



# 南方錳業投資有限公司

SOUTH MANGANESE INVESTMENT LIMITED

(incorporated in Bermuda with limited liability)

Stock Code: 1091



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Annual Report 2021



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# Corporate Information

## Board of Directors

### Executive Directors

Mr. Li Weijian (Chairman and Chief Executive Officer)  
Mr. Zhang He  
Mr. Zhang Zongjian <sup>Note</sup>

### Non-executive Directors

Mr. Lyu Yanzheng  
Mr. Cheng Zhiwei  
Ms. Cui Ling

### Independent Non-executive Directors

Mr. Zhang Yupeng  
Mr. Wang Zhihong (resigned on 31 March 2021)  
Mr. Yuan Mingliang (appointed on 31 March 2021)  
Mr. Lin Zhijun (resigned on 31 July 2021)  
Mr. Lau Wan Ki (appointed on 31 July 2021)

## Audit Committee

Mr. Lin Zhijun  
(ceased to be Chairman on 31 July 2021)  
Mr. Lau Wan Ki (appointed as Chairman on 2 August 2021)  
Mr. Zhang Yupeng  
Ms. Cui Ling  
Mr. Wang Zhihong  
(ceased to be member on 31 March 2021)  
Mr. Yuan Mingliang  
(appointed as member on 31 March 2021)

## Remuneration Committee

Mr. Wang Zhihong  
(ceased to be Chairman on 31 March 2021)  
Mr. Yuan Mingliang  
(appointed as Chairman on 31 March 2021)  
Mr. Li Weijian  
Mr. Zhang He  
Mr. Zhang Yupeng  
Mr. Lin Zhijun (ceased to be member on 31 July 2021)  
Mr. Lau Wan Ki (appointed as member on 2 August 2021)

## Nomination Committee

Mr. Zhang Yupeng (Chairman)  
Mr. Li Weijian  
Mr. Zhang He  
Mr. Wang Zhihong  
(ceased to be member on 31 March 2021)  
Mr. Yuan Mingliang  
(appointed as member on 31 March 2021)  
Mr. Lin Zhijun (ceased to be member on 31 July 2021)  
Mr. Lau Wan Ki (appointed as member on 2 August 2021)

## Company Secretary

Mr. Lau Wai Yip (resigned on 30 June 2021)  
Mr. Leung Chit Yu (appointed on 1 July 2021)

## Registered Office

Clarendon House, 2 Church Street,  
Hamilton HM 11, Bermuda

## Headquarters and Principal Place of Business in Hong Kong

Room A02, 35th Floor, United Centre,  
95 Queensway, Admiralty, Hong Kong

Telephone : (852) 2179 1310  
Facsimile : (852) 2537 0168  
E-mail : ir@southmn.com

## Principal Place of Business in the PRC

South Manganese Building, No.18 Zhujin Road,  
Nanning, Guangxi, PRC

## Bermuda Principal Share Registrar and Transfer Office

Codan Services Limited  
Clarendon House, 2 Church Street,  
Hamilton HM 11, Bermuda

Note: As detailed in our announcement dated 25 March 2022, Mr. Zhang Zongjian resigned from his position as an executive Director of the Company and Mr. Xu Xiang was appointed as an executive Director of the Company with effect from 25 March 2022.

### **Hong Kong Branch Share Registrar and Transfer Office**

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

### **Auditor**

Ernst & Young  
Certified Public Accountants  
Registered Public Interest Entity Auditor  
27th Floor, One Taikoo Place,  
Taikoo Place, 979 King's Road  
Quarry Bay, Hong Kong

### **Authorised Representatives**

Mr. Li Weijian  
Mr. Lau Wai Yip  
(ceased to be authorised representative on 30 June 2021)  
Mr. Leung Chit Yu  
(appointed as authorised representative on 1 July 2021)

### **Principal Bankers**

Agricultural Bank of China  
Bank of China  
Bank of Communications  
China Bohai Bank Co., Ltd  
China CITIC Bank  
China Construction Bank  
China Everbright Bank  
China Guangfa Bank  
DBS Bank  
Guangxi Beibu Gulf Bank  
Industrial and Commercial Bank of China  
Industrial Bank Co., Ltd  
Postal Savings Bank of China  
Shanghai Pudong Development Bank

### **Stock Code**

1091 (Mainboard of the Stock Exchange)

### **Company Website**

[www.southmn.com](http://www.southmn.com)



# Five Year Financial Summary

A summary of the results and of the assets, liabilities and non-controlling interests of the Group for the latest five financial years, as extracted from the published audited financial statements, is set out below.

## Results

	Year ended 31 December				
	2021 HK\$'000	2020 HK\$'000	2019 HK\$'000	2018 HK\$'000	2017 HK\$'000
Revenue	<b>12,830,762</b>	4,367,563	5,802,457	6,736,228	5,991,436
Profit/(loss) before tax	<b>584,936</b>	(503,810)	(217,166)	343,985	146,622
Income tax (expense)/credit	<b>(208,751)</b>	45,956	(16,832)	(7,130)	(5,240)
Profit/(loss) for the year	<b>376,185</b>	(457,854)	(233,998)	336,855	141,382
Profit/(loss) attributable to:					
Owners of the parent	<b>466,185</b>	(437,929)	(202,338)	330,931	140,851
Non-controlling interests	<b>(90,000)</b>	(19,925)	(31,660)	5,924	531
	<b>376,185</b>	(457,854)	(233,998)	336,855	141,382

## Assets, Liabilities, Non-controlling interests and Equity attributable to owners of the parent

	31 December				
	2021 HK\$'000	2020 HK\$'000	2019 HK\$'000	2018 HK\$'000	2017 HK\$'000
Non-current assets	<b>5,118,358</b>	5,086,600	4,950,793	5,023,157	5,413,627
Current assets	<b>5,865,985</b>	3,972,103	3,816,612	4,595,222	3,338,535
Total assets	<b>10,984,343</b>	9,058,703	8,767,405	9,618,379	8,752,162
Current liabilities	<b>7,142,173</b>	4,287,611	4,989,809	4,966,860	4,732,153
Non-current liabilities	<b>797,594</b>	2,220,019	939,170	1,485,036	1,052,910
Total liabilities	<b>7,939,767</b>	6,507,630	5,928,979	6,451,896	5,785,063
<b>Net Assets</b>	<b>3,044,576</b>	2,551,073	2,838,426	3,166,483	2,967,099
Equity attributable to					
owners of the parent	<b>3,107,365</b>	2,517,834	2,803,739	3,099,910	2,897,755
Non-controlling interests	<b>(62,789)</b>	33,239	34,687	66,573	69,344
	<b>3,044,576</b>	2,551,073	2,838,426	3,166,483	2,967,099



## Chairman's Statement



# Chairman's Statement

Dear Valued Shareholders,

In 2021, global economic and social activities recovered steadily as countries around the world implemented large scale vaccinations and some of them began to gradually relieve their lockdown measures in phases. Benefiting from the effective measures to prevent and control the epidemic, together with the resumption of operations in some overseas markets, companies in China have resumed operations and productions in an orderly manner and China is the forerunner in realizing the gradual economic recovery. The increase in domestic consumption in China and the recovery of the automotive industry and the new energy materials industry have further stimulated the demand of our major downstream industries, the steel and new energy sectors, therefore the selling price of manganese products kept hovering at a relatively high level during the year.

During the year, in order to achieve the goals of “*Peak Carbon Dioxide Emission in 2030 and Carbon Neutrality in 2060*”, the Chinese government strengthened the demand side regulations and reforms, requiring scientific, economical, and orderly use of electricity. In response to the national policy of energy conservation and emission reduction, certain EMM plants in China have therefore reduced production and implemented technological improvements to comply with increasingly stringent environmental protection regulations. With the combined factors, including the increase in demand and the reduced production on the supply side, etc., the selling prices of EMM products have soared up significantly during the year.

In response to the appeal by the Chinese government's promotion for energy conservation and various challenges including emission reduction and the increasingly stringent environmental protection and safety rectification policy requirements, the Group was the premier leader to implement controlled production and maintenance, as well as carbon reduction and emission reduction measures, reflecting our responsibility for green growth and sustainable development. At the same time, the Group, as always, adhered to production technology enhancement strategy, strengthening quality management, discharging our main responsibilities and keeping close controls

on the safety and environmental protection works. We prudently invested in and expanded our battery and new energy material products, improving supply chain logistics, strengthening innovation and transformation capabilities, so as to capture the potentials of each business segment. We continuously explored the development path of the Group and enhanced our market competitiveness and value through talented recruitment and technology improvement in order to achieve the stable and high quality development of the Group.

## Energy Saving, Emission Reduction, and Innovative Development

In accordance with the national requirements for scientific, economical, and orderly consumption of electricity, the Group actively pursued the relevant power policies issued by the PRC and the Guangxi government during the year, and kept regular and close connections with power supply departments at all levels to appraise of the electricity policies and trading rules, striving to minimize our electricity costs. During the year, the Group actively implemented reforms and innovations, continuously optimized the current production process, explored new process technologies, striving to reduce production costs and improve our product competitiveness. The Group's EMD products were awarded the “*Champion of Manufacturing Industry*” by the Guangxi government.

During the year, the Group fully utilized the advantages of its leading role in the international and domestic manganese industries, successively held, hosted and participated in various exchange seminars, in responding and promoting the concepts of green development and implemented the goal of “*Carbon Peak and Carbon Neutrality*”, so as to promote the healthy, green and upgraded development of the manganese industry, providing active and exploratory works for the sustainable and healthy development of manganese industry in China. The Group was awarded the “*First Class Award of Scientific and Technological Improvement*” by the Guangxi government. Huiyuan Manganese was awarded the “*National Demonstration Enterprise of Science and Technology Innovation*” by the Ministry of Industry and Information Technology of the PRC.

### Safe Production and Strengthen Environment Protection

During the year, the Group closely focused on the annual safety and environment protection responsibility goals, implemented the main responsibility for safety and environment protection, strengthened the protection management, conducted serious investigations, eliminated hidden dangers or problems at our production units, and effectively improved our employees' self-security awareness, providing a solid foundation for the normal production of the Group. Benefited from our continuous enhancement and perfection of the safety and environmental protection management system, the Group achieved the goal of zero casualties in production safety accidents during the year, and received favourable assessment results by the Guangxi Autonomous Region Safety Production Committee.

During the year, the Group actively carried out environmental protection management to prevent the occurrence of various environmental emergencies, and there were no environmental emergencies throughout the year. At the same time, we actively cooperated with the related technical departments to carry out various tasks of "*harmlessness, reduction and resource utilization*" of manganese slag, organizing seminars on the comprehensive utilization of manganese slag with the Chinese Academy of Sciences and Chongzuo Environmental Protection Bureau regarding the study on the harmless manganese slag project. The resource utilization of EMM anode slime to produce new energy cathode materials, i.e. the high purity manganese sulfate project, has come into production, which was the first in the industry to industrialize the research and development achievements in the recycling and utilization of EMM anode slime and achieved a breakthrough against the existing problems in the production process of EMM regarding the difficulties in handling anode slime, realizing clean, recyclable, and green production.

