in the letter, nothing has come to their attention that causes them to believe that the Disclosed Continuing Connected Transactions have exceeded the annual cap disclosed in the announcements of the Company dated 19 April 2017 and 23 April 2018 made by the Company in respect of each of the Disclosed Continuing Connected Transactions.

A copy of the auditor's letter has been provided by the Company to the Hong Kong Stock Exchange.

#### NON-COMPETITION UNDERTAKING

As disclosed in the Prospectus, the independent non-executive Directors will review, on an annual basis, the compliance by CNMC and its associates with the Non-Competition Undertaking under the Deed of Non-Competition Undertaking, including whether to pursue any business opportunities which may be referred or offered to the Company by the Retained Group. The Company has received an annual confirmation from CNMC in respect of its compliance with the Non-Competition Undertaking. The independent non-executive Directors of the Company have reviewed the status of compliance of the Non-Competition Undertaking for the year ended 31 December 2018 and confirmed that all the undertakings under the Deed of Non-Competition Undertaking have been complied with by CNMC.

# COMPLIANCE WITH PROVISIONS OF THE CORPORATE GOVERNANCE CODE

None of the Directors is aware of any information which would reasonably indicate that the Company has not, for any part of the year ended 31 December 2018, complied with the code provisions as set out in the Corporate Governance Code and Corporate Governance Report contained in Appendix 14 of the Listing Rules.



#### SUFFICIENCY OF PUBLIC FLOATING

Based on the information that is publicly available to the Company and as far as the Directors are aware, the Company has maintained at least 25% of public float as at the date of this annual report.

#### **AUDIT COMMITTEE**

The Company has an audit committee which was established with written terms of reference in compliance with Rule 3.22 of the Listing Rules and paragraph C3 of the CG Code of the Listing Rules. The primary duties of the Audit Committee are to supervise the financial reporting process and internal control and risk management systems of the Group. As at the date of this report, the Audit Committee consists of three members, being Mr. Jinjun Zhang (non-executive Director), Mr. Jingwei Liu (independent non-executive Director) and Mr. Huanfei Guan (independent non-executive Director). The chairman of the Audit Committee is Mr. Jingwei Liu. The Group's financial statements for the year ended 31 December 2018 have been reviewed by the Audit Committee, who was of the opinion that such statements complied with the applicable accounting standards, the Listing Rules and legal requirements, and that adequate disclosures had been made.

Note:

Mr. Jinjun Zhang has become a non-executive Director, a member of each of the Audit Committee, Remuneration Committee and Compliance Committee with effect from 29 March 2019. At the time when the Group's financial statements for the year ended 31 December 2018 was reviewed and approved, the Audit Committee consisted of Mr. Jingwei Liu, Mr. Huanfei Guan, and Mr. Diyong Yan (who was a non-executive Director and a member of the Audit Committee prior to the appointment of Mr. Jinjun Zhang with effect from 29 March 2019).

#### AUDITOR

A resolution for the re-appointment of Deloitte as auditor of the Company is to be submitted at the forthcoming annual general meeting.

Approved on behalf of the Board of Directors **Tongzhou Wang** 

Chairman

29 March 2019

# INDEPENDENT AUDITOR'S REPORT

FOR THE YEAR ENDED 31 DECEMBER 2018

# Deloitte.



#### TO THE MEMBERS OF CHINA NONFERROUS MINING CORPORATION LIMITED

(incorporated in Hong Kong with limited liability)

#### **OPINION**

We have audited the consolidated financial statements of China Nonferrous Mining Corporation Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 126 to 232, which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of 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 Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

#### **BASIS FOR OPINION**

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with HKICPA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **KEY AUDIT MATTERS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

FOR THE YEAR ENDED 31 DECEMBER 2018

#### **KEY AUDIT MATTERS (CONTINUED)**

Key audit matter

How our audit addressed the key audit matter

Impairment assessment on property, plant and equipment of NFC Africa Mining PLC ("NFCA")

We identified the impairment assessment on property, plant and equipment of NFCA, a subsidiary of the Company, as a key audit matter due to the use of judgement and estimation in assessing their recoverable amounts.

As at 31 December 2018, owing to that Chambishi Southeast Mine Project of NFCA was postponed commencement of full production, and new tax acts were enacted on 26 December 2018 with effect from 1 January 2019 (see note 11), management identified impairment indicators for NFCA's property, plant and equipment amounting to US\$653,417,000. The calculation of the recoverable amounts of the cash generating unit ("CGU") in management assessment incorporates significant estimates. Any changes in these estimates may have a significant impact on the consolidated financial statements.

No impairment loss was recognised for the year ended 31 December 2018 after the management's impairment assessment on the recoverable amount of the associated CGU.

Details of the related key source of estimation uncertainty and management impairment assessment are disclosed in notes 4 and 16, respectively, to the consolidated financial statements.

Our procedures in relation to impairment assessment of property, plant and equipment of NFCA included:

- Testing the key controls that management have in place to assess the recoverable amounts of mining properties and construction in progress;
- Evaluating the methodologies and calculation made by the management;
- Challenging the appropriateness of management's estimates of mining plan, future copper prices, production cost, capital expenditures and discount rates used in the cash flow projections; and
- Comparing the current year's actual results with the 2018 figures used in the prior year's impairment assessment.

FOR THE YEAR ENDED 31 DECEMBER 2018

#### OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's 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 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 DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance, and for such internal control as the directors determine 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 directors are 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 directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

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

# AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives 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 auditor's report that includes our opinion solely to you, as a body, in accordance with section 405 of the Hong Kong Companies Ordinance, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs 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.

FOR THE YEAR ENDED 31 DECEMBER 2018

# AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

As part of an audit in accordance with HKSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' 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 auditor's 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 auditor's 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 or 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.

FOR THE YEAR ENDED 31 DECEMBER 2018

# AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in the independent auditor's report is Cheng Pak Chuen, Patrick.

**Deloitte Touche Tohmatsu** *Certified Public Accountants* 

Hong Kong 29 March 2019

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2018

		0040	2017
	Notes	2018 <i>US\$'000</i>	US\$'000
	TVOIES	03\$ 000	US\$ 000
Revenue from goods	5, 6	2,053,320	1,838,731
Cost of sales		(1,552,788)	(1,406,783)
Cross profit		500 F20	401.040
Gross profit Other income	7	500,532	431,948
		13,241	9,599
Other gains and losses	8	(44,852)	18,121
Distribution and selling expenses		(46,507)	(46,282)
Administrative expenses	40	(62,738)	(53,443)
Other expenses	10	(11,235)	(17,599)
Finance costs	9	(24,580)	(23,117)
Profit before tax		323,861	319,227
Income tax expense	11	(79,883)	(85,368)
income tax expense	11	(19,000)	(00,000)
Profit and total comprehensive			
income for the year	6, 12	243,978	233,859
Profit and total comprehensive income attributable to:			
Owners of the Company		146,260	142,428
Non-controlling interests		97,718	91,431
Two is controlling interests		01,110	01,101
		243,978	233,859
Earnings per share			
- Basic and diluted (US cents per share)	15	4.19	4.08
- Basic and diluted (equivalent to			
approximately HK\$ per share)	15	0.33	0.32

# **CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

AT 31 DECEMBER 2018

		2018	2017
	Notes	US\$'000	US\$'000
ASSETS			
Non-current Assets			
Property, plant and equipment	16	1,295,449	1,021,166
Interest in an associate		-	2,143
Finance lease receivables		67	319
Restricted bank balances	20	6,044	6,027
Deferred tax assets	29	42,823	52,456
Other assets	19	90,782	20,082
		1,435,165	1,102,193
Current Assets			
Inventories	17	540,219	383,580
Finance lease receivables		234	950
Trade receivables	18	-	234,924
Trade receivables at amortised cost	18	3,023	-
Trade receivables at fair value through profit			
or loss ("FVTPL")	18	138,616	-
Prepayments and other receivables	19	204,568	180,299
Derivatives	25	3,413	-
Restricted bank balances	20	2,676	1,267
Bank deposits	20	-	45,000
Bank balances and cash	20	505,091	854,984
		1,397,840	1,701,004
Total Access		0.000.005	0.000.107
Total Assets		2,833,005	2,803,197

# **CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)**

AT 31 DECEMBER 2018

	Notes	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
EQUITY AND LIABILITIES			
Capital and Reserves			
Share capital Retained profits	26	613,233 294,949	613,233 173,842
Equity attributable to owners of the Company		908,182	787,075
Non-controlling interests		388,373	253,009
Total Equity		1,296,555	1,040,084
Non-current Liabilities			
Deferred tax liabilities	29	45,593	53,997
Bank and other borrowings  – due after one year	24	534,987	813,512
Provision for restoration, rehabilitation and		30 1,001	010,012
environmental costs	28	18,010	18,960
Deferred income	27	15,528	16,199
		614,118	902,668
Current Liabilities			
Trade payables	21	118,229	265,665
Trade payables designated at FVTPL	21	131,760	-
Other payables and accrued expenses	22	51,867	62,206
Income tax payable		85,435	72,930
Bank and other borrowings  – due within one year	24	527,494	455,225
Contract liabilities	23	7,547	+00,220
Derivative	25	-	4,419
		922,332	860,445
Table 1 to 1 the control of			
Total Liabilities		1,536,450	1,763,113
Total Equity and Liabilities		2,833,005	2,803,197

The consolidated financial statements on pages 126 to 232 were approved and authorised for issue by the board of directors on 29 March 2019 and are signed on its behalf by:

Tongzhou Wang

DIRECTOR

**Lin Zhang** *DIRECTOR* 

# **CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

FOR THE YEAR ENDED 31 DECEMBER 2018

#### Equity attributable to owners of the Company

				Non-	
	Share	Retained		controlling	Total
	capital	profits	Sub-total	interests	equity
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
At 1 January 2017	613,233	31,414	644,647	198,999	843,646
Profit and total comprehensive	010,200	01,111	011,017	100,000	0 10,0 10
income for the year	_	142,428	142,428	91,431	233,859
Dividends declared by subsidiaries	_	_	_	(50,046)	(50,046)
Capital contribution by non-				(,,	(==,===)
controlling shareholders of a					
subsidiary	_	_	_	12,625	12,625
,				,	· · · · · · · · · · · · · · · · · · ·
At 31 December 2017	613,233	173,842	787,075	253,009	1,040,084
Profit and total comprehensive					
income for the year	-	146,260	146,260	97,718	243,978
Dividend declared by a subsidiary	_	_	_	(4,000)	(4,000)
Capital contribution by a non-					
controlling shareholder of a					
subsidiary	_	_	_	37,860	37,860
Dividend declared by the					
Company	_	(21,367)	(21,367)	_	(21,367)
Disposal of partial interest in a					
subsidiary (note37(e))	-	(3,786)	(3,786)	3,786	-
At 31 December 2018	613,233	294,949	908,182	388,373	1,296,555

# **CONSOLIDATED STATEMENT OF CASH FLOWS**

FOR THE YEAR ENDED 31 DECEMBER 2018

	2018	2017
	US\$'000	US\$'000
	·	,
OPERATING ACTIVITIES		
Profit for the year	323,861	319,227
Adjustments for:		
Finance costs	24,580	23,117
Interest income	(8,835)	(4,748)
Depreciation of property, plant and equipment	109,678	106,154
Impairment loss, net of reversal		
- input value added tax ("VAT") receivables	10,026	7,860
Amortisation of mining right	_	10,366
Release of premium for electricity supply	440	440
Deferred income recognised	(671)	(880)
Finance income earned under finance leases to fellow subsidiaries	(69)	(189)
Gain arising on fair value change of financial assets/liabilities		
at FVTPL	(6,931)	(33,035)
Loss (gain) on disposal of property, plant and equipment, net	891	(186)
Foreign exchange loss (gain)	260	(925)
Operating cash flows before movements in working capital	453,230	427,201
Increase in inventories	(156,639)	(66,756)
(Increase) decrease in trade and other receivables, prepayments	, , ,	, ,
and other assets	(5,951)	35,337
Decrease in trade and other payables and accrued expenses	(5,410)	(34,981)
Decrease in contract liabilities	(13,352)	_
	,,,,,	
Cash generated from operations	271,878	360,801
Income tax paid	(66,149)	(25,019)
,	(11, 15)	( -,- : -)
NET CASH FROM OPERATING ACTIVITIES	205,729	335,782

# **CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)**

FOR THE YEAR ENDED 31 DECEMBER 2018

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
INVESTING ACTIVITIES		
Interest received	8,835	4,748
Proceeds on disposal of property, plant and equipment	102	277
Purchases of property, plant and equipment	(356,094)	(205,868)
Repayment of finance lease receivables from fellow subsidiaries	968	2,267
Finance income earned under finance leases to fellow		, -
subsidiaries received	69	189
Placement of restricted bank balances	(1,990)	(417)
Proceeds from release of restricted bank balances	564	250
Placement of bank deposits	_	(45,000)
Proceeds from release of bank deposits	45,000	38,000
Receipts of government grants	_	1,261
NET CASH USED IN INVESTING ACTIVITIES	(302,546)	(204,293)
FINANCING ACTIVITIES	(04.007)	
Dividends paid to shareholders of the Company	(21,367)	(40,004)
Dividends paid to non-controlling shareholders of subsidiaries	(4,245)	(49,801)
Capital contribution by non-controlling shareholders of subsidiaries	37,860	12,625
Repayments of bank and other borrowings	(354,225)	(72,750)
New bank and other borrowings raised	147,969	183,000
Interest paid	(58,808)	(35,831)
NET CASH (USED IN) FROM FINANCING ACTIVITIES	(252,816)	37,243
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(349,633)	168,732
CASH AND CASH EQUIVALENTS AT 1 JANUARY	854,984	685,327
Effect of foreign exchange rate changes on the balance of cash held	00 <del>-</del> ,00 <del>-</del>	000,021
in foreign currencies	(260)	925
	(230)	020
CASH AND CASH EQUIVALENTS AT 31 DECEMBER		
Represented by:		
Bank balances and cash	505,091	854,984

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2018

#### 1. GENERAL INFORMATION

China Nonferrous Mining Corporation Limited (the "Company") was incorporated in Hong Kong on 18 July 2011 and its shares are listed on The Stock Exchange of Hong Kong Limited. In the opinion of the directors of the Company (the "Directors"), the Company's immediate holding company is China Nonferrous Mining Development Limited, a private company incorporated in the British Virgin Islands and the Company's ultimate holding company is China Nonferrous Metal Mining (Group) Co., Ltd ("CNMC"), an enterprise established in the People's Republic of China (the "PRC") and wholly-owned by Stateowned Assets Supervision and Administration Commission of the State Council. The registered office of the Company is located at Room 1201, Allied Kajima Building, 138 Gloucester Road, Wanchai, Hong Kong, and its principal place of business is located at 32 Enos Chomba Road, Kitwe, The Republic of Zambia ("Zambia").

The principal activity of the Company is investment holding. The Company's subsidiaries are principally engaged in exploration, mining, ore processing, leaching, smelting and sale of copper cathodes, blister copper, copper anodes and sulfuric acid. The activities of the subsidiaries of the Company are set out in the note 37.

The consolidated financial statements of the Company and its subsidiaries (collectively referred to as the "Group") are presented in United States dollars ("US\$"), which is also the functional currency of the Company.

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs")

New and Amendments to HKFRSs that are mandatorily effective for the current year

The Group has applied the following new and amendments to HKFRSs issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the first time in the current year:

HKFRS 9 Financial Instruments

HKFRS 15 Revenue from Contracts with Customers and the related

**Amendments** 

HK(IFRIC)-Int 22 Foreign Currency Transactions and Advance Consideration
Amendments to HKFRS 2 Classification and Measurement of Share-based Payment

*Transactions* 

Amendments to HKFRS 4 Applying HKFRS 9 Financial Instruments with HKFRS 4 Insurance

Contracts

Amendments to HKAS 28 As part of the Annual Improvements to HKFRSs 2014–2016

Cycle

Amendments to HKAS 40 Transfers of Investment Property

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

Except as described below, the application of the new and amendments to HKFRSs in the current year has had no material impact on the Group's financial performance and positions for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

2.1 HKFRS 15 Revenue from Contracts with Customers

The Group has applied HKFRS 15 for the first time in the current year. HKFRS 15 superseded HKAS 18 Revenue, HKAS 11 Construction Contracts and the related interpretations.

