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: 01258

2021 ANNUAL REPORT

CONTENTS

General View of NFCA Southeast Mine

CORPORATE INFORMATION

REGISTERED OFFICE

Unit 1303, 13/F, Austin Tower
22–26 Austin Avenue
Tsimshatsui
Kowloon, Hong Kong

PRINCIPAL PLACE OF BUSINESS IN ZAMBIA

32 Enos Chomba Road
Kitwe, Zambia

PRINCIPAL PLACE OF BUSINESS IN THE DRC

Lubumbashi
Katanga Province
Congo (DRC)

COMPANY'S WEBSITE

www.cnmcl.net

STOCK CODE

01258

DIRECTORS

Executive Directors

Mr. Jinjun Zhang *(Chairman and President)*
(appointed as Chairman on 8 January 2021)
Mr. Chunlai Wang
(resigned as Vice President on 30 July 2021,
resigned as Executive Director on 11 April 2022)
Mr. Xiaowei Wang
(resigned on 27 May 2021)

Non-Executive Director

Mr. Yaoyu Tan
(appointed on 27 May 2021)

Independent Non-Executive Directors

Mr. Dingfan Qiu
(appointed on 30 July 2021)
Mr. Jingwei Liu
Mr. Huanfei Guan
Mr. Chuanyao Sun
(resigned on 30 July 2021)

Kambove Mining Leach Plant

THE COMMITTEES OF THE BOARD

Audit Committee

Mr. Jingwei Liu *(Chairman)*
Mr. Yaoyu Tan
(appointed on 30 July 2021)
Mr. Huanfei Guan
Mr. Chuanyao Sun
(resigned on 30 July 2021)

Nomination Committee

Mr. Dingfan Qiu *(Chairman)*
(appointed on 30 July 2021)
Mr. Jinjun Zhang
Mr. Jingwei Liu
Mr. Chuanyao Sun *(Chairman)*
(resigned on 30 July 2021)

Remuneration Committee

Mr. Huanfei Guan *(Chairman)*
Mr. Jinjun Zhang
Mr. Dingfan Qiu
(appointed on 30 July 2021)
Mr. Chuanyao Sun
(resigned on 30 July 2021)

Compliance Committee

Mr. Jinjun Zhang *(Chairman)*
Mr. Dingfan Qiu
(appointed on 30 July 2021)
Mr. Huanfei Guan
Mr. Chuanyao Sun
(resigned on 30 July 2021)

JOINT COMPANY SECRETARIES

Mr. Chaoran Zhu (appointed on 7 March 2022)
Mr. Dayong Yang (resigned on 7 March 2022)
Ms. Man Yi Wong

LEGAL ADVISER

Fangda Partners
26/F., One Exchange Square
8 Connaught Place
Central
Hong Kong

AUDITOR

Deloitte Touche Tohmatsu
Certified Public Accountants and Registered PIE Auditor
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 of the Board
and President
Jinjun Zhang

Dear Shareholders,

China Nonferrous Mining Corporation Limited (hereinafter referred to as the "Group" or the "Company") is an important listed enterprise of China Nonferrous Mining Hong Kong Holdings Limited (hereinafter referred to as the "Holding Group"). Since the end of last century, the company has built a number of mines and smelters in Zambia and the DRC with the cooperation concept of "mutual benefit and win-win, common development", which has become a valuable achievement in the implementation of China's "Belt and Road Initiative" and "Go Global" initiatives, and also the most profitable core assets of the holding group. "The year 2021 is the opening year of the 14th Five-Year Plan, and the Group's vision is to "build a world class mining enterprise with global competitiveness". With the vision of "becoming a world class mining enterprise with global competitiveness", the Group has put forward the "1+4" development strategy, and insisted on the strategic goal of expanding resources and optimizing the listed company, which has provided strong support for the Group's development.

In the past year, the COVID-19 pandemic was still rampant and the global economy and living were yet to be back on track. However, the Group coordinated the pandemic prevention and control with production and operation, made scientific decisions, deployed in an orderly manner, rose to the challenge and strived for strength in adversity, and hit a record high in major economic indicators. At the same time, the high international copper price, influenced by multiple factors such as rising demand for materials from the global new energy industry and loose monetary policies and fiscal stimulus measures in major economic entities around the world, also provided strong support to the Company's results. The Group sold 333,499 tonnes of the blister copper and copper cathodes, representing an increase of 15.6% year-on-year; 765,565 tonnes of external sales of sulphuric acid, representing an increase of 43.4% year-on-year; and 114,521 tonnes of copper cathodes, representing a decrease of 2.5% year-on-year and 363 tonnes of cobalt contained in cobalt hydroxides, representing an increase of 153.8% year-on-year in 2021.The Group recorded revenue of US$4,050.6 million, representing an increase of 56.0% year-on-year; achieved net profit of the Company of US$515.4 million, representing an increase of 161.7% year-on-year; earnings per share were US¢9.78, representing an increase of US 6.20. In the capital market, the Group successfully raised HK$985 million through accelerated bookbuilding in May last year, which effectively improved the equity and capital structure of the Company and kick-started the stock liquidity, helping the Group successfully enter the "Hong Kong Stock Connect" in March this year. This is the market's recognition of the Company and will certainly attract more investors to pay attention to the Company's development and growth. Only through hardship can we show our courage and perseverance, and only through hard work can we achieve success! I would like to take this opportunity to pay my respects to the management as well as domestic and foreign employees for their great efforts and outstanding contributions to the reform and development of the Group and extend my heartfelt gratitude to all shareholders for their care, support and help to the operation and management and the reform and development of the Group over a long period!

In 2022, the international situation will become more complex, with more instability and uncertainties. Geopolitical conflicts will bring great challenges to the global security environment; continuous changes in fiscal, monetary and exchange rate policies of major economic entities will also stimulate sharp fluctuations in commodity prices; rising costs of logistics, electricity and manpower will also add uncontrollable factors to the production and sales chain. In the foreseeable future, the Group will continue to encounter many challenges in its development. However, we also note that as the latest variant of the COVID-19 pandemic is less virulent, the impact of the pandemic on the world's economy and society will gradually decrease; the slow recovery of the global economy will bring more stable support to the long-term copper demand. The rapid development of the "green" industry will bring more application and marginal increment for copper and cobalt; although, with the successive commissioning of some mines under construction, the output on the supply side will increase, from a global perspective, the supply and demand of copper metal will continue to be in a tight balance, which will have a stabilizing effect on the current international copper price. The road ahead is long and the opportunities are always greater than the challenges.

The Group will always stick to the central theme of quality development and unswervingly push forward various reforms to stimulate potential and vitality. The Group will further expand the copper and cobalt resources reserves by strengthening geological exploration, external merger and acquisition, etc.; accelerate the pace of scientific and technological research and dig benefits from technological innovation; strengthen the construction of compliance and risk control system, and continuously improve the level of corporate governance.

The Group will continue to implement the development vision of "innovation, coordination, eco-friendliness, openness, sharing". We also pay high attention to the safety of production, environmental protection and the sustainable use of resources, strictly abide by all laws and regulations of the host country and protect the rights and interests of Chinese and foreign employees and properly handle concerns of stakeholders such as suppliers and communities, so as to pursue win-win cooperation and harmonious development.

There will be a time to get through hardship and achieve aspirations. The Group will take up the responsibility with courage and dedication, and join hands with all shareholders and investors to move forward together.

Jinjun Zhang
Chairman of the Board and President
China Nonferrous Mining Corporation Limited

Beijing, 30 March 2022

RESULTS HIGHLIGHTS

OPERATING RESULTS

In 2021, the Group recorded revenue of US$4,050.6 million, representing an increase of US$1,453.4 million from US$2,597.2 million in 2020. In 2021, the Group recorded profit attributable to owners of the Company of US$357.1 million, increased by US$232.1 million from US$125.0 million in 2020.

CHANGES IN PRODUCT OUTPUT

In 2021, the Group accumulatively produced 124,327 tonnes of copper cathodes, representing an increase of 7.3% year-on-year; 324,501 tonnes of blister copper and copper anodes, representing an increase of 26.2% year-on-year; 602 tonnes of cobalt contained in cobalt hydroxides, representing an increase of 215.2% year-on-year; 1,041,490 tonnes of sulphuric acid, representing an increase of 31.3% year-on-year; 26,002 tonnes liquid sulphur dioxide, representing an increase of 52.0% year-on-year; and the processed copper products by the Group amounted to 58,615 tonnes, representing an increase of 114.0% year-on-year.

STEADY PROGRESS IN PROJECT DEVELOPMENT

The Strip Mine Project at the Extended Section of Roan of Luanshya has a designated capacity of one million tonnes of quality oxide copper mine per annum and an output of 20,000 tonnes of copper cathodes. The Extend Section of East Roan started the construction and stripping work in September 2021.

The Integrated Exploration and Construction Project of Kambove Mining has a planned annual production capacity of 28,000 tonnes of copper cathodes and 978 tonnes of cobalt contained in crude cobaltous hydroxide. The project has completed the construction and been put into produce in the third quarter of 2021.

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 ended 31 December							
	2021				2020			
	Sales Volume [1] **(Tonnes)**	**Average Selling Price** ***(US$ per tonne)***	**Revenue** ***(US$'000)***	**Percentage of Total Revenue** ***(%)***	Sales Volume [1] *(Tonnes)*	Average Selling Price *(US$ per tonne)*	Revenue *(US$'000)*	Percentage of Total Revenue *(%)*
Blister copper and copper anodes	**333,499**	**8,667**	**2,890,597**	**71.4**	288,492	6,176	1,781,780	68.6
Copper cathodes	**114,521**	**8,334**	**954,423**	**23.6**	117,457	5,644	662,897	25.5
Cobalt contained in cobalt hydroxide	**363**	**40,193**	**14,584**	**0.3**	143	21,035	3,008	0.1
Sulphuric acid	**765,565**	**172**	**132,023**	**3.2**	534,004	220	117,689	4.5
Liquid sulphur dioxide	**25,833**	**871**	**22,498**	**0.6**	17,038	917	15,629	0.6
Copper products processing services[2]	**58,615**	**622**	**36,463**	**0.9**	27,389	592	16,210	0.7
Total			**4,050,588**	**100.0**			2,597,213	100.0

Notes: (1) The sales volumes of blister copper and copper anodes, copper cathodes are on a contained-copper basis.

(2) The copper products processing services refer to the processing and production of copper products by the Group's smelters as entrusted by the external enterprises and the Group receives processing fees from these enterprises.

Revenue

The revenue of the Group increased by 56.0% from US$2,597.2 million in 2020 to US$4,050.6 million in 2021. In 2021, the Group's revenue generated from blister copper and copper anodes, copper cathodes and sulphuric acid accounted for 71.4%, 23.6% and 3.2%, respectively, of the total revenue.

The revenue from blister copper and copper anodes increased by 62.2% from US$1,781.8 million in 2020 to US$2,890.6 million in 2021, mainly due to the increase in global copper prices and the increase in sales volume.

The revenue from copper cathodes increased by 44.0% from US$662.9 million in 2020 to US$954.4 million in 2021, mainly due to the increase in global copper price, as compared with the same period last year.

The revenue from sulphuric acid increased by 12.1% from US$117.7 million in 2020 to US$132.0 million in 2021, mainly attributed to the significant increase in sales volume as compared with the same period last year.

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							
	2021				2020			
	Cost of sales	**Unit cost of sales**	**Gross profit**	**Gross profit margin**	Cost of sales	Unit cost of sales	Gross profit	Gross profit margin
	(US$'000)	***(US$ per tonne)***	***(US$'000)***	***(%)***	*(US$'000)*	*(US$ per tonne)*	*(US$'000)*	*(%)*
Blister copper and copper anodes	**2,363,683**	**7,088**	**526,914**	**18.2**	1,532,466	5,312	249,314	14.0
Copper cathodes	**522,953**	**4,566**	**431,470**	**45.2**	389,676	3,318	273,221	41.2
Cobaltous hydroxide	**4,919**	**13,557**	**9,665**	**66.3**	2,558	17,888	450	15.0
Sulphuric acid	**39,926**	**52**	**92,097**	**69.8**	27,400	51	90,289	76.7
Liquid sulphur dioxide	**4,320**	**167**	**18,178**	**80.8**	1,734	102	13,895	88.9
Copper products processing services *Note*	**29,752**	**508**	**6,711**	**18.4**	13,937	509	2,273	14.0
Total	**2,965,553**		**1,085,035**	**26.8**	1,967,771		629,442	24.2

Note: The copper products processing services refer to the processing and production of copper products by the Group's smelters as entrusted by the external enterprises and the Group receives processing fees from these enterprises.

The cost of sales of the Group increased by 50.7% from US$1,967.8 million in 2020 to US$2,965.6 million in 2021, primarily due to the increase in the volume of sales as compared with the same period last year, and higher international copper prices led to higher raw material costs for copper concentrate and oxide ore.

The cost of sales in respect of blister copper and copper anodes increased by 54.2% from US$1,532.5 million in 2020 to US$2,363.7 million in 2021, primarily due to the increase in the volume of crude copper and copper anode sales as compared with the same period last year, higher raw material costs for copper concentrates due to higher global copper prices.

The cost of sales in respect of copper cathodes increased by 34.2% from US$389.7 million in 2020 to US$523.0 million in 2021, primarily due to the increase in the cost of raw materials for oxide ore due to higher international copper prices.

The cost of sales in respect of sulphuric acid increased by 45.6% from US$27.4 million in 2020 to US$39.9 million in 2021, primarily due to the increase in sales volume and unit sale costs as compared with the same period last year.

Gross profit and gross profit margin

The Group recorded a gross profit of US$1,085.0 million in 2021, representing an increase of 72.4% from US$629.4 million in 2020. The gross profit margin increased from 24.2% in 2020 to 26.8% in 2021. In particular:

The gross profit margin of blister copper and copper anodes increased from 14.0% in 2020 to 18.2% in 2021, primarily attributable to the increase in global copper price as compared with the same period last year.

The gross profit margin of copper cathodes increased from 41.2% in 2020 to 45.2% in 2021, mainly due to the increase in the global copper price as compared with the same period last year.

The gross profit margin of sulphuric acid decreased from 76.7% in 2020 to 69.8% in 2021, primarily due to the decrease in unit sale price as compared with the same period last year.

Distribution and selling expenses

The distribution and selling expenses of the Group amounted to US$82.3 million in 2021, representing an increase of 21.2% from US$67.9 million in 2020, primarily due to the higher freight costs and clearance fee due to increased product sales as compared with the same period last year.

Administrative expenses

The administrative expenses of the Group increased by 34.3% from US$91.5 million in 2020 to US$122.9 million in 2021, primarily due to the expanding scale of production of the Group.

Finance costs

The finance costs of the Group was US$37.3 million in 2021, basically unchanged as compared with the same period last year.

Other gains and losses

Other gains and losses of the Group decreased by US$87.2 million from a net loss of US$122.9 million in 2020 to a net loss of US$35.7 million in 2021, mainly due to the decrease in exchange loss and loss on change in fair valve of financial instruments as compared with the same period last year.

Income tax expense

The income tax expenses of the Group increased by US$178.7 million from US$112.9 million in 2020 to an expense of US$291.6 million in 2021, mainly due to the significant increase in total profit as compared with the same period last year.

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 185.7% from US$125.0 million in 2020 to a profit of US$357.1 million in 2021. 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 4.8% in 2020 and 8.8% in 2021, respectively.

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	
	2021	2020
	US$'000	*US$'000*
Net cash from operating activities	**536,383**	482,454
Net cash used in investing activities	**(204,393)**	(210,330)
Net cash used in financing activities	**(225,050)**	(249,941)
Net increase in cash and cash equivalents	**106,940**	22,183
Cash and cash equivalents at 1 January	**497,829**	481,210
Effect of foreign exchange rate changes on the balance of cash held in foreign currencies	**1,977**	(5,564)
Cash and cash equivalents at 31 December		
Represented by:		
Bank balances and cash	**606,746**	497,829

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 the purchase of raw materials and various operating expenses. Net cash flows generated from the operating activities of the Group increased by 11.2% from an inflow of US$482.5 million in 2020 to an inflow of US$536.4 million in 2021, primarily attributable to the year-on-year profit increase.

Net cash flows used in investing activities

Cash outflows used in investing activities are mainly for the purchase and construction of properties, plants and equipment for copper production. The net cash flows used in investing activities of the Group amounted to US$204.4 million in 2021, basically flat with an outflow of US$210.3 million in 2020.

Net cash flows used in 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 used in financing activities of the Group decreased by US$24.8 million from an outflow of US$249.9 million in 2020 to an outflow of US$225.1 million in 2021, primarily due to additional stock issuance in 2021 resulting in increased capital raised as compared with the same period last year.

Bank balances and cash

The Group's bank balances and cash (including cash, time deposits and demand deposits) increased by US$108.9 million from US$497.8 million as at 31 December 2020 to US$606.7 million as at 31 December 2021.

Trade receivables at amortised cost/Trade receivables at FVTPL

As at 31 December 2021, the Group recorded trade receivables at amortised cost of US$25.9 million and trade receivables at FVTPL of US$529.9 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$555.8 million, which increased by US$307.4 million from US$248.4 million as at 31 December 2020, primarily attributable to the increase in global copper price and the increase in trade receivables resulting from the fact that the copper products was not settled at the end of the reporting period, and the increase in sales volume of copper products as compared with the same period last year.

Inventories

The inventories held by the Group increased by US$176.9 million from US$671.4 million as at 31 December 2020 to US$848.3 million as at 31 December 2021, which was mainly due to the increase in stock of raw and auxiliary materials as a result of the expansion of production scale, and the increase in in-process, finished goods inventories as compared with the same period last year.

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 2021, and 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 2021 and 2020, no assets of the Group were pledged.

Capital Management

The capital structure of the Group consists of net debt (which includes bank and other borrowings, net of restricted bank balances, bank balances and cash) and equity attributable to owners of the Company (comprising share capital and retained profits). Details of capital management as at 31 December 2021 are included in note 33 to the audited consolidated financial statements of this annual report.

Gearing ratio

As at 31 December 2021, the gearing ratio was 16.9% (as at 31 December 2020: 50.4%) 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 2021 are included in note 25 to the audited consolidated financial statements of this annual report. The loans of the Group are made in US$. All of the loans of the Group have floated interest rate.

Trade payables/Trade payables designated at FVTPL

As at 31 December 2021, the Group recorded trade payables of US$359.3 million and trade payables designated at FVTPL of US$231.8 million. The trade payables designated at FVTPL were the trade payables arising from the purchase of copper concentrates under provisional pricing arrangements. The aggregate trade payables amounted to US$591.1 million, which increased by US$166.2 million from US$424.9 million as at 31 December 2020, primarily due to the increase in balance of the settlement payable of raw materials as a result of the copper price rise.

Capital expenditure

	For the year ended 31 December	
	2021	2020
	(US$'000)	*(US$'000)*
Mining and ore processing facilities at Chambishi Southeast Mine of NFCA	**33,578**	22,780
Other mining and ore processing facilities of NFCA	**21,784**	19,007
Mining and ore processing facilities at Luanshya (Baluba Center Mine)	**–**	4,049
Mining and leaching facilities at Luanshya (Muliashi Project)	**15,017**	19,550
Mining facilities at Luanshya (Roan Mine)	**1,848**	3,588
Smelting facilities at CCS	**5,333**	7,752
Leaching facilities at SML	**2,660**	1,060
Leaching facilities at Huachin Leach	**1,604**	10,440
Mining rights and leaching facilities at CNMC Huachin Mabende	**3,473**	6,889
Smelting facilities at Lualaba Copper Smelter	**473**	31,515
Mining and the processing facilities at Kambove Mining	**135,912**	98,818
Other facilities	**38**	28
Total	**221,720**	225,476

The total capital expenditure of the Group amounted to US$221.7 million, basically flat with US$225.5 million in 2020.

Financial policies

During the year ended 31 December 2021, 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 34 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 the Company has established a 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 impacts on our strategy, operations, compliance and financial condition. We urge you to carefully consider the risks described below.

Commodity price risk

The Group's commodity price risk mainly derives from the exposure to fluctuations in the market price of copper, since copper is the major commodities purchased, produced and sold by the Group. The sharp fluctuations of copper price mainly reflect the changes in supply and demand of copper products, the market uncertainties and other factors which are out of the 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, accessibility of other metals, domestic and overseas regulations of governments, natural disasters and weather conditions. Price fluctuations will have a material impact on the business, cash flow and revenue of the Group. To mitigate this risk, the Group has adopted the sales strategy with combination of long-term and short-term orders and combined with hedging to enhance the turnover of spot inventory, so as to strive to reduce the commodity price risks.

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 expediting 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.

OVERVIEW

In 2021, the Group spared no efforts in market expansion, with an equal emphasis on production and management, construction of projects and cost management. To this end, the operation quality and growth momentum improved and the main production and operation indicators of the Group has overfulfilled its annual budget and plan.

During the reporting period, revenue has increased by 56.0% to US$4,050.6 million over the last year as a result of the continued growth in sales volumes of the Group's products and the impact of a year-on-year increase of international copper price.

During the reporting period, the profit attributable to owners of the Company amounted to US$357.1 million, representing an increase of 185.7% over the last year.

Meanwhile, along with the achievement in production volume and standards of the Integrated Exploration and Construction Project of Chambishi Southeast Mine as well as the commissioning of the main ore body project of Kambove Mining with an planned investment of US$238 million, the foundation for the Group's business growth will be further consolidated.

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 the Republic of Zambia ("Zambia") and the Democratic Republic of the Congo ("DRC"). In particular, sulphuric acid and liquid sulphur dioxide are by-products generated during the blister copper smelting process. The Group is making greater efforts to develop cobalt business.

The businesses of the Group are principally carried out through the following companies: NFC Africa Mining PLC (中色非洲礦業有限公司*) ("NFCA"), CNMC Luanshya Copper Mines PLC (中色盧安夏銅業有限公司*) ("Luanshya"), Chambishi Copper Smelter Limited (謙比希銅冶煉有限公司*) ("CCS") and Sino-Metals Leach Zambia Limited (贊比亞謙比希濕法冶煉有限公司*) ("SML") located in Zambia, as well as Huachin Metal Leach SA (中色華鑫濕法冶煉股份有限公司*) ("Huachin Leach") located in DRC, CNMC Huachin Mabende, Lualaba Copper Smelter and Kambove Mining SAS (剛波夫礦業簡易股份有限公司*) ("Kambove Mining") located in the DRC.

In 2021, blister copper and copper anodes, and sulphuric acid produced by the Group amounted to 324,501 tonnes and 1,041,490 tonnes in total, representing an increase of 26.2% and 31.3% over last year, respectively. Copper cathodes produced amounted to 124,327 tonnes, representing an increase of 7.3% over last year; cobalt contained in cobalt hydroxide produced amounted to 602 tonnes; liquid sulphur dioxide produced amounted to 26,002 tonnes; the processed copper products for the Group amounted to 58,615 tonnes. In 2021, revenue of the Group increased by 56.0% to US$4,050.6 million in 2021 from US$2,597.2 million in 2020 as a result of the continued growth in sales volumes of the Group's products and the impact of a year-on-year increase of international copper price.

RESOURCES AND RESERVES

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

The same assumptions as those applied in the 2012 prospectus of the Company in accordance with the JORC Code were adopted for the annual update of resources and/or reserves in this annual report. Relevant updates were made according to 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.

As at 31 December 2021, the Group's mineral resources and mineral reserves reported in accordance with the JORC Code were as follows:

(1) Resources

Chambishi Main Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore *(Mt)***	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**9.67**	**2.35%**	**–**	**–**	9.73	2.33%	–	–
Indicated	**7.48**	**2.50%**	**–**	**–**	3.86	2.43%	–	–
Inferred	**6.68**	**2.20%**	**–**	**–**	7.47	2.33%	–	–

Note: Mining exploration for production purposes was conducted in 2021, with 190,000 tonnes of ore being extracted.

Chambishi West Mine

JORC category	31 December 2021 Ore (Mt)	31 December 2021 Average grade Total copper	31 December 2021 Average grade Oxide copper	31 December 2021 Cobalt	31 December 2020 Ore (Mt)	31 December 2020 Average grade Total copper	31 December 2020 Average grade Oxide copper	31 December 2020 Cobalt
Oxide ore								
Measured	**3.64**	**2.03%**	**1.00%**	**–**	3.64	2.03%	1.00%	–
Indicated	**1.46**	**1.83%**	**0.96%**	**–**	1.46	1.83%	0.96%	–
Inferred	**1.45**	**2.32%**	**1.10%**	**–**	1.45	2.32%	1.10%	–
Sulphide Ore								
Measured	**14.89**	**2.08%**	**–**	**–**	14.68	2.12%	–	–
Indicated	**6.25**	**2.23%**	**–**	**–**	4.66	2.15%	–	–
Inferred	**7.77**	**2.04%**	**–**	**–**	3.54	2.18%	–	–

Note: Mining exploration for production purposes was conducted in 2021, with 1,640,000 tonnes of ore being extracted.

Chambishi Southeast Mine

JORC category	31 December 2021 Ore (Mt)	31 December 2021 Average grade Total copper	31 December 2021 Average grade Oxide copper	31 December 2021 Cobalt	31 December 2020 Ore (Mt)	31 December 2020 Average grade Total copper	31 December 2020 Average grade Oxide copper	31 December 2020 Cobalt
Measured	**38.99**	**2.29%**	**–**	**0.13%**	37.54	2.29%	–	0.12%
Indicated	**33.04**	**1.87%**	**–**	**0.11%**	38.47	1.83%	–	0.10%
Inferred	**55.89**	**1.76%**	**–**	**0.08%**	52.75	1.87%	–	0.11%

Note: Mining exploration for production purposes was conducted in 2021, with 1.93 million tonnes of ore being consumed.

Mwambashi Mine

JORC category	31 December 2021 Ore (Mt)	31 December 2021 Average grade Total copper	31 December 2021 Average grade Oxide copper	31 December 2021 Cobalt	31 December 2020 Ore (Mt)	31 December 2020 Average grade Total copper	31 December 2020 Average grade Oxide copper	31 December 2020 Cobalt
Measured	**0.76**	**2.26%**	**1.25%**	**–**	2.14	2.04%	1.18%	–
Indicated	**4.25**	**2.13%**	**0.58%**	**–**	4.61	2.11%	0.58%	–
Inferred	**2.49**	**2.35%**	**0.31%**	**–**	3.75	2.06%	–	–

Note: 194,600 tonnes of ore were extracted in 2021.

Samba Mine

JORC category	31 December 2021 Ore (Mt)	31 December 2021 Average grade Total copper	31 December 2021 Average grade Oxide copper	31 December 2021 Cobalt	31 December 2020 Ore (Mt)	31 December 2020 Average grade Total copper	31 December 2020 Average grade Oxide copper	31 December 2020 Cobalt
Measured	**–**	**–**	**–**	**–**	–	–	–	–
Indicated	**3.89**	**1.74%**	**–**	**–**	2.80	1.73%	–	–
Inferred	**5.14**	**1.55%**	**–**	**–**	5.85	1.65%	–	–

Note: The resource was audited by SRK.

Baluba Center Mine

JORC category	**31 December 2021** Ore *(Mt)*	**Average grade** Total copper	Oxide copper	Cobalt	31 December 2020 Ore *(Mt)*	Average grade Total copper	Oxide copper	Cobalt
Oxide ore								
Measured	**3.86**	**1.98%**	**1.15%**	**0.12%**	1.19	2.46%	1.91%	0.18%
Indicated	**5.53**	**1.86%**	**0.87%**	**0.12%**	2.41	2.30%	1.68%	0.14%
Inferred	**1.33**	**2.18%**	**1.36%**	**0.19%**	1.70	2.11%	1.17%	0.13%
Sulphide Ore								
Measured	**1.59**	**2.23%**	**0.11%**	**0.15%**	2.19	2.26%	0.08%	0.12%
Indicated	**2.61**	**2.02%**	**0.15%**	**0.14%**	0.85	2.22%	0.08%	0.08%
Inferred	**1.56**	**2.01%**	**0.22%**	**0.14%**	3.85	1.51%	0.08%	0.09%

Note: In 2020, supplemental exploration for oxide ore was carried out at Baluba Center Mine, and the resource was reported again in 2021. 840,000 tonnes of ore was extracted from sulphide ore.

Muliashi North Mine

JORC category	**31 December 2021** Ore *(Mt)*	**Average grade** Total copper	Oxide copper	Cobalt	31 December 2020 Ore *(Mt)*	Average grade Total copper	Oxide copper	Cobalt
Measured	**3.14**	**1.26%**	**0.47%**	**0.03%**	5.89	1.23%	–	0.03%
Indicated	**4.83**	**1.66%**	**0.56%**	**0.02%**	5.30	1.13%	–	0.02%
Inferred	**18.50**	**1.31%**	**0.43%**	**0.02%**	21.19	1.17%	–	0.01%

Note: In 2021, 4.8 million tonnes of ore was extracted, and supplementary exploration was carried out, but the report has not yet been released.

Mashiba Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**–**	**–**	**–**	**–**	–	–	–	–
Indicated	**6.62**	**1.88%**	**–**	**0.03%**	6.65	2.27%	–	0.02%
Inferred	**1.05**	**1.68%**	**–**	**0.01%**	1.48	1.94%	–	0.02%

Note: No mining activities were carried out in 2021.

Baluba East Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**10.47**	**1.67%**	**0.56%**	**–**	14.64	1.67%	0.67%	0.02%
Indicated	**1.67**	**1.23%**	**0.20%**	**–**	2.07	1.21%	1.16%	0.01%
Inferred	**0.79**	**1.08%**	**0.18%**	**–**	0.90	0.98%	0.88%	0.02%

Note: No mining activities were carried out in 2021, and the decrease in ore volume was attributable to the adoption of new bulk density test results.

Roan Basin

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**5.32**	**2.38%**	**1.75%**	**0.02%**	–	–	–	–
Indicated	**1.95**	**2.10%**	**1.51%**	**0.02%**	1.87	1.81%	1.52%	–
Inferred	**1.24**	**2.29%**	**1.51%**	**0.02%**	–	–	–	–

Note: Supplemental exploration was conducted in 2020, and the resource was reported again in 2021. 290,000 tonnes of ore was extracted in 2021.

Roan Ext. West

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**1.17**	**2.57%**	**2.18%**	**–**	–	–	–	–
Indicated	**–**	**–**	**–**	**–**	2.04	3.56%	3.07%	–
Inferred	**–**	**–**	**–**	**–**	0.31	2.51%	2.31%	–

Note: Mining exploration for production purposes was conducted in 2021, with 1.48 million tonnes of ore being extracted in Roan Ext. West.

Roan Ext. East

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**4.70**	**2.54%**	**2.03%**	**–**	–	–	–	–
Indicated	**–**	**–**	**–**	**–**	4.97	2.49%	2.32%	–
Inferred	**–**	**–**	**–**	**–**	0.22	2.33%	2.20%	–

Note: Mining exploration for production purposes was conducted, with 200,000 tonnes of ore being extracted in 2021.

Smelting Slag

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Measured	**–**	**–**	**–**	**–**	–	–	–	–
Indicated	**6.58**	**1.03%**	**0.31%**	**–**	7.28	1.03%	0.31%	–
Inferred	**–**	**–**	**–**	**–**	–	–	–	–

Note: 700,000 tonnes of ore was extracted in 2021.

Kambove Main Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	Ore (Mt)	Total copper	Oxide copper	Cobalt	Ore (Mt)	Total copper	Oxide copper	Cobalt
Measured	–	–	–	–	–	–	–	–
Indicated	6.41	2.80%	–	0.12%	8.79	3.21%	–	–
Inferred	4.25	2.88%	–	0.10%	2.67	3.09%	–	–

Notes: Mining exploration for production purposes was conducted, with 650,000 tonnes of ore being extracted in 2021.

Kambove Main Open Pit Tailings

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	Ore (Mt)	Total copper	Oxide copper	Cobalt	Ore (Mt)	Total copper	Oxide copper	Cobalt
Measured	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–
Inferred	1.41	0.69%	–	0.17%	1.49	0.72%	–	–

Kambove West Open Pit Tailings

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	Ore (Mt)	Total copper	Oxide copper	Cobalt	Ore (Mt)	Total copper	Oxide copper	Cobalt
Measured	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–
Inferred	2.35	1.15%	–	0.22%	2.35	1.15%	–	–

(2) Reserves

Chambishi Main Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	Ore *(Mt)*	Total copper	Oxide copper	Cobalt	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Proved	**5.59**	**1.74%**	**–**	**–**	1.48	1.85%	–	–
Probable	**1.63**	**1.63%**	**–**	**–**	5.85	1.48%	–	–

Note: Mining exploration for production purposes was conducted, with 190,000 tonnes of resource being consumed in 2021.

Chambishi West Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	Ore *(Mt)*	Total copper	Oxide copper	Cobalt	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Sulphide Ore								
Proved	**11.72**	**1.70%**	**–**	**–**	7.94	1.93%	–	–
Probable	**2.20**	**1.84%**	**–**	**–**	10.59	1.98%	–	–

Note: Mining exploration for production purposes and supplemental exploration was conducted, with 1,640,000 tonnes of resource being consumed in 2021.

Chambishi Southeast Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Proved	**36.92**	**1.93%**	**-**	**0.11%**	38.17	2.00%	–	0.11%
Probable	**10.90**	**1.62%**	**-**	**0.07%**	11.69	1.72%	–	0.08%

Note: 1,930,000 tonnes of volumes of resource was consumed by mining in 2021. The dilution rate increased in 2021.

Mwambashi Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Proved	**0.74**	**2.23%**	**1.22%**	**-**	1.04	2.17%	1.23%	–
Probable	**1.49**	**2.31%**	**0.97%**	**-**	3.58	2.06%	1.05%	–

Note: 194,600 tonnes of ore were extracted in 2021.