### Fight with the Epidemic and Help the Community

Although the COVID-19 epidemic has been effectively controlled in China, the Group still adhered to the normalization of epidemic prevention and control, implementing our responsibility of prevention and control, and ensured the health of employees. We actively responded to the appeal by the government, and organized employees to be vaccinated against the COVID-19 to build a solid foundation for employees' health. At the same time, we also actively supported and served the community, cooperated with local governments in epidemic prevention and control, donated funding to Chongzuo City for boarder controls regarding epidemic prevention, and organized medical personnel and volunteers to support border areas.

In order to implement President of the People's Republic of China, Xi Jinping's instructions of "*No nationals would be neglected on the road to poverty alleviation*" and the spirit of the Central Ethnic Work Conference, and to promote the traditional Chinese's cultural values of helping and assisting the poor, the Group, through its Guangxi Bukang Foundation for Supporting Development, donated materials to the residential area of Yao nationality in Hezhou City so as to stimulate the vitality of the local tourism economy. At the same time, our branch companies also actively assisted the local government in the construction of transportation facilities and schools, etc., demonstrating our responsibilities and of commitments regarding the development of the enterprise to feedback and benefit the community.

### Beautify Homes and Green Mines

The Group has always actively implemented the development concept of "*Clear Waters and Lush Mountains are invaluable assets*", and adhered to the path of green and sustainable development. The Group adhered to the coordination of mine development and utilization with clear waters and lush mountains, performed high standard ecological mining duties, earnestly implemented the requirements of green mine construction standards, comprehensively promoted green mine construction, thereby recording remarkable encouraging results. During the year, Daxin Mine was awarded the honorary title of "National Green Mine" by the Ministry of Natural Resources, and was successfully selected into the National Green Mine List.



## Chairman's Statement

During the year, the Group carried out extensive tree plantation activities. During the Arbor Day, we organized our employees to carry out tree plantation and greening activities at Daxin Mine, and more than 2,000 fruit trees were planted. There were green trees planted on both sides of the transportation roads in Tiandeng Mine, which effectively improved the working environment. Grass planting and greening activities were also carried out in the industrial park at Chongzuo Branch to improve the image of the factory. Guangxi Start has cultivated green plants such as citrus, pear and peach trees in the factory areas, living areas and slag warehouses, and the factory image has been continuously improved. Huiyuan Manganese reinforced the road surfaces and built gardens and ecological trails within the factory areas.

### Looking to the Future, a Long Way to Go

On behalf of the board of directors, I would like to express my sincere gratitude to all directors, management and all employees for their solidarity, unity, hard work and dedication. I wholeheartedly thank you for all shareholders, customers and business partners for their continued trust and support to the Group this year.

The world today is facing unprecedented changes. We are facing new opportunities as well as new challenges. We must continue to maintain the hard work and perseverance, keep pace with the times, closely follow up with prevailing policies, so as to seize opportunities to accelerate development, and continue to create new development prospects for the Group. We, as always, will continue to seek more happiness for our employees, create long-term value for shareholders, and increase prosperity for the society future.

**Li Weijian**

*Chairman*

25 March 2022

The background of the page is a scenic landscape at sunset. The sky is filled with soft, golden light and scattered clouds. The sun is positioned behind a mountain peak, creating a prominent lens flare effect with rays of light extending across the scene. The foreground shows a dirt path leading through lush green vegetation. In the middle ground, a winding road is visible through a valley. The background features a range of jagged mountains under the warm glow of the setting sun. Overlaid on the right side of the image is a green graphic element consisting of a rounded rectangle with a smaller rounded square inside its top-left corner. To the right of this green shape are several concentric, semi-transparent circles in shades of blue and green, resembling a target or a signal pattern.

**Report of the  
Directors**



# Report of the Directors

The Directors are pleased to present their report and the audited financial statements for the year ended 31 December 2021.

## Principal Activities

The principal activity of the Company is investment holding. The principal activities of the Group are manganese mining and ore processing in the PRC and Gabon and downstream processing operations in the PRC, as well as trading of manganese ores, manganese alloy and related raw materials, details of which are set out in notes 1 and 5 to the financial statements. There were no significant changes in the nature of the Group's principal activities during the year.

## Business Review

Business review comprising a fair review of the Group's business, description of our principal risks and uncertainties, important events subsequent to the year end and our likely future business developments have been set out in the section headed "Management Discussion and Analysis" of this annual report, inclusive of an analysis of the Group's performance during the year using financial key performance indicators set out in the box headed "Financial Highlights" therein.

As with other natural resources and mineral processing companies, the Group's operations create hazardous and non-hazardous waste, effluent emissions into the atmosphere, as well as water, soil and safety concerns for its workforce. Consequently, the Group is required to comply with a range of health, safety and environmental laws and regulations. The Group believes that its operations are in compliance with all material respects with the applicable health, safety and environmental legislations of the People's Republic of China and Gabon. The Group regularly reviews and updates its health, safety and environmental management practices and procedures to ensure where feasible that they comply, or continue to comply, with best international standards. Our goal is to facilitate the gradual improvement of environmental indicators, while taking into account practical possibilities and social and economic factors.

Compliance procedures are in place to ensure adherence to the relevant laws and regulations in particular, those having a significant impact on the Group. The Board keeps reviewing and monitoring the Group's policies and practices on compliance with legal and regulatory requirements. Any new enactment of or changes in the relevant laws and regulations would be communicated to the relevant departments and staff to ensure compliance. Reminders on the compliance would also be sent out regularly where necessary.

Further discussions on the Company's environmental policies and performance and its compliance with the relevant laws and regulations can be found in the Environmental, Social and Governance Report and our relationship with employees can be found in the Human Resources Report. Discussions and information therein forms part of this Report of the Directors.

## Results and Dividends

The Group's profit for the year ended 31 December 2021 and the Group's financial position at that date are set out in the financial statements on pages 103 to 190.

The Board does not recommend the payment of any dividend for the year.

## Property, Plant and Equipment and Investment Properties

Details of movements in the property, plant and equipment, and investment properties of the Group during the year are set out in notes 14 and 15 to the financial statements respectively.

### Share Capital and Share Options

Details of the Company's share capital and share options during the year are set out in notes 30 and 31 to the financial statements.

### Pre-emptive Rights

There are no provisions for pre-emptive rights under the Bye-laws or the laws of Bermuda which would oblige the Company to offer new shares on a pro rata basis to existing shareholders.

### Purchase, Redemption or Sale of Listed Securities of the Company

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

### Reserves

Details of movements in the reserves of the Group during the year are set out in note 32 to the financial statements and in the consolidated statement of changes in equity, respectively.

### Borrowings

Details of borrowings (inclusive of interest-bearing bank and other borrowings) of the Group as at 31 December 2021 are set out in note 27 to the financial statements.

### 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.

### Distributable Reserves

The Company's reserves available for distribution is its contributed surplus amounting to HK\$2,618,617,000 as at 31 December 2021 and such sum is available to be applied by the Company including but not limited to, elimination of accumulated losses of the Company which amounted to HK\$432,789,000 as at 31 December 2021 and payment of dividends to Shareholders.

### Charitable Donations

During the year, the Group made charitable and other donations totalling HK\$1,217,000 (2020: HK\$827,000).

### Major Customers and Suppliers

During the year, sales to the Group's five largest customers accounted for 24.7% of the total sales for the year and sales to the largest customer included therein amounted to 7.4%. Purchases from the Group's five largest suppliers, amounted to 34.9% of the total purchases for the year and purchase from the largest supplier included therein amounted to 9.5%.

As far as the Directors are aware, none of the Directors of the Company or any of their associates or any shareholders (which, to the best knowledge of the Directors, own more than 5% of the Company's issued share capital) had any beneficial interest in the Group's five largest customers and suppliers.

### Directors

The Directors of the Company during the year ended 31 December 2021 and up to the date of this annual report are:

#### Executive Directors

Mr. Li Weijian (Chairman and Chief Executive Officer)  
Mr. Zhang He  
Mr. Zhang Zongjian <sup>Note</sup>

#### Non-executive Directors

Mr. Lyu Yanzheng  
Mr. Cheng Zhiwei  
Ms. Cui Ling

#### Independent non-executive Directors

Mr. Zhang Yupeng  
Wang Zhihong (resigned on 31 March 2021)  
Mr. Yuan Mingliang (appointed on 31 March 2021)  
Mr. Lin Zhijun (resigned on 31 July 2021)  
Mr. Lau Wan Ki (appointed on 31 July 2021)

Note: As detailed in our announcement dated 25 March 2022, Mr. Zhang Zongjian resigned from his position as an executive Director of the Company and Mr. Xu Xiang was appointed as an executive Director of the Company with effect from 25 March 2022.



## Report of the Directors

### Directors' and Senior Management's Biographies

The biographical details of the Directors of the Company and the senior management of the Company are set out on pages 52 to 54 of this annual report.

### Change of Information of Directors

Pursuant to Rule 13.51B of the Listing Rules, the change of information of Directors of the Company are set out below:

Date	Details
31 March 2021	(1) Mr. Wang Zhihong resigned as an independent non-executive director and cease to be chairman of Remuneration Committee, a member of Nomination Committee and Audit Committee.  (2) Mr. Yuan Mingliang was appointed as an independent non-executive director, chairman of Remuneration Committee, a member of Nomination Committee and Audit Committee.
31 July 2021	(1) Mr. Lin Zhijun resigned as the independent non-executive director and ceased to be the chairman of the Audit Committee, Remuneration Committee and Nomination Committee.  (2) Mr. Lau Wan Ki was appointed as the independent non-executive director of the Company.
2 August 2021	Mr. Lau Wan Ki was appointed as the chairman of the Audit Committee, a member of Remuneration Committee and Nomination Committee.
15 October 2021	Mr. Lyu Yanzheng was redesignated as the Chairman of CITIC Jinzhou Metal Co., Ltd.

### Directors' Service Contracts

None of the Directors has a service contract with the Company which is not determinable by the Company within one year without payment of compensation, other than statutory compensation.

### Directors' Remuneration

Directors' remuneration is determined by the Board with reference to the recommendations made by the Remuneration Committee. The Group's remuneration policy seeks to provide fair market remuneration in a form and value to attract, retain and motivate high quality staff. Remuneration packages are set at levels to ensure comparability and competitiveness with other companies in the industry and market competing for a similar talent pool. Emoluments are also based on an individual's knowledge, skill, time commitment, responsibilities and performance and by reference to the Group's profits and performance.

Details of the remuneration of the Directors are set out in note 9 to the financial statements.