The Group has applied HKFRS 15 retrospectively with cumulative effect of initially applying this Standard recognised at the date of initial application, 1 January 2018. Any difference at the date of initial application is recognised in the opening retained profits (or other components of equity, as appropriate) and comparative information has not been restated. Furthermore, in accordance with the transition provisions in HKFRS 15, the Group has elected to apply the Standard retrospectively only to contracts that are not completed at 1 January 2018. Accordingly, certain comparative information may not be comparable as comparative information was prepared under HKAS 18 *Revenue and* HKAS 11 *Construction Contracts* and the related interpretations.

The Group recognises revenue from selling copper products and sulfuric acid which arise from contracts with customers when the products are delivered to the destination specified by the customer.

Information about the Group's performance obligations and the accounting policies resulting from application of HKFRS 15 are disclosed in notes 5 and 3 respectively.

Summary of effects arising from initial application of HKFRS 15

There is no impact of transition to HKFRS 15 on retained profits at 1 January 2018.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

2.1 HKFRS 15 Revenue from Contracts with Customers (Continued)

The following adjustments were made to the amounts recognised in the consolidated statement of financial position at 1 January 2018. Line items that were not affected by the changes have not been included.

	Carrying amounts previously reported at 31 December 1 2017 US\$'000	Reclassification  US\$'000  (note)	Carrying amounts under HKFRS 15 at January 2018 <i>US\$'000</i>
Current Liabilities Other payables and accrued expenses Contract liabilities	62,206	(20,899)	41,307
	–	20,899	20,899

Note: As at 1 January 2018, advances from customers of US\$20,899,000 in respect of sale of goods contracts previously included in other payables and accrued expenses were reclassified to contract liabilities.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

2.1 HKFRS 15 Revenue from Contracts with Customers (Continued)

The following tables summarise the impacts of applying HKFRS 15 on the Group's consolidated statement of financial position as at 31 December 2018 and its consolidated statement of cash flows for the current year for each of the line items affected. Line items that were not affected by the changes have not been included.

	As reported <i>US\$</i> '000	Adjustments <i>US\$'000</i>	Amounts without application of HKFRS 15 US\$'000
Impact on the consolidated statement of financial position			
Current Liabilities			
Other payables and accrued expenses	(51,867)	(7,547)	(59,414)
Contract liabilities	(7,547)	7,547	_
Impact on the consolidated statement of cash flows			
Operating activities			
Decrease in trade and other payables			
and accrued expenses	(5,116)	(13,352)	(18,468)
Decrease in contract liabilities	(13,352)	13,352	_

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

#### 2.2 HKFRS 9 Financial Instruments

In the current year, the Group has applied HKFRS 9 Financial Instruments and the related consequential amendments to other HKFRSs. HKFRS 9 introduces new requirements for 1) the classification and measurement of financial assets and financial liabilities, 2) expected credit losses ("ECL") for financial assets and other items (for example, lease receivables) and 3) general hedge accounting.

The Group has applied HKFRS 9 in accordance with the transition provisions set out in HKFRS 9, i.e. applied the classification and measurement requirements (including impairment under ECL model) retrospectively to instruments that have not been derecognised as at 1 January 2018 (date of initial application) and has not applied the requirements to instruments that have already been derecognised as at 1 January 2018. The difference between carrying amounts as at 31 December 2017 and the carrying amounts as at 1 January 2018 are recognised in the opening retained profits and other components of equity, without restating comparative information.

Accordingly, certain comparative information may not be comparable as comparative information was prepared under HKAS 39 Financial Instruments: Recognition and Measurement.

Accounting policies resulting from application of HKFRS 9 are disclosed in note 3.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

2.2 HKFRS 9 Financial Instruments (Continued)

Summary of effects arising from initial application of HKFRS 9

The table below illustrates the classification and measurement of financial assets and financial liabilities and other items subject to ECL under HKFRS 9 and HKAS 39 at the date of initial application, 1 January 2018.

	Trade	Trade	
	receivables	receivables	Trade
	(previously	at amortised	receivables
	classified	cost	at FVTPL
	as loans and	required by	required by
	receivables)	HKFRS 9	HKFRS 9
	US\$'000	US\$'000	US\$'000
			(note)
Closing balance at 31 December 2017  – HKAS 39  Effect arising from initial application of HKFRS 9:	234,924	-	-
Reclassification			
From loans and receivables	(234,924)	11,965	222,959
Opening balance at 1 January 2018	-	11,965	222,959

Note: Trade receivables arising from provisionally priced sales previously separated into loans and receivables and the embedded derivative component (previously presented in the same line item as the host contract) were reclassified to trade receivables at FVTPL upon the application of HKFRS 9 because the cash flows of these receivables do not represent solely payments of principal and interest on the principal amount outstanding.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and Amendments to HKFRSs that are mandatorily effective for the current year (Continued)

2.3 Impacts on opening consolidated statement of financial position arising from the application of all new standards

As a result of the changes in the Group's accounting policies above, the opening consolidated statement of financial position had to be restated. The following table show the adjustments recognised for each of the line items affected. Line items that were not affected by the changes have not been included.

	31 December 2017			1 January 2018
	(Audited)	HKFRS 15	HKFRS 9	(Restated)
	US\$'000	US\$'000	US\$'000	US\$'000
<b>Current Assets</b>				
Trade receivables	234,924	_	(234,924)	-
Trade receivables at amortised				
cost	_	_	11,965	11,965
Trade receivables at FVTPL	-	-	222,959	222,959
<b>Current Liabilities</b>				
Other payables and accrued				
expenses	62,206	(20,899)	_	41,307
Contract liabilities	_	20,899	_	20,899

*Note:* For the purposes of reporting cash flows from operating activities under indirect method for the year ended 31 December 2018, movements in working capital have been computed based on opening statement of financial position as at 1 January 2018 as disclosed above.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

#### New and amendments to HKFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to HKFRSs that have been issued but are not yet effective:

HKFRS 16 Leases<sup>1</sup>

HKFRS 17 Insurance Contracts<sup>3</sup>

HK(IFRIC)-Int 23 Uncertainty over Income Tax Treatments<sup>1</sup>

Amendments to HKFRS 3 Definition of a Business<sup>4</sup>

Amendments to HKFRS 9 Prepayment Features with Negative Compensation<sup>1</sup>

Amendments to HKFRS 10 Sale or Contribution of Assets between an Investor and its

and HKAS 28 Associate or Joint Venture<sup>2</sup>

Amendments to HKAS 1 Definition of Material<sup>5</sup>

and HKAS 8

Amendments to HKAS 19 Plan Amendment, Curtailment or Settlement<sup>1</sup>

Amendments to HKAS 28 Long-term Interests in Associates and Joint Ventures<sup>1</sup>
Amendments to HKFRSs Annual Improvements to HKFRSs 2015–2017 Cycle<sup>1</sup>

- <sup>1</sup> Effective for annual periods beginning on or after 1 January 2019
- <sup>2</sup> Effective for annual periods beginning on or after a date to be determined
- Effective for annual periods beginning on or after 1 January 2021
- Effective for business combinations and assets acquisitions for which the acquisition date is on or after the beginning of the first annual period beginning on or after 1 January 2020
- Effective for annual periods beginning on or after 1 January 2020

Except for the new and amendments to HKFRSs mentioned below, the directors of the Company anticipate that the application of all other new and amendments to HKFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

#### HKFRS 16 Leases

HKFRS 16 introduces a comprehensive model for the identification of lease arrangements and accounting treatments for both lessors and lessees. HKFRS 16 will supersede HKAS 17 Leases and the related interpretations when it becomes effective.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and amendments to HKFRSs in issue but not yet effective (Continued)

HKFRS 16 Leases (Continued)

HKFRS 16 distinguishes lease and service contracts on the basis of whether an identified asset is controlled by a customer. In addition, HKFRS 16 requires sales and leaseback transactions to be determined based on the requirements of HKFRS 15 as to whether the transfer of the relevant asset should be accounted as a sale. HKFRS 16 also includes requirements relating to subleases and lease modifications.

Distinctions of operating leases and finance leases are removed for lessee accounting, and is replaced by a model where a right-of-use asset and a corresponding liability have to be recognised for all leases by lessees, except for short-term leases and leases of low value assets.

The right-of-use asset is initially measured at cost and subsequently measured at cost (subject to certain exceptions) less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability. The lease liability is initially measured at the present value of the lease payments that are not paid at that date. Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others. For the classification of cash flows, the Group currently presents upfront prepaid lease payments as investing cash flows in relation to leasehold lands for owned use while other operating lease payments are presented as operating cash flows. Upon application of HKFRS 16, lease payments in relation to lease liability will be allocated into a principal and an interest portion which will be presented as financing cash flows by the Group, upfront prepaid lease payments will continue to be presented as investing or operating cash flows in accordance to the nature, as appropriate.

Under HKAS 17, the Group has already recognised an asset and a related finance lease liability for finance lease arrangement and prepaid lease payments for leasehold lands where the Group is a lessee. The application of HKFRS 16 may result in potential changes in classification of these assets depending on whether the Group presents right-of-use assets separately or within the same line item at which the corresponding underlying assets would be presented if they were owned.

Other than certain requirements which are also applicable to lessor, HKFRS 16 substantially carries forward the lessor accounting requirements in HKAS 17, and continues to require a lessor to classify a lease either as an operating lease or a finance lease.

Furthermore, extensive disclosures are required by HKFRS 16.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 2. APPLICATION OF NEW AND AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (CONTINUED)

New and amendments to HKFRSs in issue but not yet effective (Continued)

HKFRS 16 Leases (Continued)

As at 31 December 2018, the Group has non-cancellable operating lease commitments of US\$18,598,000 as disclosed in note 30. A preliminary assessment indicates that these arrangements will meet the definition of a lease. Upon application of HKFRS 16, the Group will recognise a right-of-use asset and a corresponding liability in respect of all these leases unless they qualify for low value or short-term leases.

The application of new requirements may result in changes in measurement, presentation and disclosure as indicated above. The Group intends to elect the practical expedient to apply HKFRS 16 to contracts that were previously identified as leases applying HKAS 17 and HK(IFRIC)-Int 4 Determining whether an Arrangement contains a Lease and not apply this standard to contracts that were not previously identified as containing a lease applying HKAS 17 and HK(IFRIC)-Int 4. Therefore, the Group will not reassess whether the contracts are, or contain a lease which already existed prior to the date of initial application. Furthermore, the Group intends to elect the modified retrospective approach for the application of HKFRS 16 as lessee and will recognise the cumulative effect of initial application to opening retained profits without restating comparative information.

#### 3. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

FOR THE YEAR ENDED 31 DECEMBER 2018

#### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of HKFRS 2 Share-based Payment, leasing transactions that are within the scope of HKAS 17 Leases, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in HKAS 2 Inventories or value in use in HKAS 36 Impairment of Assets.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

The principal accounting policies are set out below.

#### **Basis of consolidation**

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

FOR THE YEAR ENDED 31 DECEMBER 2018

#### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Basis of consolidation (Continued)**

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Investments in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under the equity method, an investment in an associate is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate. Changes in net assets of the associate other than profit or loss and other comprehensive income are not accounted for unless such changes resulted in changes in ownership interest held by the Group. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

An investment in an associate is accounted for using the equity method from the date on which the investee becomes an associate. On acquisition of the investment in an associate, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with HKAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue from contracts with customers (upon application of HKFRS 15 in accordance with transitions in note 2)

Under HKFRS 15, the Group recognises revenue when (or as) a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates and enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with HKFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue from contracts with customers (upon application of HKFRS 15 in accordance with transitions in note 2) (Continued)

Sale of goods

Revenue from the sale of goods is recognised when control of the goods has transferred based on the terms of the sale contracts.

In most instances, the control of goods has transferred upon delivery, when the goods have been shipped at the Group's premises.

The Group sells copper products under provisional pricing arrangements where final grades of copper, gold, silver and cobalt in copper products are agreed based on third-party examination and final prices are set at a specified date based on market prices. Revenues are recognised using forward prices for the expected date of final settlement. The period between revenue recognition and final settlement is within one to three months. The contractual cash flows of trade receivable vary depending on the market price at the date of final settlement, and do not represent solely payments of principal and interests on the principal amount outstanding. Consequently, these trade receivables resulted from provisionally priced contracts are measured at FVTPL.

#### Revenue recognition (prior to 1 January 2018)

Revenue is measured at the fair value of the consideration received or receivable for goods sold in the normal course of business, net of allowances, applicable sales taxes and mineral royalty.

Revenue is recognised when the amount of revenue can be reliably measured; when it is probable that future economic benefits will flow to the Group and when specific criteria have been met for each of the Group's activities, as described below.

Sale of goods

Revenue from the sale of goods is recognised when the goods are delivered and titles have passed.

In most instances, sales revenue is recognised when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped, the destination port or the customer's premises.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Revenue recognition (prior to 1 January 2018) (Continued)

Sale of goods (Continued)

For certain sales of the Group, the sales price is determined on a provisional basis at the date of sale, as the final selling price is subject to the grades of copper, gold and silver in the Group's copper products and movements in market prices up to the date of final pricing, normally ranging from 30 to 90 days after initial booking. Revenue on provisionally priced sales is recognised based on the estimated grades of copper, gold and silver in the Group's copper products and fair value of the total consideration receivable. The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative. Accordingly, the fair value of the final sales price adjustment is re-estimated continuously in trade receivables on the consolidated statement of financial position and changes in fair value are recognised in profit or loss. In all cases, fair value is estimated by reference to forward market prices.

#### Dividend and interest income

Dividend income from investments is recognised when the shareholders' right to receive payment has been established.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

#### Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Group as lessor

Amounts due from lessees under finance leases are recorded as receivables at the amount of the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Leases (Continued)

The Group as lessor (Continued)

Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset. Such costs are recognised on a straight-line basis over the lease term.

The Group as lessee

Operating lease payments, including the cost of acquiring land held under operating leases, are recognised as an expense on a straight-line basis over the lease term. Contingent rentals arising under operating leases are recognised as an expense in the period in which they are incurred.

#### Foreign currencies

The functional currency of companies comprising the Group is US\$. In preparing the financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recognised at the rates of exchange prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit or loss in the period in which they arise.

#### **Borrowing costs**

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Government grants**

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred income in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

#### **Employee benefits**

Retirement benefit costs

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

Short-term employee benefits

Short-term employees benefits are recognised at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognised as an expense unless another HKFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognised for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

#### **Taxation**

Income tax expense represents the sum of the tax currently payable and deferred tax.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Taxation (Continued)**

#### Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit/loss before tax because of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

#### Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

FOR THE YEAR ENDED 31 DECEMBER 2018

#### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Taxation (Continued)**

Deferred tax (Continued)

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Current and deferred tax for the year

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

#### Property, plant and equipment

Property, plant and equipment including buildings held for use in the production or supply of goods or services, or for administrative purpose (other than construction in progress as described below), are stated in the consolidated statement of financial position at cost, less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Depreciation is recognised so as to write off the cost of assets other than construction in progress less their residual values over their estimated useful lives, using the straight-line method or the unit-ofproduction method.

Mining properties in the course of development or construction are included construction in progress and are not depreciated. Capitalised mining properties costs are depreciated once commercial production commences, as described in "Property, plant and equipment - mining properties".

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FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Property, plant and equipment (Continued)

Depreciation for other property, plant and equipment (other than construction in progress) is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

Land and buildings

Machinery and equipment

Motor vehicles

10 to 30 years 3 to 10 years 5 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

#### Mining properties

The costs of mining properties, which include the costs of acquiring and developing mining properties, are firstly capitalised as property, plant and equipment under the heading of "Construction in progress" in the year in which they are incurred and then reclassified to the heading of "Mining properties" when they are ready for commercial production.

When a decision is taken that a mining property is viable for commercial production, all pre-production primary development expenditure other than land, buildings, plant and equipment, etc. is capitalised as part of the cost of the mining property until the mining property is capable of commercial production. From that point, capitalised mining properties costs are depreciated on a unit-of-production basis over the total estimated remaining commercial reserves of each property or a group of properties.

Stripping costs incurred in the development of a mine (or pit) before the production commences are capitalised as part of the cost of constructing the mine (or pit) and subsequently amortised over the life of the mine (or pit) on a unit of production basis. Stripping costs and secondary development expenditure, mainly comprising costs on blasting, haulage, excavation, etc. incurred during the production stage of an ore body, to the extent that the benefit from these activities is realised in the form of improved access ore, is recognised as a non-current asset ("Mining properties") when certain criteria are met, whereas the costs of normal on-going operational stripping activities are accounted for in accordance with HKAS 2 Inventories.