Baluba Center Mine

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Proved	**0.50**	**1.30%**	**-**	**-**	0.40	1.28%	0.06%	0.10%
Probable	**0.33**	**1.36%**	**-**	**-**	0.25	1.38%	0.06%	0.10%

Note: Supplemental exploration was conducted in oxidized oxide in 2020. 840,000 tonnes of ore were extracted from sulfide ore.

Muliashi North Mine

JORC category	31 December 2021 Ore (Mt)	Average grade Total copper	Oxide copper	Cobalt	31 December 2020 Ore (Mt)	Average grade Total copper	Oxide copper	Cobalt
Proved	0.58	1.98%	0.62%	-	–	–	–	–
Probable	1.16	1.95%	0.62%	-	9.35	1.18%	0.31%	0.02%

Note: In 2021, 4.8 million tonnes of ore was extracted, and supplementary exploration was carried out, but the report has not yet been released.

Mashiba Mine

JORC category	31 December 2021 Ore (Mt)	Average grade Total copper	Oxide copper	Cobalt	31 December 2020 Ore (Mt)	Average grade Total copper	Oxide copper	Cobalt
Proved	2.71	1.93%	0.30%	-	–	–	–	–
Probable	1.78	1.83%	0.19%	-	5.61	2.11%	–	–

Note: No mining activities were conducted in 2021.

Baluba East Mine

JORC category	31 December 2021 Ore (Mt)	Average grade Total copper	Oxide copper	Cobalt	31 December 2020 Ore (Mt)	Average grade Total copper	Oxide copper	Cobalt
Proved	3.53	2.06%	0.89%	-	7.38	1.77%	0.86%	–
Probable	0.04	1.48%	0.48%	-	0.06	1.54%	0.45%	–

Note: No mining activities were carried out in 2021, and the decrease in ore volume was attributable to the adoption of new bulk density test results.

Roan Ext. East

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Proved	**3.07**	**2.32%**	**1.96%**	**-**	–	–	–	–
Probable	**-**	**-**	**-**	**-**	3.68	2.14%	2.10%	–

Note: 200,000 tonnes of ore were extracted in 2021.

Roan Basin

	31 December 2021				31 December 2020			
		Average grade				Average grade		
JORC category	**Ore** *(Mt)*	**Total copper**	**Oxide copper**	**Cobalt**	Ore *(Mt)*	Total copper	Oxide copper	Cobalt
Proved	**1.33**	**2.67%**	**1.71%**	**-**	–	–	–	–
Probable	**0.09**	**2.79%**	**2.12%**	**-**	1.93	2.67%	2.12%	–

Note: Supplementary exploration was carried out in 2020 and a feasibility study was not completed. 290,000 tonnes of ore was extracted in 2021.

Smelting Slag

JORC category	31 December 2021 Ore (Mt)	31 December 2021 Average grade Total copper	31 December 2021 Average grade Oxide copper	31 December 2021 Cobalt	31 December 2020 Ore (Mt)	31 December 2020 Average grade Total copper	31 December 2020 Average grade Oxide copper	31 December 2020 Cobalt
Proved	-	-	-	-	–	–	–	–
Probable	6.58	1.03%	0.31%	-	7.28	1.03%	0.31%	–

Note: 700,000 tonnes of ore were extracted from Smelting Slag in 2021. Reserves were provided by Luanshya without audit by SRK (ore reserves estimation cannot be made without the measurement data of the slag status).

Kambove Main Mine

JORC category	31 December 2021 Ore (Mt)	31 December 2021 Average grade Total copper	31 December 2021 Average grade Oxide copper	31 December 2021 Cobalt	31 December 2020 Ore (Mt)	31 December 2020 Average grade Total copper	31 December 2020 Average grade Oxide copper	31 December 2020 Cobalt
Proved	-	-	-	-	–	–	–	–
Probable	6.03	2.61%	-	0.11%	7.63	2.98%	–	–

Note: Mining exploration for production purposes and supplemental exploration was conducted, with 650,000 tonnes of ore being extracted in 2021.

PRODUCTION OVERVIEW

NFCA

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

In 2021, copper anodes produced by NFCA amounted to 66,005 tonnes, representing a year-on-year increase of 64.3%, among which, the production of copper anodes at the southeast ore body amounted to 35,016 tonnes. Such increase was primarily attributable to the significant year-on-year increase in production of the southeast ore body in this year.

Luanshya

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

In 2021, blister copper produced by Luanshya amounted to 13,836 tonnes, representing a year-on-year increase of 1.6%; the total amount of copper cathodes produced amounted to 43,391 tonnes, representing a year-on-year increase of 0.9%.

CCS

CCS mainly operates the Chambishi Smelting Plant.

In 2021, CCS produced 162,610 tonnes in total of blister copper and copper anodes, representing a year-on-year increase of 8.8%; produced 718,962 tonnes in total of sulphuric acid, representing a year-on-year increase of 11.8%. In 2021 CCS processed copper products of 86,614 tonnes for enterprises under the Group.

SML

SML mainly operates Mwambashi Mine and the Chambishi Leach Plant.

Blister copper produced by SML in 2021 amounted to 6,773 tonnes, representing a year-on year increase of 109.8%, mainly attributable to the year-on-year increase of the processing volume of purchased ore; the total cathode copper produced by SML amounted to 9,127 tons, representing a year-on-year increase of 0.1%.

CNMC Huachin Mabende

CNMC Huachin Mabende produced 36,129 tonnes in total of copper cathodes, representing a year-on-year decrease of 2.3%. mainly attributable to the shortage of electricity in the third quarter.

Huachin Leach

Huachin Leach accumulatively produced 27,001 tonnes of copper cathodes in 2021, representing a year-on-year increase of 0.7%.

Lualaba Copper Smelter

Lualaba Copper Smelter mainly operates the Lualaba Smelting Plant.

Lualaba Copper Smelter reaches its designed capacity in 2021 and accumulatively produced 75,278 tonnes of blister copper, representing a year-on-year increase of 151.2%; accumulatively produced 322,528 tonnes of sulfuric acid, representing a year-on-year increase of 115.1%; accumulatively produced 26,002 tonnes of liquid sulfur dioxide, representing a year-on-year increase of 52%. Lualaba Copper Smelter processed 58,615 tonnes of blister copper for enterprises outside of the Group.

Kambove Mining

The Kambove Main Mine completed construction and commenced trial operation in the third quarter of 2021, and produced 8,679 tonnes of copper cathodes in 2021.

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

	Production volume for 2021 (1), (2), (3) ***(Tonnes)***	Production volume for 2020 (1), (2), (3) *(Tonnes)*	Year-on-year growth *(%)*
Blister copper & copper anodes	**324,501**	257,219	26.2
Copper cathodes	**124,327**	115,904	7.3
Cobalt contained in cobalt hydroxide	**602**	191	215.2
Sulphuric acid	**1,041,490**	793,221	31.3
Liquid sulphur dioxide	**26,002**	17,102	52.0
Copper products processing services	**58,615**	27,389	114.0

Notes:

(1) The production of all products is based on the copper content, except for sulfuric acid, liquid sulfur dioxide, and copper hydroxide.

(2) Copper product processing services refer to the processing and production of copper product made by the fire smelters of the Group under the entrust of enterprises outside of the Group, and the Group collects processing fees from these enterprises.

(3) Among the above copper products, production volume of copper by self-owned mine are as follows:

	Production volume for the six months ended 30 June 2021 *(Tonnes)*	Production volume for the six months ended 30 June 2020 *(Tonnes)*
Blister copper and copper anodes produced by self-owned mine	**76,377**	53,117
Copper cathodes produced by self-owned mine	**54,399**	45,937
Total	**130,776**	99,055

EXPLORATION, DEVELOPMENT AND MINING COST OF THE GROUP

Expenses of exploration, development, and mining activities of the Group for the year ended 31 December 2021 are set out below:

	NFCA		Luanshya					SML		Chambishi	Huachin	CNMC	Kambove Mining			
		Chambishi								Copper	Leach	Mabende	Main	West	MSESA	
	Chambishi	Southeast	Baluba Center	Muliashi	Muliashi	Baluba	Roan	Mwambashi	Exploration	Smelter	PE5276	PE1060	mineral	mineral	mineral	
Unit: Million US dollars	West Mine	Mine	Sulphide Mine	North Mine	South Mine	East Mine	Basin	Mine	right 27089	PE5468	Mine	Mine	deposit	deposit	deposit	Total
Exploration activities																
Drilling and analysis	3.07	2.15	0.24	0.82	-	-	-	-	0.17		0.31	0.13		1.03	-	7.92
Others	0.11	-	-	-	-	-	-	-	-	0.48	-	-	0.08	1.09	0.34	2.10
Sub-total	**3.18**	**2.15**	**0.24**	**0.82**	**-**	**-**	**-**	**-**	**0.17**	**0.48**	**0.31**	**0.13**	**0.08**	**2.12**	**0.34**	**10.02**
Development activities (including mine construction)																
Purchases of assets and equipment	3.73	2.77	-	-	-	-	-	-	-	-	-	-	85.97	-	-	92.47
Civil work for construction of tunnels and roads	16.29	29.02	-	-	-	-	-	-	-	-	-	-	43.98	-	-	89.29
Sub-total	**20.02**	**31.79**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**129.95**	**-**	**-**	**181.76**
Mining activities (excluding ore processing)																
Staff cost	2.74	8.64	1.88	0.15	-	-	-	0.15	-	-	-	-	-	-	-	13.56
Materials and equipment	10.75	40.96	2.57	1.16	-	0.13	2.90	-	-	-	-	-	-	-	-	58.47
Fuel, electricity, water and others services	11.22	16.66	7.38	25.96	-	-	-	0.38	-	-	-	-	-	-	-	61.60
Non-income taxes, royalties and other government expenses			12.80	24.49	-	1.14	1.13						-	-	-	39.56
Sub-contracting charges	37.82	48.43	16.50	34.10	-	2.68	1.46	5.64	-	-	-	-	8.42	-	-	155.05
Depreciation	7.20	44.85	4.89	13.53	0.37	0.50	0.06	1.71	-	-	-	-	3.97	-	-	77.08
Sub-total	**69.73**	**159.54**	**46.02**	**99.39**	**0.37**	**4.45**	**5.55**	**7.88**	**-**	**-**	**-**	**-**	**12.39**	**-**	**-**	**405.32**

MINING EXPLORATION, MINING DEVELOPMENT AND ORE MINING ACTIVITIES

Mining Exploration

During the reporting period, NFCA, Luanshya, Huachin Mabende, Kambove Mining and CCS, each being 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, 403 drilling holes in the pit and deep exploration drilling holes were completed, with 39,588.61 m drilled, of which 100 underground drilling holes were completed at Chambishi Main Mine and Chambishi West Mine in aggregate, with 13,125.6 m drilled, and 294 drilling holes in the pit were completed at Chambishi Southeast Mine in aggregate, with 18,931.86 m drilled. 9 deep exploration drilling holes were completed at Chambishi West Mine, with 7,531.19 m drilled.

Luanshya conducted exploration, drilling and platform trenches. In particular, 66 surface drilling with a drilling footage of 7,182 m was completed at the deep north side of Muliashi and Baluba survey. At Muliashi North Strip Mine, Roan (East & West) Extension, Roan Basin 46 platform trenches for production and exploration purposes were completed, with a total length of 2,892 m and a total capacity of 1,438 m3.

Huachin Mabende conducted exploration at the PE1060 tenement, during which 2 drilling holes were completed, with 486.84 m drilled, and 511.04 m of shallow drilling. It completed shallow drilling of 525.20 m at the PE5276 tenement.

Kambove Mining has re-compiled the resource estimation report of the main ore body according to the open-pit exposure; the supplementary exploration of the west ore body and its sequel have completed 9 drilling holes with a footage of 3,212.82 m; the MSESA ore body has completed the pit underwater topography measurement.

CCS conducted geophysical and geochemical explorations for PE5468, during which the workloads of 1/25,000 soil geochemical survey was completed, with an area of 119 k㎡; 1/10,000 soil geochemical survey was completed, with an area of 16 k㎡; 1/10,000 low-altitude high-precision magnetic survey was conducted, with an area of 150 k㎡; EH-4 geophysical survey, with 100 points completed; and trenching was conducted, with an area of 2,000 m^3.

Mining Development

For details of mining development, please refer to “Projects Under Progress” on page 35.

Mining Activities

For details of mining activities, please refer to "Production Overview" on pages 30 to 32.

Infrastructure projects, subcontracting arrangements and procurement of equipment

The par value of new infrastructure project contracts entered into by the Group in 2021 amounted to approximately US$19 million.

No subcontracting arrangements were entered into by the Group during 2021*.

During 2021, contracts which amounted to approximately US$10.5 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, and laboratory purposes etc.

* 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 is awarded a project as a contractor and then transfers the entire project or subcontracts in part the project to a third party.

PROJECTS UNDER PROGRESS

Luanshya

Strip Mine Project at the Extended Section of Roan

The Strip Mine Project at the Extended Section of Roan has a designated capacity of one million tonnes of quality oxide copper mine per annum and an output of 20,000 tonnes of copper cathodes. The project consists of the Extend Section of East Roan and the Extend Section of West Roan. The Extend Section of West Roan completed all mining work in July 2021. The Extend Section of East Roan started the construction and stripping work in September 2021, with an expenditure of US$2.2825 million in stripping in 2021.

Kambove Mining

The Integrated Exploration and Construction Project of Kambove Main Mine

The project of Kambove Main Mine has a planned annual processing capacity of 990,000 tonnes of oxidized ore, 500,000 tonnes of tailings, and has a planned annual production capacity of 28,000 tonnes of copper cathodes, 978 tonnes of blister cobaltous hydroxide with an estimated investment of US$238 million in total. The project has completed the construction and been put into produce in the third quarter of 2021.

Human resources

As of 31 December 2021, the Group employed a total of 8,756 employees (as of 31 December 2020: 8,352 employees), which comprised 904 Chinese and 7,852 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 2021, the total cost of employees reflected in the consolidated statement of profit or loss and other comprehensive income amounted to approximately US$130.1 million (2020: US$113.7 million).

2022 OUTLOOK

The year 2021 is the start of the "14th Five-Year Plan", during which the Group closely followed the theme of high-quality development, based itself on the new development stage, and implemented new development concepts to promote the construction of a new development pattern. Despite the third-year COVID-19 pandemic, thanks to the Group's focus on the prevention and control of COVID-19, and the scientific decision of production and operation, the Company's results have continued to grow against the trend, especially in 2021 when key economic indicators reached record highs and landmark progress was made on key projects. The accelerated bookbuilding in the capital market successfully raised HK$985 million, which not only effectively improved the equity and capital structure and kick-started the stock liquidity, but also helped the group successfully enter the "Hong Kong Stock Connect" this year to improve the Company's market image and visibility, thus laying the foundation for further healthy and high-quality development. Achievements are made along with continuous efforts. All these achievements were attained by the hard work of our front-line employees, strong leadership of the holding group, and support of our shareholders.

Looking forward to 2022, as the international situation is complex and ever changing, the capital market is unpredictable, and the COVID-19 pandemic persists in affecting us, there are still numerous challenges ahead for the Group. However, we can also see that the recovery of the global real economy and accelerated deployment of the "dual-carbon" industry will provide more abundant application scenarios for non-ferrous metals such as copper and cobalt. Global supply and demand will maintain a "tight balance" and provide strong support for commodity prices, which will bring more opportunities and hopes to the Group.

The past is the prologue of the future. The Group will adhere to the path of high-quality development and the strategic goals of the "14th Five-Year Plan", further improve corporate governance, enhance operating efficiency, increase resource development efforts, and speed up the pace of technological innovation, striving to reach a new level in the new year. Looking forward, there are multiple possibilities in the future and it's our opportunity to forge ahead. All the members of the Group will work hard and persevere to deliver a satisfactory report to all shareholders in the new year.

DIRECTORS AND SENIOR MANAGEMENT BIOGRAPHIES

BOARD OF DIRECTORS

The Board of Directors is responsible for the management and conduct of the business. As at the Latest Practicable Date, the Board consists of five Directors, including one executive Director, 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
Jinjun Zhang *(appointed as Chairman on 8 January 2021)*	53	Chairman, Executive Director and President
Chunlai Wang *(Note)* *(resigned as Vice President on 30 July 2021, resigned as Executive Director on 11 April 2022)*	61	Executive Director
Xiaowei Wang *(Note)* *(resigned on 27 May 2021)*	59	Executive Director
Yaoyu Tan *(appointed on 27 May 2021)*	48	Non-executive Director
Dingfan Qiu *(appointed on 30 July 2021)*	80	Independent Non-executive Director
Jingwei Liu	54	Independent Non-executive Director
Huanfei Guan	64	Independent Non-executive Director
Chuanyao Sun *(Note)* *(resigned on 30 July 2021)*	77	Independent Non-executive Director

Note: For the details of resigned directors' biography, please refer to the section headed "Directors and Senior Management Biographies" in 2020 annual report.

Jinjun Zhang (張晉軍), aged 53, is the Chairman, an executive Director and the President of the Company, the chairman of the Compliance Committee, and a member of each of the Nomination Committee and the Remuneration Committee. He was appointed to the Board as a non-executive Director on 29 March 2019. Mr. Zhang was re-designated as an executive Director and was appointed as the President of the Company on 14 October 2020. He was appointed as the Chairman and cease to be the Vice Chairman of the Company on 8 January 2021. Mr. Zhang obtained a master degree in mining engineering from University of Science and Technology Beijing in 2015. Mr. Zhang joined NFCA, a subsidiary of the Company, 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. Zhang has over 31 years of experience in nonferrous metals and mining and has extensive practical experience in the operations of conglomerates.

On-site investigation at Luanshya by Jinjun Zhang, the Chairman

Standard copper cathodes produced by SML

Yaoyu Tan (譚耀宇), aged 48, is a non-executive Director of the Company and was appointed to the Board on 27 May 2021. He joined CNMC in May 2019 and served as the deputy director of the Finance Department (Funds Management Center). Mr. Tan has concurrently served as the chairman of Nonferrous Metal Mining Group Finance Co., Ltd.* (有色礦業集團財務有限公司), a subsidiary of CNMC, since September 2019. Mr. Tan has served as the director of the Finance Department of CNMC since June 2020. Prior to joining CNMC, Mr. Tan joined Daye Nonferrous Metals Co., Ltd., a non-wholly-owned subsidiary of China Daye Non-Ferrous (see definition below), in December 2008 and had served as the director of Finance Department until October 2009, and later served as the chief accountant of Daye Nonferrous Metals Group Holding Co., Ltd., the controlling shareholder of China Daye Non-Ferrous Metals Mining Limited (中國大冶有色金屬礦業有限公司) ("China Daye Non-Ferrous", Hong Kong listed company code: 00661). Mr. Tan had served as the executive director of China Daye Non-Ferrous since 2012, and served as the chairman of China Daye Non-Ferrous from September 2017 and resigned as the executive director and chairman of China Daye Non-Ferrous in May 2019. Mr. Tan has over 20 years of experience in the mining industry and rich practical experience in operation of listed companies. Mr. Tan graduated from the Party School of Hubei Province in 2007 majoring in economics and management and was accredited as a senior accountant by the Professional Title Reform Office of Hubei Province in December 2010.

* *Translation of English and Chinese terms for reference purposes only*

Full view of Isasmelt furnace at CCS

Dingfan Qiu (邱定蕃), aged 80, is an independent non-executive Director of the Company. He was appointed to the Board on 30 July 2021. Mr. Qiu graduated from Nanchang University in 1962. He then joined Beijing General Research Institute of Mining & Metallurgy (北京礦冶研究總院), and successively served as a technician of the metallurgical research institute, senior engineer and professor-level senior engineer. He became the director of metallurgical energy saving research institute in 1983, and served as the vice president of the institute from 1985 to 2002 and was primarily in charge of the scientific research of the whole institute. In 1990, after passing the examination of the Government sponsored Program of Studying Abroad, he left for study at Queen's University in Canada (as a senior visiting scholar), and served as the associate tutor of graduate students. In 1991, he returned to China and continued to serve as the vice president of Beijing General Research Institute of Mining & Metallurgy. He was elected as an academician at Chinese Academy of Engineering in 1999. He is currently a professor and doctoral tutor of Beijing General Research Institute of Mining & Metallurgy. He once concurrently served as a deputy director at Department of Chemical, Metallurgy and Materials of Chinese Academy of Engineering, vice-president of the Nonferrous Metals Society of China (中國有色金屬學會), and an adjunct professor at each of Peking University, Tsinghua University and University of Science and Technology Beijing. Mr. Qiu has 58 years of experience in mining industry. Mr. Qiu once served as an independent non-executive director in Tongling Nonferrous Metals Group Holdings Co., Ltd. (銅陵有色金屬集團控股有限公司) (a company listed on the Shenzhen Stock Exchange, stock code: SZ000630) and China Nonferrous Metal Industry's Foreign Engineering and Construction Co., Ltd. (中國有色金屬建設股份有限公司) (a company listed on the Shenzhen Stock Exchange, stock code: SZ000758), and resigned from them on 13 January 2016 and 12 April 2019, respectively.

Jingwei Liu (劉景偉), aged 54, is an independent non-executive Director of the Company, the chairman of the Audit Committee and a member of the Nomination Committee, and was appointed to the Board on 27 April 2012. He is a partner of Shinewing Certified Public Accountants (信永中和會計師事務所). Mr. Liu previously served as the head of the Forestry Fund Management Headquarters of the Ministry of Forestry, a lecturer at Beijing Forestry University and a director and deputy general manager of Beijing Jincheng Gardening Co., Ltd.* (北京金城園林公司). He currently serves as 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, SZ300288), an independent director of Beijing StarNeto Technology Co., Ltd.* (北京星網宇達科技股份有限公司) (a company listed on the Shenzhen Stock Exchange, SZ002829), 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, SH600819), a non-executive director of Shoucheng Holdings Limited (首程控股有限公司(formerly known as 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) and an independent non-executive director of AVIC Joy Holdings (HK) Limited (HK0260) appointed in September 2020. 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 Accountant.

Huanfei Guan (關浣非), aged 64, is an independent non-executive Director of the Company, chairman of the Remuneration Committee, a member of each of the Audit Committee and the Compliance Committee, and was appointed to the Board on 28 August 2014. Mr. Guan has extensive experience in the finance and insurance industry in Hong Kong and 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, deputy chairman of credit asset management committee, chairman of loan verification committee, 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. Mr. Guan is now an independent non-executive director of Sunwah Kingsway Capital Holdings Limited (Hong Kong listed company code 0188), Huarong International Financial Holdings Limited (Hong Kong listed company code 0993) and China Shandong Hi-Speed Financial Group Limited (Hong Kong listed company code 0412) (shares of those companies are listed on the Main Board of the Hong Kong Stock Exchange). He once served as the chairman emeritus of Culturecom Holdings Limited (a company listed in Hong Kong) (Hong Kong listed company code 0343). Mr. Guan was an independent non-executive director, executive director,

* *translation of English terms for reference only*

president and senior consultant of Silver Base Group Holdings Limited (Hong Kong listed company code 0886) for the period from March 2008 to December 2012. He once served as an executive director of CCT Land Holdings Limited (currently named GBA Holdings Group) (Hong Kong listed company code 0261). On 15 May 2020, he resigned as an independent non-executive director of HongDa Financial Holding Limited (currently named China Wood International Holding Co., Limited) (Hong Kong listed company code 1822). He served as an independent non-executive director of Solis Holdings Limited (Hong Kong listed company code 2227) from 23 August 2019 to 30 September 2020. He served as an executive director and the chairman of the board of Enterprise Development Holdings Limited (Hong Kong listed company code 1808) from 2 June 2020 to 22 May 2021. He was appointed as an independent non-executive director of Shanghai Zendai Property Limited (Hong Kong listed company code 0755) on 11 January 2021. Mr. Guan obtained a doctor's degree in Economics in 2000 from Wuhan University and 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.

Muliashi Leach Plant of Luanshya

SENIOR MANAGEMENT

As at the Latest Practicable Date, the senior management of the Company includes:

Jinjun Zhang (張晉軍), aged 53, is the chairman and president of the Company. Please refer to the paragraph headed "Board of Directors" for his biographical background.

Guobin Hu (胡國斌), aged 54, is a vice president of the Company and was appointed as and joined the senior management of the Company on 29 March 2019, who is in charge of the production and operation and compliance operation of Kambove Mining. He has over 32 years of experience in metal industry. Mr. Hu has successively served as the deputy director in Dongguashan Copper Mine of Tongling Nonferrous Metal Company (銅陵有色金屬公司), general manager of Zijin Tongguan Investment Co., Ltd. in Xiamen (廈門紫金銅冠投資發展有限公司), director of British Monterico Metals Company (英國蒙特瑞科金屬公司), deputy general manager of Rio Blanco Copper S.A. in Peru (秘魯白河銅業公司), director and deputy general manager of CRCC-Tongguan Investment Co., Ltd. (中鐵建銅冠投資有限公司), director of Coliante Company in Canada (加拿大寇里安特公司), senior deputy general manager of Coliante Company in Ecuador (厄瓜寇里安特公司), deputy general manager of NFCA and other positions. From January 2019 to December 2021, Mr. Hu has serves as the general manager of NFCA. Mr. Hu was appointed as the director and general manager of Kambove Mining on 17 December 2021. Mr. Hu obtained a bachelor degree of mining engineering from Central South University in 1987.

Peiwen Zhang (張培文), aged 54, is a vice president of the Company who is in charge of SML. He was appointed as 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 31 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.

Zhimin Chen (陳志敏), aged 45, is a vice president of the Company, and was appointed as and joined the senior management of the Company on 21 February 2022, who is in charge of the production and operation and compliance operation of CNMHK. Mr. Chen has over 23 years of experience in metal industry. He served as the office secretary of former Shizishan Copper Mine of Tongling Nonferrous and deputy secretary of youth league committee of Dongguashan Copper Mine of Tongling Nonferrous. From April 2008 to February 2022, Mr. Chen successively served as the general counsel, manager and deputy general manager of general office of NFCA and chairman of SML. Mr. Chen graduated from University of Science and Technology Beijing and obtained a master's degree of mining engineering in 2015.

Jinping Ma (馬金平), aged 59, is a vice president of the Company, and was appointed as a member of the senior management of the Company on 25 February 2021, in charge of resource development, planning, coordination, etc. He is a professor-level senior engineer. Mr. Ma has served for the Central Iron & Steel Research Institute under the Ministry of Metallurgy and the overseas engineering department of China Nonferrous Metal Industry's Foreign Engineering and Construction Co., Ltd. Mr. Ma successively served as the deputy general manager, interim deputy secretary to the Party committee and secretary to the commission for discipline inspection, and interim secretary to the Party committee of NFC Africa Mining PLC (中色建設非洲礦業有限責任公司) from September 1998 to August 2003. He served as the general manager of CNMC China Nonferrous Metals Int'l Mining Co., Ltd. from August 2003 to April 2005. He successively served as the deputy general manager and a member of the Party committee of China Nonferrous Metal Industry's Foreign Engineering and Construction Co., Ltd. from April 2005 to February 2021. Mr. Ma graduated from the graduate faculty of the Center Iron & Steel Research Institute in June 1988 and obtained a master's degree in metal materials and heat treatment. Mr. Jinping Ma has 34 years of experience in the non-ferrous metal industry, and has worked overseas for many years with extensive practical experience in the operation of group companies.

Dayong Yang (楊大勇), aged 52, is a vice president of the Company and was appointed as and joined the senior management of the Company on 6 July 2019, who is in charge of planning coordination and project management. He was appointed as the chief compliance officer and a joint company secretary ("Joint Company Secretary") of the Company on 1 April 2020 and 27 April 2020, respectively. He resigned as a Joint Company Secretary on 7 March 2022. Mr. Yang commenced his career at the former Ministry of Foreign Trade and Economic Cooperation of the PRC (currently known as the Ministry of Commerce of the PRC ("MOFCOM")) in 1992. He used to serve as the deputy division head and the division head of the Department of Outward Investment and Economic Cooperation of the MOFCOM. Mr. Yang's rich public administration experience also includes his services at the Economic and Commercial Counsellor's Office of the Embassy of the PRC in the Swiss Confederation and the Economic and Commercial Counsellor's Office of the Embassy of the PRC in the Republic of France. From September 2012 to January 2019, Mr. Yang served as the deputy director of the strategic planning department (previously known as "strategic research office") of CNMC, a controlling shareholder of the Company. Mr. Yang has graduated from Beijing Foreign Studies University with a bachelor's degree in French language. From September 2011 to August 2012, Mr. Yang attended an international public administration study programme at École Nationale d'Administration as a candidate sponsored by the French government.

Xiwen Sun (孫希文), aged 45, is a vice president of the Company, and was appointed as and joined the senior management of the Company on 18 May 2021, who is in charge of the development of overseas mineral resources. Mr. Sun has over 15 years of experience in nonferrous metal industry. He worked for the China Non-Ferrous Metals Resource Geological Survey Centre and Sinomine Resource Exploration Co., Ltd. From December 2012 to May 2021, he successively served as the deputy head of geological division of mineral exploration department, head of resource development division of mineral exploration department, head of resource development division of investment mineral exploration department, head of African region of international business department of China Nonferrous Group. Mr. Sun graduated from the University of Utah and obtained a master's degree of geology science in 2006.

Xinghua Liu (劉興華), aged 53, is the chief financial officer of our Company and was appointed as and joined the senior management of Company on 25 January 2016. He currently serves as a director of CNMHKI. He has 29 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 NFCA (a subsidiary of the 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's degree in accounting in 1992, and obtained a master's degree of engineering from University of Science and Technology Beijing in 2016. He also obtained the title of senior accountant in 2002.

Yuan Jiang (江源), aged 42, is a vice president of the Company and was appointed as and jointed the senior management of the Company on 6 July 2019. Mr. Jiang has over 15 years of experience in metal industry. From July 2006 to December 2016, Mr. Jiang successively served as the cadre of Department of Investment and Management, a deputy director and the director of Department of Project Development of CNMC. From December 2006 to December 2017, Mr. Jiang successively served as a deputy director (doctor service group of the Organisation Department of the Central Committee of the Communist Party of China ("CPC")) of management committee of export processing zone on a temporary basis in Beihai City, Guangxi Zhuang Autonomous Region. From December 2017 to December 2018, Mr. Jiang successively served as the assistant to general manager (doctor service group of the Organisation Department of CPC Central Committee) in International Port Group Co., Ltd. in Beibu Gulf, Guangxi Zhuang Autonomous Region. Mr. Jiang obtained a master's degree in mineral processing from Central South University in July 2006 and a doctoral degree of engineering in mining engineering from University of Science and Technology Beijing in January 2014. Mr. Jiang obtained the title of senior dressing engineer in 2012.

Note: Xiaowei Wang (王小衛) resigned as an executive director of the Company on 27 May 2021. Chunlai Wang (王春來) resigned as a vice president of the Company on 30 July 2021, and resigned as an executive director of the Company on 11 April 2022. Xingrong Du（杜興榮）resigned as a vice president of the Company on 21 February 2022. Shili Zhang (張士利) resigned as a vice president of the Company on 20 April 2022.

JOINT COMPANY SECRETARIES

As at the Latest Practicable Date, the Company's joint company secretaries are as follows:

Chaoran Zhu (朱超然), aged 34, has been appointed as a joint company secretary of the Company with effect from 7 March 2022. Mr. Zhu joined CNMC in August 2018 and was responsible for capital operation and equity financing and other relevant works. Mr. Zhu began his career as a department director in CNPC Greatwall Drilling Company ("CNPC Greatwall Drilling", a subsidiary of China National Petroleum Corporation) for the period from 2012 to 2016 and was responsible for the administrative and operational affairs of CNPC Greatwall Drilling. From 2016 to 2018, Mr. Zhu successively served as senior management in the securities affairs department and then the general office of CECEP Wind Power Corporation Co., Ltd. (an A share company listed on the Shanghai Stock Exchange). From August 2018 onwards, Mr. Zhu has served as the director of the secretariat of general office, the member of the preparatory group and deputy director of equity financing division of capital operation department in CNMC. Mr. Zhu obtained the bachelor degree in Economics and master degree in Public Administration from Renmin University of China and subsequently obtained the doctoral degree in Laws from China University of Political Science and Law. Mr. Zhu held both the Fund Professional Qualification Certificate issued by the Asset Management Association of China and the Qualification Certificate for Board Secretaries of Listed Companies issued by the Shanghai Stock Exchange.

Man Yi Wong (黃敏儀), aged 46, 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. From March 2015 to January 2020, she was the company secretary of Hao Wen Holdings Limited (shares of which are listed on GEM operated by the Hong Kong Stock Exchange). 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 Chartered Governance Institute (formerly known as The Hong Kong Institute of Chartered Secretaries) and The Chartered Governance Institute.

Note: Dayong Yang (楊大勇) resigned as a joint company secretary of the Company on 7 March 2022. Please refer to the paragraph headed "Senior Management" for his biography in details.

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 critical in safeguarding the integrity of the Company's operations and maintaining investors' trust in the Company. Except for deviation from code provision C.2.1 of the CG Code, which is explained in paragraph headed "Chairman and Chief Executive" below, the Company had complied with all the code provisions as set out in the CG Code contained in Appendix 14 of the Listing Rules during the year ended 31 December 2021.

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 sample 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 2021.

BOARD OF DIRECTORS

As at 31 December 2021, the Board comprised two executive Directors, namely Mr. Jinjun Zhang and Mr. Chunlai Wang; one non-executive Director, namely Mr. Yao yu Tan; and three independent non-executive Directors, namely Mr. Ding fan Qiu, Mr. Jingwei Liu and Mr. Huanfei Guan. Mr. Jinjun Zhang is the Chairman of the Board.