### Directors' Interests in Contracts

Save as disclosed in this annual report and herein below and so far as is known to the Directors, (i) none of the Directors was directly or indirectly interested in any business that constitutes or may constitute a competing business of the Company during the year and (ii) none of the Directors or their respective associates was materially interested in any contract or arrangement which is significant in relation to the businesses of the Group taken as a whole during the year.

- (1) Mr. Lyu is the Chairman and director of CITIC Jinzhou Metal Co., Ltd. (“**CITIC Jinzhou**”). CITIC Jinzhou carries on metallurgic business focusing on the production of middle carbon ferromanganese, chromium metal, titanium metal, vanadium pentoxide, zirconium products and silicomanganese alloy.
- (2) Ms. Cui is a dispatch director and Chief Financial Officer of Guangxi Dameng. Guangxi Dameng is a state-owned company with manganese ore mining and processing, battery producing, machinery engineering, accessories manufacturing, investment operation and export and import trade.

Pursuant to the right of first refusal agreement dated 3 November 2010, Guangxi Dameng granted the right of first refusal to the Company to acquire all the equity interest it holds in Rainbow Minerals Pte. Limited which in turn holds certain manganese and iron mines in South Africa.

Each of the above directors had abstained from voting on the transactions entered into between the Group and CITIC Jinzhou and Guangxi Dameng and/or their respective subsidiaries (as the case may be) (if any) during the year.

### Directors' and Chief Executive's Interests in Shares and Underlying Shares and Debentures

As at 31 December 2021, so far as is known to any Directors, none of the Directors or chief executives of the Company had any interests or short positions in shares, underlying shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO, which were required (a) to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have under such provisions of the SFO), or (b) to be entered into the register required to be kept by the Company pursuant to section 352 of the SFO, or (c) to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code.

### Directors' Rights to Acquire Interests or Debentures

Save as disclosed in this annual report, at no time during the year ended 31 December 2021 was the Company or any of its subsidiaries or its holding company or any of the subsidiaries of the Company's holding company a party to any arrangement to enable the Directors or their associates (as defined in the Listing Rules) to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

### Share Option Scheme

On 26 October 2010, the Company adopted a Share Option Scheme under which the Board was entitled, during the ten years ended 25 October 2020, to allot share options to eligible persons. The purpose of the scheme is to provide incentive or reward to eligible persons (including full time or part time employees, executive Directors, non-executive Directors and independent non-executive Directors of our Group) for their contribution to, and continuing efforts to promote the interests of, our Company and to enable our Company and its subsidiaries to recruit and retain high-caliber employees.

## Report of the Directors

The subscription price for Shares under the Share Option Scheme shall be determined by the Board in its absolute discretion but in any event shall not be less than the highest of:

- (1) the closing price of the Shares as stated in the daily quotations sheet issued by the Stock Exchange on the date of grant which must be a business day;
- (2) the average closing price of the Shares as stated in the daily quotations sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant; and
- (3) the nominal value of the Shares.

The maximum number of Shares which may be issued upon exercise of all options to be granted under the Share Option Scheme and options under any other share option schemes of the Company shall not, in the absence

of Shareholders' approval, in aggregate exceed 10% in nominal amount of the aggregate of Shares in issue on the listing date.

The maximum number of Shares issued and to be issued upon exercise of the Options granted to each Grantee under the Share Option Scheme (including both exercised and outstanding Options) in any 12 month period shall not (when aggregated with any Shares subject to options granted during such period under any other share option schemes of the Company other than those options granted pursuant to specific approval by the Shareholders in general meeting) exceed 1% of the Shares in issue for the time being. There is no requirement that an option must be held for any minimum period before it can be exercised.

On 11 January 2011, the Company granted share options to Directors and certain employees of the Group under the Share Option scheme. Further details of the share options are disclosed in note 31 to the financial statements.

The following table discloses movements in the Company's share options during the year:

Name and category of participant	Number of share options					At 31 December 2021	Date of grant	Exercise period <sup>Note</sup>	Exercise price per share HK\$
	At 1 January 2021	Granted during the year	Exercised during the year	Cancelled during the year	Lapsed during the year				
<b>Directors</b>									
Mr. Li Weijian	15,000,000	-	-	-	(15,000,000)	-	11.1.2011	11.1.2012 to 10.1.2021	2.81
<b>Non-Directors</b>									
	19,500,000	-	-	-	(19,500,000)	-	11.1.2011	11.1.2012 to 10.1.2021	2.81
<b>Total</b>	34,500,000	-	-	-	(34,500,000)	-			

Note:

The vesting period of the share options is from the date of grant until the respective dates of commencement of the exercise periods. The exercise period is divided into three tranches, i.e. 25% after 10 January 2012, an additional 25% after 10 January 2013 and the remaining 50% after 10 January 2014. All the share options lapsed with effect from 10 January 2021.

Save as disclosed herein and in the section headed “Substantial Shareholders and Other Person’s Interests in Shares and Underlying Shares” below and so far as is known to the Directors, as at 31 December 2021:

- (i) none of the Directors or chief executive of the Company had an interest or a short position in the shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which are required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are deemed or taken to have under such provisions of the SFO) or which are required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or which are required, pursuant to the Model Code, to be notified to the Company and the Stock Exchange; and
- (ii) none of the Directors was a director or employee of a company which had an interest or a short position in Shares or underlying Shares which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO.



## Report of the Directors

### Substantial Shareholders' and Other Persons' Interests in Shares and Underlying Shares

As at 31 December 2021, according to the register kept by the Company pursuant to Section 336 of the SFO and, so far as is known to the Directors, the persons or entities who had an interest or a short position in the shares or underlying shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or who were, directly or indirectly, interested in 5% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of the Company, or of any other company which is a member of the Group, or in any options in respect of such share capital are as follows:

Name	Notes	Capacity and nature of interest	Number of ordinary shares held (a)	Approximate percentage of the Company's issued share capital	Number of share options held
Sun Mingwen	(b)	Through a controlled corporation	994,260,000 (L)	29.00	–
Youfu Investment Co., Ltd	(b)	Directly beneficially interested	994,260,000 (L)	29.00	–
Guangxi Dameng Manganese Industrial Co., Ltd	(c)	Through a controlled corporation	776,250,000 (L)	22.64	–
Huanan Dameng Investments Limited	(c)	Through a controlled corporation	776,250,000 (L)	22.64	–
Guinan Dameng International Resources Limited	(c)	Directly beneficially interested	776,250,000 (L)	22.64	–
CITIC Group Corporation	(d)	Through a controlled corporation	203,090,000 (L)	5.92	–
CITIC Limited	(d)	Through a controlled corporation	203,090,000 (L)	5.92	–
CITIC Corporation Limited	(d)	Through a controlled corporation	203,090,000 (L)	5.92	–
Metal and Mining Link Limited	(d)	Through a controlled corporation	203,090,000 (L)	5.92	–
CITIC Metal Group Limited	(d)	Through a controlled corporation	203,090,000 (L)	5.92	–
Apexhill Investments Limited	(d)	Directly beneficially interested	203,090,000 (L)	5.92	–
Ma Xuedong	(e)	Through a controlled corporation	184,740,000 (L)	5.39	–
Feng Xiang Investment Co., Ltd.	(e)	Directly beneficially interested	184,740,000 (L)	5.39	–

Notes:

- (a) The letter "L" denotes the long position in such Shares.
- (b) Youfu Investment Co., Ltd. is wholly owned by Sun Mingwen.
- (c) Guinan Dameng International Resources Limited is wholly owned by Huanan Dameng Investments Limited ("**Huanan Dameng**"), which is in turn wholly owned by Guangxi Dameng.
- (d) Apexhill Investments Limited ("**Apexhill**") is wholly owned by CITIC Metal Group Limited ("**CITIC Metal**"), which is in turn wholly owned by Metal and Mining Link Limited ("**MML**"). MML is wholly owned by CITIC Corporation Limited ("**CITIC Corporation**"). CITIC Corporation is wholly owned by CITIC Limited (Stock Code: 0267.HK), which is owned as to 25.60% by CITIC Glory Limited and as to 32.53% by CITIC Polaris Limited. CITIC Glory Limited and CITIC Polaris Limited are wholly owned by CITIC Group Corporation. CITIC Group Corporation is a company established in the PRC.
- (e) Feng Xiang Investment Co., Ltd is wholly owned by Ma Xuedong.

Save as disclosed above, as at 31 December 2021, the Company has not been notified by any persons who had interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept by the Company under Section 336 of the SFO.

### Connected Transaction and Continuing Connected Transactions

#### (1) Continuing connected transactions with Guangxi Dameng and/or its subsidiaries

On 21 June 2018, the Company entered into Guangxi Dameng Ore Agreement, Guangxi Dameng EMM Agreement and Guangxi Dameng Raw Materials Agreement with Guangxi Dameng and/or its subsidiaries for the period from 26 July 2018 to 31 December 2020 and Integrated Services Framework Agreement, Guangxi Liuzhou Agreement and Nanning Battery Plant Agreement with Guangxi Dameng and/or its subsidiaries for the three years ending 31 December 2021 (collectively, the “**Guangxi Dameng Agreements**”). Details of the Guangxi Dameng Agreements were disclosed in the circular of the Company dated 29 June 2018.

#### (2) Continuing connected transactions with Guangxi Xishan Mining Limited Company (“**Guangxi Xishan**”)

On 25 January 2019, South Manganese Group entered into 2019 Guangxi Xishan Agreement with Guangxi Xishan, pursuant to which Guangxi Xishan agreed to provide underground mining service and underground infrastructure construction service to South Manganese Group while South Manganese Group agreed to provide electricity and auxiliary materials to Guangxi Xishan in its course of provision of underground mining service and underground infrastructure construction service at Daxin Mine for the three years ending 31 December 2021. Details of the 2019 Guangxi Xishan Agreement were disclosed in the announcement of the Company dated 25 January 2019.

During the year 2021, the amounts of transactions under the Guangxi Dameng Agreements and the 2021 Guangxi Dameng Ore Agreement are as follows:

	HK\$'000
• Purchase of finished goods from Guangxi Dameng	56,831
• Purchase of raw materials from subsidiaries of Guangxi Dameng	870

During the year 2021, the amounts of transactions under the 2019 Guangxi Xishan Agreement are as follows:

	HK\$'000
• Provision of underground mining service by Guangxi Xishan	138,700
• Provision of underground infrastructure construction service by Guangxi Xishan	37,194
• Provision of electricity and auxiliary materials to Guangxi Xishan	11,539



## Report of the Directors

The Group has followed the policies and guidelines regarding the continuing connected transactions in accordance with the Listing Rules when determining the price and terms of the transactions conducted during the year.

The independent non-executive Directors of the Company have reviewed the continuing connected transactions set out above and have confirmed that these continuing connected transactions were entered into (i) in the ordinary and usual course of business of the Group; (ii) on normal commercial terms or better; 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.