In circumstances where a mining property is abandoned, the cumulative capitalised costs relating to the property are written off in the period.

Commercial reserves are proved and probable reserves. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Impairment of property, plant and equipment

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment and to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any).

The recoverable amount of property, plant and equipment and are estimated individually, when it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash-generating unit ("CGU") to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual CGUs, or otherwise they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or a CGU) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or a CGU) is reduced to its recoverable amount. In allocating the impairment loss, the impairment loss is allocated to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit. An impairment loss is recognised immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or CGU) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a CGU) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Inventories**

Inventories are stated at the lower of cost and net realisable value.

Costs of inventories are determined on the following bases:

- Purchased copper concentrates and all other materials, including spare parts and consumables, are valued on weighted average basis.
- Finished products are valued at raw material cost plus costs of conversion, comprising labor costs and an attributable proportion of manufacturing overheads based on normal levels of activity.

Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

#### **Environmental rehabilitation**

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or production facilities. Costs arising from facility decommissioning and dismantling; removal or treatment of waste materials; site and land rehabilitation, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to profit or loss over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the life of the operation. The unwinding of the discount is shown as a finance cost in profit or loss.

Costs for restoration of subsequent site damage which is caused on an ongoing basis during production are provided for at their net present values and charged to profit or loss as extraction progresses. Where the costs of site restoration are not anticipated to be significant, they are expensed as incurred.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments**

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with HKFRS 15 since 1 January 2018. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

#### Financial assets

Classification and subsequent measurement of financial assets (upon application of HKFRS 9 in accordance with transitions in note 2)

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets that meet the following conditions are subsequently measured at fair value to other comprehensive income ("FVTOCI"):

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Classification and subsequent measurement of financial assets (upon application of HKFRS 9 in accordance with transitions in note 2) (Continued)

All other financial assets are subsequently measured at FVTPL, except that at the date of initial application/initial recognition of a financial asset the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income if that equity investment is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which HKFRS 3 *Business Combinations* applies.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that are required to be measured at the amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Classification and subsequent measurement of financial assets (upon application of HKFRS 9 in accordance with transitions in note 2) (Continued)

#### (i) Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount for a financial asset except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

#### (ii) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Trade receivables under provisional priced sales arrangements are measured at FVTPL. Considering that the contractual cash flows of trade receivables vary depending on the market price at the date of final settlement, and do not give rise to cash flows that are solely payments of principal and interests on the principal amount outstanding.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss. The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial asset and is included in the "other gains and losses" line item.

Impairment of financial assets (upon application HKFRS 9 with transitions in accordance with note 2)

The Group recognises a loss allowance for ECL on financial assets which are subject to impairment under HKFRS 9 (including trade receivables at amortised cost, other receivables, finance lease receivables, deposits in futures margin accounts, restricted bank balances, bank deposits, and bank balances). The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Impairment of financial assets (upon application of HKFRS 9 with transitions in accordance with note 2) (Continued)

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessments are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for trade receivables at amortised cost and finance lease receivables. The ECL on these assets are assessed individually.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

#### (i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Impairment of financial assets (upon application of HKFRS 9 with transitions in accordance with note 2) (Continued)

(i) Significant increase in credit risk (Continued)

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Impairment of financial assets (upon application of HKFRS 9 with transitions in accordance with note 2) (Continued)

#### (ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

The Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

#### (iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events of default that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- (a) significant financial difficulty of the issuer or the borrower;
- (b) a breach of contract, such as a default or past due event;
- (c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- (d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- (e) the disappearance of an active market for that financial asset because of financial difficulties.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Impairment of financial assets (upon application of HKFRS 9 with transitions in accordance with note 2) (Continued)

#### (iv) Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

#### (v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition. For a lease receivable, the cash flows used for determining the ECL is consistent with the cash flows used in measuring the lease receivable in accordance with HKAS 17 *Leases*.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortised cost of the financial asset.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments subject to impairment under HKFRS 9 by adjusting their carrying amount, with the exception of trade receivables at amortised cost and other receivables where the corresponding adjustment is recognised through a loss allowance account.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Classification and subsequent measurement of financial assets (before application of HKFRS 9 on 1 January 2018)

Financial assets are classified into the following specified categories: financial assets at FVTPL, held-to-maturity investments, AFS financial assets and loans and receivables. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. All regular way purchases or sales of financial assets are recognised and derecognised on a settlement date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

#### (i) Financial assets at FVTPL

Financial assets are classified as at FVTPL when the financial asset is (i) held for trading or (ii) it is designated as at FVTPL.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial assets and is included in the "other gains and losses" line items. Fair value is determined in the manner described in note 33.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Classification and subsequent measurement of financial assets (before application of HKFRS 9 on 1 January 2018) (Continued)

#### (ii) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables (including trade and other receivables (excluding the embedded commodity derivative component), restricted bank balances, bank deposit, bank balances and cash) are measured at amortised cost using the effective interest method, less any impairment.

Interest income is recognised by applying the effective interest rate, except for short-term receivables where the recognition of interest would be immaterial.

Impairment of financial assets (before application of HKFRS 9 on 1 January 2018)

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the financial assets have been affected.

For financial assets, objective evidence of impairment could include:

- significant financial difficulty of the issuer or counterparty; or
- breach of contract, such as a default or delinquency in interest or principal payments; or
- it becoming probable that the borrower will enter bankruptcy or financial re-organisation.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial assets (Continued)

Impairment of financial assets (before application of HKFRS 9 on 1 January 2018) (Continued)

Objective evidence of impairment for a portfolio of receivables could include the Group's past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period, and observable changes in national or local economic conditions that correlate with default on receivables.

For financial assets carried at amortised cost, the amount of the impairment loss recognised is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

The carrying amounts of financial assets is reduced by the impairment loss directly for all financial assets with the exception of trade and other receivables, where the carrying amount is reduced through the use of an allowance account. Changes in the carrying amount of the allowance account are recognised in profit or loss. When trade and other receivables are considered uncollectible, they are written off against the allowance account. Subsequent recoveries of amounts previously written off are credited to profit or loss.

For financial assets measured at amortised cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the assets to another entity. If the Group neither transfers nor remains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

#### Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

#### Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL.

#### Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is (i) contingent consideration of an acquirer in a business combination to which HKFRS 3 applies, (ii) held for trading or (iii) it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial liabilities and equity (Continued)

Financial liabilities at FVTPL (Continued)

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is
  managed and its performance is evaluated on a fair value basis, in accordance with the Group's
  documented risk management or investment strategy, and information about the grouping is
  provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and HKFRS 9/HKAS 39 permits the entire combined contract to be designated as at FVTPL.

Upon application of HKFRS 9, for financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. For financial liabilities that contain embedded derivatives, such as trade payables arising from provisionally priced purchases, the changes in fair value of the embedded derivatives are excluded in determining the amount to be presented in other comprehensive income. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to retained profits upon derecognition of the financial liability.

The trade payables arising from provisional pricing arrangements of copper concentrates purchase are settled at final prices set at a specified future period after shipment by suppliers based on prevailing spot prices. These trade payables are designated at FVTPL on contract by contract basis.

Financial liabilities at amortised cost

Financial liabilities including bank and other borrowings, trade payables and other payables are subsequently measured at amortised cost, using the effective interest method.

FOR THE YEAR ENDED 31 DECEMBER 2018

### 3. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Financial instruments (Continued)**

Financial liabilities and equity (Continued)

Derivative financial instruments

The Group uses derivative financial instruments to hedge its commodity price risk. The Group's derivative financial instruments mainly include copper future contracts (mainly standardised copper cathode future contracts in London Metal Exchange ("LME")) and those embedded in provisional price arrangements.

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss unless the derivative is designated and effective as a hedging instrument, in which case the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

(i) Embedded derivatives (under HKFRS 9 since 1 January 2018)

Derivatives embedded in hybrid contracts that contain financial asset hosts within the scope of HKFRS 9 are not separated. The entire hybrid contract is classified and subsequently measured in its entirety as either amortised cost or fair value as appropriate.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of HKFRS 9 are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

(ii) Embedded derivatives (before application of HKFRS 9 on 1 January 2018)

Derivatives embedded in non-derivative host contracts are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL. The embedded derivatives are presented in the same line item as the host contract.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in note 3, the Directors are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The followings are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

#### Impairment of property, plant and equipment

In determining whether an asset is impaired or the event previously causing the impairment no longer exists, the Group has to exercise judgement particularly in assessing: (1) whether an event has occurred that may affect the asset's value or such event affecting the asset's value has not been in existence; (2) whether the carrying value of an asset can be supported by its recoverable amount, which is the higher of an asset's or the CGU's fair value less costs to sell and its value in use; (3) the appropriate key assumptions to be applied in preparing cash flow projections including whether these cash flow projections are discounted using an appropriate rate. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the assets belongs.

Changes in estimations of the cash flow projections, such as the change in discount rates or the future copper price assumptions, may materially affect the amount of recoverable amount derived for impairment test purpose, which would then result in further recognition or reversal of impairment loss.

As at 31 December 2018, the carrying amount of property, plant and equipment was US\$1,295,449,000 (2017: US\$1,021,166,000).

FOR THE YEAR ENDED 31 DECEMBER 2018

# 4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

#### Depreciation of mining properties

Mining properties costs are depreciated using the unit of production method (the "UOP"). The calculation of the UOP rate of depreciation, and therefore the annual depreciation charge to operations, can fluctuate from initial estimates. This could generally result when there are significant changes in any of the factors or assumptions used in estimating mine reserves, notably changes in the geology of the reserves and assumptions used in determining the economic feasibility of the reserves. Such changes in reserves could similarly impact the useful lives of assets depreciated on a straight-line basis, where those lives are limited to the life of the project, which, in turn is limited to the lives of the proved and probable mineral reserves. Estimates of proved and probable reserves are prepared by experts in extraction, geology and reserve determination. Assessments of UOP rates against the estimated reserve base and the operating and development plan are performed regularly.

#### Restoration, rehabilitation and environmental costs

Provision is made for costs associated with restoration and rehabilitation of mining sites and certain production facilities of the Group as soon as the obligation to incur such costs arises. Such restoration and closure costs are typical of mining, leaching and smelting industries and they are normally incurred at the end of the life of the mine and production facilities. The costs are estimated on the basis of mine/plant closure plans and the estimated discounted costs of dismantling and removing these facilities and the costs of restoration are capitalised when incurred reflecting the Group's obligations at that time. A corresponding provision is created on the liability side.

The capitalised asset is charged to profit or loss through depreciation over the life of the operation and the provision is increased each period via unwinding the discount on the provision. The management estimates are mainly based on the local legislation. The actual costs and cash outflows may differ from estimates because of changes in laws and regulations, changes in prices, analysis of site conditions and changes in restoration technology.

The Group provides for such costs in accordance with the statutory requirements.

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# 4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

#### **Income Taxes**

The Group is subject to taxes in a number of jurisdictions. Significant judgement is required in determining the tax position and the estimates and assumptions in relation to the provision for taxes, the output VAT incentives on export, the progressive tax rate applicable for deferred tax provisions and the recovery of deferred tax assets, having regard to the nature and timing of their origination and compliance with the relevant tax legislation.

As at 31 December 2018, a deferred tax asset of US\$42,823,000 (31 December 2017: US\$52,456,000) in relation to unused tax losses, impairment of property, plant and equipment and impairment loss on excess and obsolete inventories has been recognised in the consolidated statement of financial position (see note 29). Deferred tax assets are recognised only if it is probable that future taxable profits will be available to utilise those temporary differences and losses, and the tax losses continue to be available having regard to the nature and timing of their origination and compliance with the relevant tax legislation associated with their recoupment. In addition, the applicable tax rate used in recognising deferred tax assets is determined by the forecast proportion of assessable income against gross sales and the timing of the usage of tax losses when the entity was granted income tax incentives.

#### Impairment for input VAT receivables

In assessing the recoverable amount of input VAT receivables, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted. The amount of the impairment loss recognised is the difference between the asset's carrying amount and the present value of estimated future cash flows.

As at 31 December 2018, the carrying amount of input VAT receivables, after deducting the provision of US\$17,886,000 (2017: US\$7,860,000) amounted to US\$202,217,000 (2017: US\$147,042,000) (see note 19).

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### 5. REVENUE FROM GOODS

#### A. For the year ended 31 December 2018

(i) Disaggregation of revenue from contracts with customers

	2018		
	Leaching	Smelting	
	US\$'000	US\$'000	
Types of goods			
Sales of goods to external customers			
Copper cathodes	597,006	_	
Blister copper	_	1,036,382	
Copper anode	_	326,902	
Copper-cobalt alloy	-	8,100	
Sulfuric acid	-	84,930	
Total	597,006	1,456,314	
Timing of revenue recognition			
A point in time	597,006	1,456,314	

#### (ii) Performance obligations for contracts with customers

The Group sells copper products and sulphuric acid to customers, revenue is recognised when control of the goods has transferred based on the terms of the sale contracts. In most cases, the control of goods has transferred upon delivery, when the goods have been shipped at the Group's premises. The Group normally requires prepayments from customers before goods dispatch with the remainder to be settled not exceeding one month upon issuance of sales invoice.

All sales are for periods of one year or less. As permitted under HKFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

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### 5. REVENUE FROM GOODS (CONTINUED)

#### B. For the year ended 31 December 2017

An analysis of the Group's revenue from its major products is as follows:

	2017
	US\$'000
Blister copper	1,285,166
Copper-cobalt alloy	3,861
Copper cathodes	494,288
Sulfuric acid	55,416
	1,838,731

### 6. SEGMENT INFORMATION

The Group's operating segments are identified on the basis of internal reports about components of the Group that are regularly reviewed by the chief operating decision maker, being the Operating Management Committee (the "CODM"), in order to allocate resources to the segments and to assess their performance.

Information reported to the CODM for the purposes of resource allocation and assessment of segment performance focuses on the types of goods produced. The Group's operating and reportable segments in current year under HKFRS 8 Operating Segments are as follows:

- Leaching Production and sale of copper cathodes (including exploration and mining of oxide copper mines) which are produced using the solvent extraction-electrowinning technology; and
- Smelting Production and sale of blister copper, copper anode, copper-cobalt alloy (including exploration and mining of sulfuric copper mines), and sulfuric acid which are produced using ISA smelting technology. Sulfuric acid is a by-product in the production of blister copper, copper anode and copper-cobalt alloy.

No operating segments have been aggregated to be derived from the reportable segments of the Group.

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# 6. SEGMENT INFORMATION (CONTINUED)

#### Segment revenue and results

The following is an analysis of the Group's revenue and results by reportable and operating segments:

### For the year ended 31 December 2018

	Leaching <i>US\$'000</i>	Smelting <i>US\$'000</i>	Consolidated <i>US\$'000</i>
Total segment revenue	597,006	1,490,022	2,087,028
Less: inter-segment sales	-	(33,708)	(33,708)
Revenue from external customers	597,006	1,456,314	2,053,320
Segment profit	155,119	87,054	242,173
Unallocated income*			6,690
Unallocated expenses#			(4,885)
		-	
Profit for the year			243,978

FOR THE YEAR ENDED 31 DECEMBER 2018

### 6. SEGMENT INFORMATION (CONTINUED)

#### Segment revenue and results (Continued)

For the year ended 31 December 2017

	Leaching US\$'000	Smelting US\$'000	Consolidated US\$'000
Total segment revenue	505,037	1,365,344	1,870,381
Less: inter-segment sales	(10,749)	(20,901)	(31,650)
Revenue from external customers	494,288	1,344,443	1,838,731
Segment profit	140,233	102,116	242,349
Unallocated income* Unallocated expenses#		_	3,501 (11,991)
Profit for the year		_	233,859

The unallocated income mainly represents the interest income arising from the bank deposits and bank balances of the Company, China Nonferrous Mining Holdings Limited ("CNMH"), a directly wholly-owned subsidiary of the Company which directly holds the Group's shareholdings in the subsidiaries in Zambia, China Nonferrous Mining Hong Kong Holdings Limited ("CNMHK"), a directly controlling subsidiary of the Company which directly holds the Group's shareholdings in two subsidiaries in Democratic Republic of Congo ("DRC"), and China Nonferrous Mining Hong Kong Investment Limited ("CNMHKI"), a directly wholly-owned subsidiary of the Company which directly holds the Group's shareholdings in two subsidiaries in DRC (collectively referred to as the "Holding Companies").