Mr. Chunlai Wang resigned as an executive Director on 11 April 2022.

To the best knowledge of the Company, there are no financial, business, family or other material relationships among members of the Board.

Lualaba Main Smelting Plant

For the year ended 31 December 2021, 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 general meetings held in person or through other electronic means of communication are as follows:

	Number of meetings held for the year ended 31 December 2021					
	Board	Audit Committee	Nomination Committee	Remuneration Committee	Compliance Committee	AGM and EGM
Mr. Jinjun Zhang	4/4	N/A	1/1	1/3	2/2	1/2
Mr. Chunlai Wang *(resigned on 11 April 2022)*	4/4	N/A	N/A	N/A	N/A	1/2
Mr. Xiaowei Wang *(resigned on 27 May 2021)*	1/1	N/A	N/A	N/A	N/A	0/0
Mr. Yaoyu Tan *(appointed on 27 May 2021)*	2/3	1/1	N/A	N/A	N/A	2/2
Mr. Dingfan Qiu *(appointed on 30 July 2021)*	3/3	N/A	0/0	2/2	1/1	1/1
Mr. Jingwei Liu	4/4	2/2	1/1	N/A	N/A	2/2
Mr. Huanfei Guan	4/4	2/2	N/A	3/3	2/2	2/2
Mr. Chuanyao Sun *(resigned on 30 July 2021)*	1/1	0/0	1/1	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 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 2021.

Main and auxiliary shafts of NFCA Southeast Mine

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/her appointment, so as to ensure that he/she understands the business and operations of the Company and that he/she is fully aware of his/her 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 2021, all the Directors took continuous professional development trainings in order to refresh their knowledge and skills and provided relevant records to the Company.

The types of trainings in which all Directors participated during 2021 are as follows:

	Type of Trainings
Executive Directors	
Mr. Jinjun Zhang	A, B
Mr. Chunlai Wang *(resigned on 11 April 2022)*	A, B
Mr. Xiaowei Wang *(resigned on 27 May 2021)*	B
Non-Executive Director	
Mr. Yaoyu Tan *(appointed on 27 May 2021)*	A
Independent Non-Executive Directors	
Mr. Dingfan Qiu *(appointed on 30 July 2021)*	A
Mr. Jingwei Liu	A
Mr. Huanfei Guan	A
Mr. Chuanyao Sun *(resigned on 30 July 2021)*	B

A: attending seminars, conferences and/or expert briefings relevant to the business or directors' 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

Mr. Jinjun Zhang was appointed as the Chairman of the Board on 8 January 2021, and continued to serve as the President of the Company. This is at variance with code provision C.2.1 of the Corporate Governance Code, which 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 Board believes that the balance of power and authority is adequately ensured by the operation of the Board, which comprises experienced talents with a sufficient number of Directors being independent non-executive Directors, and therefore, the performance of the roles of the Chairman of the Board and the President of the Company concurrently by Mr. Jinjun Zhang will not impair the balance of power and authority between the Board and the management of the Company and the deviation from code provision C.2.1 of the CG Code is appropriate in such circumstance. As to the deviation from code provision C.2.1 of the CG Code, the Board will continue to review the current structure from time to time and shall make necessary changes when appropriate and inform the shareholders accordingly.

APPOINTMENT AND RETIREMENT OF DIRECTORS

Mr. Dingfan Qiu ("Mr. Qiu") was appointed as an independent non-executive director of the Company on 30 July 2021. According to article 107 of the Articles of Association and Rule 4(2) of Appendix 3 of Main Board Listing Rules, Mr. Qiu shall retire at the forthcoming annual general meeting. He is eligible for re-election and will offer himself for re-election.

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. According to articles 102 and 103, Mr. Jinjun Zhang and Mr. Huanfei Guan shall retire at the forthcoming annual general meeting. They are eligible for re-election and 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 three 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 three 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 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 D.3 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. Mr. Chuanyao Sun resigned as a member of the Audit Committee on 30 July 2021. Mr. Yaoyu Tan has been appointed as a replacement on the same day. As at the date of this report, the Audit Committee consists of one non-executive director, being Mr. Yaoyu Tan, and two independent non-executive Directors as its members, being Mr. Jingwei Liu and Mr. Huanfei Guan. The chairman of the Audit Committee is Mr. Jingwei Liu. The Group’s financial statements for the year ended 31 December 2021 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.

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 coordination 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 2021, 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 2021 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:

Name of Directors	Number of meetings attended/held
Mr. Jingwei Liu	2/2
Mr. Yaoyu Tan *(appointed on 30 July 2021)*	1/1
Mr. Huanfei Guan	2/2
Mr. Chuanyao Sun *(resigned on 30 July 2021)*	1/1

NOMINATION COMMITTEE

The Nomination Committee consists of three members. Mr. Chuanyao Sun resigned as the Chairman of the Nomination Committee on 30 July 2021. Mr. Dingfan Qiu has been appointed as a replacement on the same day. As at the date of this report, the Nomination Committee consists of one executive director, being Mr. Jinjun Zhang, and two independent non-executive Directors as its members, being Mr. Dingfan Qiu and Mr. Jingwei Liu. The chairman of Nomination Committee is Mr. Dingfan Qiu, an independent non-executive Director. The Company has adopted the board diversity policy since 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 2021, 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 one meeting and the attendance records of individual members are set out below:

Name of Directors	Number of meetings attended/held
Mr. Dingfan Qiu *(appointed on 30 July 2021)*	0/0
Mr. Jinjun Zhang	1/1
Mr. Jingwei Liu	1/1
Mr. Chuanyao Sun *(resigned on 30 July 2021)*	1/1

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 utilises 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 Latest Practicable Date, the Board comprises five 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 at the date of this annual report:

	Age Group			Length of Service	
Name of Director	**40 to 49**	**50 to 59**	**60 or above**	**less than 3 years**	**more than 3 years**
Mr. Jinjun Zhang		✓			✓
Mr. Yaoyu Tan	✓			✓	
Mr. Dingfan Qiu			✓	✓	
Mr. Jingwei Liu		✓			✓
Mr. Huanfei Guan			✓		✓

	Educational Background			Professional Experience		
Name of Director	**Economics**	**Mining**	**Accountancy**	**Mining**	**Accounting and Finance**	**Management**
Mr. Jinjun Zhang		✓		✓		✓
Mr. Yaoyu Tan	✓		✓	✓		✓
Mr. Dingfan Qiu		✓		✓		
Mr. Jingwei Liu			✓		✓	✓
Mr. Huanfei Guan	✓				✓	✓

REMUNERATION COMMITTEE

The Remuneration Committee consists of three members. Mr. Chuanyao Sun resigned as a member of the Remuneration Committee on 30 July 2021. Mr. Dingfan Qiu has been appointed as a replacement on the same day. As at the date of this report, the Remuneration Committee consists of one executive director, being Mr. Jinjun Zhang, and two independent non-executive Directors as its members, being Mr. Dingfan Qiu and Mr. Huanfei Guan. 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 2021, please refer to note 12 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 2021:

	Number of senior management
HK$0 to HK$500,000	9
HK$500,001 to HK$1,000,000	3
HK$1,000,001 to HK$1,500,000	4
Over HK$1,500,000	2

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

Name of Directors	**Number of meetings attended/held**
Mr. Huanfei Guan	3/3
Mr. Jinjun Zhang	1/3
Mr. Dingfan Qiu *(appointed on 30 July 2021)*	2/2
Mr. Chuanyao Sun *(resigned on 30 July 2021)*	1/1

COMPLIANCE COMMITTEE

The Compliance Committee consists of three members. Mr. Chuanyao Sun resigned as a member of the Compliance Committee on 30 July 2021. Mr. Dingfan Qiu has been appointed as a replacement on the same day. As at the date of this report, the Compliance Committee consists of one executive director, being Mr. Jinjun Zhang, and two independent non-executive Directors as its members, being Mr. Dingfan Qiu and Mr. Huanfei Guan. Mr. Jinjun Zhang is the Chairman of the Compliance Committee. 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:

Name of Directors	**Number of meetings attended/held**
Mr. Jinjun Zhang	2/2
Mr. Dingfan Qiu *(appointed on 30 July 2021)*	1/1
Mr. Huanfei Guan	2/2
Mr. Chuanyao Sun *(resigned on 30 July 2021)*	1/1

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 2021 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 condensed 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 2021 amounted to US$1,000,000 (RMB4,360,000 and US$324,000) and US$352,000 (RMB1,710,000, HK$406,000 and US$35,000) respectively.

JOINT COMPANY SECRETARIES

Mr. Dayong Yang resigned as a joint company secretary of the Company on 7 March 2022. Mr. Chaoran Zhu has been appointed as a replacement on the same day, after a waiver to the Company from strict compliance with the requirements under Rule 3.28 and Rule 8.17 of the Listing Rules for a period of three years starting from the date of Mr. Zhu's appointment, has been granted by the Stock Exchange. As at the date of this report, Mr. Chaoran Zhu and Ms. Man Yi Wong are the joint company secretaries of the Company.

Before Mr. Dayong Yang's resignation as a joint company secretary on 7 March 2022, Ms. Man Yi Wong's primary corporate contact person at the Company was Mr. Dayong Yang. Ms. Wong's primary contact person at the Company has been changed to Mr. Chaoran Zhu since 7 March 2022. The joint company secretaries have taken no less than 15 hours of relevant professional training during the year. Joint company 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 2021 is set out on pages 148 to 152 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 2021, 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: we 1) further set up the comprehensive management system and mechanism for legal and compliance works; 2) engaged Deloitte Touche Tohmatsu CPA Ltd. and China Energy Conservation Environmental Advisory Group Co., Ltd. to organise and conduct two special programmes, namely "Risk Management and Internal Control System" and "Environmental, Social and Corporate Governance", with an aim to independently assess risk management, internal control system, environmental, social and corporate governance of the Group. These programmes laid a solid foundation for the enhancement of corporate governance structure and level of the Group; 3) improved management level with additional training. In 2021, the Board reviewed the risk management and internal control of the Group. The Compliance Committee held two meetings to plan for legal 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 various professional trainings provided by the Hong Kong Institute of Chartered Secretaries, with an aim to continuously improve the awareness for compliance and prevention of legal risks and refresh professional skill sets of themselves and other compliance staff.

RISK MANAGEMENT AND INTERNAL CONTROL REPORT

I. Responsibilities

The Board of the Company is fully responsible for maintaining a 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, 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 relating to risks or disclosure, and consider making recommendations for improvement of such controls. An annual review covers all material monitoring, including financial monitoring, operational monitoring and compliance monitoring. The matters that the Audit Committee reviews include, among others, 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; and

(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

Top-down: monitor, identify, assess and control the risks at corporate level

Board		Audit Committee	Compliance Committee
• Fully responsible for the Company's risk management and internal control system • Set up strategic objectives to review the effectiveness of the Company's risk management and internal control system	• Assess and define the nature and extent of the risks • Provide guidance on the importance of risk management and promote the risk management culture	• 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

Bottom-up: identify, assess and control the risks of business units at operations level

Management	Internal audit
• Design, implement and monitor risk management and internal control system • Assess the risks to the Company and its control measures	• Assist the Audit Committee in reviewing the effectiveness of the Company's risk management and internal control system
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 Organizations 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 have all established mature operational processes. The Company and all the 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 programme to effectively set restrictions on power and implement the separation of duties. With the help of digital technology, the operating efficiency was promoted.

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 manages the financial information and compliance information of all the investees. All the investees have established a unified business finance management system to strengthen the integration and sharing of information.

Internal Supervision – The supervision procedure is organised and started 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 2021

The Company has organised an overall review on the risk management and internal control system in 2021. As at 31 December 2021, as confirmed by the management, the Board considered the risk management and internal control system 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 and experience of staff responsible for the Company's accounting, internal audit and financial reporting, training and budget were sufficient.

Huachin Leach Plant Area

V. Further Reinforcing 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 – Optimising and improving Organisational management system

In 2021, under the frequent assault of COVID-19 pandemic such as Delta and Omicron, the Company strived to maintain the stability of the governance structure and organisational structure with a people-oriented approach, and added or adjusted the authorities and duties of relevant departments according to the needs of production and operation in a timely manner to promote the matching of human resources with the Company's development strategy; at the same time, the Company strengthened the awareness training of all employees in social responsibility and safety production, etc., and took various measures to strengthen and improve the internal risk management environment.

Risk Assessment – Strengthening risk identification, assessment and response capabilities

In the general context of the continuous raging of the COVID-19 pandemic, the Company's management continued the tone of risk profile in 2020, and continued to carry out risk assessment with the goal of preventing and resolving major production and operation risk events; actively promoted personnel training and emergency drills in response to the prepared emergency plans; simultaneously further optimised its measures to ensure production and operation, focused on incremental market opportunities, and strengthened internal coordination to effectively guarantee the Company's daily production and operation work.

Control Activities – Focusing on and implementing the key points, and comprehensively improving management capabilities

With the overall goal of asset safety and effective operation, in the current year, the Company actively conducted self-checking and self-correcting activities around inventory safety, capital safety, equipment safety, equipment maintenance, etc., and explored the establishment of a system and an effective safeguard mechanism during the year; meanwhile, the Company strengthened the supervision of various control activities at the executive level, fully integrated with the daily management of each subsidiary, and promoted the implementation of various rules and regulations; in addition, the Company continuously and comprehensively promoted information construction and improved its management capabilities. For example, NFCA took the upgrading and transformation of Chambishi Main West Mine and the production capacity of Chambishi Southeast Mine as the guidelines, with ERP, MES, OA and other information systems as the starting point, to increase technological innovation and promote the information, digital and intelligent constructions.

Information and Communication – Breaking down systemic barriers and accelerating data sharing

The Company continued to invest in the equipment and systems supporting its core business. Through technological transformation, the Company has made its major equipment initially capable of data collection and communication, achieving automation and digital upgrade covering important links of its core business; through the development of standard interfaces and data formats, some of the information systems supporting production operations were able to achieve internal integration, and data and information were shared within the business; at the same time, the integration of production systems and management systems at the data level was emphasized, initially forming an ecological environment around production and management data.

Internal Supervision –Steady progress in risk management and internal control work

On the basis of the conventional annual internal control evaluation, the legal and compliance department organised a special evaluation on risk management and internal control system in 2021 to carry out a thorough and holistic evaluation of the risk management and internal control system of the Company and all the investees. The annual special evaluation covers many aspects such as corporate governance, financial supervision, business operation and compliance supervision; at the same time, the Company continued to improve its risk prediction and risk response capabilities with comprehensive risk management as the starting point.

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

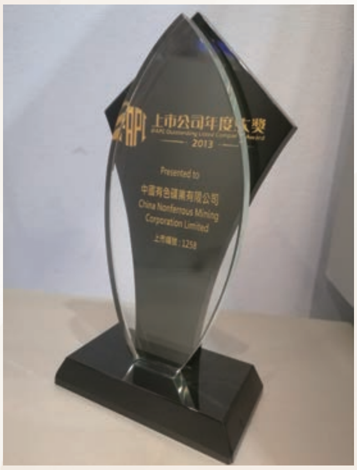
As the basis for the risk management policy, the Company should be aware of the risk factors and risk changes it is currently exposed to. The following table sets out the nature and risk changes of some of the significant risks to the Company.

Risks	Description of risks change	Risks change in 2021
Political environment	• DRC domestic political conditions was unstable, anti-government armed attacks occured frequently and overall conditions gradually became tense; Zambia's domestic political conditions basically remained stable, with a further downward trend in the economy.	Maintained
Operating environment	• The Delta and Omicron outbreaks have caused frequent disruptions to the mineral import and export trade and upstream and downstream industries, and uncertainties in the operating environment still exist.	Maintained
Product price	• In 2021, copper prices continued to rise, and fluctuated at a high level in the middle of the year, maintaining a relatively good trend.	Reduced
Provision of raw materials	• The mines of its subsidiaries had stable supply of raw materials, and the Company actively explored sources of minerals to ensure the supply of raw materials.	Maintained

Risks	Description of risks change	Risks change in 2021
Production management	• The Company actively responded to the impact of the COVID-19 pandemic on the health of employees and the Company's production. At the same time, the Company paid close attention to the management of production equipment this year, and actively enhanced the awareness of safe production to maintain effective and orderly development.	Maintained
Asset management	• Asset impairment was mainly affected by copper prices. In 2021, copper prices remained high, and the risk of asset impairment decreased.	Reduced
Foreign exchange management	• The exchange rate of ZMK against the US dollar appreciated slightly in 2021, alleviating the adverse impact of changes. Changes in exchange rates on production and operation.	Reduced
Legal litigation	• There still existed various types of proceedings, but the cases were under good management.	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

Most Valuable Investment Award in 2021

Pursuant to F.2 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 Unit 1303, 13/F, Austin Tower, 22–26 Austin Avenue, Tsimshatsui, Kowloon, 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;

(iii) retained profits 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 2021.

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. Currently, Mr. Chaoran Zhu, a joint company secretary of the Company, is responsible for the investor relations of the Group with the full support from the Board and the senior management. Mr. Zhu can be contacted by email at zhucr@cnmc.com.cn, by telephone at +86 10 8442 6085 and by fax at +86 10 8442 6376. The dedicated email for investor relations of the Group is hk1258-ir@cnmc.com.cn. 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

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.

Through on-going information dissemination, the Group's website (www.cnmcl.net) and the WeChat official account "中國有色礦業HK01258" serves as a platform to communicate with the public. The Group regularly updates the content of its website and WeChat official account, disseminates the latest updates, so as to enable the public to obtain such information in a timely manner. In 2021, the Group has published 52 announcements and 11 articles on company dynamics on its website, published 12 articles of company news on WeChat official account. 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

The Group is pleased to release the sixth Environmental, Social and Governance Report (the "Report"), which is intended to provide relevant stakeholders with the environmental, social and governance (ESG) performance of the Group, so as to let them have a more comprehensive understanding of the Group's sustainable development philosophy.

Scope of Reporting

This Report covers the head office of the Group and its subsidiaries including NFCA, Luanshya, CCS, SML, Huachin Leach, CNMC Huachin Mabende, Lualaba Copper Smelter and KAMBOVE MINING SAS, as well as the sales of copper and sulfuric acid products, the main source of revenue of the Group, in the period from 1 January 2021 to 31 December 2021 (the "Reporting Period") unless otherwise stated.

Preparation Basis

This Report has been prepared by the Group in compliance with the ESG Reporting Guide (the "Guide") set out in Appendix 27 revised by the Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") in 2019.

This Report has been in compliance with the "comply or explain" provisions under the Guide and on the basis of four reporting principles of materiality, quantification, balance and consistency.

Reporting Principles	Feedback from the Group
Materiality	The Group has identified the material issues related to the Group through materiality assessment, including inviting internal and external stakeholders to prioritize the material issues, and presenting them in the form of materiality matrix in this report. For detailed materiality assessment process and results, please refer to the section headed "Materiality Analysis" in this Report.
Quantification	The Group has disclosed in this Report the quantitative KPIs and the standards, methodologies, assumptions and calculation references used, including the source of the major conversion factors.
Balance	This Report shall present the Group's performance during the Reporting Period in an unbiased manner, and avoid selections, omissions, or presentation formats that may inappropriately influence a decision or judgment by the readers.
Consistency	This Report uses consistent calculations used in previous reporting periods to allow readers to make meaningful comparisons of ESG information over the Reporting Period. If there are any changes, we will note and explain those changes in the footnotes.

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 the Report

The Report is published in the 2021 Annual Report of China Nonferrous Mining Corporation Limited. The electronic copy of this report is available on the website of the Hong Kong Stock Exchange (https://www.hkexnews.hk) and the official website of China Nonferrous Mining Corporation Limited (http://www.cnmcl.net/Home). Your valuable feedback is critical to our continuous improvement. If you have any enquiries and suggestions, please call 8610–84426085 or 8610–84426851.

Sustainable Development Management

The Group is committed to integrating sustainability into corporate governance and daily operations. During the Reporting Period, the Group has initially established an ESG governance structure. As the highest decision-making body for the Group's ESG work, the Board of the Group assumes the ultimate responsibility for ESG matters and oversees the Group's ESG matters. The Compliance Committee under the Board leads the ESG working group. The subsidiaries of the Group are responsible for implementing the specific work of the ESG working group, including managing ESG objectives and assisting the Board to review the progress of ESG objectives on a regular basis, and adjusting or refining goals according to circumstances.The Group will continue to promote ESG management and improve the ESG governance structure, optimize the ESG management model in accordance with the requirements of the Stock Exchange and in light of the actual situation of the Group, so as to make ESG management more systematic and professional.

The Group has always adhered to the goal of sustainable development and been committed to maintaining a high-level corporate governance system. The Group has established a comprehensive and prudent risk management and internal control system, which is maintained and improved by the Board, and designed and implemented by the management.

The Group actively responds to ESG-related risks. The Board is responsible for determining, evaluating, prioritising and managing ESG-related risks, and guaranteeing the effectiveness of ESG risk management and internal control systems. The Group has integrated ESG-related risks into the risk management system, where the monitoring process includes internal environment, risk assessment, control activities, information and communication, and internal supervision.

At the same time, the Group has established internal control procedures for the businesses and matters included in the evaluation scope, which have been effectively implemented and achieved the Group's internal control objectives. The Board is responsible for maintaining a sound and effective internal control system, and adheres to performing regular evaluations on the effectiveness of internal control.

Communication with Stakeholders

The Group has been actively maintaining good relationships with stakeholders. By establishing effective and comprehensive communication channels, we hope to understand the expectations and suggestions of stakeholders, and review the potential risks and opportunities related to ESG, so as to effectively promote the sustainable development of the Group. The table below shows the expectations of various stakeholders on the Group and the Group's daily communication channels with them:

Stakeholders	Expectations	Means of communication	Frequency of communication
Governments and regulatory authorities	Obeying disciplines and laws Compliance operation Paying taxes according to law	Policy formulation Work report Information disclosure	On a regular/irregular basis
Shareholders and investors	Operational performance Profit of the Company Corporate governance	Shareholders' meeting Periodic report Results announcement Roadshow	On an annual/quarterly/ irregular basis
Employees	Remuneration and benefits Health and safety Vocational training	Employees' meeting Labour contract Employees' activity	On a regular/irregular basis
Clients	Quality control Service assurance	Contract and agreement Customer service Website of the Company	On an annual/quarterly/ irregular basis
Suppliers	Fairness and justice Mutually beneficial cooperation	Contract and agreement Work meeting Evaluation from the supplier	On a regular/irregular basis
Communities	Protecting community Environment Harmonious development	Community communication Charitable donation	On a regular/irregular basis

Analysis on Material Issues

During the Reporting Period, the Group entrusted a third-party professional consultant to assist in the assessment of material issues, and concluded the material issues for 2021. Through the assessment of material issues, the Group discloses material issues in the ESG report, effectively responds to the concerns of various stakeholders, and strengthens our sustainable development management.

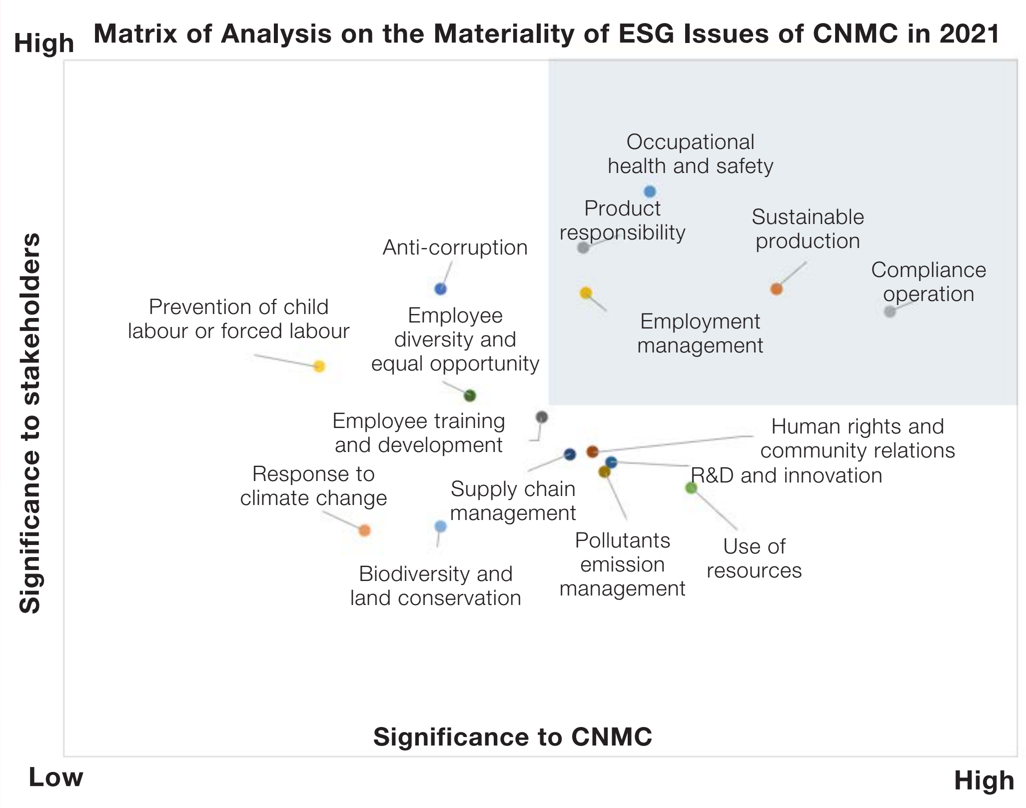
Based on the results of 2020 annual survey on material issues, we reviewed and identified relevant ESG issues with reference to the Guide, the United Nations Sustainable Development Goals and the issues involved in the metal and mining industry in the ESG rating of MSCI, in combination with the results of peer benchmarking analysis, so as to establish the ESG issue database for 2021.

Subsequently, the Group collected stakeholders' opinions through questionnaires and analyzed the development trends of our peers based on full consideration of the business nature and development strategy. During the assessment process, we analyzed the two dimensions of each issue, i.e. "impact on the Group" and "impact on stakeholders", to assess and select material ESG issues during the Reporting Period, and arrived at the materiality analysis results. The analysis results were reviewed by the Board of the Company and the material ESG issues finally determined will be highlighted in the Report.

The Group's material issue assessment process includes the following four major steps:

ESG issues indentification	• To identify the potential material issues that can reflect the effects of business of the Group on the environment and society and influence stakeholders' assessment and decision on the Group through background research, including internal management system, benchmarking analysis of our peers and other relevant documents.
ESG issues ranking	• To invite internal and external stakeholders to rank the materiality of potential ESG issues through anonymous online questionnaires, and to collect their opinions and expectations on the Group's ESG governance. Based on the survey results, to select the material issues.
Review of material issues	• The Board reviews the material issues selected by stakeholders, confirms the impact of these issues on the Group and ultimately determines the 2021 ESG material issues.
Response to material issues	• To determine the key issues for disclosure in the Report based on the ranking of materiality, to analyze key concerns of the stakeholders and prepare ESG management measures.

We actively invited the internal and external stakeholders of our Group to participate in this survey on material issues so as to understand the concern and attention that they attach to the ESG issues of the Group. We received a total of 665 responses to the questionnaire in this survey, and based on the analysis results, we formed the following matrix of material issues. The materiality analysis matrix of ESG issues of the Group in 2021 is demonstrated as below:



The senior management of the Company considered, reviewed and determined the results of the material issues analysis in terms of sustainability contribution, general concerns of stakeholders and the needs of strategic development of the Group, and finally selected the following five material ESG issues. Those issues will serve as an important factor taken into account for the direction of sustainable development of the Group, and are also the key content for disclosure in the Report.

Compliance operation	Occupational health and safety	Sustainable production	Product responsibility	Employment management

Sustainable Development Actions

In response to the problems facing all countries, the United Nations has planned 17 sustainable development goals and 169 tracking indicators in "Transforming Our World: The 2030 Agenda for Sustainable Development". These goals call for the joint efforts of the international community. The Group is well aware of the importance of global sustainable development, so we have integrated those sustainable development goals into the process of sustainable development management of the Group, and we are committed to continuously improving our operation strategy, and disclosing the actions taken by the Group in response to those goals.

United Nations Sustainable Development Goals	Definition of the goals	Actions taken by the Group	Relevant chapters in this report
	Ensure healthy lives and promote well-being for all at all ages.	• Provided medical benefits and allowances to our employees and their family, and strengthened the promotion, prevention, monitoring and treatment of epidemic infectious diseases with high incidence in part regions of Africa. • Formulated and implemented road safety-related policies, and established environmental protection management measures against exhaust gas, sewage and solid waste during the mining process to control pollution emissions from the source.	PEOPLE-ORIENTED PRINCIPLE, GREEN DEVELOPMENT
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	• Formulated and implemented internal policies in relation to employee training, carried out training adapted for different fields, and set up post self-study awards. • Provided opportunities for the children of outstanding local employees to study in China. • Supported local communities in the education cause in and provided educational subsidies to impoverished students.	PEOPLE-ORIENTED PRINCIPLE, CONTRIBUTION TO COMMUNITY

United Nations Sustainable Development Goals	Definition of the goals	Actions taken by the Group	Relevant chapters in this report
	Ensure availability and sustainable management of water and sanitation for all.	• Followed the principle of recycling, and recycled and evaporated, after filtration of scum, production sewage, respectively, through copper leaching process and copper smelting process. • Discharged office and domestic sewage after treatment to reduce pollution.	GREEN DEVELOPMENT
	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	• Eliminated use of child labor and forced labor, signed labor contracts with employees, and protected the legitimate rights and interests of employees. • Signed recognition agreements with many labor unions to ensure equal opportunities for employees. • Provided priority employment opportunities to the local society. • Formulated and implemented internal policies and emergency plans in relation to occupational health and safety. • Equipped employees with personal protective equipment, strengthened occupational safety training, conducted hazard monitoring and assessment, and purchased insurance for employees.	PEOPLE-ORIENTED PRINCIPLE

United Nations Sustainable Development Goals	Definition of the goals	Actions taken by the Group	Relevant chapters in this report
	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	• Formulated and implemented internal policies in relation to patent application and intellectual property protection. • Intensified R&D and innovation of mining process, and formulated corresponding mining plans. • Encourage production and management personnel to put forward constructive opinions on issues in production links such as quality control and high energy consumption. • Assisted some local communities in improving infrastructure construction, including well drilling, community maintenance and reconstruction, emergency repair of circuits, road repairs, etc.	MANAGEMENT EXCELLENCE, CONTRIBUTION TO COMMUNITY
	Reduce inequality within and among countries.	• Made continuous improvement in the corporate management system, and specified corporate management rules in accordance with relevant regulatory requirements. • Adhered to the principles of equality, diversity and antidiscrimination, and treated employees of different nationalities, races, and genders equally. • Provided priority employment opportunities to the local society. • Formulated and implemented internal policies in relation to community donation.	MANAGEMENT EXCELLENCE, PEOPLE-ORIENTED PRINCIPLE, CONTRIBUTION TO COMMUNITY

United Nations Sustainable Development Goals	Definition of the goals	Actions taken by the Group	Relevant chapters in this report
	Ensure sustainable consumption and production patterns.	• Took business sustainability into consideration during operation, and disclosed relevant information to the public. • Formulated and implemented internal policies in relation to environmental management. • Established management measures on waste gas, sewage, solid waste and ecological environment to reduce the impact of business operations on the environment. • Carried out resource management in terms of business operation, office and life, and improved the comprehensive utilization of resources in all aspects of the business. • Attached importance to R&D and innovation, and made relentless efforts to improve the mining process.	MANAGEMENT EXCELLENCE, GREEN DEVELOPMENT
	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	• Monitored the water quality of surrounding rivers. • Carried out afforestation activities.	GREEN DEVELOPMENT

United Nations Sustainable Development Goals	Definition of the goals	Actions taken by the Group	Relevant chapters in this report
	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	• Formulated and implemented internal policies in relation to anticorruption. • Provide employees with training on anti-corruption. • Established a reporting and complaint mechanism to report misconduct within the enterprise.	MANAGEMENT EXCELLENCE

MANAGEMENT EXCELLENCE

Compliance Operation

The principal operations of the Group are located in Zambia and the DRC in Africa. We have strictly abided by the laws and regulations of the PRC, Zambia, the DRC and other places where we operate, consistently improved our management system, and followed business ethics, and thus we have steadily enhanced the Group's international competitiveness.

The Group has developed internal 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》), 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 Guidelines for 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 relevant regulations including the Companies Ordinance in the Hong Kong area and the Listing Rules of the Hong Kong Stock Exchange and in compliance with the Articles of Association, to clarify the implementation rules for corporate governance.

Nomination Committee, Remuneration Committee, Compliance Committee and Audit Committee have been set up under the Board of Directors of the Group, which are responsible for the management and maintenance of the personnel structure, employee rights and interests, sustainable development compliance and corporate compliance operations, respectively. In addition, in order to better adapt to the legal systems of Zambia and the DRC, the Group has set up a compliance officer/corporate general counsel and the legal and compliance department to ensure the legal compliance of the overseas production and operation activities.

Product Responsibility

Taking the enhancement of quality, benefits and core competitiveness as its focus and with "sustainable utilisation of resources" and "realisation of high-quality development" as its objects, we attach importance to sustainable production and promise to continuously improve the sustainability of resource utilization to promote the standardisation on the management of products responsibility. Besides, we set goals such as improving utilisation rate of resources, safe and clean production, reducing production costs, and increasing product quality and economic benefits. We also follow the quality system standards required for LME registration: BS EN 1978:1998 Copper Cathodes, GB/T 467-2010 Copper Cathodes, ASTM B115-10 Standard Specification for Electrolytic Copper Cathode, and always provide customers with high-quality products.