Ernst & Young, the Company's auditor, was engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) Assurance Engagements Other Than Audits or Reviews of Historical Financial Information and with reference to Practice Note 740 (Revised) Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules issued by the Hong Kong Institute of Certified Public Accountants. Ernst & Young have issued their unqualified letter containing their findings and conclusions in respect of the continuing connected transactions disclosed above by the Group in accordance with Rule 14A.56 of the Listing Rules.

The Company has complied with the applicable requirements under the Listing Rules in respect of connected transactions and continuing connected transactions engaged in by the Group during the year 2021.

## Continuing Connected Transactions After The Reporting Period

### (1) Continuing Connected Transactions and Revision of Annual Caps with Guangxi Dameng and its Subsidiaries

On 21 January 2022, the Company entered into the 2022 Guangxi Dameng EMM Agreement with Guangxi Dameng. Pursuant to the 2022 Guangxi Dameng EMM Agreement, the Company (for itself and on behalf of its subsidiaries) agreed to purchase and Guangxi Dameng (for itself and on behalf of its subsidiaries) agreed to sell EMM for the period from 21 January 2022 to 31 December 2024. Details of 2022 Guangxi Dameng EMM Agreement were disclosed in the announcement of the Company dated 21 January 2022.

On 21 January 2022, the Company (for itself and on behalf of its subsidiaries) entered into 2022 Guangxi Dameng Ore Agreement with Guangxi Dameng to revise the annual caps under the 2021 Guangxi Dameng Ore Agreement. Pursuant to 2022 Guangxi Dameng Ore Agreement, the Company (for itself and on behalf of its subsidiaries) agreed to purchase and Guangxi Dameng (for itself and on behalf of its subsidiaries) agreed to sell High Grade Manganese Ore for the period from 21 January 2022 to 31 December 2024. Details of 2022 Guangxi Dameng Ore Agreement were disclosed in the announcement of the Company dated 21 January 2022.

### (2) New Continuing Connected Transactions with Guangxi Liuzhou Gremi Intelligent Equipment Manufacturing Co., Ltd. (“**Guangxi Gremi**”) and its Subsidiaries

On 21 January 2022, the Company entered into the 2022 Guangxi Gremi Negative Plates Agreement with Guangxi Gremi. Pursuant to the 2022 Guangxi Gremi Negative Plates Agreement, the Company (for itself and on behalf of its subsidiaries) agreed to purchase and Guangxi Gremi (for itself and on behalf of its subsidiaries) agreed to sell negative plates for the period from 21 January 2022 to 31 December 2024. Details of the 2022 Guangxi Negative Plates Agreement were disclosed in the announcement of the Company dated 21 January 2022.

### Sufficiency of Public Float

As at the date of this annual report, based on information that is publicly available to the Company and within the knowledge of the Directors, at least 25% of the Company’s total issued share capital are held by the public.

### Auditor

Ernst & Young shall retire and a resolution for their reappointment as auditor of the Company will be proposed at the forthcoming 2022 AGM.

ON BEHALF OF THE BOARD

### Li Weijian

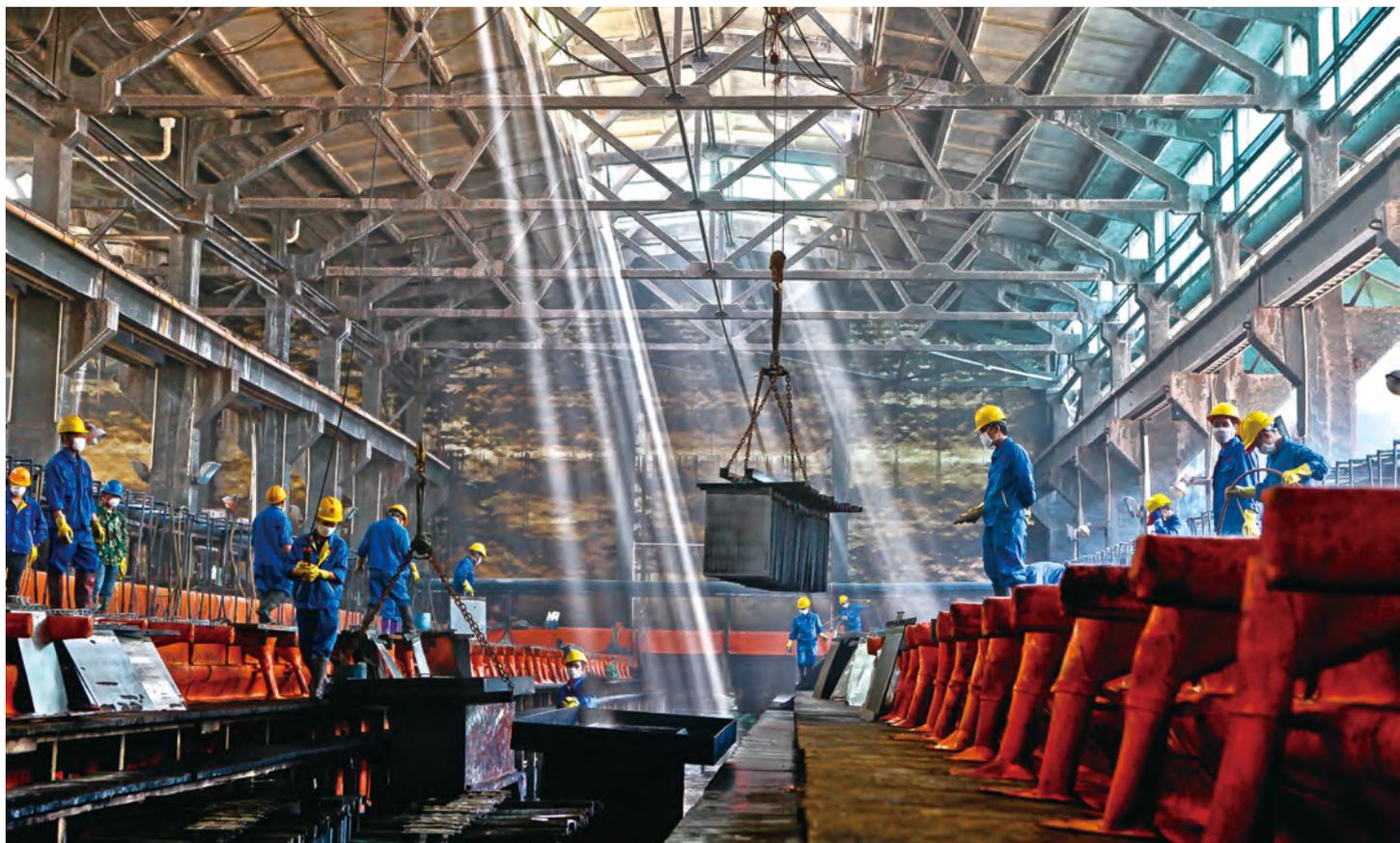
*Chairman and Chief Executive Officer*

Hong Kong  
25 March 2022

A photograph of an industrial factory floor. Two workers in blue uniforms and yellow hard hats are working with large, dark, cylindrical metal components. The floor is covered with these components, and there is a lot of steam or smoke in the air. The background shows a large, open industrial space with a high ceiling and structural beams. In the top right corner, there are several concentric circles of varying shades of blue and white, partially overlapping a brown rounded rectangle that contains the text.

## Management Discussion and Analysis

# Management Discussion and Analysis



## Financial Review

	2021 HK\$'000	2020 HK\$'000	Increase/(decrease) HK\$'000 %	
Revenue	<b>12,830,762</b>	4,367,563	8,463,199	193.8
Gross profit	<b>2,338,939</b>	576,505	1,762,434	305.7
Gross profit margin	<b>18.2%</b>	13.2%	N/A	5.0
Operating profits	<b>1,292,696</b>	112,840	1,179,856	1,045.6
Gain on bargain purchase from further acquisition of equity interest in a joint venture	–	69,411	(69,411)	(100.0)
Impairment losses on property, plant and equipment and mining right	<b>(236,425)</b>	(22,166)	214,259	966.6
Impairment losses on financial assets, net	<b>(158,663)</b>	(145,618)	13,045	9.0
Impairment loss on an investment in an associate	<b>(15,325)</b>	(295,781)	(280,456)	(94.8)
Loss on deemed disposal of partial interest in an associate	–	(92,375)	(92,375)	(100.0)
Share of profits and losses of				
– Associates	<b>(297,347)</b>	(131,914)	165,433	125.4
– A joint venture	–	1,793	(1,793)	(100.0)
Profit/(loss) before tax	<b>584,936</b>	(503,810)	1,088,746	216.1
Income tax (expense)/credit	<b>(208,751)</b>	45,956	(254,707)	(554.2)
Profit/(loss) for the year	<b>376,185</b>	(457,854)	834,039	182.2
Profit/(loss) attributable to owners of the parent	<b>466,185</b>	(437,929)	904,114	206.5
Loss attributable to non-controlling interests	<b>(90,000)</b>	(19,925)	(70,075)	(351.7)
	<b>376,185</b>	(457,854)	834,039	182.2



## Management Discussion and Analysis

### Financial Highlights

- Revenue amounted to HK\$12,830.8 million in 2021, representing an increase of 193.8% from HK\$4,367.6 million in 2020.
- Gross profit amounted to HK\$2,338.9 million in 2021, representing an increase of 305.7% from HK\$576.5 million in 2020. Gross profit margin was 18.2% in 2021, representing an increase of 5.0 percentage points from 13.2% in 2020.
- Non-cash impairment losses on property, plant and equipment and mining right of HK\$236.4 million (2020: HK\$22.2 million) was recognised in 2021.
- Non-cash impairment loss on investment in a 23.99%-owned associate GMG of HK\$15.3 million (2020: HK\$295.8 million) was recognised in 2021.
- Share of losses of associates amounted to HK\$297.3 million (2020: HK\$131.9 million) in 2021.
- Net cash generated from operations amounted to HK\$1,595.1 million (2020: 596.8 million) in 2021, representing an increase of 167.3%.
- Profit attributable to owners of the parent was HK\$466.2 million in 2021 (2020: loss of HK\$437.9 million).
- As at 31 December 2021, net gearing ratio decreased to 92.3% (2020: 134.8%).

### Overview

In 2021, the development of the coronavirus disease (“the COVID-19”) was still affecting the global economy. With the progressive launch of more large scale vaccination covering more people worldwide and certain countries began to relieve the lockdown measures in phrases, the global economy was restoring to normal gradually. This was evidenced by increasing profits from enterprises and improving economic data. Such phenomenon was largely attributable to the large scale transitory economic stimulus packages carried out by different countries around the world. The rebound of economies led to significant demand in logistic supplies and temporary distortions of global logistics and supply chains during the year 2021. There are still emerging threats of the COVID-19 variants especially near the end of the year 2021. We expect the recovery of global economy largely depends on the timing to successfully contain the COVID-19 variants.