The accounting policies of the operating and reportable segments are the same as the Group's accounting policies described in note 3. Segment profit represents the profit earned by each segment. This is the measure reported to the CODM for the purposes of resource allocation and performance assessment.

Inter-segment sales are charged at prevailing market rates.

The unallocated expenses mainly represent the administrative expenses, interest expenses and income tax expenses of the Holding Companies.

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### 6. SEGMENT INFORMATION (CONTINUED)

#### Segment assets and liabilities

The following is an analysis of the Group's assets and liabilities by reportable and operating segments:

	2018	2017
	US\$'000	US\$'000
Segment assets		
Leaching	675,198	819,186
Smelting	1,897,813	1,610,089
Total segment assets	2,573,011	2,429,275
Unallocated assets*	262,771	385,095
Elimination	(2,777)	(11,173)
Consolidated assets	2,833,005	2,803,197
Segment liabilities		
Leaching	399,482	680,942
Smelting	1,028,962	966,332
Total segment liabilities	1,428,444	1,647,274
Unallocated liabilities*	110,783	127,012
Elimination	(2,777)	(11,173)
Consolidated liabilities	1,536,450	1,763,113

<sup>\*</sup> The unallocated assets and liabilities mainly represent those of the Holding Companies.

For the purposes of monitoring segment performance and allocating resources between segments, all assets and liabilities, other than certain assets and liabilities of the Holding Companies, are allocated to reportable and operating segments.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 6. SEGMENT INFORMATION (CONTINUED)

#### Other segment information

Amounts included in the measure of segment profit and segment assets:

#### For the year ended 31 December 2018

	Leaching <i>US\$'000</i>	Smelting <i>US\$'000</i>	Unallocated <i>US\$'000</i>	Consolidated <i>US\$'000</i>
Addition to non-current assets*  Depreciation of property, plant and	79,326	316,294	1,532	397,152
equipment	71,437	39,990	_	111,427
Write-down of inventories	_	1,184	_	1,184
Interest income#	2,681	316	5,838	8,835
Finance costs	15,882	7,869	829	24,580
Finance income earned under finance				
leases to fellow subsidiaries	69	-	-	69
Gain (loss) arising on change in fair value of				
- derivatives	3,731	4,927	-	8,658
- trade receivables at FVTPL	(4,978)	(59,876)	-	(64,854)
- trade payables designated at FVTPL	50,604	63,127 29,112	- 167	63,127 79,883
Income tax expense	50,004	29,112	107	19,000
For the year ended 31 December 2017				
	Leaching	Smelting	Unallocated	Consolidated
	US\$'000	US\$'000	US\$'000	US\$'000
Addition to non-current asset*	16,319	212,261	_	228,580
Depreciation of property, plant and				
equipment	68,131	38,023	-	106,154
Write-down of inventories	_	3,189	-	3,189
Interest income#	801	446	3,501	4,748
Finance costs	16,452	6,656	9	23,117
Finance income earned under finance				
leases to fellow subsidiaries	189	-	-	189
Gain arising on change in fair value of				
derivatives	25,592	7,443	-	33,035
Income tax expense	42,778	33,711	8,879	85,368

<sup>\*</sup> Non-current assets exclude financial instruments, input VAT receivables and deferred tax assets.

<sup>#</sup> Unallocated interest income represents interest income earned from bank deposits and bank balances of the Holding Companies.

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### 6. SEGMENT INFORMATION (CONTINUED)

### **Geographical information**

The Group's operations are mainly in Zambia and DRC. US\$1,124,637,000 (2017: US\$948,229,000) and US\$261,594,000 (2017: US\$95,162,000) of the Group's non-current assets (other than financial instruments, input VAT receivables and deferred tax assets) are in Zambia and DRC, respectively, by location of the assets.

The Group's revenue from external customers by their geographical locations which are based on the destination of shipments is detailed below:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Mainland China	921,400	963,106
Hong Kong	350,200	325,217
Switzerland	338,879	232,376
Singapore	278,859	170,629
Africa	72,906	75,613
Luxemburg	91,076	71,790
	2,053,320	1,838,731

#### Information about major customers

Revenue from customers individually contributing over 10% of the total revenue of the Group are as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Customer A  - Leaching  - Smelting	298,373 614,927	297,420 661,830
Customer B - Smelting	350,200	325,216
Customer C  - Leaching  - Smelting	14,777 190,397	- 196,062
Customer D  - Leaching  - Smelting	109,101 139,484	28,881 99,983

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### 7. OTHER INCOME

	2018	2017
	US\$'000	US\$'000
Interest income	8,835	4,748
Government grants	671	880
Finance income earned under finance leases to fellow		
subsidiaries	69	189
Net income from sale of spare parts and other materials	2,098	577
Others	1,568	3,205
	13,241	9,599

### 8. OTHER GAINS AND LOSSES

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
		204 200
(Loss) gain on disposal of property, plant and equipment, net Impairment losses of input VAT receivables  Foreign exchange losses, net*	(891) (10,026) (40,866)	186 (7,860) (7,240)
Gain (loss) from changes in fair value of financial		
assets/liabilities at FVTPL  - Derivatives  - Trade receivables at FVTPL	8,658 (64,854)	33,035
- Trade payables designated at FVTPL	63,127	_
	(44,852)	18,121

<sup>\*</sup> The amount included exchange losses arising from the retranslation of input VAT receivables denominated in Zambia Kwacha ("ZMK") to US\$ amounting to US\$37,002,000 during the current year (2017: US\$5,689,000).

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### 9. FINANCE COSTS

2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
57,546	36,103
818	415
58,364	36,518
(33,784)	(13,401)
24,580	23,117
5 33%	4,46%
	US\$'000 57,546 818 58,364 (33,784)

### 10. OTHER EXPENSES

	2018	2017
	US\$'000	US\$'000
Expense on suspension of production (note)	11,199	14,899
Others	36	2,700
	11,235	17,599

Note: The amount represented the operating expenses, including depreciation of property, plant and equipment, incurred during the year in relation to the Baluba Center Mine of CNMC Luanshya Copper Mines PLC ("Luanshya"), which has been suspended as a result of the force majeure event that Zambia has reduced the power supply in September 2015. The Baluba Center Mine resumed production in July 2018 and no further expense on suspension of production has been recognised since then.

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#### 11. INCOME TAX EXPENSE

Income tax expense recognised in profit or loss:

	2018 <i>US\$</i> '000	2017 <i>US\$'000</i>
Current tax:		
<ul> <li>Income tax in The Republic of Ireland ("Ireland")</li> </ul>	6	3,937
- Income tax in DRC	33,702	29,208
- Income tax in Zambia	44,946	37,479
	78,654	70,624
Deferred tax (note 29)		
- Current year	1,229	14,744
Total income tax expense	79,883	85,368

Income tax in Ireland is calculated at 12.5% (2017: 12.5%) on the estimated assessable income.

Income tax in DRC is calculated at 30% (2017: 30%) on the estimated assessable income.

Income tax in Zambia is calculated at 35% (2017: 35%) on the assessable income, except for that arising from mining activities which is stated as below.

The applicable tax rate on income from mining operation in Zambia is 30% where the assessable income does not exceed 8% of gross sales and variable tax rate up to 15% plus 30% where the assessable income exceed 8% of gross sales. Accordingly for both reporting periods, the applicable tax rate on the assessable income of Chambishi Copper Smelter Limited ("CCS") and Sino-metals Leach Zambia Limited ("SML") is 35%, and the applicable tax rate on the assessable income of NFCA and Luanshya ranges from 30% to 45%.

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### 11. INCOME TAX EXPENSE (CONTINUED)

The Group enjoyed the following income tax incentives:

- CCS is eligible for the tax exemption for the first five profitable years; 50% income tax relief for the next three years thereafter; and 25% of income tax relief for the next two years thereafter. The tax incentives are applicable to the assessable profit generated from the two different phases of production facilities of CCS with different dates of commencement of the tax incentives. One of the phases of production facilities of CCS is under the first year of 25% income tax relief during the current year (2017: 50%). The remaining phase of production facilities of CCS is still under the tax holiday during the current year.
- SML was also granted ten-year income tax incentives of zero rate income tax for the first five profitable years; 50% of income tax relief for the next three years thereafter; and 25% of income tax relief for the remaining two years. The last year enjoying this tax incentive is 2017 and the applicable tax rate for SML for the year ended 31 December 2018 was 35% (2017: 26.25%).

According to the Convention between the Republic of Zambia and Ireland for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Tax on, which is effective on 1 January 2016, certain dividend paid by a company which is a resident of Zambia to a resident of Ireland may be taxed in Zambia according to tax law of Zambia, but as the beneficial owner of the dividends is a resident of Ireland, the tax so charged shall not exceed 7.5% of the gross amount of the dividends in Zambia. Therefore certain dividend income of CNMH from Zambia subsidiaries may be subject to withholding income tax in Zambia at tax rate of 7.5%, except that CNMH enjoyed withholding tax incentive from 2013 to 2017 on the dividend income from CCS, a Zambia subsidiary of the Company.

Certain dividend income of CNMHK from DRC subsidiaries may be subject to withholding income tax in DRC at tax rate of 10%.

At the end of the reporting period, deferred tax liability of US\$33,018,000 (2017: US\$33,499,000) has been provided for temporary differences associated with undistributed earnings of these subsidiaries (see note 29).

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## 11. INCOME TAX EXPENSE (CONTINUED)

The income tax expense for the year can be reconciled to the profit before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	2018	2017 <i>US\$'000</i>
	US\$'000	US\$ 000
Profit before tax	323,861	319,227
Tax at income tax rate in Ireland		
- for operations at 12.5%	6	_
Tax at income tax rate in DRC		
- for operations at 30%	30,527	26,172
Tax at income tax rate in Zambia		
- for operations at 30%	22,258	29,776
- for operations at 35%	51,527	46,662
'	,	,
	104,318	102,610
Tax effect of expenses not deductible for tax purpose	10,865	9,165
Deferred and withholding tax on undistributed earnings	119	8,862
Effect of tax incentives granted to the Group	(33,884)	(29,397)
Utilisation of tax losses previously not recognised	_	(3,625)
Recognition of temporary differences previously not recognised	(1,535)	(2,247)
Income tax expense for the year	79,883	85,368

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### 11. INCOME TAX EXPENSE (CONTINUED)

#### Other taxes

The Group is also subject to other non-income taxes as below:

The Group is subject to VAT at 16% on purchases and sales in Zambia and DRC whereas VAT is exempted on export, and relevant input VAT paid for purchases supported by valid VAT invoices could be refunded by the ZRA and DRC to the extent total input VAT paid on purchases exceeds total output VAT payable on domestic sales.

On 7 June 2016, the Parliament of Zambia enacted "An Act to amend the Mines and Minerals Development Act, 2015" with effect from 1 June 2016, which included, to change a mineral royalty at the rate of 4% when the norm price of copper is less than US\$4,500 per tonne, 5% when the norm price of copper is US\$4,500 per tonne or greater but less than US\$6,000 per tonne and 6% when the norm price of copper is US\$6,000 per tonne or greater. The mineral royalty rates are applicable for both open cast mining operations and underground mining operations.

#### New tax acts that are effective from 1 January 2019

On 26 December 2018, the Parliament of Zambia enacted "An Act to amend the Mines and Minerals Development Act, 2015" with effect from 1 January 2019, which included, to change a mineral royalty at the rate of 5.5% when the norm price of copper is less than US\$4,500 per tonne, 6.5% when the norm price of copper is US\$4,500 per tonne or greater but less than US\$6,000 per tonne, 7.5% when the norm price of copper is US\$6,000 per tonne or greater but less than US\$7,500 per tonne, 8.5% when the norm price of copper is US\$7,500 per tonne or greater but less than US\$9,000 per tonne and 10% when the norm price of copper is US\$9,000 per tonne or greater. The mineral royalty rates are applicable for both open cast mining operations and underground mining operations.

On 26 December 2018, the Parliament of Zambia enacted "An Act to amend the Income Tax Act." with effect from 1 January 2019, as a result, the mineral royalty under the Mines and Minerals Development Act 2015, which was deductible before 1 January 2019, is no longer allowed to deduct from profit before tax.

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## 12. PROFIT FOR THE YEAR

Profit for the year has been arrived at after charging:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Depreciation of property, plant and equipment  Amortisation of mining right	111,427 -	106,154 10,366
Tanor doddon o'r riminig rigin		. 0,000
Total depreciation and amortisation	111,427	116,520
Less: capitalised in inventories	100,522	102,423
capitalised in construction in progress	1,749	1,186
	9,156	12,911
Auditor's remuneration Staff costs (including Directors' remuneration as disclosed in note 13):	1,148	1,147
Salaries, wages and welfare	79,909	65,564
Retirement benefit schemes contributions	6,532	5,749
Total staff costs	86,441	71,313
Less: capitalised in inventories	53,319	42,210
capitalised in construction in progress	3,137	3,819
	29,985	25,284
Cost of inventories recognised as an expense	1,489,661	1,449,357
Donations	819	287
Minimum lease payments in respect of		
- Land and buildings	6,144	6,172
<ul> <li>Machinery and equipment</li> </ul>	2	2

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# 13. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS

#### **Directors**

Details of the emoluments paid or payable to the Directors are as follows:

	2018					
	Other emoluments					
	-					
		and other	performance	schemes	Total	
Name of director	Fees	allowances	bonus*	contributions	emoluments	
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	
s						
Executive Directors						
Mr. Xinghu Tao (i)	-	-	-	-	-	
Mr. Tongzhou Wang (ii)	-	-	-	-	-	
Mr. Xiaowei Wang (iii)	-	-	-	-	-	
Mr. Lin Zhang (iv)	_	78	28	11	117	
Mr. Chunlai Wang	-	110	30	11	151	
Mr. Wei Fan (v)	-	74	33	6	113	
Mr. Kaishou Xie	-			-	-	
	_	262	91	28	381	
Non-Executive Director						
Mr. Diyong Yan (vii)	-	-	-	-	-	
Independent Non-executive						
Directors						
Mr. Chuanyao Sun	35	_	_	_	35	
Mr. Jingwei Liu	35	_	_	_	35	
Mr. Huanfei Guan	35	_	_	-	35	
	405				405	
	105			-	105	
Total	105	262	91	28	486	

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# 13. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (CONTINUED)

### **Directors (Continued)**

_		C	other emoluments	3	
	_			Retirement	
		Salaries	Discretionary	benefit	
		and other	performance	schemes	Total
Name of director	Fees	allowances	bonus*	contributions	emoluments
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
<b>Executive Directors</b>					
Mr. Xinghu Tao (i)	_	_	_	_	_
Mr. Xingeng Luo (vi)	_	_	_	_	-
Mr. Lin Zhang (iv)	_	46	_	6	52
Mr. Chunlai Wang	_	114	32	11	157
Mr. Wei Fan (v)	_	116	30	8	154
Mr. Kaishou Xie	-	43	_	_	43
	-	319	62	25	406
Non-Executive Director					
Mr. Diyong Yan (vii)	_	_	_	_	_
Independent Non-executive					
Directors					
Mr. Chuanyao Sun	36	_	_	_	36
Mr. Jingwei Liu	36	_	_	_	36
Mr. Huanfei Guan	36	_	_	_	36
	108	_	_	_	108
Total	108	319	62	25	514

<sup>(</sup>i) Mr. Xinghu Tao resigned as the chairman of the Board and executive director of the Company with effect from 30 August 2018.

<sup>(</sup>ii) Mr. Tongzhou Wang was appointed as the chairman of the Board and executive director of the Company with effect from 30 August 2018.

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# 13. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (CONTINUED)

#### **Directors (Continued)**

- (iii) Mr. Xiaowei Wang was appointed as executive director of the Company with effect from 30 August 2018.
- (iv) Mr. Lin Zhang was appointed as executive director and the President of the Company with effect from 19 May 2017.
- (v) Mr. Wei Fan resigned as executive director of the Company with effect from 30 August 2018.
- (vi) Mr. Xingeng Luo resigned as executive director of the Company with effect from 19 May 2017.
- (vii) Mr. Diyong Yan resigned as non-executive director of the Company with effect from 29 March 2019.
- (viii) Mr. Jinjun Zhang was appointed as non-executive director of the Company with effect from 29 March 2019.
- \* Certain executive directors of the Company are entitled to bonus payments which are determined based on operation results of the subsidiary for which the director is in charge.