The quality inspection of the Group's products is carried out in accordance with the relevant national inspection and quality standards. The quality of copper cathodes are tested based on the national standards GB/T467–2010 for Copper Cathode in the People's Republic of China, while the quality of copper concentrate are tested with the standard for method of scientific analysis on copper concentrate under the national standards GB/T3884.1–3884.10–2000 in the People's Republic of China. The Group has continuously improved its product quality management system. Luanshya has been granted the ISO 9001 quality management system certificate, and formulated the Measures for Quality Management of Strip Mine Project (《露天礦工程質量管理辦法》) and other corresponding management measures to standardise the management of the whole process including product exploitation, production and sales, to comprehensively implement product responsibilities. In order to ensure product quality, a quality inspection center has been set up by both Luanshya and SML, conducting inspections at all stages in the process of production. If any quality problems are found in the process, relevant departments will carry out research, handle and timely rectify them to ensure that customers are provided with high-quality products. The daily operation of the Quality Inspection Center is managed through the System for Quality Control of Quality Inspection Center (《質檢中心質量控制制度》), and staff carry out work by strictly abiding by the rules and regulations thereunder.

The Group is committed to providing customers with quality products and services and pledged to continuously perfect the operation model. NFCA has formulated a series of complaints management measures, and employees must follow 14 guiding principles when handling client complaints. For example, in the principle of commitment, employees need to actively make commitments to the provisions and implementation of the complaint handling process; in the principle of objectivity, employees shall treat each complaint equally, objectively and without prejudice in the complaint handling process. Once we receive complaints from our clients, we will immediately arrange relevant responsible departments to deal with them, report them to the management, and make understanding to the relevant departments, put forward solutions, and communicate with customers in a timely manner.

During the operations, we strictly keep confidential for the material non-public information of partners and clients, to prevent disclosure and loss of sensitive information.

During the reporting period, the Group complied with the laws and regulations in relation to health and safety, advertising, labeling and privacy of our products and services in China and places where we operate our projects, and we did not receive any complaints or legal proceedings regarding violations thereof. There were no cases of recall of sold or issued products due to safety and health reasons.

Construction of Integrity-based Governance

The Group maintains a "zero tolerance" attitude towards any non-compliance including bribery, blackmail, extortion and money laundering. We strictly abide 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 fraud and strengthen the Group's governance and internal control, reduce legal risks, regulate business activities and ensure the sustainable and healthy development of the Company, the Group has formulated the Related Party Transaction Management Rules, Reporting and Complaints Management Rules, Anti-fraud Regulations, the Implementation Measures for Corruption Risk Prevention and Control and other internal management rules, and continuously improve the anti-corruption management system and integrity-based governance rules, thus enabling anti-corruption work to be done in a standard, systematic and normalized way.

Among them, the "Anti-fraud Work Regulations" of Luanshya clearly defines the main responsibilities of the management in anti-fraud work, including but not limited to establishing and promoting a corporate culture of honesty and integrity, as well as assessing fraud risks and establishing specific control procedures and mechanisms. Anti-fraud policies and procedures and related measures are also effectively communicated or trained in CNMC Luanshya in various forms, such as employee handbooks, company rules and regulations release or bulletin boards, etc., to ensure that employees receive training on relevant laws, regulations and professional ethics, and understand the concepts covered by the Code of Conduct. In addition, we encourage employees to report inappropriate behaviors. Reporting emails and telephones have been set up by the Group and its subsidiaries, and relevant complaints are dealt with by specialised agencies. In case that any serious violations are found, they will be dealt with by the judicial department.

In addition, the Group adopts strict management measures for key anti-corruption links such as bidding and procurement, and clearly sets relevant anti-corruption clauses in the procurement contract to ensure the openness and transparency of the bidding process, and strictly prevent all kinds of fraudulent acts. For example, during the selection of suppliers, Lualaba Copper Smelter has formulated a strict avoidance system for specific related persons, and required partners (including cooperative merchants in procurement, sales, transportation and services) to actively identify personnel who have certain relations with the procurement, sales and other positions of Lualaba Copper Smelter through files, and to abstain from business cooperation.

In order to strengthen the supervision mechanism, the Group has incorporated anti-corruption into the planning, conducted internal supervision, and investigated and dealt with disciplinary cases. We also regularly organize middle and senior employees to learn anti-corruption policies, carry out anti-corruption education, integrity talks and other activities, and continuously enhance employees' awareness of integrity. In particular, Lualaba Copper Smelter carried out self-inspection and self-correction of integrity risk points and integrity risk investigation. On 1 January 2021, the Company arranged relevant employees to sign the "Integrity Practice Commitment" and held a warning education conference on integrity practice on 2 August of the same year to warn and educate relevant employees on anti-corruption. During the Reporting Period, the Group has provided anti-corruption training to directors and employees, such as the study of legal compliance and anti-corruption in Party building. In particular, on 6 May 2021, CCS organized middle-level and above management personnel and branch members to participate in the warning education conference, and learned 7 warning education cases within the Group.

During the Reporting Period, there was no litigation against or corresponding penalty imposed on the Group due to bribery, blackmail, extortion and money laundering.

Lualaba Copper Smelter organized personnel in key positions to sign a Integrity Practice Commitment

Lualaba Copper Smelter organized a warning education conference

The head of the discipline inspection of Kambove Mining conducted integrity reminder talks with newly promoted management personnel

R&D and Innovation

Technological R&D and innovation constitutes important work for the Group. We expect to improve the use efficiency of resources and product quality by utilising advanced technologies. The Group proactively encourages production and management personnel to spontaneously propose constructive suggestions on production processes including quality control and high energy consumption and conduct continuous innovation. Meanwhile, our subsidiaries have formulated the Interim Measures for Patent Application Process and Awards of CNMHK, the (Interim) Measures for Protection of the Intellectual Property Law of CNMC Luanshya Copper Mines PLC and other relevant measures according to the Patent Law of the People's Republic of China, the Trademark Law of the People's Republic of China, the Copyright Law of the People's Republic of China and other laws and regulations, which specify the patent application procedures and award standards, helped to protect the intellectual property of the Group and strengthened core competitiveness of the enterprise.

Supply Chain Management

In managing the environmental and social risks of the supply chain, we have formulated a series of supplier-related systems to regulate the code of conduct of suppliers. In particular, the subsidiaries of the Group will also formulate relevant systems according to the Group's system and based on their own actual conditions, such as the Interim Measures for the Management of Biding and Purchasing of Materials of China Nonferrous Mining Hong Kong Holdings Limited (《中色香港控股有限公司物資採購招標管理暫行辦法》). Lualaba Copper Smelter has formulated internal management documents such as the Compilation of the Management Measures for the Supply Department (《供應部管理辦法匯編》), and NFCA has formulated internal management documents such as the Management Measures for Bidding (《招投標管理辦法》) and the Management Measures for Supplier Registration (《供應商註冊管理辦法》). Relevant management systems set out in detail a sound supplier supervision, review and management mechanism. As the Group's suppliers are located in different places, most of the subsidiaries also adopt an online supplier management system to establish supplier management files and file information for ease of management.

When selecting suppliers, we comprehensively take into consideration their performance including the compliance procedures, the quality of products supplied, the delivery period, product prices, after-sale services and other factors. According to relevant regulations of the management measures, the Group will arrange personnel to conduct on-the-spot investigation and reviews based on actual conditions of the Company before entering into contracts with new suppliers, thus to ensure that the quality and operations of suppliers meet the requirements of the Group. Annual assessment to suppliers is conducted by the Group with filling in the Qualified Supplier Review Form. In addition to quality and service, we also attach importance to suppliers' environmental and social performance, including sustainable development management standards, environmental management, employment of child labour or forced labour, etc., and include them into the scope of assessment. The unqualified suppliers will be warned or disqualified based on the degree of violation.

Subject to the premise that our selection standards are met, the Group will prioritise local suppliers and establish long-term and stable cooperative relationship to promote local employment and economic development. We also help suppliers improve their management level and quality of products and services, and urge them to fulfil their environmental and social responsibilities, so as to achieve win-win cooperation. We select suppliers who share our values and meet our internal standards to establish long-term partnerships by understanding their performance in compliance with laws and regulations, safety, environmental and health management systems and anti-corruption laws.

In addition, the Group pays great attention to the environmental and social risks of suppliers and has established subsidiaries to integrate the identification of environmental and social risks into the supplier management system. For example, Lualaba Copper Smelter conducts file reviews and on-site reviews of suppliers. The text review includes the review and evaluation of the supplier's qualifications, technical capabilities, production capabilities, contract performance capabilities, service capabilities, performance and other certification files. The subsidiaries will require suppliers to present certificates corresponding to their qualifications, such as certifications related to quality, safety and environmental protection systems, proven capabilities to perform contracts, business operations and major relevant performance certificates. At the same time, the Group has understood the importance of promoting multiple use of environmentally friendly products or services when selecting suppliers. In the future, we will actively consider how to cope with the actual business conditions, optimize and improve the procurement process of suppliers and products, and increase the adoption rate of environmentally friendly products and services.

Besides, for suppliers who provide special and important products, we will organize field inspection personnel to conduct on-site review according to actual needs. After the inspection, a written report will be issued to detail the overall situation of the inspected suppliers to effectively identify and reduce the potential environmental and social risks of the suppliers. As at the end of the Reporting Period, the Group's subsidiaries had a total of 427 suppliers, of which 368 were from within Zambia and the DRC, and 59 were from within and outside Zambia and the DRC. The Group has implemented relevant supplier management practices for 425 of them.

SAFETY FIRST

The Group has always adhered to the safety production policy of "safety first, prevention-oriented, and comprehensive management" while adhering to the concepts of “safety production is paramount” and “intrinsic safety and active safety”, aiming at “zero injury”, insisting on the problem, objective and result-oriented, and always paying close attention to safety to ensure the safety and stability of the Company's production.

Safety System

The Group strictly abides by *Mines and Minerals Development Act No.11 of 2005, Factories Act Chapter 441 of the Laws of Zambia, Law No.001/2018, the Mining Code* and other relevant laws and regulations, and have developed certain policy documents including Safety Production Responsibility System, the Measures for Safety Production Management, the Measures for Appraisal of Safety Production and the Rules for Report, Investigation and Handling of Production Safety Accidents, to effectively manage its production activities and safety issues.

The Group has been constantly improving the safety management system and promoting systematic, normalized, standardized and scientific safety management through six major scopes, including management organization, performance assessment, inspection and rectification, emergency management, education, training and occupational health protection.

Safety management organization	Safety performance assessment	Safety inspection and rectification
• The Group arranges responsible persons in charge of production safety based on position levels, with general manager or an eligible mine manager as the primary person in charge of production safety, the safety director in charge of full-time management 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.	• 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.	• 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	Safety education and training	Occupational health protection
• 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.	• 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.	• In addition to ensuring that its plants conform 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. • It provides appropriate labour protection articles and occupational health examination to staff exposed to occupational disease risks to prevent them from occupational diseases.

Safety Operation

The Group is committed to maintaining safety operations and upholds that safety production is the top priority. By adopting advanced, mature and reliable process and equipment, and formulating targeted standard operating procedures on process and equipment, we make every effort to build an impregnable fortress of safety production. 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 such as mine construction, safety management will check special operation files, operators' qualification and on-site equipment safety on time. We will set eye-catching safety signs for the areas and equipment prone to accidents or endangering the safety and health of personnel.

The Group also pays attention to safety management on contractors. It requires contractors to abide 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.

During the Reporting Period, Huachin Leach carried out the action of “investigating three violations, eliminating three violations, and punishing three violations” to severely crack down and rectify the “three violations”. In response, Huachin Leach has formulated a series of measures, including the establishment of a list of “three violations”, and the formulation and implementation of specific measures for “fighting three violations”; improving safety operation procedures, carrying out “recitation” and “assessment” of system procedures, and carrying out education training and examinations; establishing a behavior observation mechanism for operators in areas with major safety risks and a behavior file for operators; establishing a reporting reward mechanism such as “whistle-blower”. The list of “three violations” is formulated in combination with the production process, and sent to each production workshop for reference learning and inspection, and is communicated by the workshop leader at each level. Each production workshop has employees responsible for daily safety management. The subsidiaries will conduct monthly safety management performance evaluation and reward employees who meet the assessment standards.

Case: Huachin Leach carried out eliminating “three violations” inspection activities

During the National "Safety Production Month" in June 2021, Huachin Leach conducted 2 safety inspections, identified 30 hidden hazards, and rectified the identified safety hazards in a timely manner, with a rectification rate of 100%. Each workshop carried out eliminating “three violations” inspection activities on the production and operation site, and at the same time conducts education and training on violations in a timely manner to effectively prevent various production accidents.

Safety inspection includes:

- Auto repair conducted safety inspections and maintenance on commuter vehicles in the factory area and tailings, including hazardous chemical transportation vehicles;

- The fitter organized the settlement inspection of the semi-autogenous mill, ball mill and thickener in the plant, and the riveter and welder organized the wall thickness inspection of all pressure-sealed tanks and transportation vehicles such as sulfuric acid, diesel oil and kerosene;

- The extraction and electrowinning workshop strengthened the daily management and control of major hazard sources in the workshop, improved the management and control level of major hazard sources in the workshop, and focused on strengthening the daily management of kerosene storage tanks in the extraction operation area, personnel entry and exit, and on-site supervision of external operators; and

- The mine manages the traffic safety of mining equipment, transport vehicles and passing vehicles as key monitoring objects.

Case: “Quality Month” Safety Inspection in CCS

According to the requirements of the Notice on Carrying out the “Quality Month” Activities in 2021 issued by the Holding Group, CCS conducted safety inspections on quality, safety production risks and rectification of hidden dangers of various departments and units from 16 September to 23 September 2021.

Under the leadership of the Zambian leadership team, CCS went into the production site, focusing on the smelting, acid production process, copper acid product quality and safety, as well as the Company’s oil depots (including ancillary facilities), warehouses, construction areas, special equipment and tailings ponds to carry out safety hazard investigation. It supervised relevant units to establish ledgers and formulate measures against the problems identified, actively implemented rectification, and strictly prevented safety and quality accidents.

The Safety Director went to the electric repair workshop of the power branch for safety inspection

The Director of the Safety and Environmental Protection Committee conducted safety inspection at the smelting branch

During the Reporting Period, the Group had 1 general equipment accident, days lost due to work-related injury were 127 and no work-related fatalities.

Occupational Health and Safety

In order to prevent, control and eliminate occupational disease hazards, prevent occupational diseases, and protect the health of workers, the Group adheres to the principle of "Safety First, Life First" and the policy of "precaution as focus and combination of precaution and control" to implement classified management and comprehensive management. The subsidiaries of the Group have implemented the 7th edition of the Labour Code of the DRC and the Ministerial Order No. 12/CAB.MIN/ETPS/043/2008, and compiled a series of occupational health and safety policies and emergency plans including the Regulations on Emergency Management of Production Safety, the Muliashi Open Pit Safety Procedure of 2010, the Road Safety Rules, the Procedure for Emergency Response- Chemical Spillage, Administrative Measures on Industrial Injury Accidents, Administrative Measures on Labour Protective Supplies, Administrative Measures on Staff Health Examinations, Occupational Safety and Health Management Measures, etc., and have carefully implemented the management work regarding employees' occupational health, which include warning and notification of occupational disease hazards, routine annual medical testing for employees exposed to dust, 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. At the same time, the Group's subsidiaries set occupational health and safety objectives and indicators to effectively manage the implementation of their occupational health and safety management system. For example, Luanshya has set goals including but not limited to compliance with laws and regulations related to occupational health and safety, increasing the safety awareness of employees and contractors, reducing major traffic accidents and reducing work-related fatalities. The Group has provided employees with complete labour protective supplies according to working environment, including those for protection of head, breathing, eyes and face, ears, hand, foot, body, skin care, falling prevention and so on. Regular examinations of those protective supplies are carried out, and any staff who accesses to production zone must wear necessary protective gears. For example, SML requires each workshop to continuously improve the working conditions and working environment of employees, strengthen the management of ventilation and dust collection facilities, and guarantee that the overall working environment is in good condition. The Safety Production Department also regularly engages qualified units to monitor the dust, noise, acid mist and other workplaces in the plant area, and the monitoring results will be announced to employees in a timely manner. If any non-compliance is found in the monitoring, it shall be immediately rectified.

SML performs testing on specific equipment

With respect to potential injury accidents, each department is delegated with clear functions and responsibilities, and rescue and first-aid work will be carried out as early as possible when accident occurs. The person in charge shall count the number of casualties and report it to the Group and consulate overseas within 6 to 24 hours depending on the severity of the accidents upon receiving the report of the occurrence of accidents. An investigation team will be set up to investigate accidents, analyse the cause and publish a report on that, and propose rectification measures, draw lessons from the accidents that have occurred, and strive to reduce the risks of the occurrence of potential accidents at the mine area.

The Group has continuously improved our occupational safety and health protection system, purchased social insurance, medical insurance and other commercial insurance for eligible staff and offer health examinations every year and set up health record for our employees, to create a safe, healthy and comfortable working environment for employees.

For example, Huachin Leach continuously improves its occupational health management and implements the following measures.

1. Addition of acid mist inhibitors in the electrowinning workshop effectively reduces the production of acid mist in the electrowinning tank surface and reduces occupational hazards
2. Arrange regular sprinkling of sprinklers on transportation roads and dust-generating sites in the plant area throughout the year to effectively control the generation of dust and maintain the environment of the plant area and living areas
3. Distribute earplugs, dust masks and other protective equipment to employees in places where crushing and grinding produce noise
4. Chinese personnel returning to China are required to undergo a health examination to let us know more about their personal health
5. Congolese employees will be arranged for a medical examination at the local hospital once a year, which effectively protects the health and rights of employees

The following is the safety data of the past three years (including the reporting period):

Year	2021	2020	2019
Number of work-related fatalities	0	3	1
Rate of work-related fatalities[1]	0%	0.0004%	0.0001%

During the Reporting Period, the novel coronavirus pneumonia epidemic ("COVID-19") continued. The Group continued to carry out epidemic prevention and control in all operating locations, and strived to cope with the normalisation of the prevention and control of the novel coronavirus to ensure that employees can stay away from the virus and maintain their health. During the Reporting Period, the Group formulated the Emergency Notice on Further Strengthening the Epidemic Prevention and Control of Overseas Enterprises (Projects) and the Notice on Printing and Distributing the "Recent Work Plan for the Prevention and Control of the COVID-19" to standardize the anti-epidemic measures of the Group's subsidiaries. The Group distributes labor protection supplies, epidemic prevention equipment and medicines to all employees, and arranges injections of epidemic prevention vaccines. The Group strictly implemented the "Big lockdown, small quarantine, same rules and regulations as well as prevention and control, categorization and implementation of policies and attention to details", and "3+3+3+3" "normalised" prevention and control measures for the pandemic in accordance with the local pandemic situation, i.e. the "three ratings" of high, medium and low pandemic risk areas, the "three areas" of workplace pandemic risk areas including external contact areas, mixed work areas and internal control areas, the "three categories" of red, yellow and blue personnel management areas including employees in contact with external personnel, employees in contact with category 1 personnel and employees with no contact with the outside, and the "three levels" of light, heavy and urgent risk prevention and control measures of the pandemic areas. We strictly control the inspection and testing of various units and mines, and strictly prevent idle personnel and virus carriers from entering the plant and mining areas; strengthen the implementation of the inspection and duty system for epidemic prevention and control in the plant and mining areas, and focus on security and stability maintenance from the source.

1 The rate of work-related fatalities is calculated by dividing the number of work-related fatalities by the number of workers.

In 2021, the China-Zambia Friendship Hospital affiliated to the Holding Group will intensify its services for Chinese and Zambian employees of enterprises in Zambia, providing a strong guarantee for the safety work of overseas employees. In order to ensure the safety production of enterprises, the hospital has stepped up efforts in epidemic investigation and rescue support, actively built laboratories, carried out COVID-19 nucleic acid detection, and provided enterprises with more than 8,000 antigen rapid detection reagents. At the same time, the hospital actively participated in the vaccination. After completing the first and second doses of vaccination, the hospital actively contacted local hospitals to coordinate various COVID-19 vaccines, vaccinated employees of the enterprise with booster injection, and contributed to the establishment of an overall protective barrier.

Case: Special Inspection on Anti-epidemic Work of CCS

On 23 December 2021, CCS carried out special inspections on epidemic prevention, further strengthened supervision and reminders, urged all units to earnestly implement their responsibilities of epidemic prevention, and held the bottom line of the Company's epidemic prevention to cope with the impact of the COVID-19. To this end, the deputy general manager of CCS led the relevant personnel of the epidemic prevention office, the safety and environmental protection department and the comprehensive supervision office to conduct inspections.

The inspection team went to various places in the operation sites of CCS, such as the warehouse of the supply department, the sulfuric acid branch and the living area of the administrative office building to check the on-site wearing of protective materials, management of external personnel, temperature measurement records, disinfection records, network management, reserve of epidemic prevention materials, inventory management of living materials and emergency measures. At the same time, the inspection team listened to the epidemic prevention work report of each unit and the current severe situation of COVID-19 epidemic prevention and control and their epidemic prevention policies, urged all units to firmly grasp the thoughts, further strengthened the education and guidance of internal employees, and solidly implemented various epidemic prevention measures.

Health and Safety Training

The Group hopes to enhance the safety and environmental protection awareness of practitioners, prevent safety and environmental protection accidents and mitigate occupational hazards through diversified health and safety training. The Group has formulated the Implementation Plan of Safety Skill Improvement Action Plan, which aims to improve the safety skills of employees engaged in high-risk industries as a whole, as well as to ensure that all the on-the-job and newly recruited employees of each subsidiary receive the training on production safety knowledge and skill improvement, and achieve 100% passing in training assessment; and 100% of special operators are certified to work.

The subsidiaries of the Group have also established different training systems for the overall training objectives of the Group. For example, Lualaba Copper Smelter has formulated the Safety and Environmental Protection Training Management System (Trial). The system stipulates that the employees in each unit shall receive three levels of safety and environmental protection training and education of the Company, branch (workshop/center) and team before taking up their posts, and new employees shall receive at least 24 hours of safety and environmental protection training before taking up their posts. Units involving dangerous chemicals and metal smelting shall conduct mandatory safety and environmental protection training for new temporary workers, contract workers, laborers, rotation workers, contract workers, etc. and not less than 72 hours to ensure that they have the knowledge and skills required for the safe operation, self and mutual rescue and emergency disposal of their positions before they are assigned to work.

Watch Life is of paramount importance(《生命重於泰山》)TV features by CNMC Huachin Mabende

Watch Life is of paramount importance(《生命重於泰山》)TV features by Huachin Leach

Case: safety education examination and training in Luanshya

In June 2021, Luanshya organized a safety education thorough examination and training to understand the extent of team leaders' mastery of theoretical knowledge of on-site safety production and to carry out safety training according to local conditions. The activity effectively strengthens the safety responsibility awareness of team leaders, enhances safety literacy, and forms the consciousness of all employees to be aware of, assumed and performed our responsibilities.

Case: safety warning education in NFCA

On 3 June 2021, NFCA conducted safety virtual training for employees at the Safety Production Warning Education Center. The safety virtual training system adopts virtual reality (VR) experience, allowing employees to experience 11 types of typical accidents in mines, such as vehicle injuries, mechanical injuries, lifting injuries and electric shock, for warning education. Virtual training management system contains four parts: training file management, training resources management, training course management, training examination management, which provides data support for the whole education center; virtual training hardware system contains a VR headset experience equipment, VR experience platform, VR egg chair, large touch all-in-one machine, high-performance computer, etc., providing a stable operating environment for the system. Through this safety virtual training, the staff can understand the seriousness of negligence of safety as a warning.

Zambia's management backbone of NFCA is participating in VR safety virtual training

Safety Virtual Training Scene at warning education center

Case: the fire emergency drill in CCS

In response to the national "Work Safety Month" and in order to thoroughly implement the national important statement on safety production, CCS jointly organized a fire emergency drill in the afternoon of 28 June 2021 between its the Supply Department and Safety and Environmental Protection Department, and the main persons in charge of the two departments and some staff representatives participated in the drill. The drill was a simulation of a fire within a short distance of the Company's oil depot, which directly threatens the safety of the oil tank. During the whole drill process, from the start of emergency response to command and coordination, resource allocation, accident disposal, regional control and post-disposal, members of each group cooperated closely, coordinated in place, responded rapidly, disposed properly and achieved the expected results. The drill fully demonstrated the good spirit of the Company's safety and emergency response team, as well as the rapid response to emergencies, emergency handling capabilities and coordination of combat capabilities.

Staff takes prompt measures

Fire rescue drill

PEOPLE-ORIENTED PRINCIPLE

The Group promotes a "people-oriented" idea and is committed to promoting equal and standardized employment management, as well as respecting the background culture and rights of employees. The Group continues to improve the talent management system and has been recruiting talents in a fair and equal manner while ensuring the protection of employees' legitimate rights and interests. In addition, the Group also attaches importance to the cultivation of talents and actively establishes an effective incentive mechanism to provide diversified training and a quality growth environment for employees, so as to achieve the common development of employees and the enterprise.

Employment Policy

The Group strictly abides by 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, CODE DU TRAVAIL of 2002, Occupational Health and Safety Act No. 36 of 2010, Workers Compensation Act No. 10 of 1999 of the DRC and related laws and regulations in Mainland China and Hong Kong. In accordance with its actuality, the Group and its subsidiaries have formulated a series of internal policies including Administrative Measures for Labour Contracts with Employees, Administrative Measures for Recruitment of Employees, Administrative Measures for Resignation of Employees, Measures for the Management of Employee Performance, Certain Provisions on Personnel Management of China Nonferrous Mining Hong Kong Holdings Limited, etc., to ensure legal compliance of the employment.

The Group has "zero" tolerance for child labor and forced labor. During the recruitment process, we will strictly review the identity information of applicants to ensure that they reach the legal age for employment and are eligible for employment, and adhere to strict prohibition of child labour or of forced labour no matter in any way. In case of any child labour or forced labour found, the Group will immediately dismiss the relevant person and hold the recruiter accountable. All employees confirmed to be employed will sign a labor contract with us, which specifies the remuneration, position and reasons for termination of employment, guarantee their legitimate interests. During the reporting period, in the Group, and there was no violation of any laws and regulations related to employment or labour practices, and there was no child labor or forced labor.

Employment management

The Group follows the equal, diversified and non-discriminatory principle and give equal treatment for staff of different nationalities, races and genders. We treat staff with sincerity, respect the culture and custom of foreign staff. We believe that only by establishing a fair and reasonable talent management system can we strengthen the sustainable development of the Group. We are committed to continuing to promote the implementation of the “talent internationalisation and localisation” strategy, improve all employee benefits to attract more talents. We will also give priority to local staff in Zambia and the DRC in respect of employment to increase the proportion of localized staff in the Group. In order to guarantee the rights of employees, NFCA has entered into recognition agreements with many trade unions in accordance with the laws of countries in which it operates to ensure that each employee can be treated in a reasonable manner and that the legitimate interests of the staff can be earnestly safeguard.

In terms of remuneration and performance appraisal, the subsidiaries of 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, Administrative Measures for the Career Path of Employees, and other internal management measures, endeavouring to provide employees with competitive remuneration systems and open and transparent appraisal and promotion mechanisms.

In terms of recruitment, the subsidiaries of the Group has formulated the Administrative Measures for Employment of Chinese Employees to standardize the appointment and management of Chinese employees, and to form a mechanism for selecting and employing candidates by ability, suitability, achieving full potential and merit. The system specifies the recruitment principle of "openness, equality, competition and merit selection", the recruitment and hiring process, the rights of hired staff and the management of promotion. Employees are given room for promotion, and we will conduct an intra-grade floating appraisal and adjustment for employees at the end of each year according to their annual performance appraisal results.

In terms of dismissal, according to the relevant regulations, if an employee applies for termination on his or her own initiative, he or she shall submit a written resignation application signed by him or her to the person in charge of the unit where he or she works, and the Human Resources Department shall go through the subsequent termination procedures. If an employee is dismissed for reasonable reasons, the Human Resources Department will notify him/her one month in advance or go through the subsequent termination procedures after paying one month's salary (position salary compensation).

As for holiday benefits, the Group, complying with the laws and regulations of the countries (regions) in which we are located, ensures that employees' working hours shall not exceed the statutory working hours. Aside from statutory holidays, it also provides employees with paid holidays including annual leave, sick leave, maternity leave, marriage leave and bereavement leave. Moreover, it offers overtime compensation, night shift allowances and high-temperature subsidies to further improve employees' welfare, protect the legitimate rights and interests of employees and promote their work-life balance.

As at the end of the Reporting Period, the number of staff of the subsidiaries of the Group and employee turnover rate by gender, age group, employment type and geographical region are set out as:

		Number of staff *(Individual)*	Turnover Rate[2]
Total		8,756	6.66%
By gender	Male	8,385	6.52%
	Female	371	9.70%
By age group	30 years old and below	3,143	4.77%
	30–50 years old	4,774	6.70%
	50 years old and above	839	13.47%
By employment type	Full-time staff	8,754	–
	Part-time staff	2	–
By geographical region	Chinese staff	904	9.96%
	Local staff	7,852	6.28%

Employee Care

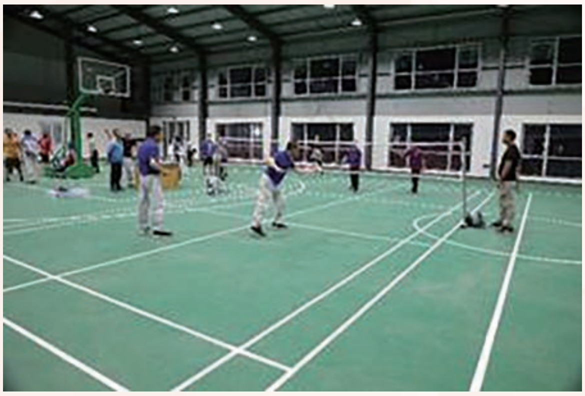
In addition to a good employment management system, the Group also attaches great importance to the physical and mental health of employees and their families. Therefore, we insist on providing various benefits to employees and their families, and we also carry out diversified employee care activities.

The Group provides staff with pension, medical, housing, transportation and other welfare and subsidies and actively improves its medical security capabilities. Meanwhile, we strengthen the promotion, prevention, monitoring, and treatment of epidemic diseases including malaria, dengue and AIDS in certain regions in Africa, and regularly organise physical examinations for employees to ensure employees' physical health and necessities in life. In order to enrich the leisure life of employees, we specially build stadiums for them, such as basketball courts, football fields and so forth, and provide sports equipment. We actively organise various holiday activities, such as basketball games, badminton games, tug of war, etc., improving the health of employees, whose leisure and cultural life are thus enriched. Therefore, there are enhanced communications and team cohesion between Chinese and foreign employees.

In order to perfect employee benefits, aside from the employees themselves, we also offer medical services to family members of registered staff. We regularly organise open day activities for employees' family, inviting their family members to participate in Company activities and learn about the development of the Group. In addition, we also render aid for the outstanding children of employees to increase employees' sense of belonging to the Company, and continued to strengthen the protection of the rights of female employees. During the reporting period, CCS issued condolence letters and Chinese New Year packages to the domestic families of employees who were unable to go home for vacation due to the COVID-19 pandemic.

2 The turnover rate is calculated by dividing the number of staff lost under each class during the reporting period by the number of staff under that class as at the end of the reporting period.

Case: different events for employees in Kambove Mining



"July 1" Staff Badminton Competition

"July 1" Staff Basketball Competition

Christmas gifts to employees on 24 December 2021

Chinese and Congolese employees celebrate Women's Day together

Talent Development

The Group is committed to improving the capabilities and qualities of employees through training and attaches great importance to the long-term personal development of employees, and also hopes that the improvement of employees' capabilities will return to the business development of the Group. “Bolstering enterprise with talents” is one of our important strategies. We spare no effort to set up models for multi-level trainings, and therefore we can meet the needs of different positions and improve the capabilities and qualities of employees. In doing so, employees can do their best and grow with the Company.

During the reporting period, the Group's subsidiaries actively conducted management and safety skills improvement training. Among them, Kambove Mining carried out training on safety education, legal knowledge, knowledge of electricity supply and consumption, professional technology of mining, processing and smelting, the leach production technology and other related courses; Luanshya carried out a series of training such as certification of safety competent personnel at all levels, certification of special equipment operators, popularization of laws and regulations, learning of safety knowledge and safety skills education; SML carried out training and certification of special operators and safety skills training for all staff; NFCA actively carried out training on certification of special operation such as electricity, clamping and welding, first aid certificate and blasting certificate, management skills improvement training for team leaders, safety awareness and management skills training for responsible persons in charge of on-site production safety/team leaders; Lualaba Copper Smelter carried out safety skills training for special positions; China Nonferrous Mining Hong Kong Holdings carried out training for management staff and all workshop positions. During the reporting period, the subsidiaries trained a total of 6,618 times. Through comprehensive skills training, the comprehensive quality, technical skills, safety awareness and management ability of the staff were improved, providing sufficient talents for the Group's safety management.

Case: welder training in Lualaba Copper Smelter

Lualaba Copper Smelter carried out a two-month professional training for welders from June to August 2021, which was divided into two parts: theoretical knowledge and practical operation. 44 staff from Congo participated in the training. The training is effective in further improving the professional and technical level of the staff and the safety operation skills of the positions, creating an atmosphere of learning skills and competing for skills. Lualaba Copper Smelter organized professional technicians to conduct professional skills training on site, encouraging the trainees to learn in practice, practice in learning, learn from each other, complement each other's strengths and weaknesses, and jointly improve their business standards, cultivating a highly skilled, high level local language elite team. At the end of the training, Lualaba Copper Smelter organized trainees to take the professional qualification examination, with an excellent rate of 61% and a pass rate of 93%, which is encouraging.