Steel sector is our major downstream industry, its demand for our products largely arising from consumptions within China. China has successfully contained the spread of the COVID-19 at early stages and quickly resumed its industrial productions in 2021 and thus stimulated demand for steel. On other hand, in order to achieve China’s carbon peak and carbon neutrality commitments, the PRC government strengthened the demand side management of electric power and regulate the orderly use of power supply in 2021. Certain EMM suppliers in China therefore slowed down their production and took this opportunity to upgrade their EMM plants to comply with more stringent environmental protection requirements. Such mixtures of demand side momentum and supply side factors have driven up the price of EMM Products significantly. As a result, the average selling price of our EMM Products for 2021 increased significantly by 106.3% to HK\$22,121 per tonne (2020: HK\$10,725 per tonne). The gross profit ratio of EMM Products increased by 29.7 percentage points to 44.2% in 2021 (2020: 14.5%) and the gross profit contribution of EMM Products increased by 369.0% to HK\$1,355.7 million in 2021 (2020: HK\$289.1 million).

## Management Discussion and Analysis

Given our blueprint laid out in early years and after several years of development and integration of our talents, our production of battery materials including EMD becomes more stabilized and mature and is achieving encouraging results. In 2021, the Group continues our strategy to cautiously invest and expand our battery material products. By the end of the year 2021, the Group owns Huiyuan Manganese and Daxin EMD Plant with a total annual capacity of 150,000 tonnes per annum which is the largest EMD manufacturer in China with cost advantages including internal supply of manganese ores stably from our Gabon Bembélé Manganese Mine. The Group continues to focus on seizing market share, securing raw materials supplies, strengthening product research and development, further upgrading our EMD production plants and expanding our production to other battery material products including lithium manganese oxide and high purity manganese sulfate. The Group expects such measures would further integrate our battery materials production segment to grasp market opportunities arising from the commercialization of electric vehicles and development of battery products at unprecedented speed. In view of the development and results in the year 2021, the Group remains optimistic about this business segment.

In 2021, due to the full year effect from further acquisition of equity interest in Huiyuan Manganese in March 2020 and the ramping up of production upon its major technological upgrade completed by the end of the year 2020, the sales volume of EMD increased by 38.5% to 119,539 tonnes in 2021 (2020: 86,294 tonnes) while the average selling price increased by 24.7% to HK\$10,741 per tonne (2020: HK\$8,616 per tonne), the gross profit ratio increased by 3.8 percentage points to 29.2% (2020: 25.4%). Therefore, the gross profit contribution of EMD recorded a remarkable increase of 98.7% to HK\$374.9 million (2020: HK\$188.7 million).

In summary, mainly due to increase in average selling prices of EMM Products and EMD and increase in sales volume of EMD, the Group's operating profit for 2021 increased by 1,045.6% to HK\$1,292.7 million (2020: HK\$112.8 million).

In 2021, the Group had the following major non-cash items:

- (a) Impairment losses on property, plant and equipment and mining right of HK\$236.4 million (2020: HK\$22.2 million) were recognised mainly related to (i) further alteration of our expansion plan of Changgou Manganese Mine owned by our 64%-owned subsidiary Zunyi Group led to a further adjustment to its value-in-use and corresponding impairment in value of the mining right, amounting to HK\$166.9 million (2020: HK\$18.6 million); and (ii) certain obsolete plant and machinery during the course of our modifications and upgrades in accordance with our overall strategy to focus on more manganese-related battery materials production, resulting to an impairment loss of HK\$69.5 million (2020: HK\$3.6 million).
- (b) Impairment losses on financial assets of HK\$158.7 million (2020: HK\$145.6 million) were recognised mainly represents impairment losses on trade and notes receivables including an amount due from one of our major customers and its subsidiaries of HK\$121.0 million (2020: HK\$31.5 million) which were overdue for over one year.
- (c) Share of losses of associates of HK\$297.3 million (2020: HK\$131.9 million) mainly represents our share of loss of 33.0%-owned Dushan Jinmeng of HK\$288.9 million (2020: HK\$24.5 million). The net loss of Dushan Jinmeng increased in 2021 mainly due to a provision for settlement expense with a subcontractor and impairment losses on a long outstanding receivable and obsolete equipment.

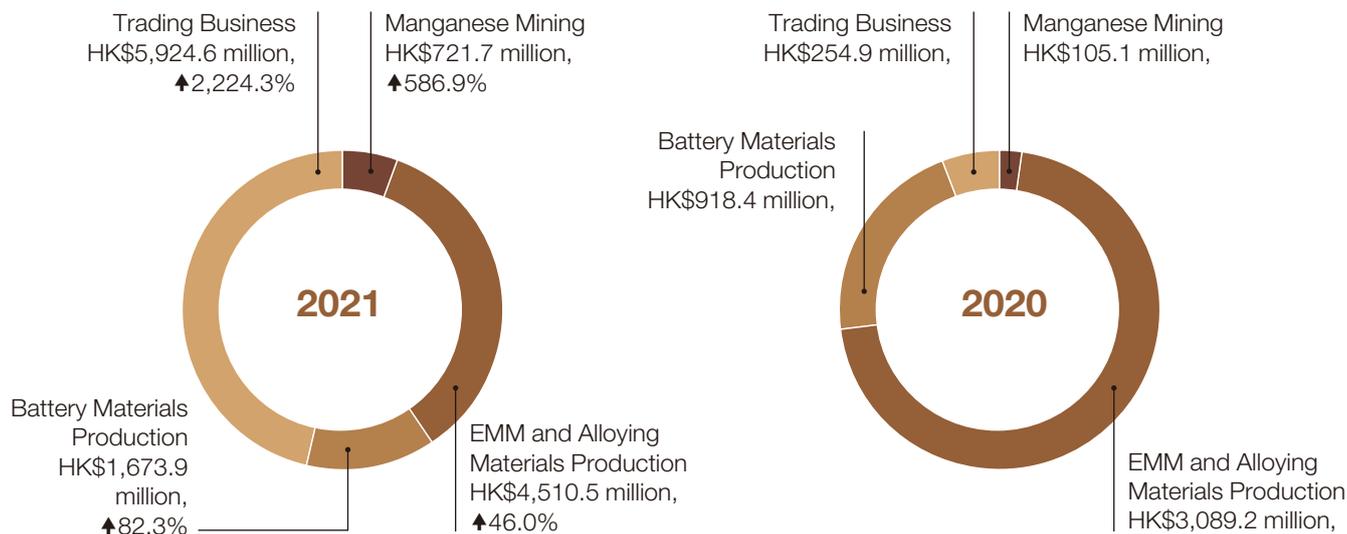
As a result, the earnings before interest, taxes, depreciation and amortisation ("EBITDA") for 2021 increased by 830.7% to HK\$1,345.1 million (2020: HK\$144.5 million) and the profit attributable to owners of the parent of the Group in 2021 was HK\$466.2 million (2020: loss of HK\$437.9 million).



## Management Discussion and Analysis

### Comparison with 2020

#### Revenue by segment



In 2021, the Group's revenue was HK\$12,830.8 million (2020: HK\$4,367.6 million), representing an increase of 193.8% as compared with 2020. The increase was mainly due to (a) increase in average selling prices of our major products including EMM Products, EMD and silicomanganese alloy; (b) increase in sales volume of EMD; (c) increase in sales revenue from Gabon ore; and (d) substantial increase in sales revenue from trading business.

In 2021, the revenue of our EMM Products accounted for 23.9% (2020: 45.7%) of our total revenue.

#### Manganese mining segment

	Sales Volume (tonnes)	Average Selling Price (HK\$/tonne)	Revenue (HK\$'000)	Unit Cost of Sales (HK\$/tonne)	Cost of Sales (HK\$'000)	Gross Profit (HK\$'000)	Gross Profit Margin (%)
<b>Year 2021</b>							
Gabon ore (Note)	716,951	819	587,303	553	396,471	190,832	32.5
Manganese concentrate	227,940	486	110,737	345	78,537	32,200	29.1
Natural discharging manganese powder and sand	7,660	3,088	23,654	379	2,902	20,752	87.7
<b>Total</b>	<b>952,551</b>	<b>758</b>	<b>721,694</b>	<b>502</b>	<b>477,910</b>	<b>243,784</b>	<b>33.8</b>
<b>Year 2020</b>							
Gabon ore (Note)	-	-	-	-	-	-	-
Manganese concentrate	268,862	320	86,144	303	81,578	4,566	5.3
Natural discharging manganese powder and sand	6,887	2,747	18,920	368	2,535	16,385	86.6
<b>Total</b>	<b>275,749</b>	<b>381</b>	<b>105,064</b>	<b>305</b>	<b>84,113</b>	<b>20,951</b>	<b>19.9</b>

## Management Discussion and Analysis

Note: The Group entered into a subcontracting agreement with a subcontractor, which is also the major shareholder of an associate of the Group, entrusting it with certain rights to operate the Group's Bembélé Manganese Mine in Gabon under the supervision of the Group and subject to certain conditions for a period of five years commencing from 1 March 2017. During the subcontracting period, the Group continues to control the strategy and significant matters of the mine's operation and the Group receives a fixed income of RMB26,000,000 (equivalent to HK\$31,325,000) per annum plus a variable income upon sales of ores mined by the subcontractor and determined with reference to the ore's selling price ("Gross subcontracting income"). The revenue and cost of sales from the ores of Bembélé Manganese Mine mined by the subcontractor were not recognised in the Group's consolidated statement of profit or loss. Instead, the aggregate of fixed income and variable income, i.e. the gross subcontracting income, after deducting the depreciation expenses of the Group's equipment utilised by the subcontractor above-mentioned is recognised as "Net subcontracting income" under "Other income and gains" in the consolidated statement of profit or loss. On 30 March 2021, the Group and the subcontractor reached an agreement to terminate the subcontracting agreement with effect from 31 December 2020 and the Group began to run the mining operations on its own in 2021.

In 2021, revenue of manganese mining segment increased by 586.9% to HK\$721.7 million (2020: HK\$105.1 million) mainly attributable to increase in sales revenue of Gabon ore as the Group began to run the mining operations of Bembélé Manganese Mine on its own in 2021. The gross profit of manganese mining segment increased by 1,063.6% to HK\$243.8 million (2020: HK\$21.0 million) mainly due to increase in sales revenue of Gabon ore and increase in average selling price of manganese concentrate and natural discharging powder and sand.

There was no subcontracting income from Gabon Bembélé Manganese during the year 2021 (2020: HK\$85.3 million) as the subcontracting arrangement was terminated in 2021.

During the year 2021, the results of manganese mining segment recorded a loss HK\$180.6 million (2020: profit of HK\$86.9 million) mainly attributable to (a) increase in impairment loss on mining right of Changgou Manganese Mine and (b) a settlement expense of HK\$166.0 million was recorded, arising from early termination of subcontracting service with the subcontractor of our Gabon Bembélé Manganese Mine.