The executive directors' emoluments shown above were mainly for their services in connection with the management of the affairs of the Company and the Group.

The independent non-executive directors' emoluments shown above were mainly for their services as directors of the Company.

No Directors waived any emoluments in the year ended 31 December 2018 (2017: Nil).

Mr. Xinghu Tao, the chairman of the Board, assumed the role as a chief executive officer and his emoluments for services rendered by him to the Group up to the date of his resignation have been borne by CNMC.

Mr. Tongzhou Wang, the chairman of the Board, assumes the role as a chief executive officer in CNMC and his emoluments for services rendered by him to the Group commencing from the date of appointment have been borne by CNMC.

Mr. Xiaowei Wang assumes the role in CNMC and his emoluments for services rendered by him to the Group commencing from the date of his appointment have been borne by CNMC.

Mr. Xingeng Luo assumes the role in CNMC and his emoluments for services rendered by him to the Group have been borne by CNMC.

Mr. Kaishou Xie has assumed a role in CNMC from May 2017. His emoluments for services rendered to the Group have been borne by CNMC from then on.

Mr. Diyong Yan's emoluments for services rendered to the Group have been borne by CNMC.

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# 13. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (CONTINUED)

#### **Employees**

Of the five individuals with the highest emoluments in the Group, one (2017: two) were Directors whose emoluments are included in the disclosure above. The emoluments of the remaining four (2017: three) individuals were as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Salaries, other allowances and bonus	484	319
Discretionary performance bonus	178	138
Retirement benefit schemes contributions	32	16
	694	473

The emoluments of the above employees were within the following bands:

	2018	2017	
	Number of employees		
HK\$1,000,001 to HK\$1,500,000	4	3	

#### 14. DIVIDENDS

	2018	2017
	US\$'000	US\$'000
Dividends recognised as distribution during the year:		
2018 Final, paid – US ¢ 0.6124 per share	21,367	-

Subsequent to the end of the reporting period, final dividend in respect of the year ended 31 December 2018 of US \$ 0.8384 per share amounting to approximately US\$29,252,100 (2017: US \$ 0.6124 per share amounting to US\$21,367,000) has been proposed by the Directors and is subject to the approval of the shareholders of the Company in the forthcoming annual general meeting.

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### 15. EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share attributable to the owners of the Company is based on the following data:

	2018	2017
Profit for the year attributable to owners of the Company for the purpose of basic and diluted earnings per share (in US\$'000)	146,260	142,428
Number of ordinary shares for the purpose of basic and diluted earnings per share (in '000)	3,489,036	3,489,036
Earnings per share  - Basic and diluted (US cents per share)  - Basic and diluted (equivalent to approximately HK\$ per share)	4.19 0.33	4.08 0.32

During the years ended 31 December 2018 and 2017, there was no potential ordinary share outstanding with diluted impact.

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## 16. PROPERTY, PLANT AND EQUIPMENT

			Machinery			
	Mining	Land and	and	Motor	Construction	
	properties	buildings	equipment	vehicles	in progress	Total
	US'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Cost						
At 1 January 2017	450,426	425,521	696,574	56,866	338,408	1,967,795
Additions	1,818	260	14,163	3,930	202,153	222,324
Transfer from construction in	, -		,	-,	, , , , ,	, -
progress	1,667	12,124	5,176	_	(18,967)	_
Disposals	_	_	(421)	(1,232)	* * * * * * * * * * * * * * * * * * * *	(1,653)
			, ,	, , ,		( , , ,
At 31 December 2017	453,911	437,905	715,492	59,564	521,594	2,188,466
Additions	19,595	733	24,714	11,060	330,601	386,703
Transfer from construction in	10,000		,	,	333,331	000,100
progress	10,658	33,671	23,039	_	(67,368)	_
Disposals	(50)	(1,167)	(8,156)	(561)		(9,934)
	. ,	( ) ,	( ) /	, ,		( , ,
At 31 December 2018	484,114	471,142	755,089	70,063	784,827	2,565,235
Depreciation and impairment						
At 1 January 2017	(269,107)	(146,811)	(439,824)	(47,398)		(1,062,708)
Depreciation	(28,225)	(21,344)	(51,757)	(4,828)	-	(106,154)
Disposals	_		337	1,225		1,562
At 31 December 2017	(297,332)	(168,155)	(491,244)	(51,001)		(1,167,300)
Depreciation	(32,848)	(21,184)	(51,942)	(5,453)	-	(111,427)
Disposals	50	367	7,986	538	-	8,941
At 31 December 2018	(330,130)	(188,972)	(535,200)	(55,916)	(159,568)	(1,269,786)
Carrying amounts						
At 31 December 2018	153,984	282,170	219,889	14,147	625,259	1,295,449
At 31 December 2017	156,579	269,750	224,248	8,563	362,026	1,021,166

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### 16. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Note: As at 31 December 2018, owing to that Chambishi Southeast Mine Project of NFCA was postponed commencement of full production and new tax acts were enacted on 26 December 2018 with effect from 1 January 2019 (see note 11), management specifically assessed whether NFCA's property, plant and equipment amounting to US\$653,417,000 at 31 December 2018 may have impairment. As it is not possible to estimate the recoverable amount of the property, plant and equipment of NFCA individually, the Group estimated the recoverable amount of NFCA's property, plant and equipment as a CGU ("NFCA CGU").

The recoverable amount of NFCA's property, plant and equipment has been determined based on such CGU's value in use. The cash flows were determined based on cash flow projections which incorporate management's best estimates of mining plan, future copper prices, production cost, capital expenditures and discount rates.

As a result of impairment assessment as at 31 December 2018, the Directors determined there was no further impairment to NFCA CGUs.

The significant estimation and inputs used in calculating the CGU's cash flows included future copper price as summarised below, a pre-tax discount rate of 18.76%; an applicable tax rate of 30% on the assessable income from mining operations; a mineral royalty at the rate of 7.5% when the norm price of copper is US\$6,000 per tonne or greater but less than US\$7,500 per tonne, 8.5% when the norm price of copper is US\$7,500 per tonne or greater but less than US\$9,000 per tonne and 10% when the norm price of copper is US\$9,000 per tonne or greater (the change in tax rate and mineral royalty was discussed in note 11); and mine reserves based on the most recent reserve report.

	2019-	Long term	
	2019	Average	average
	US\$	US\$	US\$
Copper price (per ton)	6,515	7,019	7,973

Future copper price with reference to the market estimation has taken into account the historical fluctuation.

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## 17. INVENTORIES

	2018	2017
	US\$'000	US\$'000
Raw materials	366,262	237,285
Spare parts and consumables	94,704	81,458
Work in progress	66,179	48,097
Finished goods	13,074	16,740
	540,219	383,580

# 18. TRADE RECEIVABLES/TRADE RECEIVABLES AT AMORTISED COST/TRADE RECEIVABLES AT FVTPL

	2018	2017
	US\$'000	US\$'000
Trade receivables	_	237,845
Trade receivables at amortised cost	5,863	-
Less: Allowance for credit losses	(2,840)	(2,921)
	3,023	234,924
Trade receivables at FVTPL	138,616	_

As at 31 December 2018 and 1 January 2018, all trade receivables/trade receivables at amortised cost/trade receivables at FVTPL are from contracts with customers.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 18. TRADE RECEIVABLES/TRADE RECEIVABLES AT AMORTISED COST/TRADE RECEIVABLES AT FVTPL (CONTINUED)

The following is an aging analysis of trade receivables/trade receivables at amortised cost, net of allowance for credit losses, presented based on the invoice dates:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
0 to 30 days	1,542	216,464
31 to 90 days	1,021	15,587
91 to 180 days	258	1,868
181 to 365 days	202	417
1–2 years	-	588
	3,023	234,924

The following is an aging analysis of trade receivables at FVTPL, presented based on the invoice dates:

	2018 <i>US\$</i> '000
0 to 30 days	129,931
31 to 90 days	7,996
91 to 180 days	689
	138,616

Details of impairment assessment of trade receivables at amortised cost for the year ended 31 December 2018 are set out in note 33.

As at 31 December 2017, included in the Group's trade receivables balances are debtors with aggregate carrying amount of US\$51,431,000 which are past due as at the end of the reporting period for which the Group has not provided for impairment loss. The Group does not hold any collateral over these balances.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 18. TRADE RECEIVABLES/TRADE RECEIVABLES AT AMORTISED COST/TRADE RECEIVABLES AT FVTPL (CONTINUED)

Aging of trade receivables at 31 December 2017 which are past due but not impaired is analysed as follows:

	2017
	US\$'000
Overdue by:	
0 to 30 days	32,971
31 to 90 days	15,587
91 to 180 days	1,868
181 to 365 days	417
1-2 years	588
	51,431
Movement in the allowance for doubtful debts during the year is as follows:	
Movement in the allowance for doubtful debts during the year is as follows:	
Movement in the allowance for doubtful debts during the year is as follows:	2017
Movement in the allowance for doubtful debts during the year is as follows:	2017 <i>US\$</i> '000
Movement in the allowance for doubtful debts during the year is as follows:	2017 <i>US\$'000</i>
	US\$'000
1 January	
	US\$'000
1 January	US\$'000

FOR THE YEAR ENDED 31 DECEMBER 2018

# 18. TRADE RECEIVABLES/TRADE RECEIVABLES AT AMORTISED COST/TRADE RECEIVABLES AT FVTPL (CONTINUED)

Included in the Group's trade receivables/trade receivables at amortised cost/trade receivables at FVTPL are balances with the following related parties:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Trade receivables:		
Fellow subsidiaries	_	136,607
Subsidiaries of a non-controlling shareholder of a subsidiary	_	78,393
	-	215,000
Tuesda usaaii ahlaa ah amaadia ad aash		
Trade receivables at amortised cost: Fellow subsidiaries	940	
Trade receivables at FVTPL:		
Fellow subsidiaries	90,745	-
Subsidiaries of a non-controlling shareholder of a subsidiary	39,438	
	130,183	_

The above balances with related parties are unsecured, interest-free and are receivable according to the relevant sales contracts.

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## 19. PREPAYMENTS, OTHER RECEIVABLES AND OTHER ASSETS

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Non-current:		
Deposits for property, plant and equipment	18,091	7,642
Deposits in connection with the restoration and rehabilitation		
obligations (note 28)	2,139	2,139
Premium for electricity supply (notes a and b)	10,301	10,301
Input VAT receivables, net (note c)	60,251	_
	90,782	20,082
Current:		
Prepayments for inventories and others	34,384	14,797
Input VAT receivables, net (note c)	141,966	147,042
Deposits in futures margin accounts	22,929	14,220
Other receivables	5,289	4,240
	204,568	180,299

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# 19. PREPAYMENTS AND OTHER RECEIVABLES AND OTHER ASSETS (CONTINUED)

Notes:

a. Pursuant to a power supply agreement (the "Luanshya Power Supply Agreement") and a connection agreement (the "Luanshya Connection Agreement") entered into between Luanshya and Copperbelt Energy Corporation Plc ("Copperbelt Energy"), a power supply company in Zambia, Luanshya undertook to construct certain power supply network assets (the "Luanshya Network Assets") to enable Copperbelt Energy to supply the electricity to the mining/leaching project of Luanshya in Muliashi, Copperbelt Province of Zambia. According to the Luanshya Connection Agreement, Luanshya transferred the Luanshya Network Assets to Copperbelt Energy upon the completion of the construction in March 2012 at a consideration of US\$3,725,000. Luanshya received the consideration during the year ended 31 December 2016.

The total construction cost of the Luanshya Network Assets is US\$9,442,000 and the construction of the Luanshya Network Assets completed in March 2012.

The Directors consider that the difference between the construction costs for the Luanshya Network Assets and the consideration received from Copperbelt Energy amounting to US\$5,717,000 is, in substance, premium for electricity supply that will be amortised over the tenure of the Luanshya Power Supply Agreement (expiring in January 2025) upon the commencement of electricity consumption by Luanshya. During the year ended 31 December 2018, premium for electricity supply released to profit or loss is amounting to US\$440,000 (2017: US\$440,000).

b. Pursuant to a connection agreement (the "NFCA Connection Agreement") entered into between NFCA and Copperbelt Energy, NFCA undertook to construct certain power supply network assets (the "NFCA Network Assets") to enable Copperbelt Energy to supply the electricity to the Chambishi Southeast Mine Project of NCFA at Chambishi, Copperbelt Province of Zambia. According to the NFCA Connection Agreement, NFCA shall transfer the NFCA Network Assets to Copperbelt Energy on the date which Copperbelt Energy issues a Taking-Over Certificate. A consideration of US\$4,695,000 will be paid by Copperbelt Energy to NFCA within the seventh anniversary from the date of transfer, subject to NFCA's fulfillment of consumption of electricity prescribed in the NFCA Connection Agreement.

The construction of NFCA Network Assets is completed and is in progress of transfer to Copperbelt Energy. The construction cost of the NFCA Network Assets is US\$7,443,000 as at 31 December 2018 (2017: US\$7,003,000).

The Directors consider that the difference between the construction costs for the NFCA Network Assets and the consideration received from Copperbelt Energy amounting to US\$2,748,000 are, in substance, premium for electricity supply that will be amortised over the estimated useful life of the NFCA Network Assets upon the commencement of electricity consumption by NFCA.

FOR THE YEAR ENDED 31 DECEMBER 2018

# 19. PREPAYMENTS AND OTHER RECEIVABLES AND OTHER ASSETS (CONTINUED)

Notes: (Continued)

c. The gross carrying amount of input VAT receivables is US\$220,103,000 (2017: US\$154,902,000). Impairment provision is estimated based on the present value of the estimated future cash flows, discounted using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the input VAT receivables for which the estimates of future cash flows have not been adjusted. An impairment provisions amounting to US\$17,886,000 in aggregate have been made on input VAT receivables amounting to US\$195,344,000 generated in Zambia and US\$24,759,000 generated in DRC.

The movements in the allowance for input VAT receivables during the year are as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
1 January Impairment losses recognised	7,860 10,026	- 7,860
31 December	17,886	7,860

Included in the Group's prepayments and other receivables and other assets are balances with the following related parties:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
CNMC Fellow subsidiaries A subsidiary of a non-controlling shareholder of a subsidiary	41 2,035 4,378 6,454	41 5,645 4,856 10,542

The above balances with related parties are unsecured, interest-free and are repayable on demand.

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# 20. RESTRICTED BANK BALANCES/BANK DEPOSITS/BANK BALANCES AND CASH

#### a. Restricted bank balances

The Group's restricted bank balances are analysed as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Non-current restricted bank deposits for the banks' letters of guarantee to secure future restoration costs		
as required by the government of Zambia (note 28)	6,044	6,027
Current restricted bank deposits for:		
- Custom clearance	-	460
<ul> <li>Issuing letters of credit</li> </ul>	2,676	807
	2,676	1,267
	8,720	7,294

The restricted bank balances carry interest at rates ranging from 0.1% to 0.5% (2017: from 0.1% to 0.5%) per annum.

#### b. Bank balances and cash

Bank balances carry interest at market rates ranging from 0.1% to 0.4% (2017: 0.1% to 0.3%) per annum.

#### c. Bank deposits

As at 31 December 2017, the bank deposits of US\$45,000,000 were with initial maturity of more than three months and carried interest at rates ranging from 1.9% to 3.0% per annum. As at 31 December 2018, there was no such kind of bank deposits.

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## 21. TRADE PAYABLES/TRADE PAYABLES DESIGNATED AT FVTPL

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Trade payables	118,229	265,665
Trade payables designated at FVTPL	131,760	-

The following is an aging analysis of trade payables presented based on the invoice date:

	2018	2017
	US\$'000	US\$'000
0 to 30 days	49,265	141,273
31 to 90 days	14,769	20,166
91 to 180 days	4,812	34,689
181 to 365 days	1,961	15,548
1–2 years	344	25,187
Over 2 years	47,078	28,802
	118,229	265,665

The following is an aging analysis of trade payables designated at FVTPL presented based on the invoice date:

	2018
	US\$'000
0 to 30 days	80,155
31 to 90 days	19,738
91 to 180 days	21,171
181 to 365 days	10,696
	131,760

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# 21. TRADE PAYABLES/TRADE PAYABLES DESIGNATED AT FVTPL (CONTINUED)

The average credit period on purchases of certain goods is within 3 months and most payables are paid within the credit time frame.