Students practice in class

Students participate in professional qualification examinations

The number of staff trained, the coverage rate, the training hours and the average training hours of the staff of the Group's subsidiaries by gender and employment type are as follows:

Employment type	**Number of staff trained** *(Individual)*	**Coverage rate**[3]	**Training hours** *(Hour)*	**Average training hours**[4] *(Hour)*
Male	6,331	95.66%	217,279	34.32
Female	287	4.34%	8,799	30.66
Senior management	45	0.68%	214,433	44.32
Mid-level management	310	4.68%	9,650	31.13
General Staff	6,263	94.64%	1,995	34.24

GREEN HOME

As a responsible enterprise, the Group always bears in mind its responsibility to protect the environment while developing its business and strives to create a green home together with all sectors of the society. 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", we actively fulfill our social responsibility for environmental protection and resource management, establishing a long-term mechanism for safe environment and resource protection and management, to make contribution to green development.

The Group's business involves the development of mines. Therefore, we have established a relevant system to reduce the environmental impact brought by the development of mines. Luanshya has formulated the Administrative Measures for Ecological Environmental Protection, which requires to protect the geological environment of mines, reduce the damage to the geological environment of mines caused by mineral resources exploration and mining activities, and meet the requirements of green mine construction. Luanshya will ensure that existing mines meet the construction standards of green mines, and new mines should be constructed based on the green mine standards, and proactively carry out self-evaluation of green mine construction and accept the spot checks and audits by the governmental regulatory authorities in Zambian and the Group.

3 The coverage rate is calculated by dividing the number of staff trained under each class by the total number of staff trained ×100%.

4 The average training hours is calculated by dividing the training hours of staff under each class by the total number of staff trained under that class.

The Group focuses on the up-to-standard pollutants emission, environmental risk prevention and control of the tailing ponds and ecological restoration of mines to carry out the control and governance of the ecological environment, so as to ensure the continuous improvement of the ecological environment of mines. The Group regularly monitors and analyzes pollutant emissions, provides early warning, formulates targeted control measures, and carries out environmental risk inspection of the tailing ponds and monitor the surrounding soil conditions to ensure that no pollution occurs. The Group carries out annual afforestation in accordance with the plan to reduce the surface area of bare ground.

Green Management

The Group strictly abides by 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 Laws No. 007/2002, the Mining Code of DRC and other relevant laws and regulations. It also strictly implemented a series of environmental management measures formulated in accordance with the controlling shareholder, CNMC, including Administrative Measures for Protection of the External Investment and Cooperation Environment, General Principles of the Environmental Protection and Risk Management and Emergency Plan for Environmental Emergencies.

In order to further promote green and sustainable development, prevent and reduce the adverse impact of production and operation activities on the environment and natural resources, and protect the ecological environment, Lualaba Copper Smelter has developed related internal policies such as the Administrative Measures for Environmental Protection, which sets out detailed systematic guidance on environmental protection management and environmental assessment goals and clarifies management responsibilities. A comprehensive plan for environmental emergencies was also developed. In the meantime, Luanshya has formulated a series of measures for resource management, including the Measures for Appraisal on Load Utilisation, the Measures for Appraisal on Consumption of Ancillary Vehicles of the Company, the Measures for Management of Energy Utilisation, the System for Management of Energy Saving and Emission Reduction, the Administrative Measures for Energy Saving and the Administrative Measures for Ecological Environmental Protection, continuing to contribute to energy saving and emission reduction goals.

The Administrative Measures for the Ecological Environmental Protection provide that Luanshya is required to minimize the significant impact on the environment and natural resources during land development of construction project. The project will first be preceded by a feasibility study report or pre-feasibility study report, in which the compliance with Zambian laws and regulations on ecological environment protection will be discussed, and the impact factors that may cause changes in the surrounding environment will be analyzed and prevention measures will be proposed.

During the construction of the project, the environmental planning requirements of Zambia will be met, and the construction site will not be located in the areas that are legally designated as nature reserves, scenic areas, drinking water reserves or other areas that require special protection. During the construction of the project on newly acquired land, a survey of environmental background value will be conducted and filed with the Zambian environmental authorities. All projects are strictly controlled and subject to Zambia's environmental impact assessment system to ensure that projects are developed in a way that minimizes the impact on environmental resources.

The Group's subsidiaries have set up the Safety and Environmental Protection Department, which is in charge of daily management for environment and supervisions, and assigns responsibilities to designated personnel in key areas to ensure full coverage of supervision and management. At the same time, we divided the environmental emergencies into three different levels, and made different emergency plans for each level, to ensure timely response in the event of an emergency, minimising the negative impact. In addition, the Group also stepped up environment inspection with the focus on operation of pollution prevention and treatment facilities and timely and effective rectification for the problems.

During the reporting period, the Group's subsidiaries set targets related to air pollutants, greenhouse gas emissions, waste, energy and water usage efficiency. The following takes CCS as an example:

- The overall environmental management goal of CCS is to continue to promote the ISO 14000 environmental management series standards and to initiate ISO 14001 environmental management system certification or product environmental label certification;

- Air pollutants: to strengthen the management of pollutant emissions, which shall meet the Zambian standards, and the treatment and transformation of those who cannot meet the requirements, with no SOX emission concentration indicators as production technology indicators for planning and assessment;

- Emissions of greenhouse gases: compliance emissions in accordance with Zambian standards, with the comprehensive energy consumption indicators as the production technology indicators for planning and assessment;

- Waste: to implement in accordance with the relevant provisions of environmental protection in Zambia, and to strengthen the standardized management of the generation, storage, transfer and disposal of hazardous wastes; and

- Water consumption: total new water consumption ≤ 2.6 million cubic meters.

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

Pollution Control

For the exhausts, sewage and solid waste produced in the mining process, the Group established a detailed environmental protection management system. We are committed to the source control and pollution prevention and control in accordance with the principle of "prevention – recycling – treatment – disposal".

In terms of exhausts management, the Group used copper leaching process in some of its projects, and there was no SOx, NOx or other emissions during the production process, avoiding the generation and emission of exhausts at source. For copper smelting production process, we stabilised the conditions of smelting furnace to control smoke emission and reduce emission of exhausts. At the same time, we strengthened the control over preparation of strong sulphuric acid to enhance sulfur utilisation ratio, and installed electrostatic precipitators and online monitoring equipment to reduce and detect the emission of pollutants in order to ensure the emission indicators reaching the requirements of the environmental protection authorities of Zambia. In addition, we strengthened dust control by sweeping, watering, covering and other means to effectively reduce dust in mining, vehicle transportation, storage on stock ground and other operations.

For the solid waste, we insist on the practice of "minimising 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. Regarding non-hazardous waste, the production workshop uses the desilter to effectively use and recycle the residue, and the production workshop uses the sedimentation tank to effectively use the residue for recycling. For unusable waste, when going through pressure filtration, its filter residue will be transported to the designated storage point for unified treatment, and the filtrate will be discharged to the sewage pipe.

In order to further standardize the management of hazardous waste, effectively prevent environmental pollution caused by hazardous waste and protect human health, Lualaba Copper Smelter has developed the Hazardous Wastes Management System. The units need to build special facilities and sites for proper preservation and their own treatment and disposal in accordance with the relevant provisions, or hand it over to units with corresponding capacity for collection, transportation, storage, treatment and disposal. In the process of treatment and disposal, measures should be taken to reduce the volume, weight and level of risk of hazardous waste, and the Hazardous Waste Management Ledger will be used on a daily basis to record the amount of hazardous waste generated. At the same time, Lualaba Copper Smelter hopes to achieve resource recovery, and therefore requires each unit to give priority to recycling when handling hazardous waste to reduce the burden of subsequent treatment and disposal. Hazardous waste that cannot be recycled will be disposed of by units with the appropriate capacity.

In terms of wastewater management, 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 has built a risk inspection system for safety and environmental protection of tailings pond with a specially-assigned person in charge, strengthened the tailings pond inspection to deal with the problems immediately, reducing the environmental risks of the enterprises. The Group’s office and sanitary sewer enter septic tanks and are discharged after treatment. We regularly sample and submit inspections of the water surrounding the plant and monitored well water from a groundwater source, and compare and analyze them according to the standards of the area where the project is located, and then issue an analysis report and make improvements based on it. In addition, subsidiaries such as CCS and NFCA have permits from the environmental management authority of Zambia to discharge wastewater into the natural environment, as well as permits for mine drainage and water usage. They submit two annual reports to the environmental management authority of Zambia and the Mine Safety Department on the quality of wastewater discharged to the natural environment.

Case: NFCA actively reduces solid waste

During the reporting period, NFCA vigorously promoted the underground paste filling technology, completed the construction of the first deep well paste filling system in Africa in the southeast ore body, and added a deep cone thickener to the main west ore body in 2021, which greatly improved the filling capacity, the tailings filling rate reached 51.5%, which effectively reduced the amount of tailings and the output of solid waste. Its technical management department vigorously promoted the filling of underground waste rock. In 2021, a total of 43,582 cubic meters of waste rock would be filled, with a waste rock filling rate of 20.6%; a stone factory has been established on the surface to process waste rock for sale as stone to improve the value of waste utilization. 141,000 tons and 430,000 tons of waste rock was sold in 2021 and the utilization rate of underground mining waste rock was 100%, which effectively reduced the generation of solid waste.

Table of Emission Data[5]

Type of emission	單位	2021	2020
Emissions of sulfur oxide[6]	Tonne	4,211.2	3,323.7
Emissions of nitric oxide[6]	Tonne	110.1	78.4
Emissions of dust[6]	Tonne	124.0	88.4[7]
Mining wastewater	0'000 Tonnes	1,308.8	1,126.5
Intensity of mining wastewater	Tonne/US$'000[8]	3.2	4.3
Other wastewater	0'000 Tonnes	35.6	33.3
Intensity of other wastewater	Tonne/US$'000	0.1	0.1
Amount of hazardous wastes[9]	0'000 Tonnes	16.3	13.3[10]
Intensity of hazardous wastes	Tonne/US$'000	4.0×10^{-2}	0.1
Treatment ratio of hazardous wastes	%	100	100
Amount of non-hazardous wastes[11]	0'000 Tonnes	4,322.7	2,826.1[12]
Intensity of hazardous wastes	Tonne/US$'000	10.7	10.9
Treatment ratio of non-hazardous wastes	%	100	100
Total emissions of greenhouse gases[13]	Tonne	207,635.2	178,534.7
• Emissions of greenhouse gases (scope 1)	Tonne	204,030.3	175,087.9
• Emissions of greenhouse gases(scope 2)	Tonne	3,604.9	3,446.8
Intensity of greenhouse gases	Kg/US$'000	51.3	68.7

5 During the reporting period, the Group's reporting scope added 1 subsidiary (Kambove Mining), which increased the scope of environmental performance data disclosure to 8 subsidiaries. The scope of disclosure was expanded as compared with the 2020 ESG report. Therefore, the overall resource consumption data is higher than in 2020.

6 The data involved are derived from the data recorded by the subsidiaries of the Group and the most reliable conservative estimates based on past performance or with reference to similar facilities.

7 Due to the unification of the calculation of emission of dust for 2021 and 2020, the emission of dust for 2020 was readjusted.

8 The denominator is the Group's annual gross income per thousand US dollars. The total revenue of the Group in 2021 is US$4,050.6 million, and the total revenue in 2020 is US$2,597.2 million.

9 Including waste lubricating oil (including motor oil), waste lead batteries, waste catalysts and other hazardous wastes.

10 The amount of hazardous waste generated in 2020 was adjusted after recalculation.

11 Including waste slag, scrap steel, mining waste ore, mining filling waste, domestic and office waste and other non-hazardous waste. In addition, the Group's reporting scope added 1 subsidiary (Kambove Mining), which increased the scope of environmental performance data disclosure to 8 subsidiaries during the reporting period. The scope of disclosure was expanded as compared with the 2020 ESG report, resulting in an increase in the overall non-hazardous waste data compared to the 2020 ESG report.

12 The amount of non-hazardous waste generated in 2020 was adjusted after recalculation.

13 GHG emissions are based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories issued by the Intergovernmental Panel on Climate Change.

Wise Use of Resources

The Group shoulders the corporate mission of "development of resources, contributions to the society" and achieve comprehensive sustainable development of environment, enterprise, industry, and society and reasonably uses resources, improving the utilisation ratio of resources in mining, ore processing and smelting. The Group performs social responsibilities through strict resource management with respect of operations and life.

As for operations, comprehensively utilises waste ore to enhance ore recovery and effectively prolong the life time of mine, thoroughly sorting through underground recoverable reserves by areas in the production. We prepared production technology transformation plan, aiming at reducing the energy consumption of high energy-consumption and equipment including ball mill and pump and improve the operational stability of waste heat power station, Isasmelt furnace and other critical equipment and continuously improved production processes, equipment and facilities. In addition, we formulated monthly production plans and control targets of total energy consumption, and implemented performance assessment to control energy consumption at multiple levels. The nature of the Group's products and operations does not involve the use of packaging materials.

NFCA, a subsidiary of the Group, formulated the Electric Energy Measurement Management System to further improve the electric energy measurement management level, gave full play to the role of the electric energy management and control system, scientifically and reasonably controlled peak loads, and controlled internal electric energy consumption. The system regulated the supervision procedures for electric energy measurement, including that various measuring instruments shall be submitted for inspection on time; the testing data of various electric energy measuring instruments shall be certified through random inspection; the electric energy measuring instruments in use were periodically checked, and if they were unqualified, they should be promptly reported for replacement; carefully made various original records, kept them properly, and shall not be arbitrarily altered or lost. NFCA further conducted comprehensive quality control and economic accounting based on the electrical energy metering data, and used the data to detect the completion of the operating indicators of each unit.

As for office and life management, the Group required transformation of energy saving LED lights for mine lots and offices in premises and installation of light-operated switches, time switches and other intelligent switches. It adopted natural lighting for production workshops wherever possible, used natural light for office lighting wherever possible, and made sure that lights stay off when no one is around in the offices to avoid energy waste. The Group also conducted publicity and education on energy saving and posting labels on energy conservation and emission reduction, and encouraged employees to do their part and to use resources wisely.

As for the use of water resources, the Group has not encountered any problems in obtaining suitable water sources due to its rich underground water yield of mine. In order to effectively use water resources and avoid wasting the same, the Group diverts the underground water to the surface pool with the volume of 10,000 tonnes. After clarification in the surface pool, the water will be used for production in processing plant and mine lot and certain underground water will be further purified and then used for domestic purposes.

Case: Huachin Leach Environmental Work Highlights

During the reporting period, Huachin Leach achieved leak-free management of the wet tailings pond throughout the year; annual energy consumption per tonne of copper decreased to 0.41 standard coal per tonne of copper compared to 0.42 in 2020; and the metal recovery rate increased to 88.8% compared to 88.7% in 2020 through refinement of the whole process management on the basis of more frequent power outage time and lower raw ore grade than the previous year. Current efficiency also improved overall, reaching 92.5% in 2021, up 2.0% from 2020, on the basis of 90.50% of annual average current efficiency in 2020.

Table of Resource Consumption Data[14]

Type of resource	Unit	2021	2020
Direct Energy Consumption[15]	MWh	488,980.6	363,122.7
• Diesel	Litre	22,408,039.8	22,284,437.0
• Gasoline	Litre	213,627.5	237,473.4
• Coal	Tonne	33,654.9[16]	15,537.4
• Coke	Tonne	1,694.0	2,249.0
• Acetylene	Kg	21,515.1	29,157.0
• Liquefied petroleum gas	Kg	16,060.0	21,890.0
Indirect Energy Consumption	MWh	1,348,849.3	1,289,462.1
• Purchased electricity	MWh	1,348,849.3	1,289,462.1
Total comprehensive energy consumption equivalent to standard coal	Tonne of standard coal	201,014.3	193,976.6[17]
Intensity of comprehensive energy consumption	Kg standard coal/ US$'000	49.6	74.7
Consumption of fresh water	0'000 Tonnes	1,241.7	1,350.6
Intensity of fresh water	Tonne/US$'000	3.1	5.2

14 During the reporting period, the Group's reporting scope added 1 subsidiary (Kambove Mining), which increased the scope of environmental performance data disclosure to 8 subsidiaries. Compared with the 2020 ESG report, the scope of disclosure was expanded. Therefore, the overall resource consumption data is higher than in 2020.

15 Direct energy consumption data refer to the *Calculation Method and Reporting Guidance on Greenhouse Gas Emission by Other Industrial Enterprises (Trial) and the Guidance for Compiling Provincial GHG Emission Inventory (Trial) for the calculation of the relevant conversion factors.*

16 The increase in coal usage compared to 2020 was due to the increase in the operation rate of the Group's subsidiaries in 2021, the increase in concentrate processing volume and blister copper production, and the change in the production raw material structure.

17 In 2020, total comprehensive energy consumption equivalent to standard coal was adjusted after recalculation.

Responding to Climate Change

Climate change is a pressing global issue. The Group proactively identifies climate risks that have a significant impact on its business, and formulates corresponding measures to reduce the impact of various climate risks. During the reporting period, Lualaba Copper and NFCA identified physical risks as significant risks affecting their business, and the extreme climates that affected them included but were not limited to heavy rain, lightning and drought.

Physical Risk	Influence	Countermeasures
Rainstorm	• Increasing underground drainage pressure and endangering surface equipment and facilities; affecting the stability of tailings dam body	• Covering open-air materials to reduce dust and rainwater runoff loss; • Strengthening drainage ditch inspection and cleaning during the rainy season to avoid poor drainage of ditches, resulting in flooding of facilities and equipment; ensuring normal operation of the tailing dam drainage system to ensure the safety of the tailing dam; • In the event of extreme weather that affects production, operations will be stopped in a timely manner, and experts will be assigned to guard core safety and environmental protection equipment and facilities.
Thunder and lightning	• Bringing risks to important places such as electrical equipment, facilities, gas stations, and explosive depots	• Timely attention to weather forecasts and early warnings for extreme weather; • Stopping outdoor lifting and high places operation.
Dry Climate	• Dry seasons can lead to fires that endanger the Group's surface buildings, equipment and facilities; • Zambia is primarily a hydroelectric power generation country, and a prolonged drought will result in a shortage of electricity supply to the grid throughout Zambia, which will have a serious impact on business production.	• Strengthening the management of reservoirs, pay continuous attention to water level changes, and reduce the management of overflow water from pumping pools.

In addition, NFCA assessed the risks of climate change and taken corresponding measures. According to the environmental impact assessment of the tailings dam, the local flood event occurred once every 100 years. Therefore, in order to cope with the related flood storms, NFCA built a drainage system in the plant area and built a spillway in the tailings dam. The board of directors of NFCA would also learn about production safety, environmental safety and corporate social responsibility performance through regular quarterly production and operation reports to ensure that various risks are properly managed.

COMMUNITY CONTRIBUTION

Human Rights and Community

The Group attached great importance to respect human rights and was committed to complying with the International Labour Convention and incorporating human rights into the Group's risk management system and induction training. We expected every employee to understand the importance of respecting human rights, and to practice and upheld the concept of respecting human rights in their daily work so as to promote sustainable development.

With the philosophy of "win-win cooperation and mutual development", the Group has been actively communicating with the communities where we operate for many years. We took the initiative to strengthen communication and contacted with stakeholders such as local government departments, regulatory agencies, social service agencies, and community members, and set up a public relations department to manage the relationship between the company and the local community. We met community development demands through visits, press conferences, interviews, and daily reports and other ways. At the same time, we fully respected the religious beliefs and cultural traditions of the regions where each project was located, encouraged and held cultural exchange activities, and promoted exchanges and understanding with the local people. Therefore, we actively organized employees to participate in activities organized by the local community, and maintained good relations between the Group and the local community through exchanges and interactions with the community.

Public Welfare in Communities

The Group effectively discharges its corporate social responsibilities and gives back to the society by way of the public welfare activities held in communities. All subsidiaries have formulated Administrative Measures on Donation to External as per the demand from communities where the projects are located, taking into consideration the realities of the Group, which sets out the principle, types, channels, approval process, supervision and administration for charitable donation in detail. We prepare a detailed charitable donation plan at the beginning of year, clarifying why to donate, who will receive our donation, through what channels to donate and how much we plan to donate, and summarise the performance of those plans at year end, to strengthen management. The Group proactively makes social charitable donation as its capacity allows, and has established friendly relationship with local public and social organisations, creating favorable external environment for the operation of the Group.

Our public welfare work in communities primarily includes the improvement of infrastructural construction and medical treatment and public health conditions in communities. We had helped with digging new well, maintenance and renovating communal facilities for communities, hospitals and farm produce fair in the regions where some of our projects were located, provided assistance for local power supplier to restore power supply, restoration of roads, prevention of diseases such as AIDS, malaria and so on. In addition, to support education cause in local communities, we built school campuses, provided poverty-stricken students with subsidies on their education, as well as donated books and stationery to orphans there. Furthermore, we had also donated money on important days such as Youth Day, Women's Day, Labour Day, Teachers' Day, World Environment Day, etc., making constant contribution to local public welfare.

Charitable donations made by the Group during the reporting period amounted to US$461,000.

Case: Luanshya's Donation to external

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ZAMBIA DAILY MAIL, Tuesday, April 13, 2021

Clergy hail PF for holding inclusive conference

Lungu praised on agriculture

Chief Kabamba happy with early delivery of fertiliser

'Include bostic, genkem on restricted drugs list'

SMLZ donates wheelchairs to Kalulushi council

NOTICE TO THE PUBLIC

MEMORIAM

In loving memory of my beloved wife, the late Caroline Zulu Maoka, who passed on on 13th April, 2019.

Sadly missed by husband John Maoka, children Washeni, Clementina and Jemaima and the entire family.

May Her Soul Rest in Peace

Case: Luanshya's Donation of agricultural production materials to local farmers

On 23 November 2021, Luanshya held a grand and simple donation ceremony for agricultural production materials in the square in front of the office building. This public welfare donation activity has received extensive attention from the mainstream media in Zambia. Six media including Zambia National Radio and Television Corporation, Zambia Daily Mail, Zambia National Daily, and Phoenix Radio have witnessed this donation activity. The continuous support of local small-scale farmers for many years has promoted the development of local agriculture and improved the lives of local farmers in difficulty, and given their positive comments on Luanshya's support for the donation.

Case: NFCA is committed to community development

During the reporting period, NFCA donated a total of 8 sets of large construction equipment, including front loaders, road rollers, graders, loaders, bulldozers and excavators, to the construction of Karurusi municipal community where the mine is located, which significantly increased the infrastructure capacity of the municipality. In addition, we donated construction materials to the community to repair damaged roads after the rainy season; built fences for schools to ensure the safety of students and school buildings; donated a large number of desks and chairs for new schools to ensure the smooth entry of students; drilled water wells for relocated farmers, actively maintained and repaired water pumps when they were damaged, and sent water trucks to supply water to ensure the living standards of farmers; built churches, clinics, schools, and public places for resettlement sites; and donated furniture. We have built churches, clinics, schools, and public places in the resettlement areas, and donated furniture, respecting local beliefs and preserving local culture.

ESG GUIDE CONTENT INDEX

General disclosures and key performance indicators ("KPIs")	Description	Corresponding section in the Report or other descriptions
ENVIRONMENTAL		
Aspect A1: Emissions		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and nonhazardous waste	Greenhouse
KPI A1.1	Types of emissions and respective emissions data	Pollution Control
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Pollution Control
KPI A1.3	Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Pollution Control
KPI A1.4	Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Pollution Control

General disclosures and key performance indicators ("KPIs")	Description	Corresponding section in the Report or other descriptions
KPI A1.5	Description of emissions targets set and steps taken to achieve the targets	Green Management and Pollution Control
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and description of waste reduction goals set and the steps taken to achieve the targets.	Green Management and Pollution Control
Aspect A2: Use of Resources		
General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials	Wise Use of Resources
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility)	Wise Use of Resources
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility)	Wise Use of Resources
KPI A2.3	Description of energy efficiency goals established and the steps taken to achieve the targets.	Green Management and Pollution Control
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency targets set and steps taken to achieve the targets.	Green Management and Wise Use of Resources
KPI A2.5	Total packaging materials used for finished products (in tons) and, if applicable, with reference to per unit produced	Due to the nature of the Group's products and business, we are not involved in the use of packaging materials.
Aspect A3: The Environment and Natural Resources		
General disclosure	Policies on minimizing the issuer's impact on the environment and natural resources	Green Management
KPI A3.1	Description of significant environmental and natural resources impacts and actions taken to manage them	Green Management
Aspect A4: Climate Change		
General disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Responding to Climate Change

General disclosures and key performance indicators ("KPIs")	Description	Corresponding section in the Report or other descriptions
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them	Responding to Climate Change
SOCIAL		
Employment and Labour Practices		
Aspect B1: Employment		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare	Employment Policies
KPI B1.1	Total workforce by gender, employment type (part-time or full-time), age group and geographical region	Employment Management
KPI B1.2	Employee turnover rate by gender, age group and geographical region	Employment Management
Aspect B2: Health and Safety		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	Safety First
KPI B2.1	Number and rate of work-related fatalities in each of the past three years (including the reporting period).	Occupational Safety and Health
KPI B2.2	Lost days due to work injury	Safe operation
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored	Safety First

General disclosures and key performance indicators ("KPIs")	Description	Corresponding section in the Report or other descriptions
Aspect B3: Development and Training		
General disclosure	Policies on improving employee knowledge and skills for discharging duties at work. Description of training activities	Health and safety training, talent development
KPI B3.1	Percentage of trained employees, by gender and category (e.g. Senior management, middle management)	Talent development
KPI B3.2	Average training hours completed per employee, by gender and category	Talent development
Aspect B4: Labor Standards		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour	Employment policies
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour	Employment policies
KPI B4.2	Description of steps taken to eliminate such practices when discovered	Employment policies
Operating Practices		
Aspect B5: Supply Chain Management		
General disclosure	Policies on managing environmental and social risks of the supply chain	Supply chain management
KPI B5.1	Number of suppliers by geographical region	Supply chain management
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored	Supply chain management
KPI B5.3	Description of practice for identifying environmental and social risks at each stage of the supply chain, and how they are implemented and monitored.	Supply chain management
KPI B5.4	Description of practice that promote the use of environmentally friendly products and services when selecting suppliers, and how they are implemented and monitored.	Supply chain management

General disclosures and key performance indicators ("KPIs")	Description	Corresponding section in the Report or other descriptions
Aspect B6: Product Responsibility		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress	Product responsibility
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	Product responsibility
KPI B6.2	Number of products and service-related complaints received and how they are dealt with	Product responsibility
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights	Research and innovation
KPI B6.4	Description of quality assurance process and recall procedures	Product responsibility Due to the nature of business, the products sold by the Group are within the scope of standard of grading as agreed in the agreement, so this product recycling procedure is not applicable and there will not be recycling
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored	Product responsibility

General disclosures and key performance indicators ("KPIs")	Description	Corresponding section in the Report or other descriptions
Aspect B7: Anti-corruption		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering	Integrity construction
KPI B7.1	Number of concluded legal cases regarding corrupted practices brought against the issuer or its employees during the reporting period and the outcomes of the cases	Integrity construction
KPI B7.2	Description of preventive measures and whistleblowing procedures, how they are implemented and monitored	Integrity construction
KPI B7.3	Description of anti-corruption training provided to directors and staff	Integrity construction
Community		
Aspect B8: Community Investment		
General disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests	Community contribution
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport)	Public welfare in communities
KPI B8.2	Resources contributed (e.g. money or time) to the focus area	Public welfare in communities

The Directors present the annual report and the audited consolidated financial statements of the Group for the year ended 31 December 2021.

PRINCIPAL ACTIVITIES

The principal activity of the Company is investment holding. The Company's subsidiaries are principally engaged in exploration, mining, ore processing, leaching, smelting of copper and cobalt, and sale of copper cathodes, blister copper and copper anodes, copper-cobalt alloy, cobaltous hydroxide and sulfuric acid. There has been no significant change in the Group's principal activities for the year ended 31 December 2021.

USE OF PROCEEDS FROM GLOBAL OFFERING

As of 31 December 2021, the Company has used net proceeds of US$247.77 million from the Global Offering. Details of the use of proceeds from the Global Offering are as follows:

	Intended use of net proceeds	**Utilised amount as at 31 December 2021**	**Utilised amount for the year ended 31 December 2021**	**Utilised amount as at 31 December 2021**	**Expected timetable for use of utilised amount**
	US$'000	*US$'000*	*US$'000*	*US$'000*	
Exploration and development of the Chambishi Southeast Mine	72,000	72,000	–	–	N/A
Expansion of the Chambishi Copper Smelter	48,000	48,000	–	–	N/A
The Muliashi Project	12,000	12,000	–	–	N/A
Development of the Mwambashi Project	12,000	12,000	–	–	N/A
Kambove integrated exploration and construction project	37,000	37,000	5,000	–	N/A
Repayment of certain existing loans	36,000	36,000	–	–	N/A
Working capital and other general corporate purposes	30,770	30,770	–	–	N/A
Total	247,770	247,770	5,000	–	

USE OF PROCEEDS FROM THE PLACING OF NEW SHARES UNDER GENERAL MANDATE

In order to broaden its shareholder base as well as its capital base, on 6 May 2021, the Company, China Nonferrous Mining Development Limited, the controlling shareholder of the Company (the "Placing Shareholder") and CLSA Limited (the "Placing Agent") entered into a placing and subscription agreement (the "Placing and Subscription Agreement"), pursuant to which, the Placing Agent placed a total of 250,000,000 placing shares at the placing price of HK$3.96 per ordinary share of the Company ("Share") owned by the Placing Shareholder to not less than six placees, all of whom/which are professional, institutional and/or other investors and are third parties independent from the Company and its connected persons (the "Placing"). Pursuant to the Placing and Subscription Agreement, a total of 250,000,000 subscription shares were subscribed by the Placing Shareholder, and the Company allotted and issued 250,000,000 Shares at HK$3.96 per Share (the "Subscription") on 14 May 2021. The Company received total net proceeds from the Subscription of approximately HK$984.78 million. The closing price of the Shares on 13 May 2021, being the last trading day prior to the date of the agreement, was HK$4.50. Details of the Placing and the Subscription were set out in the announcements of the Company dated 6 May 2021 and 14 May 2021 (the "Announcements").

As disclosed in the Announcements, the Company received total net proceeds (the "Proceeds") from the Subscription and intends to use the same for (i) project construction and development works; (ii) acquisitions of mineral resources; and (iii) replenishing part of the working capital of the Group. As at 31 December 2021, details of the use of the Proceeds are as follows:

Unit: US$'000

Net proceeds from the Placing	Planned usage	Amount utilized	Actual usage	Utilized amount	Timeline for the planned use
126,886	Project construction and development	46,886 *(note)*	Project construction and development	–	–
	Acquisitions of resources				
	Replenishing part of the working capital	80,000	Replenishment of working capital		

Note: In April 2021, the Company entered into a loan agreement with a bank (the "Bank") in respect of a term loan of US$150 million for the designated purpose of the Kambove Main Mine Leach Copper Smelting Project. After the completion of the Placing and Subscription, through communication with the Bank, the Bank agreed that the Company could pay Kambove Mining with the Proceeds in advance and then withdraw from the Bank to replace the Proceeds. In May and June 2021, the Company successively paid Kambove Mining with the Proceeds of US$126,886,000. As at 30 June 2021, Kambove Mining had used US$36,000,000 cumulatively for the Kambove Main Mine Leach Copper Smelting Project. In late July 2021, the Company withdrew a loan of US$80,000,000 from the Bank to replace the Proceeds of the same amount. In March 2022, the Company withdrew US$70,000,000 loans from the bank, among which US$46,886,000 of loans were used for replacement of proceeds with the same amount.

RESULTS

The Group's operating results for the year ended 31 December 2021 and the financial position of the Group as at 31 December 2021 are set out on pages 153 to 265 in the audited consolidated financial statements contained in this annual report.

DIVIDENDS

The Board proposes a payment of final dividends of US¢3.8205 per share for the year ended 31 December 2021. The proposed final dividend will be paid on Thursday, 14 July 2022 after approval at the forthcoming AGM of the Company.

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 266 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 page 7 and pages 8 to 36, respectively, 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 utilisation 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 76 to 126 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 2015 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 2021, the Group 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 2021, the Group was 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 page 16 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 6 and pages 8 to 36 in the "Management Discussion and Analysis" section of this annual report.

Subsequent Event After the End of Financial Year

Save as disclosed in this annual report, there were no other significant events in relation the Group after the reporting period.

BANK AND OTHER BORROWINGS

Details of bank borrowings of the Group as at 31 December 2021 are set out in note 25 to the consolidated financial statements.

CHARITABLE DONATIONS

Charitable donations made by the Group during the year ended 31 December 2021 amounted to US$461,000. In addition, the Group subsidised schools and community hospitals, provided financial aid for the construction and maintenance of public sports facilities such as football fields and swimming pools, and participated in programmes 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 2021 are set out in note 15 to the consolidated financial statements.

As at 31 December 2021, 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 2021 are set out in the consolidated statement of changes in equity.

DISTRIBUTABLE RESERVES

As at 31 December 2021, the Company had distributable reserves amounting to US$245,886,000.

SHARE CAPITAL

During the year ended 31 December 2021, under general mandate pursuant to the placing and subscription agreement dated 6 May 2021, the details of which are disclosed in the announcement of the Company dated 6 May 2021, the Company issued 250,000,000 new ordinary shares at HK$3.96 per share on 14 May 2021.

Save as disclosed above, there was no change in the share capital of the Company during the year ended 31 December 2021.

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, SALE OR REDEMPTION 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 2021.