## Management Discussion and Analysis

### EMM and alloying materials production segment

	Sales Volume (tonnes)	Average Selling Price (HK\$/tonne)	Revenue (HK\$'000)	Unit Cost of Sales (HK\$/tonne)	Cost of Sales (HK\$'000)	Gross Profit (HK\$'000)	Gross Profit Margin (%)
<b>Year 2021</b>							
EMM	119,102	22,824	2,718,331	12,336	1,469,280	1,249,051	45.9
Manganese briquette	19,580	17,845	349,398	12,396	242,713	106,685	30.5
	138,682	22,121	3,067,729	12,345	1,711,993	1,355,736	44.2
Silicomanganese alloy	168,188	8,379	1,409,280	7,457	1,254,146	155,134	11.0
Others	2,073	16,157	33,493	11,120	23,051	10,442	31.2
<b>Total</b>	<b>308,943</b>	<b>14,600</b>	<b>4,510,502</b>	<b>9,676</b>	<b>2,989,190</b>	<b>1,521,312</b>	<b>33.7</b>
<b>Year 2020</b>							
EMM	150,945	10,707	1,616,135	9,224	1,392,262	223,873	13.9
Manganese briquette	35,281	10,802	381,093	8,953	315,884	65,209	17.1
	186,226	10,725	1,997,228	9,172	1,708,146	289,082	14.5
Silicomanganese alloy	163,835	6,511	1,066,648	6,291	1,030,766	35,882	3.4
Others	3,457	7,312	25,279	6,371	22,023	3,256	12.9
<b>Total</b>	<b>353,518</b>	<b>8,738</b>	<b>3,089,155</b>	<b>7,810</b>	<b>2,760,935</b>	<b>328,220</b>	<b>10.6</b>

Revenue of EMM and alloying materials production segment increased by 46.0% to HK\$4,510.5 million in 2021 (2020: HK\$3,089.2 million) mainly attributable to the followings:

- EMM Products continued to be our major products in terms of revenue and its average selling price recorded a significant increase of 106.3% to HK\$22,121 per tonne (2020: HK\$10,725 per tonne).
- The revenue of silicomanganese alloy increased by 32.1% to HK\$1,409.3 million (2020: HK\$1,066.6 million) mainly attributable to increase in average selling price of silicomanganese alloy by 28.7% to HK\$8,379 per tonne in 2021 (2020: HK\$6,511 per tonne).

The above impact is partially offset by the following:

- The sales volume of EMM Products decreased by 25.5% to 138,682 tonnes in 2021 (2020: 186,226 tonnes) mainly due to the Group has slowed down its production to carry out upgrades on production plants and also partly because of power supply restrictions in China.

As a result of increase in average selling prices of EMM Products and silicomanganese alloy, the gross profit contribution of EMM and alloying materials production segment increased significantly by 363.5% to HK\$1,521.3 million (2020: HK\$328.2 million) and the EMM and alloying materials production segment recorded a profit of HK\$895.0 million (2020: HK\$147.5 million), representing an increase of 506.8%.

### Battery materials production segment

	Sales Volume (tonnes)	Average Selling Price (HK\$/Tonne)	Revenue (HK\$'000)	Unit Cost of Sales (HK\$/Tonne)	Cost of Sales (HK\$'000)	Gross Profit/ (Loss) (HK\$'000)	Gross Profit/ (Loss) Margin (%)
<b>Year 2021</b>							
EMD	119,539	10,741	1,283,990	7,605	909,083	374,907	29.2
Manganese sulfate	27,798	3,780	105,089	3,239	90,031	15,058	14.3
Lithium manganese oxide	6,012	43,236	259,936	34,371	206,640	53,296	20.5
NCM	192	129,740	24,910	122,438	23,508	1,402	5.6
<b>Total</b>	<b>153,541</b>	<b>10,902</b>	<b>1,673,925</b>	<b>8,006</b>	<b>1,229,262</b>	<b>444,663</b>	<b>26.6</b>
<b>Year 2020</b>							
EMD	86,294	8,616	743,518	6,429	554,808	188,710	25.4
Manganese sulfate	29,742	3,373	100,330	2,532	75,318	25,012	24.9
Lithium manganese oxide	2,951	24,461	72,184	21,760	64,213	7,971	11.0
NCM	24	100,667	2,416	103,125	2,475	(59)	(2.4)
<b>Total</b>	<b>119,011</b>	<b>7,717</b>	<b>918,448</b>	<b>5,855</b>	<b>696,814</b>	<b>221,634</b>	<b>24.1</b>

Revenue of battery materials production segment increased significantly by 82.3% to HK\$1,673.9 million (2020: HK\$918.4 million) and gross profit of this segment increased by 100.6% to HK\$444.7 million (2020: HK\$221.6 million) mainly attributable to the followings:

- (a) EMD continued to be our major battery materials product and the sales volume of EMD substantially increased by 38.5% to 119,539 tonnes (2020: 86,294 tonnes) mainly attributable to (i) the further acquisition of 65.17% equity interest of Huiyuan Manganese on 30 March 2020 as the Group consolidated the operating results of Huiyuan Manganese for the whole year in the year 2021 as contrary to only nine months in 2020; and (ii) ramping up of production by Huiyuan Manganese after its major technological upgrade completed by the end of the year 2020.
- (b) In 2021, the Group obtained more sales order from a major downstream customer which was a leading battery manufacturer in China, therefore, the sales volume and average selling price of lithium manganese oxide increased.

As a result of the net effect of (a) increasing sales volume and average selling price of EMD and lithium manganese oxide in 2021; and (b) the Group did not record the gain on bargain purchase of HK\$69.4 million from further acquisition of equity interest of Ningbo Dameng Group as contrary to 2020, the results of battery materials production segment recorded a profit of HK\$292.8 million (2020: HK\$164.0 million), representing an increase of 78.6%.



## Management Discussion and Analysis

### Other business segment

	Revenue (HK\$'000)	Cost of Sales (HK\$'000)	Gross Profit (HK\$'000)	Gross Profit Margin (%)
<b>Year 2021</b>				
Trading	5,924,641	5,795,461	129,180	2.2
<b>Year 2020</b>				
Trading	254,896	249,196	5,700	2.2

Revenue of other business segment increased by 2,224.3% to HK\$5,924.6 million (2020: HK\$254.9 million) mainly because the Group cautiously resumed its trading business of manganese ore and non-manganese metals to build up the supply chain operations in Guangxi and Hong Kong in 2021.

### Cost of Sales

Total cost of sales increased by 176.8% to HK\$10,491.8 million in 2021 (2020: HK\$3,791.1 million) in line with the increase of the revenue and soaring prices of raw materials.

### Gross Profit

In 2021, the Group recorded a gross profit of HK\$2,338.9 million (2020: HK\$576.5 million), which represented an increase of HK\$1,762.4 million from 2020, or 305.7%. The Group's overall gross profit margin was 18.2%, representing an increase of 5.0 percentage points from 13.2% in 2020. Improved overall gross profit margin was mainly attributable to increase in average selling prices of our major products including EMM Products, EMD and silicomanganese alloy.

### Other Income and Gains

Other income and gains decreased by 36.2% to HK\$158.4 million (2020: HK\$248.3 million) in 2021 mainly due to decrease in net subcontracting income from Gabon Bembélé Manganese Mine.

### Selling and Distribution Expenses

Selling and distribution expenses increased by 29.4% to HK\$135.4 million (2020: HK\$104.6 million) in 2021 mainly attributable to increase in sales volume and the transportation costs of EMD.

### Administrative Expenses

Administrative expenses increased by 56.7% to HK\$597.5 million (2020: HK\$381.4 million) in 2021 mainly attributable to (a) increase in staff costs including social insurance contributions and performance related bonus; and (b) increase in product research and development expenses.

### Impairment Losses on Property, Plant and Equipment and Mining Right

The amount represents impairment loss on mining right of HK\$166.9 million (2020: HK\$18.6 million) and impairment losses on property, plant and equipment of HK\$69.5 million (2020: HK\$3.6 million).

#### (a) Impairment Loss on Mining Right

At 31 December 2021, the Group recognised an impairment loss of HK\$166.9 million (2020: HK\$18.6 million) in respect of Changgou Manganese Mine owned by our 64%-owned subsidiary Zunyi Group to write down to the recoverable amount of the mining right and its related infrastructure and plant and machinery (“CGU”) of HK\$423.3 million. As a result of power supply restrictions and more stringent environmental regulations for ore production, downstream production plants near Changgou Manganese Mine are expected to close down or move out. Hence demand for manganese ores from Changgou Manganese Mine is expected to drop. Therefore we are minded in the expansion plan of Changgou Manganese Mine and made alterations to the plan by reducing the investments and adjusting its outputs to cope with the change in conditions. Further alternations during the year of our expansion plan of Changgou Manganese Mine led to an adjustment to its value-in-use and therefore a corresponding impairment in value of the mining right.

The Group has assessed the value-in-use of Changgou Manganese Mine by discounting the future cash flows generated from the continuous use of the CGU. The major assumptions used in the discounted cash flows include discount rate, future production volume, estimated selling prices, capital expenditure and operating expenditure. The most critical assumptions are production volume, selling prices and discount rate as follow:

	<b>31 December 2021</b>	31 December 2020
(a) Production volume of ore ('000 tonnes)		
i) First year of production	<b>338</b>	200
ii) Second and third years of production	<b>636</b>	711
iii) Fourth to last year of production	<b>5,611</b>	6,337
	<b>6,585</b>	7,248
(b) Average selling price (HK\$/tonnes)	<b>502</b>	527
(c) Pre-tax discount rate	<b>11.1%</b>	9.7%

For valuation as at 31 December 2021, the production volume was determined based on estimated ore reserves which was assessed by the Local Bureau of Geology and Mineral Exploration in accordance with the relevant rules governing the exploration of geology and mineral resources and future production plan as expanded starting from the year 2022.

The assumed average ore selling price of HK\$502 per tonne (equivalent to RMB417 per tonne) (2020: HK\$527 per tonne, equivalent to RMB442 per tonne) over the remaining useful life of the mining rights was estimated with reference to historic average market price of ore and current market condition in accordance with Guiding Opinions on Determination of Mining Rights Evaluation Parameters (or “礦業權評估參數確定指導意見” in Chinese).

The discount rate was determined using weighted average cost of capital calculation taking into account of the specific risk factor for the business operation.