Included in the Group's trade payables/trade payables designated at FVTPL are balances with the following related parties:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Trade payables: Fellow subsidiaries	39,184	36,268
Trade payables designated at FVTPL: Fellow subsidiaries	23,826	-

The above balances with related parties are unsecured, interest-free and are repayable within the three months.

#### 22. OTHER PAYABLES AND ACCRUED EXPENSES

	2018	2017
	US\$'000	US\$'000
Receipts in advance from customers	_	20,899
Payables for properties, plant and equipment	23,093	14,361
Dividend payable	-	245
Other tax payables	4,087	3,692
Interest payables	-	1,262
Payroll payables	10,670	7,633
Accrued expenses	14,017	14,114
	51,867	62,206

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## 22. OTHER PAYABLES AND ACCRUED EXPENSES (CONTINUED)

Included in the Group's other payables and accrued expenses are balances with the following related parties:

	2018	2017
	US\$'000	US\$'000
CNMC	1,822	1,898
Fellow subsidiaries	5,020	3,653
A non-controlling shareholder of a subsidiary	-	301
An associate	-	2,143
	6,842	7,995

The above balances with related parties are unsecured, interest-free and are repayable on demand.

### 23. CONTRACT LIABILITIES

	2018 <i>US\$'000</i>
Advance from customers	7,547

The advance from customers at 1 January 2018 after adjustments from application of HKFRS 15 amounted to US\$20,899,000 and has been recognised as revenue fully in the current year.

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#### 24. BANK AND OTHER BORROWINGS

	2018	2017
	US\$'000	US\$'000
Bank loans, unsecured (note a)	924,481	1,020,660
Loan from CNMC, unsecured (note b)	_	1,077
Loan from a fellow subsidiary, unsecured (note c)	138,000	247,000
	1,062,481	1,268,737
The carrying amounts are repayable:		
Within one year	527,494	455,225
More than one year but not exceeding two years	314,610	426,339
More than two years but not exceeding five years	220,377	387,173
	1,062,481	1,268,737
Less: Amounts shown under current liabilities	(527,494)	(455,225)
Amounts shown under non-current liabilities	534,987	813,512

#### Notes:

- a. As at 31 December 2018, the unsecured bank loans of US\$741,085,000 (2017: US\$810,410,000) are supported by corporate guarantees issued by CNMC in favour of the relevant banks and unsecured bank loans of US\$80,000,000 (2017: US\$80,000,000) are supported by joint corporate guarantees issued by both CNMC and a non-controlling shareholder of a subsidiary in favour of the relevant banks.
  - The unsecured bank loans as at 31 December 2018 bore interest at rates varied based on LIBOR ranging from 3.8% to 5.4% per annum (2017: from 2.7% to 4.7% per annum).
- b. The loan from CNMC at 31 December 2017 bore interest at rate varies based on benchmark interest rate published by The People's Bank of China at 3.3% per annum. The loan was repaid on 22 July 2018.
- c. The loan from a fellow subsidiary of US\$138,000,000 (2017: US\$247,000,000) bore interest at a fixed rate of 4.0% per annum (2017: 4.0% per annum) and was due on 31 December 2018. The fellow subsidiary agreed to extend the due date and the loan contract is in progress of renewal.

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### 25. DERIVATIVES

	2018	2017
	US\$'000	US\$'000
Copper futures contracts	3,413	(4,419)

Details of the above futures contracts are analysed as follows:

	At December 31		
	2018 201		
Number of contracts			
- Sell	626	270	
Notional amount (in US\$'000)	96,813	44,242	
Exercise price (in US\$)	5,958-5,973	7,208-7,219	
Maturity date	16 January 2019	4 January 2018	
	-18 March 2019	-16 January 2018	

During the year, the Group entered into certain copper futures contracts to hedge its risk associated with the prices of its blister copper and copper cathodes sold and recognised a gain of US\$8,658,000 (2017: a loss of US\$11,880,000) arising on change in fair value of derivatives in profit or loss.

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### 26. SHARE CAPITAL

	Number of shares		Number of shares		Share	capital
	2018	2017	2018	2017		
	'000	'000	HK\$'000	HK\$'000		
Issued and fully paid: At beginning and end of the year ordinary shares with no par value	3,489,036	3,489,036	4,775,319	4,775,319		
			US\$'000	US\$'000		
Presented in the consolidated financial statements as			613,233	613,233		

## 27. DEFERRED INCOME

	2018	2017
	US\$'000	US\$'000
At beginning of year	16,199	15,818
Additions	_	1,261
Recognised in profit or loss during the year	(671)	(880)
At end of year	15,528	16,199

The above balances represented grants from Ministry of Finance of the PRC to subsidise the Group's capital expenditure and interest incurred in its copper mines development activities in Zambia which were capitalised under mining properties. These grants are recognised in profit or loss on a systematic and rational basis over the useful lives of the related assets.

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# 28. PROVISION FOR RESTORATION, REHABILITATION AND ENVIRONMENTAL COSTS

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Balance at beginning of year	18,960	19,863
Provisions revision	(1,768)	(1,318)
Unwinding of discount (note 9)	818	415
Balance at end of year	18,010	18,960

The Group's provision for restoration, rehabilitation and environmental costs is related to the Group's subsidiaries in Zambia which are involved in mining, leaching and smelting operations. The provision represents the accrued cost required to provide adequate restoration and rehabilitation measured by qualified professionals in Zambia, as discounted at rates ranging from 4.2% to 5.3% per annum (2017: 3.2% to 4.5% per annum), upon the completion of their operations. These amounts will be settled when rehabilitation is undertaken, generally at the end of a project life, which ranges from 4 to 36 years.

The Group is required, under the prevailing regulations, to make an annual contribution over a period of five years beginning from the year of prospecting, exploration or mining operations are commissioned, at 5% to 20% of the estimated restoration costs into an Environmental Protection Fund which is administrated by the Government of the Republic of Zambia amounting to US\$2,139,000 (2017: US\$2,139,000) (note 19). The regulations also require that the balance of the estimated restoration costs be secured using letters of guarantee. Companies in Zambia of the Group have provided the relevant letters of guarantee as at 31 December 2018 amounting to US\$6,044,000 (2017: US\$6,027,000) (note 20 (a)), except for SML, which has not received a demand notice at the date of issuance of these consolidated financial statements.

The Directors opined that adequate provision has been made at the end of each reporting period.

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### 29. DEFERRED TAX ASSETS/LIABILITIES

For the purpose of presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances for financial reporting purposes:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Deferred tax assets Deferred tax liabilities	42,823 (45,593)	52,456 (53,997)
	(2,770)	(1,541)

The followings are the major deferred tax liabilities and assets recognised and movements thereon during the current and prior years:

		Undistributed		
	Property, plant	profits of		
	and equipment	subsidiaries	Tax losses	Total
	US\$'000	US\$'000	US\$'000	US\$'000
At 1 January 2017	(75,573)	(28,915)	117,691	13,203
Charge (credit) to profit or loss	7,144	(4,584)	(17,304)	(14,744)
At 31 December 2017	(68,429)	(33,499)	100,387	(1,541)
Charge (credit) to profit or loss	16,713	481	(18,423)	(1,229)
At 31 December 2018	(51,716)	(33,018)	81,964	(2,770)

As at 31 December 2018, the Group has unused tax losses of US\$273,213,000 (2017: US\$335,822,000) in respect of the subsidiaries in Zambia and DRC available for offset against future profits. Deferred tax assets have been recognised in respect of all the losses of these subsidiaries in Zambia and DRC. Subject to regulations in Zambia and DRC, the above tax losses of these subsidiaries are available to be carried forward up to a maximum of ten years from the year in which they are incurred for set off against future taxable profits from the same source of those subsidiaries.

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#### 30. OPERATING LEASE - THE GROUP AS LESSEE

At the end of the reporting period, the Group had commitments for future minimum lease payments under a non-cancellable operating lease in respect of buildings and properties of CNMC and a fellow subsidiary in the PRC and Zambia for general and ancillary purposes which fall due as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Within one year	5,679	5,692
In the second to fifth years inclusive	12,919	17,849
	18,598	23,541

### 31. CAPITAL COMMITMENTS

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Capital expenditure contracted for but not provided for in respect of:		
<ul> <li>acquisition of property, plant and equipment</li> </ul>	342,919	214,455

#### 32. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to stakeholders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged from prior year.

The capital structure of the Group consists of net debt (which includes bank and other borrowings, net of restricted bank balances, bank deposits, bank balances and cash) and equity attributable to owners of the Company (comprising share capital and retained profits).

The Group is not subject to any externally imposed capital requirements.

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## 32. CAPITAL MANAGEMENT (CONTINUED)

#### **Gearing ratio**

The Group's management committee reviews the capital structure on a regular basis. As part of this review, the committee considers the cost of capital and the risks associated with each class of capital.

The gearing ratio of the Group at the end of the reporting period was as follows:

		2018	2017
	Notes	US\$'000	US\$'000
Debts Less:	(a)	1,062,481	1,268,737
Restricted bank balances, bank deposits, bank balances and cash		(513,811)	(907,278)
Net debt Equity	(b)	548,670 908,182	361,459 787,075
Net debt to equity ratio	. ,	60.4%	45.9%

#### Notes:

- (a) Debts comprise non-current and current bank and other borrowings as detailed in note 24.
- (b) Equity includes share capital and retained profits attributable to owners of the Company.

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#### 33. FINANCIAL INSTRUMENTS

#### **Categories of financial instruments**

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Financial assets FVTPL Trade receivables at FVTPL Derivative financial instruments Financial assets at amortised cost Loans and receivables	138,616 3,413 545,353 -	- 1,556 - 1,160,375
Financial liabilities FVTPL Trade payables designated at FVTPL Derivative financial instruments Amortised costs	131,760 - 1,217,820	- 5,066 1,563,437

#### Financial risk management objectives and policies

The Group's major financial instruments include trade and other receivables (at amortised cost or FVTPL), restricted bank balances, bank deposits, bank balances and cash, trade and other payables (at amortised cost or designated at FVTPL), bank and other borrowings and derivatives. Details of the financial instruments are disclosed in the respective notes. The risks associated with these financial instruments include market risk (currency risk, interest rate risk and commodity price risk), credit risk and liquidity risk. The policies on how to mitigate these risks are set out below. The Directors manage and monitor these exposures to ensure appropriate measures are implemented on a timely and effective manner.

#### Market risk

#### (i) Currency risk

The Group's significant operations are in Zambia and DRC and most of its sales and purchases were denominated in US\$, the functional currency of the companies comprising the Group, while certain sales and purchases were settled in currencies (mainly ZMK), Congolese Franc ("CDF") and Renminbi ("RMB") other than the functional currency of these group entities that expose the Group to foreign currency risk.

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## 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Market risk (Continued)

#### (i) Currency risk (Continued)

The carrying amounts of the Group's ZMK, CDF and RMB denominated monetary assets (including financial assets and input VAT receivables) and liabilities (including financial liabilities and tax payables) which expose the Group to foreign currency risk are as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
ZMK denominated monetary assets ZMK denominated monetary liabilities CDF denominated monetary assets CDF denominated monetary liabilities RMB denominated monetary assets RMB denominated monetary liabilities	199,915 (26,408) 17,135 (56,977) 4,605 (2,068)	153,056 (42,815) 10,491 (33,562) 12,246 (1,254)

The Group currently does not have a foreign exchange hedging policy. However, the management of the Group monitors foreign exchange exposure and will consider hedging significant foreign exchange exposure should the need arises.

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## 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Market risk (Continued)

#### (i) Currency risk (Continued)

The sensitivity analysis below has been determined based on the exposure to exchange rates of ZMK, CDF and RMB against US\$. For a 5%, 10%, 15% weakening of ZMK, CDF and RMB against US\$ and all other variables being held constant, there would have no impact on the Group's total equity apart from the retained profits and the effect on the Group's profit after tax are as follows:

0040

0047

	2018 <i>US\$'000</i> Increase/(	2017 US\$'000 [Decrease]
<b>ZMK</b> against <b>US\$</b> Weakening - 5% - 10% - 15%	(7,519) (15,037) (22,556)	(9,523)
<b>CDF against US\$</b> Weakening - 5% - 10% - 15%	1,395 2,788 4,183	806 1,611 2,417
RMB against US\$ Weakening - 5% - 10% - 15%	(122) (243) (365)	(440) (880) (1,320)

For a 5%, 10%, 15% strengthening of ZMK, CDF and RMB against US\$, there would be an equal and opposite impact on the profit after tax.

#### (ii) Interest rate risk

Apart from the fixed rate loan from a fellow subsidiary that expose the Group to fair value interest rate risk, the Group is also exposed to cash flow interest rate risk through the impact of rate changes on interest-bearing financial assets and liabilities, mainly interest-bearing restricted bank balances, bank deposits and balances, and bank and other borrowings at variable interest rates. The Group currently does not have an interest rate hedging policy. However, the Directors will consider hedging significant interest rate risk should the need arise.

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### 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Market risk (Continued)

#### (ii) Interest rate risk (Continued)

The sensitivity analysis below has been determined based on the exposure to variable rate bank and other borrowings at the end of each reporting period and assumed that the amount of liabilities outstanding at the end of each reporting period was outstanding for the whole year. The effect on restricted bank balances, bank deposits and bank balances, however, had been ignored as most of them bore interest at minimal rate at the end of each reporting period.

If interest rates on bank and other borrowings had been 100 basis points ("BPs") change and all other variables were held constant, there would have no impact on the Group's total equity apart from retained profits and the potential effect on profit after tax is as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
(Decrease) increase in profit for the year		
- as the result of increase in interest rate	(3,630)	(4,837)
- as the result of decrease in interest rate	3,630	4,837

#### (iii) Commodity price risk

The Group's commodity price risk is mainly the exposure to fluctuations in the prevailing market price of copper which are the major commodities purchased, produced and sold by the Group. To minimise this risk, the Group enters into copper futures contracts and provisional price arrangement to manage the Group's exposure in relation to forecasted sales of copper products, forecasted purchases of copper concentrates, inventories and firm commitments to sell the Group's copper products.

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### 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Market risk (Continued)

#### (iii) Commodity price risk (Continued)

Financial assets and liabilities of the Group whose fair value change in line with the fluctuations in the prevailing market price of copper mainly comprise copper futures contracts and provisional price arrangements. If all prices of copper futures had been increased by 10% and all other variables were held constant, there would have no impact on the Group's total equity apart from retained profits and the potential effect on profit after tax is as follows:

	2018	2017
	US\$'000	US\$'000
(Decrease) increase in profit after tax for the year	(28,537)	12,016

There would be an equal and opposite impact on the profit after tax for the year where there had been 10% decrease in all prices of copper futures.

#### Credit risk and impairment assessment

The Group's maximum exposure to credit risk in the event of the counterparties failure to perform their obligations at the end of each reporting period in relation to each class of recognised financial assets is the carrying amount of those assets stated in the consolidated statement of financial position.

The Group's credit risk is primarily attributable to its trade receivables at amortised cost, other receivables and finance lease receivables. In order to minimise the credit risk, the Group's management continuously monitors the level of exposure to ensure that follow-up action is taken to recover overdue debts. In addition, the Group performs impairment assessment under ECL model upon application of HKFRS 9 (2017: incurred loss model) on trade receivables at amortised cost (in 2017, trade receivables), other receivables, finance lease receivables, deposits in futures margin accounts, restricted bank balances, bank deposits and bank balances individually. In this regard, the Directors consider that the Group's credit risk is significantly reduced.

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### 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Trade receivables at amortised cost

As at 31 December 2018, included in the Group's trade receivables at amortised cost balance were debtors with aggregate amount of US\$5,863,000 and were assessed for impairment individually. Impairment allowance of US\$2,840,000 were made on these debtors.

The Group has concentration of credit risk as 84% (2017: 91%) of the total trade receivables at amortised cost/trade receivables was due from the Group's two (2017: two) largest customer. The two largest customers accounted for 35% (2017: 70%) of the Group's sales and are large and reputable in the market. They have been trading with the Group with good settlement history.

Other than the above, the Group does not have significant concentration of credit risk.

For trade receivables at amortised cost, the Group has applied the simplified approach in HKFRS 9 to measure the loss allowance at lifetime. The Group determines the expected credit losses on these items individually.