MAJOR CUSTOMERS AND SUPPLIERS

During the year ended 31 December 2021, sales to the Group's five largest customers accounted for 87.4% of the Group's total sales, and sales to its largest customer, being the Retained Group, accounted for 49.1% of the Group's total sales. The second largest customer was the group comprising a non-controlling shareholder of subsidiaries and its subsidiaries.

During the year ended 31 December 2021, purchases from the Group's five largest suppliers in aggregate accounted for approximately 70.2% of the total purchases, and purchases from the largest supplier accounted for approximately 18.5% of total purchases.

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 5% or more 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 2021.

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 2021.

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 2021.

DIRECTORS

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

Executive Directors
Mr. Jinjun Zhang
Mr. Chunlai Wang (resigned on 11 April 2022)
Mr. Xiaowei Wang (resigned on 27 May 2021)

Non-Executive Director
Mr. Yaoyu Tan (appointed on 27 May 2021)

Independent Non-Executive Directors
Mr. Dingfan Qiu (appointed on 30 July 2021)
Mr. Jingwei Liu
Mr. Huanfei Guan
Mr. Chuanyao Sun (resigned on 30 July 2021)

Mr. Dingfan Qiu ("Mr. Qiu") was appointed as an independent non-executive director of the Company on 30 July 2021. According to article 107 of the Articles of Association and Rule 4(2) of Appendix 3 of Main Board Listing Rules, Mr. Qiu shall retire at the forthcoming annual general meeting. He is eligible for re-election and will offer himself for re-election. 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. Jinjun Zhang and Mr. Huanfei Guan 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 2021 or during the period from 1 January 2022 to 30 March 2022 are set out below and those marked with an asterisk(*) are directors as at 30 March 2022:

Chunlai Wang	Jinghe Zhu	Jinping Ma *
Xiaoduan Liu *	Xinghua Liu*	He Yang
Dayong Yang*	Yibin Liu*	Jiapeng Cui*
Helin Xu*	Jinjun Zhang*	Guobin Hu*
Jingwen Qin	Rongman Huang*	Fawu Shi*
Chunguang Pang*	Zuotai Zhou*	Mingming Cheng*
Xuemin Zheng	Zhanyan Li*	Chengguo Li
Bing Zhang	Mufingwe Ng' ambi*	Luke Chenjelani Mbewe*
Zhimin Chen*	Jingjun Wang*	Chuanjiang Yao*
Ran Zhu*	Yuanyuan Liu	Mrs. Tamara S Ngoma*
Cosmas V Mwananshiku*	Situmbeko Mubano*	Yongzhong Tian*
Tian Wang*	Wei Fan	Wei Yang*
Hongyan Zhang	Yani Gong*	Xinliang Yu*
Xiaowei Wang	Xi Yi*	Weimin Xu*
Jian Guo*	Peiwen Zhang*	Ligang Yang*
Shengjun Shao*	Xingrong Du*	Jianming Zhu*
Wenyan Xu*	Chengyi Fang*	Yuan Jiang*
Siukam Ng*	Siuhong Ng*	Peng Hu*
Hassan Moukachar*	Shaocheng Li*	Zhiwei Wang
Zhiguo Meng*	Xinguo Yang*	Guoming Zhang*
Xingeng Luo*	Donghong Zhang	Simon Tsibangu Ngoy*
Gaetan Tshibangu Luabeya*	Shili Zhang*	Clotilde Wamana Kalongo*
Yi Yao*	Qiongzhi Pu*	Muchang Xu*

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 37 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 2021.

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 2021, and such coverage remained in full force as at 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 2021.

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 reporting period whereby the Directors or their respective spouse or children under the age of 18 years 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 2021, 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 under the Part XV of the SFO; or interests 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 12 and 36(4) 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 at 31 December 2021, 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)*	Registered owner	Long position	2,600,000,000	69.54%
CNMC	Interest in a controlled corporation	Long position	2,600,000,000	69.54%

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 .

Save as disclosed above, as at 31 December 2021, 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.

As at 31 December 2021, 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 Et Des Mines SA	45%
Lualaba Copper Smelter	YH Metal	38%
Kingsail	YH Metal	40%

RETIREMENT BENEFIT SCHEMES

Details of the retirement benefit schemes of the Group are set out in note 37 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 2021.

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 April 2017, the Company entered into the CNMC Copper Supply Framework Agreement ("2017 CNMC Copper Supply Framework Agreement") with CNMC for a term of three years from 1 January 2018 to 31 December 2020, 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 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.

On 30 October 2020, the Company entered into the CNMC Copper Supply Framework Agreement ("2020 CNMC Copper Supply Framework Agreement") with CNMC for a term of three years from 1 January 2021 to 31 December 2023, 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 2020 CNMC Copper Supply Framework Agreement and the proposed annual caps at the EGM held on 16 December 2020. Details of the 2020 CNMC Copper Supply Framework Agreement were disclosed in the announcement and circular of the Company dated 30 October 2020 and 20 November 2020 respectively.

On 9 September 2021, the Company revised the annual caps under the 2020 CNMC Copper Supply Framework Agreement and obtained the approval of the Independent Shareholders at the EGM held on 21 October 2021. Details of the revision were disclosed in the announcement and circular of the Company dated 9 September 2021 and 30 September 2021 respectively.

During the year ended 31 December 2021, the revenue and gains from the sale of copper products (including loss on change in fair value) to the Retained Group amounted to US$1,942,009,000, which is below the annual cap amount of US$2,852,745,000.

2. Yunnan Copper Supply Framework Agreement

On 18 April 2017, the Company entered into the Yunnan Copper Supply Framework Agreement ("2017 Yunnan Copper Supply Framework Agreement") with Yunnan Copper Group, for a term of three years from 1 January 2018 to 31 December 2020, 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. 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.

On 30 October 2020, the Company entered into the Yunnan Copper Supply Framework Agreement ("2020 Yunnan Copper Supply Framework Agreement") with Yunnan Copper Group, for a term of three years from 1 January 2021 to 31 December 2023, 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. Details of the 2020 Yunnan Copper Supply Framework Agreement were disclosed in the announcement of the Company dated 30 October 2020.

On 9 September 2021, the Company revised the annual caps under the 2020 Yunnan Copper Supply Framework Agreement. Details of the revision were disclosed in the announcement of the Company dated 9 September 2021.

During the year ended 31 December 2021, 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$670,180,000, which is below the annual cap amount of US$1,449,000,000.

Yunnan Copper Group and its subsidiary Yunnan & Hongkong Metal Company Limited (雲港金屬有限公司) are respectively the substantial shareholders of CCS and LCS, holding 40% and 38% of the issued share capital of CCS and LCS, respectively. Yunnan Copper Group and its subsidiaries constitute connected persons of the Company under the Listing Rules.

3. 2020 Mabende Ore Supply Framework Agreement

On 18 April 2017, the Company entered into the Huachin Ore Supply Framework Agreement ("2017 Huachin Ore Supply Framework Agreement") with Mabende Mining, for a term of three years from 1 January 2018 to 31 December 2020, pursuant to which the Company agreed to buy, or procure its subsidiaries to buy, copper ores mined by Mabende Mining. 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.

On 30 October 2020, the Company entered into the Mabende Ore Supply Framework Agreement ("2020 Mabende Ore Supply Framework Agreement") with Mabende Mining, for a term of three years from 1 January 2021 to 31 December 2023, pursuant to which Mabende Mining has principally agreed to sell all of the ores mined by Mabende Mining, except that with the Company's consent, Mabende Mining may sell ores in excess of the Group's demand to third parties. In respect of transactions, the nature of which is similar to that of the transactions under the 2017 Huachin Ore Supply Framework Agreement. Details of the 2020 Mabende Ore Supply Framework Agreement were disclosed in the announcement of the Company dated 30 October 2020.

On 28 October 2021 and 12 November 2021, the Company revised the annual caps under the 2020 Mabende Ore Supply Framework Agreement. Details of the revision were disclosed in the announcements of the Company dated 28 October 2021 and 12 November 2021.

During the year ended 31 December 2021, the Group purchased ores amounting to US$157,222,000 from Mabende Mining, which is below the annual cap amount of US$168,000,000.

Huachin Leach and CNMC Huachin Mabende are 32.5% and 35%, respectively, indirectly owned by Mr. Siu Kam Ng, 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 April 2017, the Company entered into the Mutual Supply Framework Agreement ("2017 Mutual Supply Framework Agreement") with CNMC for a term of three years from 1 January 2018 to 31 December 2020, 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 2017 Mutual Supply Framework Agreement and the proposed annual caps at the AGM 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.

On 27 April 2020, the Company revised the annual caps under the 2017 Mutual Supply Framework Agreement as at 31 December 2020 and obtained the approval of the Independent Shareholders at the AGM held on 29 June 2020. Details of the revision were disclosed in the announcement and circular of the Company dated 27 April 2020 and 26 May 2020 respectively.

On 30 October 2020, the Company entered into the Mutual Supply Framework Agreement ("2020 Mutual Supply Framework Agreement") with CNMC for a term of three years from 1 January 2021 to 31 December 2023, 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 2020 Mutual Supply Framework Agreement and the proposed annual caps at the EGM held on 16 December 2020. Details of the 2020 Mutual Supply Framework Agreement were disclosed in the announcement and circular of the Company dated 30 October 2020 and 20 November 2020 respectively.

On 9 September 2021, the Company revised the annual caps under the 2020 Mutual Supply Framework Agreement and obtained the approval of the Independent Shareholders at the EGM held on 21 October 2021. Details of the revision were disclosed in the announcement and circular of the Company dated 9 September 2021 and 30 September 2021 respectively.

During the year ended 31 December 2021, the amount paid by the Group for the provision of raw materials, products and services provided by the Retained Group amounted to US$386,226,000, and the revenue from the provision of raw materials, products and services to the Retained Group amounted to US$67,907,000, both of which are below the annual caps of US$496,731,000 and US$145,515,000, respectively.

5. Huachin Copper Supply Framework Agreement

On 13 October 2020, the Company and Huachin entered into the Huachin Copper Supply Framework Agreement ("2020 Huachin Copper Supply Framework Agreement"), pursuant to which the Company agreed to sell, or procure its subsidiaries to sell, Copper Products to Huachin Group. The term of the 2020 Huachin Copper Supply Framework Agreement commences on 13 October 2020, and remains valid until 31 December 2020. Details of the 2020 Huachin Copper Supply Framework Agreement were disclosed in the announcement of the Company dated 13 October 2020.

On 30 October 2020, the Company and Huachin entered into the Huachin Copper Supply Framework Agreement ("2020 Huachin Copper Supply Framework Agreement"), for a term of three years from 1 January 2021 to 31 December 2023, pursuant to which the Company agreed to sell, or procure its subsidiaries to sell, Copper Products to Huachin Group. Details of the 2020 Huachin Copper Supply Framework Agreement were disclosed in the announcement of the Company dated 30 October 2020.

On 9 September 2021, the Company revised the annual caps under the 2020 Huachin Copper Supply Framework Agreement. Details of the revision were disclosed in the announcement of the Company dated 9 September 2021.

During the year ended 31 December 2021, the revenue and gains from the sale of copper products (including loss on change in fair value) to Huachin International Trading Limited amounted to US$72,471,000, which is below the annual cap amount of US$153,000,000.

Huachin is wholly-owned by an associate of Mr. Siu Kam Ng, and Mr. Siu Kam Ng indirectly owns 32.5% and 35% equity interests in Huachin Leach and CNMC Huachin Mabende, respectively. Therefore, Mr. Siu Kam Ng is a connected person of the Company at the subsidiary level under the Listing Rules.

6. Properties Leasing Framework Agreement

On 18 April 2017, the Company entered into the Properties Leasing Framework Agreement ("2017 Properties Leasing Framework Agreement") with CNMC for a term of three years from 1 January 2018 to 31 December 2020, pursuant to which CNMC has agreed to lease the Leased Properties to the Group for general business and ancillary purposes. Details of the 2017 Properties Leasing Framework Agreement were disclosed in the announcement of the Company dated 18 April 2017.

On 30 October 2020, the Company entered into the Properties Leasing Framework Agreement ("2020 Properties Leasing Framework Agreement") with CNMC for a term of three years from 1 January 2021 to 31 December 2023, pursuant to which CNMC has agreed to lease the Leased Properties to the Group for general business and ancillary purposes. Details of the 2020 Properties Leasing Framework Agreement were disclosed in the announcement of the Company dated 30 October 2020.

During the year ended 31 December 2021, the total property rentals paid amounted to US$5,222,000, which is below the annual cap amount of US$9,530,000.

Details of related party transactions of the Company for the year ended 31 December 2021 are set out in note 36 to the consolidated financial statements. Save for the related party transactions as set out under item (4) in respect of remuneration of key management personnel, all the related party transactions set out in note 36 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 18 April 2017, 23 April 2018, 27 April 2020, 13 October 2020, 30 October 2020, 9 September 2021, 28 October 2021 and 12 November 2021 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 2021 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

Mr. Jinjun Zhang was appointed as the Chairman of the Board on 8 January 2021, and continued to serve as the President of the Company. Save as that Mr. Jinjun Zhang serves as the Chairman and President of the Company with effect from 8 January 2021 which is at variance with code provision C.2.1 of the CG Code (as defined below), the Company had complied with all the code provisions as set out in the Corporate Governance Code and Corporate Governance Report ("CG Code") contained in Appendix 14 of the Listing Rules during the year ended 31 December 2021.

The Board believes that the balance of power and authority is adequately ensured by the operation of the Board, which comprises experienced talents with a sufficient number of Directors being independent non-executive Directors, and therefore, the performance of the roles of the Chairman of the Board and the President of the Company concurrently by Mr. Jinjun Zhang will not impair the balance of power and authority between the Board and the management of the Company and the deviation from code provision C.2.1 of the CG Code is appropriate in such circumstance. As to the deviation from code provision C.2.1 of the CG Code, the Board will continue to review the current structure from time to time and shall make necessary changes when appropriate and inform the shareholders accordingly.

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 D.3 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. Jingwei Liu (independent non-executive Director), Mr. Yaoyu Tan (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 2021 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.

Approved on behalf of the Board of Directors
Jinjun Zhang
Chairman

Beijing, 30 March 2022

Deloitte.

德勤

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 153 to 265, which comprise the consolidated statement of financial position as at 31 December 2021, 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 2021, 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 the 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.

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 2021, owing to the increasing copper price above management's expectation set out in the prior years, management identified an indication that the impairment loss recognised in prior years for NFCA's property, plant and equipment with carrying amount of US$776,373,000 may have decreased. The calculation of the recoverable amount of the cash generating unit ("CGU") to which NFCA's property, plant and equipment belong in assessment incorporates significant management estimates. Any changes in these estimates may have a significant impact on the consolidated financial statements. No impairment loss was reversed for the year ended 31 December 2021 after the management's impairment assessment on the CGU. Details of the related key source of estimation uncertainty and management impairment assessment are disclosed in notes 4 and 15, respectively, to the consolidated financial statements.	Our procedures in relation to impairment assessment on property, plant and equipment of NFCA included: • Understanding the key controls that management have in place to assess the recoverable amounts of the CGU to which NFCA's property, plant and equipment belong; • Involving internal expert to evaluate the methodologies and calculation adopted by the management and assess reasonableness of management's estimate of discount rate； • Challenging the appropriateness of management's estimates of mining plan, future copper prices and production cost used in the cash flow projections; and • Comparing the current year's cash flows with the 2021 figures used in the prior year's impairment assessment.

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.

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.

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

- 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.

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, actions taken to eliminate threats or safeguards applied.

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 Ng Kwok Ho.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong
30 March 2022

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2021

	NOTES	2021 US$'000	2020 US$'000
Revenue from contracts with customers	5, 6	**4,050,588**	2,597,213
Cost of sales		**(2,965,553)**	(1,967,771)
Gross profit		**1,085,035**	629,442
Other income	7	**9,656**	7,634
Other gains and losses	8	**(35,743)**	(122,860)
Distribution and selling expenses		**(82,313)**	(67,886)
Administrative expenses		**(122,902)**	(91,486)
Other expenses		**(9,381)**	(7,967)
Finance costs	9	**(37,316)**	(37,022)
Profit before tax		**807,036**	309,855
Income tax expense	10	**(291,641)**	(112,915)
Profit and total comprehensive income for the year	6, 11	**515,395**	196,940
Profit and total comprehensive income attributable to:			
Owners of the Company		**357,121**	124,965
Non-controlling interests		**158,274**	71,975
		515,395	196,940
Earnings per share			
– Basic and diluted (US cents per share)	14	**9.78**	3.58
– Basic and diluted *(equivalent to approximately HK$ per share)*	14	**0.76**	0.28

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AT 31 DECEMBER 2021

	NOTES	2021 US$'000	2020 US$'000
ASSETS			
Non-current Assets			
Property, plant and equipment	15	**1,697,104**	1,719,997
Right-of-use assets	16	**9,930**	14,895
Mining rights	17	**130,216**	136,187
Restricted bank balances	21	**1,505**	1,505
Deferred tax assets	31	**13,102**	20,588
Prepayments and other receivables	20	**68,283**	34,508
		1,920,140	1,927,680
Current Assets			
Inventories	18	**848,301**	671,427
Trade receivables at amortised cost	19	**25,863**	20,666
Trade receivables at fair value through profit or loss ("FVTPL")	19	**529,904**	227,740
Prepayments and other receivables	20	**229,784**	185,728
Restricted bank balances	21	**3,246**	2,289
Bank balances and cash	21	**606,746**	497,829
		2,243,844	1,605,679
Total Assets		**4,163,984**	3,533,359
EQUITY AND LIABILITIES			
Capital and Reserves			
Share capital	28	**740,119**	613,233
Retained profits		**802,083**	498,531
Equity attributable to owners of the Company		**1,542,202**	1,111,764
Non-controlling interests		**629,682**	547,178
Total Equity		**2,171,884**	1,658,942

	NOTES	2021 US$'000	2020 US$'000
Non-current Liabilities			
Deferred tax liabilities	31	**141,373**	63,233
Bank and other borrowings – due after one year	25	**848,133**	464,000
Lease liabilities	26	**6,411**	13,424
Provision for restoration, rehabilitation and environmental costs	30	**37,400**	28,272
Deferred income	29	**13,940**	16,345
		1,047,257	585,274
Current Liabilities			
Trade payables	22	**359,327**	219,728
Trade payables designated at FVTPL	22	**231,803**	205,178
Other payables and accrued expenses	23	**112,507**	114,417
Income tax payable		**196,669**	123,525
Bank and other borrowings – due within one year	25	**24,225**	597,442
Lease liabilities	26	**7,472**	6,770
Contract liabilities	24	**9,069**	11,141
Financial liabilities designated at FVTPL	27	**3,771**	10,942
		944,843	1,289,143
Total Liabilities		**1,992,100**	1,874,417
Total Equity and Liabilities		**4,163,984**	3,533,359

The consolidated financial statements on pages 153 to 265 were approved and authorised for issue by the board of directors on 30 March 2022 and are signed on its behalf by:

Jinjun Zhang
DIRECTOR

Yaoyu Tan
DIRECTOR

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2021

	Equity attributable to owners of the Company				
	Share capital *US$'000*	**Retained profits** *US$'000*	**Sub-total** *US$'000*	**Non-controlling interests** *US$'000*	**Total equity** *US$'000*
At 1 January 2020	613,233	400,571	1,013,804	522,272	1,536,076
Profit and total comprehensive income for the year	–	124,965	124,965	71,975	196,940
Dividend declared by a subsidiary	–	–	–	(47,069)	(47,069)
Dividend declared by the Company	–	(27,005)	(27,005)	–	(27,005)
At 31 December 2020	613,233	498,531	1,111,764	547,178	1,658,942
Issue of shares *(note 28)*	**127,482**	**–**	**127,482**	**–**	**127,482**
Share issuance cost *(note 28)*	**(596)**	**–**	**(596)**	**–**	**(596)**
Profit and total comprehensive income for the year	**–**	**357,121**	**357,121**	**158,274**	**515,395**
Dividend declared by a subsidiary	**–**	**–**	**–**	**(75,770)**	**(75,770)**
Dividend declared by the Company *(note 13)*	**–**	**(53,569)**	**(53,569)**	**–**	**(53,569)**
At 31 December 2021	**740,119**	**802,083**	**1,542,202**	**629,682**	**2,171,884**

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2021

	2021 US$'000	2020 US$'000
OPERATING ACTIVITIES		
Profit before tax	**807,036**	309,855
Adjustments for:		
Finance costs	**37,316**	37,022
Interest income	**(262)**	(1,337)
Depreciation of property, plant and equipment	**198,926**	149,253
Depreciation of right-of-use assets	**4,965**	4,965
Amortisation of mining rights	**5,971**	140
Impairment loss, net of reversal		
– input value added tax ("VAT") receivables	**28,977**	(7,866)
– financial assets under expected credit loss ("ECL") model	**2,473**	13,845
– mining rights	**–**	16,898
Loss on disposal of property, plant and equipment, net	**6,745**	408
Loss arising on fair value change of financial assets/liabilities at FVTPL	**3,981**	41,872
Release of premium for electricity supply	**1,274**	1,110
Deferred income recognised	**(2,405)**	(1,658)
Foreign exchange (gain) loss	**(1,977)**	5,564
Operating cash flows before movements in working capital	**1,093,020**	570,071
Increase in inventories	**(176,874)**	(141,334)
(Increase) decrease in trade and other receivables and prepayments	**(247,342)**	99,247
Increase in trade and other payables and accrued expenses	**2,522**	31,922
Decrease in contract liabilities	**(2,072)**	(7,361)
Cash generated from operations	**669,254**	552,545
Income tax paid	**(132,871)**	(70,091)
NET CASH FROM OPERATING ACTIVITIES	**536,383**	482,454

CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2021

	2021	2020
	US$'000	*US$'000*
INVESTING ACTIVITIES		
Interest received	**262**	1,337
Proceeds on disposal of property, plant and equipment	**803**	602
Purchases of property, plant and equipment	**(204,501)**	(142,418)
Purchases of mining rights	**–**	(75,000)
Repayment of finance lease receivables from fellow subsidiaries	**–**	63
Placement of restricted bank balances	**(3,613)**	(4,677)
Proceeds from release of restricted bank balances	**2,656**	8,326
Receipts of government grants	**–**	1,437
NET CASH USED IN INVESTING ACTIVITIES	**(204,393)**	(210,330)
FINANCING ACTIVITIES		
Net proceeds from issue of shares	**126,886**	–
Dividends paid to shareholders of the Company	**(68,270)**	(12,282)
Dividends paid to non-controlling shareholders of subsidiaries	**(53,269)**	(45,824)
Interest paid	**(34,602)**	(51,475)
Repayments of bank and other borrowings	**(718,847)**	(359,213)
Repayments of lease liabilities	**(6,948)**	(6,147)
New bank and other borrowings raised	**530,000**	225,000
NET CASH USED IN FINANCING ACTIVITIES	**(225,050)**	(249,941)
NET INCREASE IN CASH AND CASH EQUIVALENTS	**106,940**	22,183
CASH AND CASH EQUIVALENTS AT 1 JANUARY	**497,829**	481,210
Effect of foreign exchange rate changes on the balance of cash held in foreign currencies	**1,977**	(5,564)
CASH AND CASH EQUIVALENTS AT 31 DECEMBER,		
Represented by:		
Bank balances and cash	**606,746**	497,829

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 State-owned Assets Supervision and Administration Commission of the State Council. The registered office of the Company is located Unit 1303, 13/F, Austin Tower, 22–26 Austin Avenue, Tsimshatsui, Kowloon, Hong Kong, and its principal places of business are located at 32 Enos Chomba Road, Kitwe, the Republic of Zambia ("Zambia") and Bloc B-Luano City-Route Aeroport Commune Annexe Lubumbashi, the Democratic Republic of Congo ("DRC").

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 and copper anodes, cobaltous hydroxide, sulfuric acid and liquid sulphur dioxide. The activities of the subsidiaries of the Company are set out in note 38.

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")

Amendments to HKFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the following amendments to HKFRSs issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the first time, which are mandatorily effective for the annual period beginning on or after 1 January 2021 for the preparation of the consolidated financial statements:

Amendment to HKFRS 16	Covid-19-Related Rent Concessions
Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16	Interest Rate Benchmark Reform – Phase 2

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

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

In addition, the Group applied the agenda decision of the IFRS Interpretations Committee (the "Committee") of the International Accounting Board issued in June 2021 which clarified the costs an entity should include as "estimated costs necessary to make the sale" when determining the net realised value of inventories.

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

2.1 Impacts on application of Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16 Interest Rate Benchmark Reform - Phase 2

The amendments relate to changes in the basis for determining the contractual cash flows of financial assets, financial liabilities and lease liabilities as a result of interest rate benchmark reform, specific hedge accounting requirements and the related disclosure requirements applying HKFRS 7 Financial Instruments: Disclosures ("HKFRS 7").

The amendments have had no impact on the consolidated financial statements as none of the relevant contracts has been transitioned to the relevant replacement rates during the year. The Group will apply the practical expedient in relation to the changes in contractual cash flows resulting from the interest rate benchmark reform for bank loans measured at amortised cost. Additional disclosures as required by HKFRS 7 are set out in note 34.

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 17	Insurance Contracts and the related Amendments[3]
Amendments to HKFRS 3	Reference to the Conceptual Framework[2]
Amendments to HKFRS 10 and HKAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[4]
Amendment to HKFRS 16	Covid-19-Related Rent Concessions beyond 30 June 2021[1]
Amendments to HKAS 1	Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)[3]
Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies[3]
Amendments to HKAS 8	Definition of Accounting Estimates[3]
Amendments to HKAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction[3]
Amendments to HKAS 37	Onerous Contracts – Cost of Fulfilling a Contract[2]
Amendments to HKFRSs	Annual Improvements to HKFRSs 2018 – 2020[2]

1 Effective for annual periods beginning on or after 1 April 2021.
2 Effective for annual periods beginning on or after 1 January 2022.
3 Effective for annual periods beginning on or after 1 January 2023.
4 Effective for annual periods beginning on or after a date to be determined.

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

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)

Amendments to HKAS 16 Property, Plant and Equipment – Proceeds before Intended Use

The amendments specify that the costs of any item that were produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management (such as samples produced when testing whether the relevant property, plant and equipment is functioning properly) and the proceeds from selling such items should be recognised and measured in the profit or loss in accordance with applicable standards. The cost of the items are measured in accordance with HKAS 2 Inventories.

The Group's existing accounting policy is to account for sale proceeds on samples produced during testing as reduction of cost of the relevant property, plant and equipment. Upon application of the amendments, such sale proceeds and the related costs will be included in profit and loss with corresponding adjustments to the cost of property, plant and equipment.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

3.1 Basis for preparation of consolidated financial statements

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. 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.

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 leasing transactions that are accounted for in accordance with HKFRS 16 *Leases* ("HKFRS 16"), and measurements that have some similarities to fair value but are not fair value, such as net realisable value in HKAS 2 Inventories ("HKAS 2") or value in use in HKAS 36 *Impairment of Assets*.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.1 Basis for preparation of consolidated financial statements (Continued)

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.

3.2 Significant accounting policies

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Revenue from contracts with customers

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Revenue from contracts with customers (Continued)

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 *Financial Instruments* ("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.

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 cases, the control of goods has transferred upon delivery when the goods have been shipped at the Group's premises. In some other cases, the control of goods has transferred upon delivery at specific destination ports.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Revenue from contracts with customers (Continued)

Services

Revenue from the rendering of copper products processing service is recognised when control of the completed processing copper products has transferred based on the terms of the service contracts.

Contract costs

Costs to fulfil a contract

The Group incurs costs to fulfil a contract in its service contracts. The Group first assesses whether these costs qualify for recognition as an asset in terms of other relevant standards, failing which it recognises an asset for these costs only if they meet all of the following criteria:

(a) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify;

(b) the costs generate or enhance resources of the Group that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and

(c) the costs are expected to be recovered.

The asset so recognised is subsequently amortised to profit or loss on a systematic basis that is consistent with the transfer to the customer of the services to which the assets relate. The asset is subject to impairment review.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Contract costs (Continued)

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 timely 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

Definition of a lease

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified on or after the date of initial application of HKRS16 or arising from business combinations, the Group assesses whether a contract is or contains a lease based on the definition under HKFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as a lessee

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group applies practical expedient not to separate Non-lease components from lease component, and instead account for the lease component and any associated non-lease components as a single lease component .

Short-term leases

The Group applies the short-term lease recognition exemption to leases of buildings that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. Lease payments on short-term leases are recognised as expense on a straight-line basis or another systematic basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received; and
- any initial direct costs incurred by the Group.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as a lessee (Continued)

Right-of-use assets (Continued)

Right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

Lease liabilities

At the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable; and
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date; and
- Variable lease payments that reflect changes in market rental rates are initially measured using the market rental rates as at the commencement date.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as a lessee (Continued)

Lease liabilities (Continued)

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.

- the lease payments change due to changes in market rental rates following a market rent review/expected payment under a guaranteed residual value, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Leases (Continued)

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and

- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Leases (Continued)

The Group as a lessor

Classification and measurement of leases

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Amounts due from lessees under finance leases are recognised as receivables at commencement date at amounts equal to net investments in the leases, measured using the interest rate implicit in the respective leases. Interest 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.

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, and such costs are recognised as an expense on a straight-line basis over the lease term.

Foreign currencies

The functional currency of the companies comprising the Group is US$. In preparing the financial statements of each individual group entity, transactions in currencies other than US$ (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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

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.

Any specific borrowing that remain outstanding after the related asset is ready for its intended use or sale is included in the general borrowing pool for calculation of capitalisation rate on general borrowings. 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.

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 related to income 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. Such grants are presented under "other income".

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

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.

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 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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Taxation (Continued)

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 purposes of measuring deferred tax for leasing transactions in which the Group recognises the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities and provision for decommissioning and restoration in which the tax deductions are attributable to ultimate costs incurred, the Group applies HKAS 12 requirements to the assets and related liabilities separately. Temporary differences on initial recognition of the relevant assets and the related liabilities are not recognised due to application of the initial recognition exemption. Temporary differences arising from subsequent revision to the carrying amounts of the assets and the related liabilities, resulting from remeasurement of the liabilities and lease modifications, that are not subject to initial recognition exemption are recognised on the date of remeasurement or modification.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Taxation (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 to the same taxable entity by the same taxation authority.

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.

In assessing any uncertainty over income tax treatments, the Group considers whether it is probable that the relevant tax authority will accept the uncertain tax treatment used, or proposed to be used by individual group entities in their income tax filings. If it is probable, the current and deferred taxes are determined consistently with the tax treatment in the income tax filings. If it is not probable that the relevant taxation authority will accept an uncertain tax treatment, the effect of each uncertainty is reflected by using either the most likely amount or the expected value.

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 any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Property, plant and equipment (Continued)

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-of-production method.

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

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	10 to 30 years
Machinery and equipment	3 to 10 years
Motor vehicles	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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Property, plant and equipment (Continued)

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.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Mining rights

The cost of mining rights either as an individual asset purchase or as part of a business combination is capitalised and represents the asset's fair value at the date of acquisition.

Subsequent to initial recognition, mining rights are reported at costs less accumulated amortisation and any accumulated impairment losses. The costs of mining rights are amortised or depreciated on a unit-of-production basis over the total estimated remaining commercial reserves of each mine.

A mining right is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains and losses arising from derecognition of a mining right, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

Impairment on property, plant and equipment, right-of-use assets and mining rights

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets and mining rights 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, right-of-use assets and mining rights are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the CGU to which the assets belong.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Impairment on property, plant and equipment, right-of-use assets and mining rights (Continued)

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. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a CGU, the Group compares the carrying amount of a group of CGUs, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of CGUs, with the recoverable amount of the group of CGUs. In allocating the impairment loss, the impairment loss is allocated to the assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of CGUs. 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 or the group of CGUs. An impairment loss is recognised immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or CGU or a group of CGUs) 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 or a group of CGUs) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

Inventories

Inventories are stated at the lower of cost and net realisable value. Costs of inventories are determined on a weighted average method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Costs necessary to make the sale include incremental costs directly attributable to the sale and non-incremental costs which the Group must incur to make the sale.

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 labour costs and an attributable proportion of manufacturing overheads based on normal levels of activity.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Inventories (Continued)

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 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 *Revenue From Contracts With Customers* ("HKFRS 15"). 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 FVTPL) 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 FVTPL 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

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

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 selling and collecting 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.

All other financial assets are subsequently measured at FVTPL, except that at 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* ("HKFRS 3") applies.

A financial asset is 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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other item subject to impairment assessment under HKFRS 9

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade receivables at amortised cost, other receivables, deposits in futures margin accounts, restricted bank balances, and bank balances) and other item (finance lease receivables) which are subject to impairment assessment under HKFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

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, in which case 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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other item subject to impairment assessment under HKFRS 9 (Continued)

(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.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- 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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other item subject to impairment assessment under HKFRS 9 (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 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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other item subject to impairment assessment under HKFRS 9 (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 and 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 HKFRS 16.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial assets (Continued)

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 asset to another entity. If the Group neither transfers nor retains 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.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

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.

Perpetual instruments, which include no contractual obligation for the Group to deliver cash or other financial assets or the Group has the sole discretion to defer payment of distribution and redemption of principal amount indefinitely are classified as equity instruments.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

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 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.

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 permits the entire combined contract to be designated as at FVTPL.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 Significant accounting policies (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Financial liabilities at FVTPL (Continued)

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 other than those designated at FVTPL and other payables are subsequently measured at amortised cost, using the effective interest method.

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.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

3.2 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.

Embedded derivatives

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.

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.