## Management Discussion and Analysis

### **(b) Impairment Losses on Property, Plant and Equipment**

At 31 December 2021, the Group recognised an impairment loss of HK\$69.5 million which represents:

- (i) an impairment loss of HK\$46.8 million in respect of plant and machinery in relation to a production plant in Tiandong. The production plant in Tiandong was originally designed for EMM production and the project was ceased before production commenced due to constraints in local supply of manganese ores because of disputes between local villagers and mine suppliers over the mining operations. In order to resume the project in Tiandong, the Group had carried out feasibility study and intended to transform the production plant to produce high purity manganese sulfate since the year 2019. In 2021, owing to the surge in costs of production including ores and electricity costs, the Group remained hesitant to carry out the project and the timetable in resuming the production of this project became uncertain. Any further delay in resuming the production of the project would lead to an adjustment to the recoverable amount of these assets. Therefore, an impairment loss of HK\$46.8 million was recognised in 2021 to write down to its recoverable amount of HK\$26.6 million. The recoverable amount was determined by estimating the fair values of items of plant and machinery less their costs to sell.
- (ii) an impairment loss on obsolete plant and machinery of HK\$22.7 million in relation to a production plant in Tiandeng arising during the course of upgrading its EMM production plant, certain obsolete production facilities and machinery were impaired to their recoverable amounts. The recoverable amounts were determined by estimating the fair values of items of plant and machinery less their costs to sell.

### **Impairment Losses on Financial Assets, Net**

The amount mainly represents (a) impairment loss on trade and notes receivables due from one of our major customers including its subsidiaries of HK\$121.0 million (2020: HK\$31.5 million); (b) impairment loss on a loan due from an associate GMG of HK\$11.4 million (2020: HK\$33.0 million); and (c) impairment losses on other long outstanding receivables.

### **Impairment Loss on an Investment in an Associate**

According to the announcements issued by GMG, GMG was affected adversely due to (a) the continuing worsening of the emergency situation in Myanmar since early 2021, where the Myanmar military has recently imposed martial law to a larger area across Myanmar, certain telecommunications had been interrupted and/or restricted and many countries have announced the arrangements for evacuation of their nationals; and (b) the continuing spread of the COVID-19, which resulted in certain travel prohibitions and/or restrictions imposed by the governments of Myanmar and China. These factors have affected the valuation of the GMG's business and assets in Myanmar and China.

Due to worsening of the situations as mentioned above, an impairment loss of HK\$15,325,000 was recognised for the investment in 2021.

### **Finance Costs**

In 2021, the Group's finance costs remain constant at HK\$219.5 million (2020: HK\$213.9 million), representing an increase of 2.7%.

### Other Expenses

Other expenses of HK\$252.3 million (2020: HK\$12.1 million) mainly represents a settlement expense with the subcontractor in Gabon Bembélé Manganese Mine, foreign exchange losses and losses on disposals of property, plant and equipment. The increase was primarily due to (a) a settlement expense of HK\$166.0 million was recorded from early termination of subcontracting service with the subcontractor of our Gabon Bembélé Manganese Mine; (b) appreciation of United States dollars against RMB and EURO resulting in exchange loss in operations in Hong Kong and Gabon; and (c) losses on disposals of property, plant and equipment arising from upgrades of EMM production plants while certain obsolete equipment was disposed.

### Share of Losses of Associates

Share of losses of associates of HK\$297.3 million (2020: HK\$131.9 million) represents:

- (a) share of loss of Dushan Jinmeng, a 33.0%-owned associate of the Group, of HK\$288.9 million (2020: HK\$24.5 million) mainly due to (i) provision for settlement expenses with a construction subcontractor; (ii) impairment losses on its property, plant and equipment owing to certain delays of its construction project; and (iii) impairment loss on a long outstanding receivable.
- (b) share of loss of GMG, a 23.99%-owned associate of the Group, of HK\$9.1 million (2020: HK\$107.4 million) mainly due to temporary suspension of operations of certain operating mines because of the COVID-19 and political unrest in Myanmar.
- (c) share of profit of Qingdao Manganese, a 16.35%-owned associate of the Group, of HK\$0.7 million (2020: nil).

### Income Tax Expense

In 2021, the effective tax rate was 35.7% (2020: 9.1%), being higher than the statutory corporate income tax rates of the jurisdictions in which the Group operates, as share of losses of associates were non-deductible for tax purpose and certain subsidiaries in the PRC recorded losses in 2021 but did not recognize deferred tax arising from such losses for the sake of prudence. A reconciliation of the income tax expense at the statutory rate to that at the effective tax rate has been set out in note 11 to the financial statements.

### Profit Attributable to Owners of the Parent

For 2021, the Group's profit attributable to owners of the parent was HK\$466.2 million (2020: loss of HK\$437.9 million).

### Earnings per Share

For 2021, earnings per share attributable to ordinary equity holders of the Company was HK\$0.1360 (2020: loss per share HK\$0.1277).

### Final Dividend

The Board does not recommend the payment of any dividend for the year ended 31 December 2021 (2020: Nil).



## Management Discussion and Analysis

### Use of Proceeds from IPO

Up to 31 December 2021, we utilised the net proceeds raised from the IPO in accordance with the designated uses set out in the Prospectus as follows:

Description	Amount designated in Prospectus (HK\$ Million)	Amount utilised up to 31.12.2021 (HK\$ Million)	% utilised	Amount utilised up to 31.12.2020 (HK\$ Million)	% utilised
1 Expansion project at Daxin EMD Plant	79	79	100.0%	79	100.0%
2 Expansion project of underground mining and ore processing at Daxin Mine	278	278	100.0%	278	100.0%
3 Expansion and construction projects of our EMM production facilities	516	516	100.0%	516	100.0%
4 Construction project at Chongzuo Base	59	59	100.0%	59	100.0%
5 Development of Bembélé Manganese Mine and associated facilities	119	119	100.0%	119	100.0%
6 Technological improvement and renovation projects at our production facilities	40	40	100.0%	40	100.0%
7 Acquisition of mines and mining rights	397	301	75.8%	282	71.0%
8 Repayment on a portion of our bank borrowings	297	297	100.0%	297	100.0%
9 Working capital and other corporate purposes	198	198	100.0%	198	100.0%
Total	1,983	1,887	95.2%	1,868	94.2%

As at 31 December 2021, proceeds from IPO designated for acquisition of mines and mining rights to the extent of HK\$96.0 million was not yet utilised. According to the Prospectus, the proceeds shall be used for the acquisition of mines, mining rights in relation to mines with identified mining resources or related production facilities. During the year 2021, HK\$19.4 million was utilised and paid to the PRC government to extend the mining right of Changgou Manganese Mine. The unutilised portion of IPO proceeds continues to be maintained in deposits with licensed banks.

### Liquidity and Financial Resources

#### Cash and bank balances

As at 31 December 2021, the currency denomination of the Group's cash and bank balances including pledged deposits were as follows:

Currency Denomination	2021 HK\$ million	2020 HK\$ million
Denominated in:		
RMB	1,122.5	1,028.0
HKD	1.8	7.9
USD	85.5	133.2
XAF	36.1	5.8
EUR	–	0.1
	<b>1,245.9</b>	1,175.0

As at 31 December 2021, our cash and bank balances including pledged deposits were HK\$1,245.9 million (2020: HK\$1,175.0 million) while the Group's borrowings amounted to HK\$4,113.9 million (2020: HK\$4,569.4 million). The Group's borrowings net of cash and bank balances amounted to HK\$2,868.0 million (2020: HK\$3,394.4 million).

To manage liquidity risk, the Group continues to monitor current and expected liquidity requirements to secure sufficient balance of cash in the short and long terms as well as facilities from banks and financial institutions.

#### Other major changes in working capital

- (a) At 31 December 2021, inventories increased by 164.9% to HK\$1,399.1 million mainly attributable to (i) increase in inventories and production materials for Gabon Bembélé Manganese Mine and (ii) increase in inventories of EMM Products to fulfil customer order as the Group plans to slow down its production in the first quarter of the year 2022.
- (b) At 31 December 2021, prepayments, other receivables and other assets classified under current assets increased by 115.8% to HK\$1,764.2 million (2020: HK\$817.4 million). It was mainly attributable to (i) increase in prepayment for purchase of manganese ores by the Group to secure supplies for trading and production purposes; and (ii) more suppliers in battery materials production segment request advance payment for purchase of raw materials in the year 2021 due to rapid growth of the market demand.
- (c) At 31 December 2021, trade and notes payables increased by 90.2% to HK\$1,300.2 million (2020: HK\$683.8 million) mainly attributable to (i) increase in trade payable balance of EMD suppliers due to ramping up of EMD production and (ii) increase in notes payable balance from trading business.
- (d) At 31 December 2021, other payables and accruals increased by 118.6% to HK\$2,009.9 million (2020: HK\$919.6 million) mainly attributable to (i) increase in receipt in advance from customers of trading business and (ii) increase in value-added tax payable in China.

#### Net current liabilities

As at 31 December 2021, the Group's net current liabilities increased to HK\$1,276.2 million (2020: HK\$315.5 million). The increase was mainly due to reclassification of certain long-term bank loans to short-term bank loans as they were due within one year as at 31 December 2021.



## Management Discussion and Analysis

### Bank and other Borrowings

As at 31 December 2021, the Group's borrowing structure and maturity profile were as follows:

<b>Borrowing structure</b>	<b>2021 HK\$ million</b>	<b>2020 HK\$ million</b>
Secured borrowings (including lease liabilities)	42.6	39.5
Unsecured borrowings	4,071.3	4,529.9
	<b>4,113.9</b>	4,569.4

<b>Maturity profile</b>	<b>2021 HK\$ million</b>	<b>2020 HK\$ million</b>
Repayable:		
On demand or within one year	3,624.0	2,676.0
After one year and within two years	478.1	1,434.5
After two years and within five years	11.8	458.9
	<b>4,113.9</b>	4,569.4

<b>Currency denomination</b>	<b>2021 HK\$ million</b>	<b>2020 HK\$ million</b>
Denominated in:		
RMB	4,060.9	4,130.8
USD	53.0	438.6
	<b>4,113.9</b>	4,569.4

As at 31 December 2021, borrowings as to the amounts of HK\$2,301.0 million (2020: HK\$2,380.6 million) and HK\$1,812.9 million (2020: HK\$2,188.8 million), carry fixed and floating rate interest respectively. The fixed rate borrowings carry interest at rates ranging from 0.91% to 5.50%. The floating rate borrowings comprise RMB denominated loans carrying interest at a premium up to 10% above the China Loan Prime Rate.

Overall, aggregate borrowings decreased to HK\$4,113.9 million (2020: HK\$4,569.4 million). The Group is continuing to explore various means including short-term or medium-term notes to improve borrowing structure in terms of interest rate level and repayment terms.

### Charge on group assets

As at 31 December 2021, (a) right-of-use assets of HK\$147.9 million (2020: HK\$147.3 million) related to property, plant and equipment were held under leases; and (b) bank balances of HK\$200.5 million (2020: HK\$45.5 million) and notes receivables of nil (2020: HK\$90.8 million) were pledged to secure certain of the Group's bank acceptance notes payable.