During the year ended 31 December 2018, movement in the loss allowance all of which is relating to credit-impaired trade receivables is as follows:

	2018 <i>US\$'000</i>
1 January	2,921
Impairment losses reversed	(81)
31 December	2,840

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## 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

For all other financial assets including bank balances, restricted bank balances, other receivables and deposits in futures margin account, the Group measures the loss allowance equal to 12-month ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised based on significant increases in the likelihood or risk of a default occurring since initial recognition. The Group has assessed and concluded that the risk of default rate for the aforementioned other financial assets are steady based on the Group's assessment of the financial health of the counterparties, especially the counterparty banks of bank balances and restricted bank balances with good reputation and external public credit ratings. Thus, the Directors considered that the ECL for the aforementioned other financial assets of the Group is insignificant as at December 31, 2018.

The tables below detail the credit risk exposures of the Group's financial assets, which are subject to ECL assessment:

		12-month or	Gross			
2018	Note	lifetime ECL	carrying	amount		
			US\$'000	US\$'000		
Financial assets at amortised costs						
Trade receivables at amortised cost	18	Lifetime ECL	3,023			
	Credit impaired		2,840	5,863		
Other receivables	19	12-month ECL	5,289	5,289		
Deposits in futures margin accounts	19	12-month ECL	22,929	22,929		
Bank balances	20	12-month ECL	505,091	505,091		
Restricted Bank balances	20	12-month ECL	8,720	8,720		
Other item						
Finance lease receivables		12-month ECL	301	301		

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## 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Financial risk management objectives and policies (Continued)

Liquidity risk

The Directors have built an appropriate liquidity risk management framework for the management of the Group's short, medium and long-term funding and liquidity management requirements. The Group manages liquidity risk by maintaining banking facilities and by continuously monitoring forecast and actual cash flows and matching the maturity profiles of its financial assets and liabilities.

The following table details the Group's remaining contractual maturity for its financial liabilities. The table has been drawn up based on the undiscounted cash flows of non-derivative financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. The interest payments are computed using contractual rates or if variable, based on the prevailing market rate at the end of each reporting period. For derivatives settled on a net basis, the table has been drawn up based on undiscounted contractual net cash flows.

	Weighted average interest rate %	On demand or less than 6 months US\$'000	Over 6 months but not more than 1 year US\$'000	1 to 5 years <i>US\$'000</i>	More than 5 years <i>US\$</i> '000	Total undiscounted cash flows <i>US\$</i> *000	Carrying amounts US\$'000
31 December 2018 Non-derivative financial liabilities							
Trade and other payables		155,339	-	-	-	155,339	155,339
Other borrowings at fixed rate	4.0	138,000	-	-	-	138,000	138,000
Bank borrowings at variable							
rate	5.2	140,246	255,867	413,264	-	809,377	924,481
Trade payables designated at							
FVTPL		131,760	-	-	-	131,760	131,760
		565,345	255,867	413,264	-	1,234,476	1,349,580

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## 33. FINANCIAL INSTRUMENTS (CONTINUED)

### Financial risk management objectives and policies (Continued)

Liquidity risk (Continued)

			Over				
	Weighted	On demand	6 months			Total	
	average	or less than	but not more		More than	undiscounted	Carrying
	interest rate	6 months	than 1 year	1 to 5 years	5 years	cash flows	amounts
	%	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
31 December 2017							
Non-derivative financial							
liabilities							
Trade and other payables		293,438	_	_	_	293,438	293,438
Other borrowings							
- fixed rate	4.0	4,948	251,940	-	-	256,888	247,008
- variable rate	3.3	98	1,078	-	-	1,176	1,157
Bank borrowings at variable							
rate	3.8	118,459	125,331	861,730	_	1,105,520	1,021,834
		416,943	378,349	861,730	-	1,657,022	1,563,437
<b>Derivative financial liabilities</b>							
<ul> <li>net settlement</li> </ul>							
Copper future contracts		4,419	-	-	-	4,419	4,419
Embedded derivatives		647		_	_	647	647
		5,066	_	_		5,066	5,066

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## 33. FINANCIAL INSTRUMENTS (CONTINUED)

#### Fair value measurement of financial instruments

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable:

	<b>Level 1</b> <i>US\$'000</i>	<b>Level 2</b> <i>US\$'000</i>	<b>Level 3</b> <i>US\$'000</i>	<b>Total</b> US\$'000
31 December 2018				
Copper future contracts				
(note a)	_	3,413	_	3,413
Trade receivables at FVTPL		3,113		3,113
(note b)	_	138,616	_	138,616
Trade payables designated at		•		·
FVTPL (note b)	-	(131,760)	-	(131,760)
31 December 2017				
Copper future contracts				
(note a)	_	(4,419)	_	(4,419)
Embedded derivatives arising				
from sales under provisional				
pricing arrangement (note b)	-	1,556	-	1,556
Embedded derivatives				
arising from purchases				
under provisional pricing				
arrangement (note b)	-	(647)	-	(647)

#### Notes:

- a. Calculated based on the initial transaction prices and quoted prices in an active market.
- b. Calculated based on the quoted prices in an active market and the estimated grades of copper, gold and silver in Group's copper products.

There were no transfers between Level 1 and 2 in the year.

Except as detailed above, the Directors consider that the carrying amounts of financial assets and financial liabilities recorded at amortised cost recognised in the consolidated financial statements approximate their fair values.

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# 34. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were for future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Bank			
	and other	Interests	Dividends	
	borrowings	payable	payable	Total
	US\$'000	US\$'000	US\$'000	US\$'000
	note 24	note 22	note 22	
At 1 January 2018	1,268,737	1,262	245	1,270,244
Financing cash flows	(263,802)	(1,262)	(25,612)	(290,676)
Interest expenses	57,546	_	_	57,546
Dividends declared	-	-	25,367	25,367
At 31 December 2018	1,062,481	-	-	1,062,481
At 1 January 2017	1,158,487	990	_	1,159,477
Financing cash flows	110,250	(35,831)	(49,801)	24,618
Interest expenses	_	36,103	_	36,103
Dividends declared declared by				
a subsidiary	_	_	50,046	50,046
At 31 December 2017	1,268,737	1,262	245	1,270,244

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### 35. RELATED PARTY TRANSACTIONS

The Company is ultimately controlled by the PRC government and the Group operates in an economic environment currently predominated by entities controlled, jointly controlled or significantly influenced by the PRC government ("government-related entities").

Other than the transactions and balances with related parties disclosed elsewhere in these consolidated financial statements, during the year, the Group had the following significant transactions with related parties:

#### (1) Transactions with government-related entities

(a) Transactions with CNMC and its subsidiaries

		Related parties	2018	2017
	Notes		US\$'000	US\$'000
Sales of:				
<ul> <li>Blister copper</li> </ul>	(i)(iii)	Fellow subsidiaries	374,891	700,098
<ul> <li>Copper cathodes</li> </ul>	(i)(iii)	Fellow subsidiaries	294,222	314,710
<ul><li>Copper anode</li></ul>	(i)(iii)	Fellow subsidiaries	209,133	-
<ul> <li>Sulfuric acid</li> </ul>	(i)	Fellow subsidiaries	13,815	1,717
<ul> <li>Other materials</li> </ul>	(i)	Fellow subsidiaries	1,988	1,420
Services income	(i)	A fellow subsidiary	40	46
Finance income earned under	(i),(ii)	Fellow subsidiaries	69	189
finance leases				
Purchases of:				
<ul> <li>Plant and equipment</li> </ul>	(i)	Fellow subsidiaries	(83,147)	(34,110)
<ul> <li>Copper concentrate</li> </ul>	(i)(iv)	Fellow subsidiaries	(261,918)	(118,218)
<ul><li>– Materials</li></ul>	(i)	Fellow subsidiaries	(51,020)	(19,321)
<ul><li>Electricity</li></ul>	(i)	A fellow subsidiary	(28,544)	(17,413)
<ul><li>Services</li></ul>	(i)	Fellow subsidiaries	(84,052)	(81,087)
<ul> <li>Freight and transportation</li> </ul>	(i)	Fellow subsidiaries	(6,040)	(15,915)
Rental expenses	(i)	A fellow subsidiaries	(5,780)	(6,122)
Guarantee fees	(i)	CNMC	(656)	(1,643)
Interest expenses	(i)	Fellow subsidiaries	(9,729)	(9,745)
	(i)	CNMC	(17)	(31)

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## 35. RELATED PARTY TRANSACTIONS (CONTINUED)

### (1) Transactions with government-related entities (Continued)

(a) Transactions with CNMC and its subsidiaries (Continued)

#### Notes:

- (i) These transactions were conducted in accordance with terms of the relevant agreements.
- (ii) The finance income earned under finance leases arose from the finance leases to fellow subsidiaries.
- (iii) Included in the sales amount of blister copper, copper cathodes and copper anode, losses arising from provisional pricing arrangement are US\$23,004,000, US\$4,150,000 and US\$7,900,000 (2017: US\$38,268,000 (gain), US\$17,290,000 (gain) and nil) respectively.
- (iv) Included in the purchase amount of copper concentrate, gain arising from provisional pricing arrangement is USS\$9,221,000 (2017: US\$7,457,000 (loss)).

In addition to the above, the Group also had the following transactions with CNMC and its subsidiaries:

- CNMC provided guarantees to banks, at nil consideration, for granting unsecured loans to the Group. Further details are set out in note 24.
- On 1 July 2009, a subsidiary of the Company, CCS, entered into an agreement with Fifteen MCC Africa Construction & Trade Ltd. ("Fifteen MCC Africa"), a fellow subsidiary, (the "Fifteen MCC Africa Agreement") pursuant to which that subsidiary agreed to provide certain living quarters to Fifteen MCC Africa on a free of charge basis. Fifteen MCC Africa shall pay for the use of water and electricity and other expenses such as repair and any applicable tax in Zambia. The Fifteen MCC Africa Agreement shall remain for as long as CCS is in existence. As Fifteen MCC Africa provides construction as well as equipment repair and maintenance services to CCS on an ongoing basis, it requires accommodation for its staff based in Zambia.

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## 35. RELATED PARTY TRANSACTIONS (CONTINUED)

### (1) Transactions with government-related entities (Continued)

(b) Transactions with other government-related entities

	Notes	Related parties	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Sales of:				
- Blister copper	(i)(ii)	Subsidiaries of a non-controlling shareholder of a subsidiary	224,100	343,035
<ul> <li>Copper anode</li> </ul>	(i)(ii)	Subsidiaries of a non-controlling shareholder of a subsidiary	109,168	-

#### Notes:

- (i) These transactions were conducted in accordance with terms of the relevant agreements.
- (ii) Included in the sales amount of blister copper and copper anode, losses arising from provisional pricing arrangement are US\$12,390,000 and US\$4,542,000 respectively (2017: US\$17,823,000 (gain) and nil).

In addition to the above, the Group has entered into various transactions, amongst others, including deposit placements, borrowings and other bank facilities, with certain banks and financial institutions which are the PRC government-related entities in its ordinary course of business. In view of the nature of these transactions, the Directors are of the opinion that separate disclosures would not be meaningful.

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## 35. RELATED PARTY TRANSACTIONS (CONTINUED)

#### (2) Transactions with a non-controlling shareholder of a subsidiary

	Note	Related parties	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Purchases of: - Materials	(a)	A subsidiary of a non-controlling shareholder of a subsidiary of the Group	(14,126)	(23,090)

#### Note:

(a) These transactions were conducted in accordance with terms of the relevant agreements.

#### (3) Compensation of key management personnel

The remuneration of directors and other members of key management during the year was as follows:

	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Short-term benefits Post-employment benefits	988 65	852 54
	1,053	906

The remuneration of directors and key executives is determined by remuneration committee having regard to the performance of individuals and market trends.

#### 36. RETIREMENT BENEFIT SCHEMES

The local employees of the Group's subsidiaries in Zambia and DRC are members of the state-managed retirement benefits scheme operated by the Zambia government and DRC government, respectively. The subsidiaries are required to contribute a certain percentage of their payroll to the retirement benefits scheme to fund the benefits. Besides, certain employees of the Group are also members of the state-managed retirement benefits scheme operated by the PRC government. The Group also contributes a certain percentage of their payroll to the retirement benefits scheme to fund the benefits.

The only obligation of the Group with respect to the aforesaid retirement benefits schemes is to make the required contributions under the schemes.

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## 37. PARTICULARS OF SUBSIDIARIES OF THE COMPANY

Details of the subsidiaries directly and indirectly held by the Company at the end of the reporting period are set out below.

	Equity interest attributable to th  Place/Country Issued and fully Company as at 3  of operations of paid-up ordinary December		ble to the as at 31			
Name of company	incorporation	share capital	<b>2018</b> %	2017 %	Principal activities	
CNMH (Note (a))	Ireland	Euro171,152,002	100	100	Investment holding	
CNMHK (Note (a))	Hong Kong	HK\$10,000	70	70	Investment holding	
CNMHKI (Note (a))	Hong Kong	US\$20,000	100	100	Investment holding	
NFCA	Zambia	US\$9,000,001	85	85	Exploration and mining of copper and production of copper concentrates	
CCS	Zambia	US\$2,000	60	60	Production and sale of blister copper, copper anode, copercobalt alloy and sulfuric acid	
SML	Zambia	US\$1,000	67.75	67.75	Production and sale of copper cathodes	
Luanshya	Zambia	US\$10,000,001	80	80	Exploration and mining of copper and production of copper concentrates and copper cathode	
Huachin Metal Leach SA <i>(Note (c))</i>	DRC	US\$10,000,000	43.75	43.75	Production and sale of copper cathodes	

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## 37. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

**Equity interest** 

	Place/Country of operations of	Issued and fully paid-up ordinary	attributable to the Company as at 31 December		
Name of company	incorporation	share capital	<b>2018</b> %	2017 %	Principal activities
CNMC Huachin Mabende Mining SA ("CHM") (Note (c))	DRC	US\$9,000,000	42	42	Production and sale of copper cathodes
Green Home Farm Limited	Zambia	ZMK5,000,000	85	85	Farming
CCS Chinda Trade & Investment SARL	DRC	US\$2,000	60	60	Sale of sulfuric acid
Sylver Back Resources SARL ("SBR") (Note (b))	DRC	CDF717,005,314	39.9	39.9	Exploration and mining of copper
Lualaba Copper Smelter SAS ("LCS") (Note (d), (e))	DRC	US\$2,000	57	60	Production and sale of blister copper and sulfuric acid
Kambove Mining SAS ("KM") (Note (d))	DRC	CDF14,000	55	55	Exploration and mining of copper and production of copper concentrates
Kingsail Limited ("KL") (Note (d))	Hong Kong	HKD10,000	60	-	Sale of copper cathodes and copper concentrates

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# 37. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

#### Notes:

- (a) The ordinary share capital of these companies is directly held by the Company.
- (b) CHM acquired SBR on 20 November 2015 and 95% of the issued and paid-up ordinary share capital of SBR is directly held and controlled by CHM.
- (c) 62.5% and 60% of the issued and paid-up ordinary share capital of Huachin Metal Leach SA and CHM, respectively, are directly held and controlled by CNMHK.
- (d) 57%, 55% and 60% of the issued and paid-up ordinary share capital of LCS, KM and KL, respectively, are directly held and controlled by CNMHKI.
- (e) On 13 April 2018, LCS received capital contributions of US\$37,860,000 and US\$56,790,000 from non-controlling shareholder and CNMHKI respectively, which were credited to share premium account. According to Article 71 of Mines Act 007/2002 published on 11 July 2002 and Article 144 of Mines Act 68/2003 published on 26 March 2003, 5% non-diluted equity interest of share capital of LCS was required to be transferred to DRC government. In 2018, CNMHKI and the non-controlling shareholder transferred 3% and 2% equity interest of LCS to the DRC government at no consideration respectively, and the paid-up ordinary share capital held and controlled by CNMHKI changed from 60% to 57%.

#### Details of non-wholly owned subsidiaries that have material non-controlling interests

The table below shows details of non-wholly-owned subsidiaries of the Group that have material non-controlling interests:

	Place/Country of operations and Principal place of	Proportion of ownership interests and voting rights held interests by non-controlling interests		Profit allocated to non-controlling interests		Accumulated non-controlling interests	
Name of company	activities	<b>2018</b> %	2017 <i>%</i>	2018	2017	2018	2017
CCS CHM	Zambia DRC	40 58	40 58	45,953 29,317	42,522 26,845	211,454 73,817	165,501 50,300
Subsidiaries with individually immaterial non-controlling interests						103,102	37,208
						388,373	253,009

Summarised financial information in respect of each of the Group's subsidiaries that has material non-controlling interests is set out below. The summarised financial information below represents amounts before intragroup eliminations.