Key sources of estimation uncertainty

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 assessment of property, plant and equipment

Property, plant and equipment are stated at costs less accumulated depreciation and impairment loss, if any. In determining whether an asset is impaired, the Group has to exercise judgement and make estimation, particularly in assessing: (1) whether an event has occurred or any indicators that may affect the asset value; (2) whether the carrying value of an asset can be supported by the recoverable amount, in the case of value in use, the net present value of future cash flows which are estimated based upon the continued use of the asset; and (3) the appropriate key assumptions to be applied in estimating the recoverable amounts including cash flow projections and an appropriate discount 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 belong, including allocation of corporate assets when a reasonable and consistent basis of allocation can be established, otherwise recoverable amount is determined at the smallest group of CGUs, for which the relevant corporate assets have been allocated. Changing the assumptions and estimations, including the discount rate or the growth rate in the cash flow projections, could materially affect the net present value used in the impairment test. Furthermore, the cash flows projections, growth rate and discount rate are subject to greater uncertainties in the current year due to uncertainty on how the Covid-19 pandemic may progress and evolve and volatility in financial markets.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

Key sources of estimation uncertainty (Continued)

Impairment assessment of property, plant and equipment (Continued)

As at 31 December 2021, the carrying amount of property, plant and equipment subject to impairment assessment was US$776,373,000 (2020: US$779,257,000). No impairment loss in respect of property, plant and equipment has been recognised or reversed. Details of the impairment test of property, plant and equipment are disclosed in note 15.

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 during each reporting 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.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

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 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 2021, a deferred tax asset of US$13,102,000 (31 December 2020: US$20,588,000) in relation to unused tax losses and impairment of property, plant and equipment has been recognised in the consolidated statement of financial position (see note 31). 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.

In 2018, the Domestic Republic of Congo (the "DRC") parliament adopted a new mining code (the "2018 Mining Code") introducing wide-ranging reforms including the introduction of higher royalties, a new Super Profits Tax regime and further regulatory controls. In accordance with the 2018 Mining Code, should a single product meet the threshold condition that its average effective selling price within one accounting year rise over 25% more than its average selling price in such year as predicated in its project economic feasibility study report (the "Feasibility Report"), excess profit taxes is imposed on a tax base that is the difference between the earnings before interests, taxes, depreciation and amortisation (the "EBITDA") of the product and the predicted in the Feasibility Report in such accounting year with applicable tax rate at 50% with effect from 8 June 2018. The Directors have taken the view that the average selling prices in 2021 are not 25% more than those in the Feasibility Report or the actual EBITDAs do not exceed those in the Feasibility Report, thus, no Super Profits Tax is recognised in the consolidated financial statements for the years ended 31 December 2021 and 2020. However, there is limited guidance in relation to the implementation of certain parts of the 2018 Mining Code; the Directors' interpretation of the 2018 Mining Code may be subject to future changes following the publication of relevant implementation guidance on those impacted areas, which are currently uncertain period.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CONTINUED)

Key sources of estimation uncertainty (Continued)

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 2021, in view of impairment indicators, the Group performed an impairment assessment on input VAT receivables, the carrying amount of which, after deducting the provision of US$44,876,000 (2020: US$15,899,000), amounted to US$143,556,000 (2020: US$120,607,000). For the year ended 31 December 2021, an impairment loss of US$28,977,000 was recognised (2020: US$7,866,000 was reversed) in respect of input VAT receivables. Details of the impairment assessment of input VAT receivables are disclosed in note 20.

5. REVENUE FROM CONTRACTS WITH CUSTOMERS

(i) Disaggregation of revenue from contracts with customers

	2021	
	Leaching	**Smelting**
	US$'000	***US$'000***
Types of goods or services		
Sales of goods to external customers		
Copper cathodes	**954,423**	**–**
Blister copper and copper anodes	**–**	**2,890,597**
Sulfuric acid	**–**	**132,023**
Liquid sulphur dioxide	**–**	**22,498**
Cobalt contained in cobaltous hydroxide	**14,584**	**–**
Copper products processing services	**–**	**36,463**
Total	**969,007**	**3,081,581**
Timing of revenue recognition		
A point in time	**969,007**	**3,081,581**

	2020	
	Leaching	Smelting
	US$'000	*US$'000*
Types of goods or services		
Sales of goods to external customers		
Copper cathodes	662,897	–
Blister copper and copper anodes	–	1,781,780
Sulfuric acid	–	117,689
Liquid sulphur dioxide	–	15,629
Cobalt hydroxide	3,008	–
Copper products processing services	–	16,210
Total	665,905	1,931,308
Timing of revenue recognition		
A point in time	665,905	1,931,308

5. REVENUE FROM CONTRACTS WITH CUSTOMERS (CONTINUED)

(ii) Performance obligations for contracts with customers

The Group sells copper products, sulphuric acid, liquid sulphur dioxide and cobalt hydroxide and renders copper products processing services to customers, revenue is recognised when control of the goods or services has transferred based on the terms of relevant contracts. In most cases, the control of goods has transferred upon delivery when the goods have been shipped at the Group's premises. In some other cases, the control of goods has transferred upon delivery at specific destination ports. Revenue from the rendering of copper products processing service is recognised when control of the completed processing copper products has transferred based on the terms of the service contracts. 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.

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 board of directors (the "Board"), being the chief operating decision maker (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 and cobalt hydroxide (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 and copper anodes (including exploration and mining of sulfuric copper mines), sulfuric acid and liquid sulphur dioxide which are produced using ISA smelting technology. Sulfuric acid and liquid sulphur dioxide are by-products in the production of blister copper and copper anodes. Copper products processing services are also rendered using ISA smelting technology.

No operating segments have been aggregated to be derived from the reportable segments of the Group.

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 2021

	Leaching	Smelting	Consolidated
	US$'000	*US$'000*	*US$'000*
Total segment revenue	969,007	3,128,704	4,097,711
Less: inter-segment sales	–	(47,123)	(47,123)
Revenue from external customers	969,007	3,081,581	4,050,588
Segment profit	286,291	246,012	532,303
Unallocated income*			192
Unallocated expenses#			(17,100)
Profit for the year			515,395

6. SEGMENT INFORMATION (CONTINUED)

Segment revenue and results (Continued)

For the year ended 31 December 2020

	Leaching	Smelting	Consolidated
	US$'000	*US$'000*	*US$'000*
Total segment revenue	665,905	1,972,792	2,638,697
Less: inter-segment sales	–	(41,484)	(41,484)
Revenue from external customers	665,905	1,931,308	2,597,213
Segment profit	127,583	76,559	204,142
Unallocated income*			971
Unallocated expenses#			(8,173)
Profit for the year			196,940

* 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 non-wholly-owned subsidiary of the Company which directly holds the Group's shareholdings in three subsidiaries in 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 the other three subsidiaries in DRC (collectively referred to as the "Holding Companies").

The unallocated expenses mainly represent the administrative expenses, interest expenses and income tax expenses of 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.

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:

	2021	2020
	US$'000	*US$'000*
Segment assets		
Leaching	**1,348,698**	1,005,540
Smelting	**2,746,800**	2,509,331
Total segment assets	**4,095,498**	3,514,871
Unallocated assets*	**73,319**	29,178
Elimination	**(4,833)**	(10,690)
Consolidated assets	**4,163,984**	3,533,359
Segment liabilities		
Leaching	**517,953**	401,246
Smelting	**1,432,463**	1,427,834
Total segment liabilities	**1,950,416**	1,829,080
Unallocated liabilities*	**46,517**	56,027
Elimination	**(4,833)**	(10,690)
Consolidated liabilities	**1,992,100**	1,874,417

* 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.

6. SEGMENT INFORMATION (CONTINUED)

Other segment information

Amounts included in the measure of segment profit and segment assets:

For the year ended 31 December 2021

	Leaching *US$'000*	Smelting *US$'000*	Unallocated *US$'000*	Consolidated *US$'000*
Addition to non-current assets*	**168,421**	**20,708**	**38**	**189,167**
Depreciation of property, plant and equipment	**91,728**	**110,725**	**–**	**202,453**
Depreciation of right-of-use assets	**–**	**4,965**	**–**	**4,965**
Amortisation of mining rights	**5,971**	**–**	**–**	**5,971**
Write-down of inventories	**2,120**	**–**	**–**	**2,120**
Interest income#	**60**	**10**	**192**	**262**
Finance costs	**2,179**	**35,132**	**5**	**37,316**
(Loss) gain arising on change in fair value of				
– financial liabilities designated at FVTPL	**(14,052)**	**(34,194)**	**–**	**(48,246)**
– trade receivables at FVTPL	**38,669**	**130,084**	**–**	**168,753**
– trade payables designated at FVTPL	**–**	**(124,488)**	**–**	**(124,488)**
Income tax expense	**142,333**	**137,947**	**11,361**	**291,641**

6. SEGMENT INFORMATION (CONTINUED)

Other segment information (Continued)

For the year ended 31 December 2020

	Leaching *US$'000*	Smelting *US$'000*	Unallocated *US$'000*	Consolidated *US$'000*
Addition to non-current assets*	232,162	36,540	28	268,730
Depreciation of property, plant and equipment	80,080	76,833	–	156,913
Depreciation of right-of-use assets	–	4,965	–	4,965
Amortisation of mining rights	140	–	–	140
Write-down of inventories	–	21,700	–	21,700
Impairment of mining rights	16,898	–	–	16,898
Interest income#	356	10	971	1,337
Finance costs	5,972	31,050	–	37,022
(Loss) gain arising on change in fair value of				
– financial liabilities designated at FVTPL	(12,241)	(29,602)	–	(41,843)
– trade receivables at FVTPL	19,443	71,716	–	91,159
– trade payables designated at FVTPL	–	(91,188)	–	(91,188)
Income tax expense	60,938	48,862	3,115	112,915

* Non-current assets exclude financial instruments, input VAT receivables and deferred tax assets.

\# Unallocated interest income represents interest income earned from bank balances of the Holding Companies.

6. SEGMENT INFORMATION (CONTINUED)

Geographical information

The Group's operations are mainly in Zambia and DRC. US$1,098,261,000 (2020: US$1,185,546,000) and US$756,950,000 (2020: US$720,041,000) 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:

	2021	2020
	US$'000	*US$'000*
Mainland China	**2,280,423**	1,235,400
Switzerland	**472,144**	326,584
Singapore	**360,624**	158,943
Hong Kong	**492,163**	623,644
Luxemburg	**246,171**	88,067
Africa	**199,063**	164,575
	4,050,588	2,597,213

Information about major customers

Revenue from customers individually contributing over 10% of the total revenue of the Group are as follows:

	2021	2020
	US$'000	*US$'000*
Customer A[1]		
– Leaching	**641,672**	425,825
– Smelting	**1,217,569**	776,479
	1,859,241	1,202,304
Customer B[1]		
– Smelting	**630,580**	526,673

1 Revenue from copper products

7. OTHER INCOME

	2021	2020
	US$'000	*US$'000*
Interest income	**262**	1,337
Government grants	**2,405**	1,658
Net income from sale of spare parts and other materials	**3,437**	2,400
Net income from service of custom clearance	**234**	703
Others	**3,318**	1,536
	9,656	7,634

8. OTHER GAINS AND LOSSES

	2021	2020
	US$'000	*US$'000*
Loss on disposal of property, plant and equipment, net	**(6,745)**	(408)
Impairment loss (recognised) reversed in respect of		
– input VAT receivables (note 20)	**(28,977)**	7,866
– financial assets under ECL	**(2,473)**	(13,845)
– mining rights (note 17)	**–**	(16,898)
Foreign exchange gains (losses), net	**6,433**	(57,703)
(Loss) gain from changes in fair value of financial liabilities/assets at FVTPL		
– financial liabilities designated at FVTPL	**(48,246)**	(41,843)
– trade receivables at FVTPL	**168,753**	91,159
– trade payables designated at FVTPL	**(124,488)**	(91,188)
	(35,743)	(122,860)

9. FINANCE COSTS

	2021	2020
	US$'000	*US$'000*
Interest on bank and other borrowings	**34,365**	51,352
Interest on lease liabilities	**637**	938
Unwinding of the discount (note 30)	**2,314**	802
	37,316	53,092
Less: amounts capitalised in construction in progress arose on the borrowings specifically for the purpose of qualifying assets	**–**	(16,070)
	37,316	37,022
The weighted average capitalisation rate used to determine the amount of borrowing costs arose on the borrowings specifically eligible for capitalisation (per annum)	**N/A**	3.72%-5.34%

10. INCOME TAX EXPENSE

Income tax expense recognised in profit or loss:

`	**2021**	2020
	US$'000	*US$'000*
Current tax:		
– Income tax in The Republic of Ireland ("Ireland")	**1,338**	5
– Income tax in DRC	**65,802**	34,900
– Income tax in Zambia	**138,875**	61,405
	206,015	96,310
Deferred tax *(note 31)*		
– Current year	**83,676**	16,605
– Attributable to a change in tax rate	**1,950**	–
	85,626	16,605
Total income tax expense	**291,641**	112,915

Income tax in Ireland is calculated at 12.5% (2020: 12.5%) on the estimated assessable income.

Income tax in DRC is calculated at 30% on the estimated assessable income where 30% of the assessable income exceeds 1% of gross sales, and calculated at 1% of gross sales where 30% of the assessable income does not exceeds 1% of gross sales.

In accordance with the 2018 Mining Code of DRC with effect from 8 June 2018, should a single product meet the threshold condition that its average effective selling price within one accounting year rise over 25% more than its average selling price in such year as predicated in its feasibility report, excess profit taxes is imposed on a tax base being the difference between the EBITDA of the product and the predicted amount in the feasibility report in that accounting year with applicable tax rate of 50%.

Income tax in Zambia is calculated at 35% (2020: 35%) on the assessable income, except for that arising from mining activities which is stated as below.

For both reporting periods, the applicable tax rate on income from mining operation in Zambia is 30% and the mineral royalty is not allowed to be deducted from profit before tax. Accordingly, for both reporting periods, the applicable tax rate on the assessable income of Chambishi Copper Smelter Limited ("CCS") is 35%, and the applicable tax rate on the assessable income of NFCA, CNMC Luanshya Copper Mines PLC ("Luanshya") and Sino-metals Leach Zambia Limited ("SML") is 30%.

10. INCOME TAX EXPENSE (CONTINUED)

The Group enjoyed the following income tax incentives:

- Certain phase of production facilities of CCS (the "Phase") 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 Phase is under the second year of 50% income tax relief during the current year (2020: 50%).

The actual applicable tax rate of CCS is 27.1% during the current year (2020: 27.1%).

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 CCS is subject to withholding tax in Zambia at tax rate of 7.5% (2020: 7.5%) and certain dividend income of CNMH from Luanshya, NFCA and SML which are mining operations is under withholding tax relief for both years.

Certain dividend income of CNMHK from DRC subsidiaries is subject to withholding tax in DRC at tax rate of 10% (2020: 10%).

At the end of the reporting period, deferred tax liability of US$42,816,000 (2020: US$39,466,000) has been provided for temporary differences associated with undistributed earnings of these subsidiaries (see note 31).

Pursuant to "An Act to amend the Income Tax Act, 2021" enacted by the Parliament of Zambia on 29 December 2021, the income tax rate of Zambia changes from 35% to 30% and non-deductible mineral royalty expense under the Mines and Minerals Development Act, 2015 becomes deductible.

10. 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:

	2021	2020
	US$'000	*US$'000*
Profit before tax	**807,036**	309,855
Tax at income tax rate in Ireland		
– for operations at 12.5%	**1,338**	5
Tax at income tax rate in DRC		
– for operations at 30%	**47,281**	21,103
Tax at income tax rate in Zambia		
– for operations at 30%	**144,907**	37,470
– for operations at 35%	**52,645**	34,230
	246,171	92,808
Tax effect of expenses not deductible for tax purpose	**41,790**	18,589
Deferred and withholding tax on undistributed earnings	**9,952**	3,010
Effect of tax incentives granted to the Group	**(16,148)**	(11,187)
Tax effect of deductible temporary differences not recognised	**5,905**	6,584
Decrease in opening deferred tax assets resulting from		
a decrease in applicable tax rate	**1,950**	–
Tax effect of income tax rate at 1% of gross sales	**2,021**	3,111
Income tax expense for the year	**291,641**	112,915

10. 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% (2020: 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 Zambia Revenue Authority and DRC to the extent total input VAT paid on purchases exceeds total output VAT payable on domestic sales.

For both reporting periods, the mineral royalty rates are applicable for both open cast mining operations and underground mining operations in Zambia and DRC.

In Zambia, the mineral royalty is 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.

In DRC, the mineral royalty is at the rate of 3.5% (2020: 3.5%) for copper products.

11. PROFIT FOR THE YEAR

Profit for the year has been arrived at after charging:

	2021	2020
	US$'000	*US$'000*
Depreciation of property, plant and equipment	**202,453**	156,913
Depreciation of right-of-use assets	**4,965**	4,965
Amortisation of mining right	**5,971**	140
Total depreciation and amortisation	**213,389**	162,018
Less: capitalised in inventories	**(193,066)**	(139,418)
capitalised in construction in progress	**(3,527)**	(7,660)
	16,796	14,940
Auditor's remuneration	**1,174**	1,012
Staff costs (including Directors' remuneration as disclosed in note 12):		
Salaries, wages and welfare	**120,866**	104,534
Retirement benefit schemes contributions	**9,201**	9,157
Total staff costs	**130,067**	113,691
Less: capitalised in inventories	**(83,270)**	(65,943)
capitalised in construction in progress	**(1,341)**	(15,135)
	45,456	32,613
Cost of inventories recognised as an expense	**2,965,553**	1,967,771

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS

Directors

Details of the emoluments paid or payable to the Directors are as follows:

	2021				
		Other emoluments			
Name of director	Fees	Salaries and other allowances	Discretionary performance bonus*	Retirement benefit schemes contributions	Total emoluments
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Executive Directors					
Mr. Jinjun Zhang (i)	–	–	–	–	–
Mr. Xiaowei Wang (ii)	–	–	–	–	–
Mr. Chunlai Wang	–	97	111	6	214
	–	97	111	6	214
Non-executive Director					
Mr. Yaoyu Tan (iii)	–	–	–	–	–
Independent Non-executive Directors					
Mr. Dingfan Qiu (iv)	15	–	–	–	15
Mr. Chuanyao Sun (v)	22	–	–	–	22
Mr. Jingwei Liu	37	–	–	–	37
Mr. Huanfei Guan	37	–	–	–	37
	111	–	–	–	111
Total					325

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (CONTINUED)

Directors (Continued)

	2020				
		Other emoluments			
Name of director	Fees	Salaries and other allowances	Discretionary performance bonus*	Retirement benefit schemes contributions	Total emoluments
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Executive Directors					
Mr. Jinjun Zhang (i)	–	–	–	–	–
Mr. Tongzhou Wang (vi)	–	–	–	–	–
Mr. Xiaowei Wang	–	–	–	–	–
Mr. Wei Fan (vii)	–	109	32	2	143
Mr. Lin Zhang (viii)	–	55	–	3	58
Mr. Chunlai Wang	–	137	52	7	196
Mr. Kaishou Xie (ix)	–	–	–	–	–
	–	301	84	12	397
Independent Non-executive Directors					
Mr. Chuanyao Sun	35	–	–	–	35
Mr. Jingwei Liu	35	–	–	–	35
Mr. Huanfei Guan	35	–	–	–	35
	105	–	–	–	105
Total					502

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (CONTINUED)

Directors (Continued)

(i) Mr. Jinjun Zhang resigned as non-executive director of the Company and was appointed as executive director of the Company with effect from 14 October 2020, and was appointed as the chairman of the Board with effect from 8 January 2021.

Mr. Jinjun Zhang assumes the role as a vice president in CNMC and his emoluments for services rendered by him to the Group commencing from the date of appointment have been borne by CNMC.

(ii) Mr. Xiaowei Wang resigned as executive director of the Company with effect from 27 May 2021.

Mr. Xiaowei Wang assumes a 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.

(iii) Mr. Yaoyu Tan was appointed as non-executive director of the Company with effect from 27 May 2021.

Mr. Yaoyu Tan assumes a 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.

(iv) Mr. Dingfan Qiu was appointed as independent non-executive director of the Company with effect from 30 July 2021.

(v) Mr. Chuanyao Sun resigned as independent non-executive director of the Company with effect from 30 July 2021.

(vi) Mr. Tongzhou Wang resigned as the chairman of the Board and executive director of the Company with effect from 4 September 2020.

Mr. Tongzhou Wang, the former 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 to the date of resignation had been borne by CNMC.

(vii) Mr. Wei Fan was appointed as executive director of the Company with effect from 24 March 2020 and resigned as executive director of the Company with effect from 14 October 2020.

(viii) Mr. Lin Zhang resigned as executive director of the Company with effect from 14 October 2020.

(ix) Mr. Kaishou Xie resigned as executive director of the Company with effect from 24 March 2020.

Mr. Kaishou Xie has assumed a role in CNMC from May 2017 to 24 March 2020. His emoluments for services rendered to the Group have been borne by CNMC during the period.

* Certain executive directors of the Company are entitled to bonus payments which are determined based on operation results of the subsidiaries for which the director is in charge.

12. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (CONTINUED)

Directors (Continued)

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 2021 (2020: Nil).

Employees

The five highest paid employees of the Group during the year included one director (2020: two directors), details of whose remuneration are set out in the disclosure above. Details of the remuneration for the year of the remaining four (2020: three) highest paid employees who are neither a director nor chief executive of the Company are as follows:

`	**2021** ***US$'000***	2020 *US$'000*
Salaries, other allowances and bonus	**564**	349
Discretionary performance bonus	**298**	119
Retirement benefit schemes contributions	**47**	14
	909	482

The number of the highest paid employees who are neither directors nor chief executive of the Company whose remuneration fell within the following bands is as follows:

	2020 ***Number of employees***	2020 *Number of employees*
HK$1,000,001 to HK$1,500,000	**–**	3
HK$1,500,001 to HK$2,000,000	**3**	–
HK$2,000,001 to HK$2,500,000	**1**	–
	4	3

13. DIVIDENDS

	2021	2020
	US$'000	*US$'000*
Dividends recognised as distribution during the year:		
2021 Final, paid – US ¢ 1.4327 per share	**53,569**	–
2020 Final, paid – US ¢ 0.7740 per share	**–**	27,005

Subsequent to the end of the reporting period, a final dividend in respect of the year ended 31 December 2021 of US ¢ 3.8205 (2020: final dividend in respect of the year ended 31 December 2020 of US ¢ 1.4327) per share, in an aggregate amount of US$142,848,400 (2020: US$49,987,419), has been proposed by the Directors and is subject to the approval of the shareholders of the Company in the forthcoming annual general meeting.

14. 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:

	2021	2020
Profit for the year attributable to owners of the Company for the purpose of basic and diluted earnings per share *(in US$'000)*	**357,121**	124,965
Weighted average number of ordinary shares for the purpose of basic and diluted earnings per share *(in '000)*	**3,649,995**	3,489,036
Earnings per share		
– Basic and diluted (US cents per share)	**9.78**	3.58
– Basic and diluted (equivalent to approximately HK$ per share)	**0.76**	0.28

The weighted average number of ordinary shares for the purpose of basic earnings per share has been adjusted for subscription of new shares which took place on 14 May 2021 (see note 28).

During the two years ended 31 December 2021 and 2020, there were no potential ordinary shares outstanding with diluted impact.

15. PROPERTY, PLANT AND EQUIPMENT

	Mining properties *US'000*	Land and buildings *US$'000*	Machinery and equipment *US$'000*	Motor vehicles *US$'000*	Construction in progress *US$'000*	Total *US$'000*
Cost						
At 1 January 2020	581,121	571,108	897,633	96,565	922,501	3,068,928
Additions	6,688	2,214	17,892	24,639	132,753	184,186
Transfer from construction in progress	381,393	184,787	259,591	–	(825,771)	–
Disposals	–	(70)	(5,654)	(2,064)	–	(7,788)
At 31 December 2020	969,202	758,039	1,169,462	119,140	229,483	3,245,326
Additions	2,520	1,144	20,608	2,951	159,885	187,108
Transfer from construction in progress	66,279	75,235	155,361	–	(296,875)	–
Disposals	(138,366)	(901)	(66,067)	(4,146)	–	(209,480)
At 31 December 2021	**899,635**	**833,517**	**1,279,364**	**117,945**	**92,493**	**3,222,954**
Depreciation and impairment						
At 1 January 2020	(380,252)	(225,259)	(606,898)	(61,231)	(101,554)	(1,375,194)
Depreciation	(32,238)	(29,738)	(80,070)	(14,867)	–	(156,913)
Transfer of impairment	(60,287)	(14,763)	(13,119)	–	88,169	–
Disposals	–	70	4,718	1,990	–	6,778
At 31 December 2020	(472,777)	(269,690)	(695,369)	(74,108)	(13,385)	(1,525,329)
Depreciation	(56,883)	(38,101)	(92,210)	(15,259)	–	(202,453)
Transfer of impairment	(3,487)	(3,152)	(6,746)	–	13,385	–
Disposals	132,572	512	64,903	3,945	–	201,932
At 31 December 2021	**(400,575)**	**(310,431)**	**(729,422)**	**(85,422)**	**–**	**(1,525,850)**
Carrying amounts						
At 31 December 2021	**499,060**	**523,086**	**549,942**	**32,523**	**92,493**	**1,697,104**
At 31 December 2020	496,425	488,349	474,093	45,032	216,098	1,719,997

15. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Note: As at 31 December 2021, owing to the increasing copper price above management's expectation, management specifically assessed whether impairment loss provision for NFCA's property, plant and equipment amounting to US$776,373,000 (2020: US$779,257,000) at 31 December 2021 need to be reversed. 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 the CGU to which NFCA's property, plant and equipment belong ("NFCA CGU").

The recoverable amount of NFCA CGU 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 and discount rates.

After the impairment assessment, the Directors determined no impairment reversal for NFCA CGU is needed as at 31 December 2021.

The significant estimation and inputs used in calculating the NFCA CGU's cash flows included future copper price as summarised below, a pre-tax discount rate of 20.56% (2020: 20.22%) per annum and mine reserves based on the most recent reserve report.

For the year ended 2021:

	2022–2026		**Long term**
	2022	**Average**	**average**
	US$	***US$***	***US$***
Copper price *(per ton)*	**9,000**	8,300	7,800

For the year ended 2020:

	2021–2025		Long term
	2021	Average	average
	US$	*US$*	*US$*
Copper price *(per ton)*	7,029	7,055	7,000

Future copper price with reference to the market estimation has taken into account its historical fluctuation.

16. RIGHT-OF-USE ASSETS

	Leased properties *US$'000*
Carrying amount	
At 1 January 2020	19,860
Depreciation charge	(4,965)
At 31 December 2020	14,895
Depreciation charge	(4,965)
At 31 December 2021	9,930

	2021 **US$'000**	2020 US$'000
Expense relating to short-term leases	**247**	371
Total cash outflow for leases	**7,195**	6,518

For both years, the Group leases properties for its operations. Lease contract is entered into for a fixed term of 4 years. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

17. MINING RIGHTS

	Mining rights *US$'000*
Cost	
At 1 January 2020	79,108
Addition *(note a)*	75,000
At 31 December 2020 and 2021	154,108
Amortisation and impairment	
At 1 January 2020	(883)
Amortisation	(140)
Impairment *(note b)*	(16,898)
At 31 December 2020	(17,921)
Amortisation	(5,971)
At 31 December 2021	(23,892)
Carrying amount	
At 31 December 2021	130,216
At 31 December 2020	136,187

17. MINING RIGHTS (CONTINUED)

Notes:

a. Mining rights amounting to US$58,774,000 was contributed by a non-controlling shareholder (the "Party A") of a subsidiary of the Company (the "Entity") and was recognised in the consolidated financial statements in 2019.

A new supplemental operation agreement dated 20 June 2020 was entered into among the Group, the Entity, and Party A, pursuant to which, the Entity paid a one-off entry fee (the "Entry Fee") amounting to US$75,000,000 for the mining rights (the "Mining Rights") to Party A in three installments.

In the opinion of the Directors, the Entry Fee was an additional consideration for the use of the Mining Rights and was recognised as mining rights in the consolidated financial statements.

b. In 2019, the Group obtained two leasehold mining rights and recognised as mining rights. As at 31 December 2020, due to the estimated commercial reserves of the mine was less than the expected mine reserves, the Group performed an impairment assessment on the mining rights and recognised an impairment loss of US$16,898,000. As at 31 December 2021,no further impairment loss was considered necessary.

18. INVENTORIES

	2021 ***US$'000***	2020 *US$'000*
Raw materials	**490,952**	415,646
Spare parts and consumables	**90,829**	89,699
Work in progress	**150,286**	110,149
Finished goods	**116,234**	55,933
	848,301	671,427

19. TRADE RECEIVABLES AT AMORTISED COST/TRADE RECEIVABLES AT FVTPL

	2021	2020
	US$'000	*US$'000*
Trade receivables at amortised cost		
– contracts with customers	**28,438**	22,463
Less: Allowance for credit losses	**(2,575)**	(1,797)
	25,863	20,666
Trade receivables at FVTPL		
– contracts with customers	**529,904**	227,740

The following is an aged analysis of trade receivables at amortised cost, net of allowance for credit losses, presented based on the invoice dates:

	2021	2020
	US$'000	*US$'000*
0 to 30 days	**22,245**	13,625
31 to 90 days	**3,618**	7,041
	25,863	20,666

19. TRADE RECEIVABLES AT AMORTISED COST/TRADE RECEIVABLES AT FVTPL (CONTINUED)

The following is an aged analysis of trade receivables at FVTPL, presented based on the invoice dates:

	2021	2020
	US$'000	*US$'000*
0 to 30 days	**370,242**	196,126
31 to 90 days	**139,626**	27,472
91 to 180 days	**15,338**	4,142
181 to 365 days	**4,698**	–
	529,904	227,740

Details of impairment assessment of trade receivables at amortised cost are set out in note 34.

Included in the Group's trade receivables at amortised cost/trade receivables at FVTPL are balances with the following related parties:

	2021	2020
	US$'000	*US$'000*
Trade receivables at amortised cost:		
Fellow subsidiaries	**8,565**	2,999
Trade receivables at FVTPL:		
Fellow subsidiaries	**294,027**	120,313
Subsidiaries of a non-controlling shareholder of subsidiaries	**131,544**	60,675
	425,571	180,988

The above balances with related parties are unsecured, interest-free and are receivable according to the relevant sales contracts.

20. PREPAYMENTS AND OTHER RECEIVABLES

	2021	2020
	US$'000	*US$'000*
Non-current:		
Prepayments for property, plant and equipment	**2,491**	670
Deposits in connection with the restoration and rehabilitation obligations *(note 30)*	**2,616**	2,378
Premium for electricity supply *(notes a and b)*	**12,854**	14,128
Long-term receivables *(note c)*	**28,426**	–
Loan receivable from a non-controlling shareholder of a subsidiary	**–**	7,626
Input VAT receivables, net *(note d)*	**21,896**	9,706
	68,283	34,508
Current:		
Prepayments for inventories and others	**23,644**	22,764
Input VAT receivables, net *(note d)*	**121,660**	110,901
Deposits in futures margin accounts	**77,456**	43,874
Other receivables	**21,291**	20,761
Less: allowance for credit losses	**(14,267)**	(12,572)
	229,784	185,728

20. PREPAYMENTS AND OTHER RECEIVABLES (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 was, 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 2021, premium for electricity supply released to profit or loss is amounting to US$439,000 (2020: US$439,000). As at 31 December 2021, premium for electricity supply is amounting to US$1,540,000 (2020: US$1,979,000).

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 transferring to Copperbelt Energy. The construction cost of the NFCA Network Assets is US$12,819,000.

The Directors consider that the difference between the construction costs for the NFCA Network Assets and the consideration to be received from Copperbelt Energy amounting to US$8,124,000 (2020: US$8,124,000) is, 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. During the year ended 31 December 2021, premium for electricity supply released to profit or loss is amounting to US$835,000 (2020: US$670,000). As at 31 December 2021, premium for electricity supply is amounting to US$11,314,000 (2020: US$12,149,000).

20. PREPAYMENTS AND OTHER RECEIVABLES (CONTINUED)

Notes: (Continued)

c. Pursuant to an agreement (the "LCS Project Agreement") entered into between Lualaba Copper Smelter SAS ("LCS") and Societe Nationale D'electricite (the "SND"), a state-owned power supplier in DRC, in July 2018, LCS undertook to construct certain power supply network assets (the "LCS Network Assets"). According to the LCS Project Agreement, LCS should transfer the LCS Network Assets to SND upon the completion of construction and SND should repay the agreed construction cost by installments with interest rate of 6% per annum.

The construction of LCS Network Assets was completed on 2 February 2021. Construction cost was agreed to be US$29,300,000. The agreed construction cost together with the interests will be offset by LCS's partial monthly electricity fees payable to SND starting from 1 January 2021.

d. The gross carrying amount of input VAT receivables is US$188,432,000 (2020: US$136,506,000). Impairment provision is estimated based on the present value of the estimated future cash flows, discounted using a pre-tax 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$44,876,000 (2020: US$15,899,000) in aggregate have been made on input VAT receivables amounting to US$105,424,000 (2020: US$78,960,000) generated in Zambia and US$83,008,000 (2020: US$57,546,000) generated in DRC.

The movements in the allowance for input VAT receivables during the year are as follows:

	2021 ***US$'000***	2020 *US$'000*
1 January	**15,899**	23,765
Impairment losses recognised	**28,977**	6,809
Impairment losses reversed	**–**	(14,675)
31 December	**44,876**	15,899

20. PREPAYMENTS AND OTHER RECEIVABLES (CONTINUED)

Included in the Group's prepayments and other receivables are balances with the following related parties:

	2021	2020
	US$'000	*US$'000*
Fellow subsidiaries	**485**	7,409
A non-controlling shareholder of a subsidiary	**69**	7,627
	554	15,036

The above balances with related parties are unsecured, interest-free and are repayable on demand.

21. RESTRICTED BANK BALANCES/BANK BALANCES AND CASH

a. Restricted bank balances

The Group's restricted bank balances are analysed as follows:

	2021	2020
	US$'000	*US$'000*
Non-current restricted bank deposits for the banks' letters of guarantee to secure future restoration costs as required by the government of Zambia (*note 30*)	**1,505**	1,505
Current restricted bank deposits for:		
– Issuing letters of credit	**3,246**	2,289
	4,751	3,794

The restricted bank balances carry interest at rates ranging from 0% to 0.1% (2020: from 0.1% to 0.3%) per annum.

b. Bank balances and cash

Bank balances carry interest at market rates ranging from 0.01% to 0.3% (2020: 0.1% to 0.3%) per annum.

22. TRADE PAYABLES/TRADE PAYABLES DESIGNATED AT FVTPL

	2021	2020
	US$'000	*US$'000*
Trade payables at amortised cost	**359,327**	219,728
Trade payables designated at FVTPL	**231,803**	205,178

The following is an aged analysis of trade payables at amortised cost presented based on the invoice date:

	2021	2020
	US$'000	*US$'000*
0 to 30 days	**160,051**	101,332
31 to 90 days	**96,299**	34,435
91 to 180 days	**44,208**	19,207
181 to 365 days	**13,385**	17,135
1–2 years	**1,055**	3,290
Over 2 years	**44,329**	44,329
	359,327	219,728

The following is an aged analysis of trade payables designated at FVTPL presented based on the invoice date:

	2021	2020
	US$'000	*US$'000*
0 to 30 days	**209,919**	169,845
31 to 90 days	**9,166**	26,230
91 to 180 days	**12,718**	7,715
181 to 365 days	**–**	1,388
	231,803	205,178

The average credit period on purchases of certain goods is within three months.

22. TRADE PAYABLES/TRADE PAYABLES DESIGNATED AT FVTPL (CONTINUED)

Included in the Group's trade payables at amortised cost/trade payables designated at FVTPL are balances with the following related parties:

	2021	2020
	US$'000	*US$'000*
Trade payables:		
Fellow subsidiaries	**62,989**	81,468
CNMC	**154**	154
Subsidiaries of a non-controlling shareholder of subsidiaries	**92,507**	–
	155,650	81,622
Trade payables designated at FVTPL:		
Fellow subsidiaries	**9,216**	15,076

The above balances with related parties are unsecured, interest-free and are repayable within three months.

23. OTHER PAYABLES AND ACCRUED EXPENSES

	2021	2020
	US$'000	*US$'000*
Payables for properties, plant and equipment	**37,372**	63,285
Dividend payable to non-controlling shareholders of subsidiaries	**24,796**	2,295
Dividend payable to the controlling shareholder of the Company	**22**	14,723
Other tax payables	**17,819**	10,955
Payroll payables	**13,151**	9,698
Accrued expenses	**19,347**	10,307
Provision for compensation *(note)*	**–**	3,154
	112,507	114,417

Note: On 18 December 2014, Hybrid Poultry (Z) Ltd. (the "HP(Z)") initiated a legal proceeding in the high court for Zambia against NFCA. HP(Z) averred the disturbance to its breeder farms, contamination of water supply and damage to its land etc. were resulted from NFCA's heavy mining operation. On 30 October 2020, a final award from the arbitral tribunal was delivered to NFCA, pursuant to which, NFCA had a legal obligation to HP(Z) for actual loss and projected losses amounting to US$3,154,000 which was recognised in other expense and other payables in 2020 and was paid in February 2021.

Included in the Group's other payables and accrued expenses are balances with the following related parties:

	2021	2020
	US$'000	*US$'000*
CNMC	**1,170**	16,154
Fellow subsidiaries	**37,710**	49,878
Non-controlling shareholder of a subsidiary	**29,796**	2,604
	68,676	68,636

The above balances with related parties are unsecured, interest-free and are repayable on demand.

24. CONTRACT LIABILITIES

	2021	2020
	US$'000	*US$'000*
Advance from customers	**9,069**	11,141

As at 1 January 2020, contract liabilities amounted to US$18,502,000.

During the year ended 31 December 2021, US$11,141,000 (2020: US$18,502,000) of the revenue recongised relates to carried-forward contract liabilities.

As at 31 December 2021, contract liabilities amounted to US$9,069,000, which is expected to be recognised as revenue within one year.

25. BANK AND OTHER BORROWINGS

	2021	2020
	US$'000	*US$'000*
Bank loans, unsecured *(note a)*	**870,633**	929,480
Loan from a fellow subsidiary, unsecured *(note b)*	**–**	130,000
Interest payable	**1,725**	1,962
	872,358	1,061,442
The carrying amounts of the above borrowings are repayable*:		
Within one year	**24,225**	597,442
More than one year but not exceeding two years	**45,000**	112,500
More than two years but not exceeding five years	**696,633**	240,000
More than five years	**106,500**	111,500
	872,358	1,061,442
Less: Amounts due within one year shown under current liabilities	**(24,225)**	(597,442)
Amounts shown under non-current liabilities	**848,133**	464,000

* The amounts due are based on scheduled repayment dates set out in the loan agreements.

25. BANK AND OTHER BORROWINGS (CONTINUED)

Notes:

a. As at 31 December 2021, the unsecured bank loans of US$169,600,000 (2020: US$149,600,000) are supported by corporate guarantees issued by a non-controlling shareholder of a subsidiary in favour of the relevant banks. As at 31 December 2020, the unsecured bank loans of US$365,480,000 were supported by corporate guarantees issued by CNMC in favour of the relevant banks.

   The unsecured bank loans as at 31 December 2021 bore interest at rates varied based on LIBOR ranging from 2.1% to 2.5% per annum (2020: from 3.5% to 5.1% per annum).

b. The loan from a fellow subsidiary bore interest at rates varied based on LIBOR ranging from 3.8% to 3.9% per annum (2020: from 4.0% to 5.5% per annum) and was repaid during the year.

26. LEASE LIABILITIES

	2021	2020
	US$'000	*US$'000*
Lease liabilities payable:		
Within one year	**7,472**	6,770
Within a period of more than one year but not more than two years	**6,411**	6,651
Within a period of more than two years but not more than five years	**–**	6,773
	13,883	20,194
Less: Amount due for settlement within 12 months shown under current liabilities	**(7,472)**	(6,770)
Amount due for settlement after 12 months shown under non-current liabilities	**6,411**	13,424

The weighted average incremental borrowing rate applied to lease liabilities is 4.33% (2020: 4.33%).

26. LEASE LIABILITIES (CONTINUED)

Included in the Group's lease liabilities are balances with the following related parties:

	2021	2020
	US$'000	*US$'000*
A fellow subsidiary	**13,883**	20,194

27. FINANCIAL LIABILITIES DESIGNATED AT FVTPL

	2021	2020
	US$'000	*US$'000*
Copper futures contracts	**3,771**	10,942

Details of the above futures contracts are analysed as follows:

	At 31 December	
	2021	2020
Number of contracts		
– Sell	**1,024**	959
Notional amount (in US$'000)	**245,325**	175,093
Exercise price (in US$)	**9,480–9,923**	6,170–7,769
Maturity date	**7 January 2022**	13 January 2021
	-31 March 2022	-10 March 2021

During the year, the Group entered into certain copper futures contracts to mitigate its risk associated with the prices of its blister copper and copper anodes and copper cathodes sold. Hedge accounting is not applied by the Group and a loss of US$48,246,000 (2020: US$41,843,000) arising on changes in fair value of derivatives was recognised in profit or loss (see note 8).

28. SHARE CAPITAL

	Number of shares *'000*	Share capital *HK$'000*	Share capital *US$'000*
Issued and fully paid			
At 1 January 2020, 1 January 2021	**3,489,036**	4,775,319	**613,233**
Issue of shares on 14 May 2021 *(note)*	**250,000**	990,000	**127,482**
Transaction costs attributable to issue of shares	**–**	(4,630)	**(596)**
At 31 December 2021	**3,739,036**	5,760,689	**740,119**

Note: Upon the completion of all conditions as stated in a placing and subscription agreement entered into by the Company, China Nonferrous Mining Development Limited ("CNMD"), the Company's immediate holding company, and a placing agent dated at 6 May 2021, (1) a total of 250,000,000 shares of the Company held by CNMD were placed at HK$3.96 per share to not less than six placees on 11 May 2021; and (2) a total of 250,000,000 new shares of the Company were subscribed by CNMD at HK$3.96 per share on 14 May 2021. Net proceeds of approximately HK$985,370,000 (equivalent to approximately US$126,886,000) were received by the Company. Details of the placing and subscription are set out in the announcements published by the Company dated 6 May 2021 and 14 May 2021.

29. DEFERRED INCOME

	2021 *US$'000*	2020 *US$'000*
At beginning of year	**16,345**	16,566
Additions	**–**	1,437
Recognised in profit or loss during the year	**(2,405)**	(1,658)
At end of year	**13,940**	16,345

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.

30. PROVISION FOR RESTORATION, REHABILITATION AND ENVIRONMENTAL COSTS

	2021	2020
	US$'000	*US$'000*
Balance at beginning of year	**28,272**	23,131
Provisions revision	**6,814**	4,339
Unwinding of discount *(note 9)*	**2,314**	802
Balance at end of year	**37,400**	28,272

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 1.5% to 4.1% (2020: 3.1% to 4.8%) 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 2 to 29 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$2,616,000 (2020: US$2,378,000) (note 20). 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 2021 amounting to US$1,505,000 (2020: US$1,505,000) (note 21(a)), except for SML and NFCA, 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.

31. 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:

	2021	2020
	US$'000	*US$'000*
Deferred tax assets	**13,102**	20,588
Deferred tax liabilities	**(141,373)**	(63,233)
	(128,271)	(42,645)

The followings are the major deferred tax liabilities and assets recognised and movements thereon during the current and prior years:

	Property, plant and equipment	**Undistributed profits of subsidiaries**	**Tax losses**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
At 1 January 2020	(50,727)	(41,358)	66,045	(26,040)
(Charge) credit to profit or loss	(20,133)	1,892	1,636	(16,605)
At 31 December 2020	(70,860)	(39,466)	67,681	(42,645)
Charge to profit or loss	(28,391)	(3,350)	(53,885)	(85,626)
At 31 December 2021	**(99,251)**	**(42,816)**	**13,796**	**(128,271)**

As at 31 December 2021, the Group has unused tax losses of US$45,987,000 (2020: US$225,603,000) in respect of the subsidiaries in Zambia available for offset against future profits. Deferred tax assets have been recognised in respect of all the losses of these subsidiaries in Zambia. Subject to regulations in Zambia, 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.

As at 31 December 2021, the Group has deductible temporary differences of US$48,436,000 (2020: US$28,471,000). No deferred tax asset has been recognised in relation to such deductible temporary difference as it is not probable that taxable profit will be available against which the deductible temporary differences can be utilised.

32. CAPITAL COMMITMENTS

	2021	2020
	US$'000	*US$'000*
Capital expenditure in respect of the acquisition of property, plant and equipment contracted for but not provided in the consolidated financial statements	**36,135**	234,603

33. 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 disclosed in note 25, net of restricted bank balances, 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.

33. 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:

	Notes	**2021** **US$'000**	2020 US$'000
Debts	(a)	**872,358**	1,061,442
Less: Restricted bank balances and bank balances and cash		**(611,497)**	(501,623)
Net debt		**260,861**	559,819
Equity	(b)	**1,542,202**	1,111,764
Net debt to equity ratio		**16.9%**	50.4%

Notes:

(a) Debts comprise non-current and current bank and other borrowings as detailed in note 25.

(b) Equity includes share capital and retained profits attributable to owners of the Company.

34. FINANCIAL INSTRUMENTS

Categories of financial instruments

	2021	2020
	US$'000	*US$'000*
Financial assets		
FVTPL		
Trade receivables at FVTPL	**529,904**	227,740
Financial assets at amortised cost	**750,266**	581,978
Financial liabilities		
FVTPL		
Trade payables designated at FVTPL	**231,803**	205,178
Financial liabilities designated at FVTPL	**3,771**	10,942
Amortised costs	**1,313,222**	1,374,934

Financial risk management objectives and policies

The Group's major financial instruments include trade receivables at amortised cost, trade receivables at FVTPL, other receivables, restricted bank balances, bank balances and cash, trade payables, trade payables designated at FVTPL, other payables, bank and other borrowings, and financial liabilities designated at FVTPL. Details of the financial instruments are disclosed in 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.

34. FINANCIAL INSTRUMENTS (CONTINUED)

Financial risk management objectives and policies (Continued)

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 mainly settled in currencies of ZMK, Congolese Franc ("CDF") and Renminbi ("RMB") other than the functional currency of these group entities that expose the Group to foreign currency risk.

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:

	2021	2020
	US$'000	*US$'000*
ZMK denominated monetary assets	**108,672**	80,698
ZMK denominated monetary liabilities	**(83,190)**	(39,571)
CDF denominated monetary assets	**86,940**	55,419
CDF denominated monetary liabilities	**(123,909)**	(87,325)
RMB denominated monetary assets	**26,870**	8,024
RMB denominated monetary liabilities	**(5,606)**	(5,460)

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 arise.

34. 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 material 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:

	(Decrease)/Increase	
	2021	2020
	US$'000	*US$'000*
ZMK against US$		
Weakening		
– 5%	**(1,051)**	(1,511)
– 10%	**(2,102)**	(3,021)
– 15%	**(3,153)**	(4,532)
CDF against US$		
Weakening		
– 5%	**637**	1,117
– 10%	**1,274**	2,232
– 15%	**1,911**	3,349
RMB against US$		
Weakening		
– 5%	**(732)**	(115)
– 10%	**(1,464)**	(229)
– 15%	**(2,196)**	(344)

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.

34. FINANCIAL INSTRUMENTS (CONTINUED)

Financial risk management objectives and policies (Continued)

Market risk (Continued)

(ii) Interest rate risk

Apart from the fixed rate loan from a fellow subsidiary and lease liabilities 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, 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.

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 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 material impact on the Group's total equity apart from retained profits and the potential effect on profit after tax is as follows:

	2021	2020
	US$'000	*US$'000*
(Decrease) increase in profit for the year		
– as the result of increase in interest rate	**(5,523)**	(3,138)
– as the result of decrease in interest rate	**5,523**	3,138

(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.

34. 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 material impact on the Group's total equity apart from retained profits and the potential effect on profit after tax is as follows:

	2021	2020
	US$'000	*US$'000*
Increase in profit after tax for the year	**15,776**	12,582

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

Credit risk refers to the risk that the Group's counterparties default on their contractual obligations resulting in financial losses to the Group. The Group's credit risk exposures are primarily attributable to trade receivables at amortised cost, trade receivables at FVTPL, other receivables, deposits in futures margin accounts, restricted bank balances and bank balances. 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.

Except for trade receivables at FVTPL, the Group performed impairment assessment for financial assets and other items under ECL model individually. The Directors consider that the Group's credit risk is insignificant.

34. FINANCIAL INSTRUMENTS (CONTINUED)

Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Trade receivables at FVTPL

As at 31 December 2021, the Group's trade receivables at FVTPL were debtors with aggregate amount of US$529,904,000 (2020: US$227,740,000).

The Group has concentration of credit risk as 80% (2020: 79%) of the total trade receivables at FVTPL was due from the Group's two (2020: two) largest customers. The two largest customers accounted for 65% (2020: 67%) of the Group's sales of copper products 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 other significant concentration of credit risk.

Trade receivables at amortised cost

As at 31 December 2021, included in the Group's trade receivables at amortised cost balance were debtors with aggregate amount of US$28,438,000 (2020: US$22,463,000) and were assessed for impairment individually. As at 31 December 2021, impairment allowance of US$2,575,000 (2020: US$1,797,000) were made on these debtors.

The Group has concentration of credit risk as 53% (2020: 38%) of the total trade receivables at amortised cost was due from the Group's four (2020: three) largest customers. The four largest customers accounted for 60% (2020: 60%) of the Group's sales of goods other than copper products 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 other 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.

34. FINANCIAL INSTRUMENTS (CONTINUED)

Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Bank balances and restricted bank balances

Credit risk on bank balances and restricted bank balances is limited because the counterparty banks are with good reputation and external public credit ratings. Thus, the Directors considered that the probability of default is negligible for the bank balances and restricted bank balances of the Group and no expected credit loss was recognised as at 31 December 2021 and 2020.

For all other financial assets including other receivables, long-term 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 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, except for receivable from a third party amounting to US$12,787,000 as at 31 December 2021 (2020: US$12,787,000), which was credit impaired and assessed individually, and impairment allowance of US$12,787,000 (2020: US$12,451,000) was recognised in the consolidated financial statements.

Movements in the loss allowance all of which are relating to trade receivables at amortised cost and other receivables is as follows:

	2021	2020
	US$'000	*US$'000*
1 January	**14,369**	524
Impairment recognised	**2,473**	13,845
31 December	**16,842**	14,369

34. FINANCIAL INSTRUMENTS (CONTINUED)

Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

The tables below detail the credit risk exposures of the Group's financial assets, which are subject to ECL assessment:

	Notes	**12-month or lifetime ECL**	**Gross carrying amount**	
			2021	2020
			US$'000	*US$'000*
Financial assets at amortised cost				
Trade receivables at amortised cost	19	Lifetime ECL	**25,863**	20,666
		Credit impaired	**2,575**	1,797
			28,438	22,463
Other receivables	20	12-month ECL	**7,024**	15,815
		Credit impaired	**14,267**	**12,572**
			21,291	28,387
Long-term receivables	20	12-month ECL	**28,426**	–
Deposits in futures margin accounts	20	12-month ECL	**77,456**	43,874
Bank balances	21	12-month ECL	**606,746**	497,829
Restricted bank balances	21	12-month ECL	**4,751**	3,794

34. 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 financial liabilities based on the earliest date on which the Group can be required to pay. The maturity dates are based on the agreed repayment dates.

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	Over 6 months but not more than1 year	1 to 5 years	More than 5 years	Total undiscounted cash flows	Carrying amounts
	%	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
31 December 2021							
Non-derivative financial liabilities							
Trade and other payables		440,864	–	–	–	440,864	440,864
Bank borrowings at variable rate	2.3	11,785	32,386	780,524	110,936	935,631	872,358
Trade payables designated at FVTPL		231,803	–	–	–	231,803	231,803
		684,452	32,386	780,524	110,936	1,608,298	1,545,025
Lease liabilities		3,736	3,736	6,467	–	13,939	13,883
Financial liabilities designated at FVTPL							
Copper futures contracts	4.3	3,771	–	–	–	3,771	3,771

34. FINANCIAL INSTRUMENTS (CONTINUED)

Financial risk management objectives and policies (Continued)

Liquidity risk (Continued)

	Weighted average interest rate	On demand or less than 6 months	Over 6 months but not more than1 year	1 to 5 years	More than 5 years	Total undiscounted cash flows	Carrying amounts
	%	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
31 December 2020							
Non-derivative financial liabilities							
Trade and other payables		313,492	–	–	–	313,492	313,492
Bank borrowings at variable rate	3.4	179,456	445,159	381,506	119,430	1,125,551	1,061,442
Trade payables designated at FVTPL		205,178	–	–	–	205,178	205,178
		698,126	445,159	381,506	119,430	1,644,221	1,580,112
Lease liabilities	4.3	3,532	3,532	14,880	–	21,944	20,194
Financial liabilities designated at FVTPL							
Copper futures contracts		10,942	–	–	–	10,942	10,942

34. 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:

	Level 1 *US$'000*	**Level 2** *US$'000*	**Level 3** *US$'000*	**Total** *US$'000*
31 December 2021				
Financial liabilities designated at FVTPL				
– Copper future contracts *(note a)*	–	(3,771)	–	(3,771)
Trade receivables at FVTPL *(note b)*	–	529,904	–	529,904
Trade payables designated at FVTPL *(note b)*	–	(231,803)	–	(231,803)
31 December 2020				
Financial liabilities designated at FVTPL				
– Copper future contracts *(note a)*	–	(10,942)	–	(10,942)
Trade receivables at FVTPL *(note b)*	–	227,740	–	227,740
Trade payables designated at FVTPL *(note b)*	–	(205,178)	–	(205,178)

34. FINANCIAL INSTRUMENTS (CONTINUED)

Fair value measurement of financial instruments (Continued)

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.

35. 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 borrowings *US$'000*	**Dividends payable** *US$'000*	**Lease liabilities** *US$'000*	**Total** *US$'000*
At 1 January 2020	1,195,778	1,050	25,403	1,222,231
Financing cash flows	(185,688)	(58,106)	(6,147)	(249,941)
Interest expenses	51,352	–	938	52,290
Dividends declared	–	74,074	–	74,074
At 31 December 2020	**1,061,442**	**17,018**	**20,194**	**1,098,654**
Financing cash flows	**(223,449)**	**(121,539)**	**(6,948)**	**(351,936)**
Interest expenses	**34,365**	**–**	**637**	**35,002**
Dividends declared	**–**	**129,339**	**–**	**129,339**
At 31 December 2021	**872,358**	**24,818**	**13,883**	**911,059**

36. RELATED PARTY TRANSACTIONS

The Company is controlled by CNMC through China Nonferrous Mining Development Limited, which is a subsidiary of CNMC. The Directors consider the ultimate holding company is CNMC, a stated-owned company established in the PRC.

Other than as disclosed elsewhere in these consolidated financial statements, the Group has following transactions with related parties:

(1) Transactions with CNMC and its subsidiaries

Relationships	*Notes*	**Nature of transactions**	**2021** **US$'000**	2020 US$'000
Fellow subsidiaries	(i) (iii)	Sales of blister copper and copper anodes	**1,271,215**	792,697
	(i) (iii)	Sales of copper cathodes	**670,794**	439,861
	(i)	Sales of sulfuric acid	**53,538**	43,768
	(i)	Sales of other materials	**14,335**	3,395
	(i)	Services income	**34**	33
	(i) (ii)	Finance income earned under finance leases	**–**	3
	(i)	Purchases of plant and equipment	**(85,397)**	(73,322)
	(i) (iv)	Purchases of copper concentrate	**(86,602)**	(19,369)
	(i)	Purchases of materials	**(67,241)**	(52,056)
	(i)	Purchases of electricity	**(35,868)**	(29,194)
	(i)	Purchases of services	**(109,434)**	(59,955)
	(i)	Interest expenses on borrowings	**(6,700)**	(7,832)
	(i)	Interest expenses on lease liabilities	**(637)**	(938)
Ultimate holding company	(i)	Expenses relating to short-term leases	**(247)**	(371)

36. RELATED PARTY TRANSACTIONS (CONTINUED)

(1) 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 and copper anodes, gains arising from provisional pricing arrangement are US$53,645,000 (2020: US$16,218,000).

Included in the sales amount of copper cathodes, gains arising from provisional pricing arrangement are US$29,121,000 (2020: US$14,036,000).

(iv) Included in the purchase amount of copper concentrate, losses arising from provisional pricing arrangement is US$2,552,000 (2020: US$1,868,000).

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 25.
- 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.

36. RELATED PARTY TRANSACTIONS (CONTINUED)

(2) Transactions with other state-owned enterprises

Relationships	*Notes*	**Nature of transactions**	**2021** **US$'000**	2020 US$'000
Subsidiaries of a non-controlling	(i) (ii)	Sales of blister copper and copper anodes	**670,180**	554,215
shareholder of subsidiaries	(i)	Interest expense on borrowings	**–**	(987)
		Purchases of services	**(1,684)**	–

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 anodes, gain arising from provisional pricing arrangement are US$39,601,000 (2020: US$27,542,000).

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 state-owned 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.

(3) Transactions with certain subsidiaries of a non-controlling shareholder of subsidiaries

Relationships	*Notes*	**Nature of transactions**	**2021** **US$'000**	2020 US$'000
Subsidiaries of a non-controlling	(i) (ii)	Sale of copper cathodes	**72,471**	33,260
shareholder of subsidiaries	(i)	Purchases of materials	**(157,222)**	(69,381)

Notes:

(i) These transactions were conducted in accordance with terms of the relevant agreements.

(ii) Included in the sales amount of copper cathodes, gain arising from provisional pricing arrangement are US$4,190,000 (2020: US$1,002,000).

36. RELATED PARTY TRANSACTIONS (CONTINUED)

(4) Compensation of key management personnel

The remuneration of directors and other members of key management during the year was as follows:

	2021	2020
	US$'000	*US$'000*
Short-term benefits	**1,231**	1,153
Post-employment benefits	**82**	38
	1,313	1,191

The remuneration of directors and key executives is determined by the remuneration committee having regard to the performance of individuals and market trends.

37. 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 (together with the aforesaid state retirement benefit schemes operated by the Zambia government and DRC government, the "Retirement Benefit Schemes"). The Group also contributes a certain percentage of their payroll to the Retirement Benefit Schemes to fund the benefits.

There were no forfeited contributions (by employers on behalf of employees who leave the Retirement Benefit Schemes prior to vesting fully in such contributions) in the Group under the Retirement Benefit Schemes. Hence, there is no forfeited contribution available for the Group to reduce its existing level of contributions to the pension schemes in future years.

The only obligation of the Group with respect to the aforesaid Retirement Benefit Schemes is to make the required contributions under these schemes.

38. 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.

Name of company	Place/Country of incorporation and/operation action	Issued and fully paid-up ordinary share capital	Equity interest attributable to the Company as at 31 December		Principal activities
			2021 %	2020 %	
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 and copper anodes, copper-cobalt 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 cathodes
Huachin Metal Leach SA (Note (c))	DRC	US$10,000,000	**43.75**	43.75	Production and sale of copper cathodes
CNMC Huachin Mabende Mining SA ("CHM") (Note (c),(d))	DRC	US$10,000,000	**42**	42	Production and sale of copper cathodes
Green Home Farm Limited (Note (f))	Zambia	ZMK5,000,000	**–**	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 (e))	DRC	US$2,000	**57**	57	Production and sale of blister copper and sulfuric acid
Kambove Mining SAS ("KM") (Note (e))	DRC	CDF14,000	**55**	55	Exploration and mining of copper and production of copper concentrates
Kingsail Limited ("KL") (Note (e))	Hong Kong and Zambia	HK$10,000	**60**	60	Sale of copper cathodes and copper concentrates
CNMC Congo Luano Mining SASU ("LUANO") (Note (c))	DRC	US$10,000	**100**	100	Production and sale of copper cathodes

38. 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%, 60% and 100% of the issued and paid-up ordinary share capital of Huachin Metal Leach SA, CHM and LUANO, respectively, are directly held and controlled by CNMHK.

(d) On 5 December 2019, CHM converted US$1,000,000 from retained earnings to paid-in capital based on the proportion of shareholders' contribution, and to make paid-in capital consistent with registered capital.

(e) 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.

(f) Green Home Farm Limited was deregistered on 31 December 2021.

38. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

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:

Name of company	Place/Country of operations and principal ace of activities	Proportion of ownership interests and voting rights held interests by non-controlling interests		Profit allocated to non-controlling interests		Accumulated non-controlling interests	
		2021	2020	**2021**	2020	**2021**	2020
		%	*%*	***US$'000***	*US$'000*	***US$'000***	*US$'000*
CCS	Zambia	**40**	40	**41,227**	29,953	**272,542**	254,030
CHM	DRC	**58**	58	**35,057**	10,521	**100,828**	82,012
Subsidiaries with individually immaterial non-controlling interests						**256,312**	211,136
						629,682	547,178

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.

38. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

Details of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

CCS	**2021** ***US$'000***	2020 *US$'000*
Current assets	**900,476**	728,620
Non-current assets	**171,941**	193,099
Current liabilities	**(309,952)**	(200,747)
Non-current liabilities	**(92,245)**	(97,036)
Equity attributable to owners of the Company	**397,678**	369,906
Non-controlling interests	**272,542**	254,030
Revenue	**1,580,758**	1,107,998
Expenses	**(1,477,689)**	(1,033,115)
Profit and total comprehensive income for the year	**103,069**	74,883
Profit and total comprehensive income attributable to owners of the Company	**61,842**	44,930
Profit and total comprehensive income attributable to the non-controlling interests	**41,227**	29,953
Dividends paid to the non-controlling interests	**22,714**	33,684
Net cash (outflow) inflow from operating activities	**(3,877)**	103,914
Net cash outflow from investing activities	**(2,573)**	(7,286)
Net cash outflow from financing activities	**(13,734)**	(141,903)
Effect of foreign exchange rate changes	**164**	72
Net cash outflow	**(20,020)**	(45,203)

38. PARTICULARS OF SUBSIDIARIES OF THE COMPANY (CONTINUED)

Details of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

CHM	**2021** *US$'000*	2020 *US$'000*
Current assets	**308,661**	169,770
Non-current assets	**57,802**	67,926
Current liabilities	**(190,672)**	(92,358)
Non-current liabilities	**(2,385)**	(4,375)
Equity attributable to owners of the Company	**72,578**	58,951
Non-controlling interests	**100,828**	82,012
Revenue	**296,030**	212,818
Expenses	**(235,587)**	(194,679)
Profit and total comprehensive income for the year	**60,443**	18,139
Profit and total comprehensive income attributable to owners of the Company	**25,386**	7,618
Profit and total comprehensive income attributable to the non-controlling interests	**35,057**	10,521
Dividends paid to the non-controlling interests	**16,240**	9,802
Net cash inflow from operating activities	**60,241**	71,659
Net cash inflow from investing activities	**4,839**	22,724
Net cash outflow from financing activities	**(26,929)**	(16,055)
Effect of foreign exchange rate changes	**11**	(159)
Net cash inflow	**38,162**	78,169

None of the subsidiaries had issued any debt securities at the end of the year.

39. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	2021 *US$'000*	2020 *US$'000*
ASSETS		
Non-current Assets		
Equipment	**59**	56
Investment in subsidiaries	**515,663**	307,665
Receivable from a subsidiary	**–**	101,979
Loans to subsidiaries	**518,116**	385,510
	1,033,838	795,210
Current Assets		
Other receivables	**39,215**	18,515
Loans to a subsidiary	**90,000**	–
Bank balances and cash	**44,560**	10,282
	173,775	28,797
Total Assets	**1,207,613**	824,007
EQUITY AND LIABILITIES		
Capital and Reserves		
Share capital	**740,119**	613,233
Retained profits	**245,887**	59,329
Total Equity	**986,006**	672,562

39. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

	2021	2020
	US$'000	*US$'000*
Non-current Liabilities		
Bank and other borrowings – due after one year	**80,000**	–
Amount due to a subsidiary	**132,000**	132,000
	212,000	132,000
Current Liabilities		
Accrued expenses	**3,693**	2,350
Dividends payable	**22**	14,723
Bank and other borrowings – due within one year	**5,892**	2,372
	9,607	19,445
Total Liabilities	**221,607**	151,445
Total Equity and Liabilities	**1,207,613**	824,007

The Company's statement of financial position was approved and authorised for issue by the board of directors on 30 March 2022 and is signed on its behalf by:

Jinjun Zhang
DIRECTOR

Yaoyu Tan
DIRECTOR

39. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (CONTINUED)

Movements in reserve of the Company

	Retained profits *US$'000*
At 31 December 2019	67,213
Profit and total comprehensive income for the year	19,121
Dividend	(27,005)
At 31 December 2020	59,329
Profit and total comprehensive income for the year	240,127
Dividend	(53,569)
At 31 December 2021	**245,887**

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				
	2021	2020	2019	2018	2017
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Revenue	**4,050,588**	2,597,213	2,008,719	2,053,320	1,838,731
Gross profit	**1,085,035**	629,442	468,473	500,532	431,948
Profit before tax	**807,036**	309,855	324,035	323,861	319,227
Net profit	**515,395**	196,940	224,514	243,978	233,859
Profit attributable to owners of the Company	**357,121**	124,965	134,874	146,260	142,428

ASSETS, LIABILITIES, NON-CONTROLLING INTERESTS AND EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY

	At 31 December				
	2021	2020	2019	2018	2017
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Non-current assets	**1,920,140**	1,927,680	1,911,091	1,435,165	1,102,193
Current assets	**2,243,844**	1,605,679	1,404,440	1,397,840	1,701,004
Total assets	**4,163,984**	3,533,359	3,315,531	2,833,005	2,803,197
Current liabilities	**944,843**	1,289,143	781,902	922,332	860,445
Net current assets	**1,299,001**	316,536	622,538	475,508	840,559
Non-current liabilities	**1,047,257**	585,274	997,553	614,118	902,668
Equity attributable to owners of the Company	**1,542,202**	1,111,764	1,013,804	908,182	787,075
Non-controlling interests	**629,682**	547,178	522,272	388,373	253,009

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 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
"COVID-19 pandemic"	Corona Virus Disease 2019
"Deed of Non-Competition Undertaking"	a deed of non-competition undertaking dated 14 May 2012 entered into between CNMC and the Company under which CNMC has given us certain undertakings in respect of the conduct of certain of its activities outside the PRC
"Director(s)"	director(s) of the Company
"DRC"	the Democratic Republic of the Congo
"EGM"	the extraordinary general meeting of the Company
"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 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
"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"	Huachin International Trading Limited (國際華鑫貿易有限公司), a company incorporated in Hong Kong with limited liability

DEFINITIONS (CONTINUED)

"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
"Latest Practicable Date"	24 April 2022, being the latest practicable date prior to the printing of this annual report for ascertaining certain information herein
"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
"Octagon Commodities"	Octagon Commodities SA, a Société Anonyme (equivalent to a public company limited by shares) incorporated in Swiss Confederation
"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

DEFINITIONS (CONTINUED)

"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 2021
"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 Group"	Yunnan Copper Industry (Group) Co., Ltd.* (雲南銅業(集團)有限公司), a 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

* *Translation of English or Chinese terms for reference purposes only.*

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