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# 37. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

ccs	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Current assets	682,016	610,297
Non-current assets	179,257	192,718
Current liabilities	(298,546)	(268,184)
Non-current liabilities	(34,090)	(121,076)
Equity attributable to owners of the Company	317,183	248,254
Non-controlling interests	211,454	165,501
Revenue	1,505,310	1,427,239
Expenses	(1,390,428)	(1,320,932)
Profit and total comprehensive income for the year	114,882	106,307
Profit and total comprehensive income attributable to owners of the Company	68,929	63,785
Profit and total comprehensive income attributable to the non- controlling interests	45,953	42,522
Dividends paid to the non-controlling interests	_	48,000
Net cash (outflow) inflow from operating activities	(8,717)	31,873
Net cash outflow from investing activities	(7,733)	(11,500)
Net cash outflow from financing activities	(46,000)	(143,000)
Effect of foreign exchange rate changes	(40)	615
Net cash outflow	(62,490)	(122,012)

FOR THE YEAR ENDED 31 DECEMBER 2018

# 37. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

СНМ	2018 <i>US\$'000</i>	2017 <i>US\$'000</i>
Current assets	127,810	90,891
Non-current assets	63,474	64,938
Current liabilities	(56,450)	(59,871)
Non-current liabilities	(7,564)	(9,234)
Equity attributable to owners of the Company	53,453	36,424
Non-controlling interests	73,817	50,300
Revenue	224,335	169,114
Expenses	(173,789)	(122,830)
Profit and total comprehensive income for the year	50,546	46,284
Profit and total comprehensive income attributable to owners of the Company	21,229	19,439
Profit and total comprehensive income attributable to the non- controlling interests	29,317	26,845
Dividends paid to the non-controlling interests	4,000	_
Net cash inflow from operating activities	24,838	18,590
Net cash outflow from investing activities	(12,928)	(3,640)
Net cash outflow from financing activities	(4,000)	(20)
Effect of foreign exchange rate changes	(16)	32
Net cash inflow	7,894	14,962

FOR THE YEAR ENDED 31 DECEMBER 2018

# 38. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	2018	2017
	US\$'000	US\$'000
ASSETS		
Non-current Assets		
Equipment	50	35
Investment in subsidiaries	272,085	215,295
Receivable from a subsidiary	94,285	90,659
Loans to subsidiaries	215,103	162,250
	581,523	468,239
Current Assets		
Other receivables	116	85
Loans to subsidiaries	-	14,000
Due from subsidiaries	2,175	10,811
Bank balances and cash	246,398	293,187
	248,689	318,083
Total Assets	830,212	786,322

FOR THE YEAR ENDED 31 DECEMBER 2018

# 38. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

	2018	2017
	US\$'000	US\$'000
EQUITY AND LIABILITIES		
Capital and Reserves		
Share capital	613,233	613,233
Retained profits	70,691	81,561
Table Surface	000.004	004.704
Total Equity	683,924	694,794
Non-Current Liabilities		
Bank and other borrowings		
- due after one year	59,213	73,103
- due arter one year	39,213	70,100
Current Liabilities		
Accrued expenses	1,186	1,277
Amount due to a subsidiary	72,000	-
Bank and other borrowings		
- due within one year	13,889	17,148
	07.075	10.405
	87,075	18,425
Total Liabilities	146,288	91,528
		01,020
Total Equity and Liabilities	830,212	786,322

The Company's statement of financial position was approved and authorised for issue by the board of directors on 29 March 2019 and is signed on its behalf by:

Tongzhou Wang

DIRECTOR

**Lin Zhang** *DIRECTOR* 

FOR THE YEAR ENDED 31 DECEMBER 2018

## 38. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE **COMPANY (CONTINUED)**

### Movements in reserve of the Company

	Retained profits
	US\$'000
At 31 December 2016	72,928
Profit and total comprehensive income for the year	8,633
At 31 December 2017	81,561
Profit and total comprehensive income for the year	10,497
Dividend	(21,367)
At 31 December 2018	70,691

# **FIVE YEAR FINANCIAL SUMMARY**

A summary of selected items of the results and of the assets, liabilities and non-controlling interests of the Group for the last five financial years, as extracted from the published audited financial statements and the Prospectus, is set out below.

### **RESULTS**

	Year ended 31 December				
	2018	2017	2016	2015	2014
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Revenue	2,053,320	1,838,731	1,313,291	1,189,164	1,941,973
Gross profit	500,532	431,948	199,913	125,609	302,587
Profit (loss) before tax	323,861	319,227	69,097	(351,561)	169,493
Net profit (loss)	243,978	233,859	45,447	(313,509)	229,643
Profit (loss) attributable to owners of					
the Company	146,260	142,428	11,832	(279,902)	146,821

# ASSETS, LIABILITIES, NON-CONTROLLING INTERESTS AND EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY

		At 31 December			
	2018	2017	2016	2015	2014
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Non-current assets	1,435,165	1,102,193	998,240	994,191	1,246,060
Current assets	1,397,840	1,701,004	1,431,501	1,175,076	1,230,082
Total assets	2,833,005	2,803,197	2,429,741	2,169,267	2,476,142
	/ /				
Current liabilities	922,332	860,445	403,428	610,669	591,124
	1 1		A		
Net current assets	475,508	840,559	1,028,073	564,407	638,958
				MAST	
Non-current liabilities	614,118	902,668	1,182,667	771,127	762,164
	AHAVIVI	77.55			
Equity attributable to owners of		4度級			
the Company	908,182	787,075	644,647	632,815	922,591
Non-controlling interests	388,373	253,009	198,999	154,656	200,263

# **DEFINITIONS**

In this annual report, unless the context otherwise requires, the following words and expressions shall have the following meanings.

"AGM" the annual general meeting of the Company

"Articles of Association" or

"Articles"

the articles of association of the Company that were adopted on 27

April 2012

"associate(s)" has the meaning ascribed thereto under the Listing Rules

"Audit Committee" the audit committee of the Board

"Board of Directors" or "Board" the board of directors of the Company

"BVI" the British Virgin Islands

"CCS" Chambishi Copper Smelter Limited (謙比希銅冶煉有限公司\*), a

company incorporated in Zambia on 19 July 2006 and a subsidiary of

the Company

"CG Code" or "Corporate

Governance Code"

code provisions set out in the Corporate Governance Code and Corporate Governance Report contained in Appendix 14 of the Listing

Rules

"Chambishi Leach Plant" the copper leaching plant located in the Copperbelt province in Zambia

held by SML and where SML undertakes its leaching operations

"China" or "PRC" the People's Republic of China. For the purpose of this report and for

geographical reference only and except where the context requires, references to "China" and the "PRC" do not include Taiwan, the Macau Special Administrative Region and Hong Kong Special Administrative

Region

"CNMC" China Nonferrous Metal Mining (Group) Co., Ltd\* (中國有色礦業集團

有限公司), a state-owned enterprise incorporated under the laws of the PRC in 1997 with operating history dating back to 1983, directly administered by SASAC, and the ultimate controlling shareholder of the

Company

"CNMC Guarantee Fees Framework

Agreement"

the framework agreement dated 18 November 2014 entered into between the Company and CNMC in relation to the reimbursement of

guarantee fees paid by CNMC to third party financial institutions

"CNMC Huachin Mabende"

CNMC Huachin Mabende Mining SA (中色華鑫馬本德礦業股份有限公司\*) (formerly known as "CNMC Mabende SPRL" (中色馬本德礦業有限公司\*), a joint venture established in the DRC on 9 November 2012 by SML and Huachin SPRL, an associate of the Group

"CNMD"

China Nonferrous Mining Development Limited (中色礦業發展有限公司\*), an investment holding company incorporated under the laws of the BVI on 12 July 2011, a wholly-owned subsidiary of CNMC and the controlling shareholder of the Company

"CNMH"

China Nonferrous Mining Holdings Limited (中色礦業控股有限公司\*), an investment holding company incorporated under the laws of the Republic of Ireland on 23 September 2011 and a wholly-owned subsidiary of the Company

"CNMHK"

China Nonferrous Mining Hong Kong Holdings Limited (中色礦業香港 控股有限公司), an investment holding company incorporated in Hong Kong on 6 October 2015 with limited liability under the Companies Ordinance, a directly controlling subsidiary of the Company

"CNMHKI"

China Nonferrous Mining Hong Kong Investment Limited (中色礦業香港投資有限公司), an investment holding company incorporated in Hong Kong on 2 December 2016 with limited liability under the Companies Ordinance, a directly controlling subsidiary of the Company

"Companies Ordinance"

the Companies Ordinance of Hong Kong (Chapter 622 of the laws of Hong Kong), as amended, supplemented or otherwise modified from time to time

"Company", "we", "us" or "our"

China Nonferrous Mining Corporation Limited (中國有色礦業有限公司), a company incorporated in Hong Kong on 18 July 2011 with limited liability under the Companies Ordinance and, except where the context otherwise requires, all of its subsidiaries or where the context refers to any time prior to its incorporation, the business which its predecessors or the predecessors of its present subsidiaries were engaged in and which were subsequently assumed by it

"Compliance Committee"

the compliance committee of the Board

"connected person(s)"

has the meaning ascribed thereto in the Listing Rules

"connected transaction(s)" has the meaning ascribed thereto in the Listing Rules

"controlling shareholder" has the meaning ascribed thereto under the Listing Rules

"Deed of Non-Competition a deed of non-competition undertaking dated 14 May 2012 entered into Undertaking" between CNMC and the Company under which CNMC has given us

outside the PRC

"Director(s)" director(s) of the Company

"DRC" the Democratic Republic of the Congo

"Fifteen MCC Africa" Fifteen MCC Africa Construction & Trade Ltd (中國十五冶非洲建築貿易

公司\*), a company incorporated under the laws of Zambia on 24 May

certain undertakings in respect of the conduct of certain of its activities

2007 and a fellow subsidiary of CNMC

"Global Offering" the offering of the Shares of the Company for subscription by the public

in Hong Kong and purchase by institutional and professional investors as

described in the Prospectus

"Group", "we" or "us" the Company and its subsidiaries or any of them, or where the context

so requires, in respect of the period before the Company became the holding company of its present subsidiaries, the present subsidiaries of

the Company

"HK\$"or "Hong Kong dollar(s)" Hong Kong dollars, the lawful currency for the time being of Hong Kong

"HKFRS" Hong Kong Financial Reporting Standard, as issued by the Hong Kong

Institute of Certified Public Accountants

"Hong Kong" or "HK" the Hong Kong Special Administrative Region of the People's Republic

of China

"Hong Kong Stock Exchange"

The Stock Exchange of Hong Kong Limited



Football game of staff

"Hong Kong Zhongfei" Hong Kong Zhongfei Mining Investment Limited (香港中非礦業投資有

限公司), a company incorporated under the Companies Ordinance in Hong Kong in January 2014 holding 30% of SML and 30% of CNMHK

"Huachin Leach" Huachin Metal Leach SA (中色華鑫濕法冶煉股份有限公司\*), a company

incorporated under the laws of the DRC on 17 December 2010 and a

subsidiary of SML

"Independent Shareholders" Shareholders other than CNMD and its associates

"JORC" the Australasian Joint Ore Reserves Committee

"JORC Code" the Australasian Code for Reporting of Exploration Results, Mineral

Resources and Ore Reserves

"Kambove Mining" Kambove Mining SAS (剛波夫礦業簡易股份有限公司\*), a company

established in DRC and a subsidiary of the Company

"Kingsail" Kingsail Limited (香港鑫晟有限公司), a company incorporated in Hong

Kong on 9 October 2018 with limited liability under the Companies

Ordinance, a subsidiary of the Company

"LIBOR" London Interbank Offer Rate

"Listing" the listing of the Shares on the Main Board of the Hong Kong Stock

Exchange on 29 June 2012

"Listing Rules" The Rules Governing the Listing of Securities on The Stock Exchange of

Hong Kong Limited, as amended from time to time

"Lualaba Copper Smelter" Lualaba Copper Smelter SAS (盧阿拉巴銅冶煉股份有限公司\*), a

company established in DRC and a subsidiary of the Company

"Luanshya" CNMC Luanshya Copper Mines PLC (中色盧安夏銅業有限公司\*),

formerly Luanshya Copper Mines PLC, a company incorporated in

Zambia on 10 July 2003 and a subsidiary of the Company

"Mabende Mining" Mabende Mining SARL (馬本德礦業有限責任公司\*) (formerly known as

Mabende Mining SPRL (馬本德礦業有限公司\*)), a company incorporated

under the laws of the DRC

"Mabende Project" the project undertaken by CNMHK through CNMC Huachin Mabende to

construct and operate a leaching plant in the DRC

"Main Board" the Main Board of the Hong Kong Stock Exchange

"Model Code" the Model Code for Securities Transactions by Directors of Listed Issuers

set out in Appendix 10 of the Listing Rules

"Muliashi Project" an integrated project involving the mining and leaching of copper oxide

ores undertaken by Luanshya, including the Muliashi North Mine, the

Muliashi Leach Plant and the planned Baluba East Mine

"NFCA" NFC Africa Mining PLC (中色非洲礦業有限公司\*), a company

incorporated in Zambia on 5 March 1998, and a subsidiary of the

Company

"Nomination Committee" the nomination committee of the Board

"Non-Competition Undertaking" the non-competition undertaking set out in the Deed of Non-

Competition Undertaking

"PRC government" or "State" the government of the PRC, including all governmental subdivisions

(including provincial, municipal and other regional or local government

entities)

"Properties Leasing Framework

Agreement"

the properties leasing framework agreement dated 18 November 2014

entered into between the Company and CNMC

"Prospectus" the prospectus dated 20 June 2012 issued by the Company in

connection with the Global Offering and the Listing

"Remuneration Committee" the remuneration committee of the Board

"Renminbi" or "RMB" Renminbi yuan, the lawful currency for the time being of the PRC

"Retained Group" CNMC and its subsidiaries (excluding the Group)

"SFO" the Securities and Futures Ordinance of Hong Kong (Chapter 571 of the

Laws of Hong Kong), as amended, supplemented or otherwise modified

from time to time

"Share(s)" ordinary share(s) in the share capital of the Company

"Shareholder(s)" holder(s) of the Shares of the Company

"SML" Sino-Metals Leach Zambia Limited (贊比亞謙比希濕法冶煉有限公司\*), a

company incorporated under the laws of Zambia on 3 December 2004

and a subsidiary of the Company

"subsidiary" or "subsidiaries" has the meaning ascribed thereto in section 2 of the Companies

Ordinance

"substantial shareholder" has the meaning ascribed thereto in the Listing Rules

"United States" the United States of America, its territories, its possessions and all

areas subject to its jurisdiction

"US ¢" or "US cent(s)" United States cents, the lawful currency for the time being of the United

States

"US\$", "USD" or "US dollar(s)" United States dollars, the lawful currency for the time being of the

United States

"VAT" value-added tax; all amounts are exclusive of VAT in this report except

indicated otherwise

"Year" year ended 31 December 2018

"YH Metal" Yunnan & Hongkong Metal Company Limited (雲港金屬有限公司), a

company established in Hong Kong with limited liability and a wholly-

owned subsidiary of Yunnan Copper Group

"Yunnan Copper" Yunnan Copper Industry Co., Ltd\* (雲南銅業股份有限公司), a company

incorporated under the laws of the PRC on 15 May 1998 and a

subsidiary of Yunnan Copper Group

Yunnan Copper Industry (Group) Co., Ltd.\* (雲南銅業(集團)有限公司), a "Yunnan Copper Group"

company incorporated under the laws of the PRC in April 1996 holding

40% of the issued share capital of CCS

"Zambia" the Republic of Zambia

"ZCCM" Zambia Consolidated Copper Mines Limited, a company incorporated in

Zambia in 1982 and succeeded by ZCCM-IH

"ZCCM-IH" Zambia Consolidated Copper Mines Investments Holdings Plc, the

successor company to ZCCM, majority owned by the Government of

Zambia

"ZMK" Zambian Kwacha, the lawful currency for the time being of Zambia



Staff of CCS playing games with children in an orphanage

<sup>\*</sup> Translation of English or Chinese terms for reference purposes only.