### Guarantees

- (a) As at 31 December 2021, the outstanding bank loan of an associate, in which the Group has a 33.0% equity interest, was secured by the associate's lands and property, plant and equipment and guaranteed by the Group and the associate's holding company, according to their respective shareholding percentage on a several basis.

As at 31 December 2021, the associate's banking facilities guaranteed by the Group and the associate's holding company amounted to RMB800.0 million (equivalent to HK\$980.0 million) and were utilised to the extent of RMB559.9 million (equivalent to HK\$685.9 million) as at 31 December 2021 (2020: RMB564.9 million, equivalent to HK\$673.4 million).

- (b) As at 31 December 2021, loan facilities provided by Guangxi Dameng to a company (the "Borrower"), in which the Group has a 10% equity interest, were guaranteed by the Group and the major shareholder of the Borrower according to the shareholding percentage on a several basis.

As at 31 December 2021, loan facilities guaranteed by the Group and the holding company of the Borrower amounted to RMB100.0 million (equivalent to HK\$122.5 million) (2020: RMB100.0 million, equivalent to HK\$119.2 million) and were utilised to the extent of RMB50.0 million (equivalent to HK\$61.3 million) (2020: RMB85.0 million, equivalent to HK\$101.3 million) by the Borrower.



## Management Discussion and Analysis

### Key Financial Ratios of the Group

	2021	2020
Current ratio	0.82	0.93
Quick ratio	0.63	0.80
Net gearing ratio	92.3%	134.8%

Current ratio = balance of current assets at the end of the year/balance of current liabilities at the end of the year

Quick ratio = (balance of current assets at the end of the year – balance of inventories at the end of the year)/balance of current liabilities at the end of the year

Net gearing ratio = Calculated as net debt divided by equity attributable to owners of the parent. Net debt is defined as the sum of interest-bearing bank and other borrowings less cash and cash equivalents and pledged deposits

At 31 December 2021, current ratio and quick ratio decreased because certain long-term bank loans becoming repayable within one year have been reclassified from long-term to current at 31 December 2021. Net gearing ratio improved mainly due to total comprehensive income attributable to the owners of the parent in 2021.

### Liquidity risk and going concern basis

The Group monitors its risk to a shortage of funds on an on-going basis by closely monitoring the maturity of both its financial instruments and financial assets and projected cash flows from operations. The Group's objective is to maintain sufficient working capital to finance its operations and meet its financial obligation as and when they fall due. At the same time, the Group will strive a balance between continuity of funding and flexibility through the use of short-term and long-term bank loans, finance leases, other interest-bearing borrowings and short-term and medium-term notes, taking also into account of the different pricing of various financing for each alternatives. Due consideration will also be given to equity financing alternatives.

In preparing the consolidated financial statements, the directors of the Company have given careful consideration to the future liquidity of the Group in light of the fact that the Group's current liabilities exceeded its current assets by HK\$1,276.2 million as at 31 December 2021. Subsequent to the year end, the Group has i) successfully renewed or obtained new bank loans of HK\$1,117.9 million during the period from 1 January 2022 up to the date of this report and ii) obtained confirmations from certain PRC banks which had confirmed in writing to the Group to renew their short-term bank loans totaling HK\$882.1 million on repayment when due. The directors of the Company, also after taking into account the expected sales and internally generated funds from its operations and the successful renewals of bank loans during the year and after the reporting date, are of the opinion that the Group has sufficient working capital for its present requirements for the next twelve months from the end of the reporting period. Accordingly, the consolidated financial statements have been prepared on a going concern basis.

### Credit risk

The Group endeavoured to maintain strict control over its outstanding receivables to minimise credit risk. The Group's trading terms with its customers are mainly on credit, except for new customers, where payment is required either in advance or upon delivery. Credit periods allowed are determined according to relevant business practice and the relevant type of goods and generally are in the range of one to three months from the invoice date and cash realisation may be further extended by three to six months for those customers paying by bank acceptance notes. Overdue balances are regularly reviewed by senior management. Since the Group's trade and notes receivables related to a large number of diversified customers, there was no significant concentration of credit risk save for a customer described below. The Group did not hold any collateral or other credit enhancements over its trade and notes receivable balances except for those detailed in this section of credit risk.

As at 31 December 2021, the customer with the largest balance of trade and notes receivables of the Group was a customer together with its subsidiaries ("Customer A") principally engaged in manganese ferroalloy production and manganese ore trading in the PRC and manganese mining in Gabon and the PRC. Customer A maintains close business relationship with major steel plants in the PRC. The Group supplies manganese ores to Customer A, which is also our subcontractor of Gabon Bembélé Manganese Mine.

Due to rapid cooling down in market demand of manganese ores and significant decrease in market ore price since the fourth quarter of the year 2019, liquidity risk for a large number of alloy and manganese ore suppliers in China including Customer A significantly increased. The market was further dampened by the outbreak of the COVID-19 in the year 2020. As a result, the overdue trade receivables balance of Customer A increased since the year 2019.

To contain the credit risk with Customer A and to secure the continuing production of Gabon Bembélé Manganese Mine, the Group started the process to take over the mining operations in Gabon since the second half of the year 2020. On 30 March 2021, the Group reached an agreement with Customer A to terminate the subcontracting arrangement with effect from 31 December 2020 and began the mining operations of Gabon Bembélé Manganese Mine on its own. The Group then took over the custody of Customer A's assets (mainly ore inventories) in Gabon ("Gabon Assets") and started the process of transferring those assets to the Group as partial repayment of the outstanding balance due from Customer A. After a thorough due diligence and asset valuations procedures and ongoing negotiations with Customer A, the Group finally reached an agreement with Customer A on 18 December 2021 to transfer the Gabon Assets at a total net worth of HK\$210.7 million to the Group.

As a result, at 31 December 2021, trade receivables balance due from Customer A decreased to HK\$231.6 million (2020: HK\$392.3 million) and represented 20.4% of the Group's total trade receivable. The balance was totally overdue and fully provided at 31 December 2021. The Group is now in the process to negotiate a repayment schedule with Customer A with an aim to speed up the collections of the outstanding balance.

### Interest rate risk

We are exposed to interest rate risk resulting from fluctuations in interest rates on our floating rate debt. Floating interest rates are subject to interest rate changes in the China Loan Prime Rate as well as movements in LIBOR. If the China Loan Prime Rate increases or LIBOR moves up, our finance costs will increase. In addition, to the extent that we may need to raise debt financing or roll over our short-term loans in the future, any upward fluctuations in interest rates will increase the costs of new debt obligations. The Group secured interest rate swap contracts to effectively lock up certain United States dollars floating rate loan to fixed rate loan to contain interest rate risk from time to time.



## Management Discussion and Analysis

### Foreign exchange risk

The Group's operations are primarily in Hong Kong, the PRC and Gabon. Foreign exchange risks for operations in each location are set out below.

- (a) In respect of our trading operations in Hong Kong, our sales and purchases are both denominated in United States dollars. In addition, Hong Kong dollars is pegged to United States dollars and hence foreign exchange risk is minimal.
- (b) In respect of our mining and downstream operations in the PRC, our products are sold to local customers in RMB and to a less extent to overseas customers in United States dollars. Major expenses of our PRC operations are denominated in RMB. Our PRC operations face minimal foreign exchange risks except for the followings:

The Group imported manganese ores for self-use from overseas suppliers which are denominated in United States dollars to cope with its production of alloy materials and trading purpose. In addition, certain of our purchases was financed by bank borrowings denominated in United States dollars. In order to contain the foreign currency risk in association with such purchases, the Group may enter into forward currency contracts for selected major purchases at the time of entering into the relevant purchase contracts or loan contracts to secure against exchange rate movements.

- (c) In respect of our Gabon operation, our income is substantially denominated in RMB and United States dollars and all major local expenses are denominated in RMB and XAF, which is pegged to EURO; while the freight charges are dominated in United States dollars.

### Business Model and Strategy

The Group strives to be the global leading one stop and vertical integrated manganese producer while maintaining the Group's long term profitability and assets growth with adoption of flexible business model and strategy and prudent risk and capital management framework. We intend to adopt and implement the following strategies to achieve our objective:

- (a) expand and upgrade our manganese resources and reserves through exploration and enhance our strategic control of manganese resources and reserves through mergers and acquisitions;
- (b) enhance our operational efficiency and profitability; and
- (c) establish and consolidate our strategic relationships with selected major customers and industry leading partners.

### Future Development and Outlook

In 2021, the COVID-19 had been effectively under control in China but the Group will continue to demonstrate its commitment to its duties and align with the government in adopting measures to prevent the resurgence of the epidemics. It is expected that with gradual increase in vaccination coverage in China, we are cautiously optimistic about the continuous recovery of the economy of China. Overseas, the numbers of reported cases though showing a decreasing trend in certain parts of the world, there are still some areas of reported resurgence of the epidemics and virus mutation. But hopefully with the proper implementation of different measures and the wider use of vaccines, economy in the Western countries will return to normal gradually.

Since the beginning of 2021, the Group's operating performance improved significantly and its profits increased substantially. The Group will continue to focus on five areas, i.e. ore and traditional manganese-related products, new energy materials, alloying materials, supply chain logistics and integrated solid waste recycling. The Group will also continue to improve internal efficiency and management skills to reduce costs and increase productivity and competitiveness, so as to carry on the good momentum in the following years.

As the second largest EMM manufacturer and supplier in China, we integrate the aims and requirements of the government to achieve "carbon peak and carbon neutrality", work with the initiatives and plans of China National Manganese Industry Technology Committee EMM Innovation Alliance ("全國錳業技術委員會電解金屬錳創新聯盟"), strengthen the cooperation within the industry with common objectives to improve and upgrade our industry, accelerate eco-friendly development and achieving sustainable development, which are achieving notable progress.

Although the Group becomes the largest EMD manufacturer in China, we continue to strengthen our leading position in battery materials production segment and carry out technical research and development to upgrade the quality of our battery material products including EMD and lithium manganese oxide to enhance their value and further extend the applications in electric vehicles and other electric tools and equipment. The Group will actively respond to carbon reduction targets initiated by the PRC government for the 14th Five-Year Plan period and pave the way to seize opportunities brought by such targets, including the optimization of industry structure and energy structure as well as the upgrade and replacement in the industry and the improvement of energy efficiency. It announced the "Green stimulus package" with a scale close to US\$195 billion focusing on accelerating the development of industries with established development foundation, such as new energy and electric vehicles. The rapid development of green manufacturing industries, such as new materials and new energy vehicles, will provide a vastly broad market and opportunities for one of the Group's major businesses – cathode materials for batteries (including EMD, lithium manganese oxide and high purity manganese sulfate).



## Management Discussion and Analysis

With the promotion of upgrade construction of China-ASEAN Free Trade Areas, more and more steel manufacturers gradually extend their presence into ASEAN and peripheral coastal regions, with increasing demands in downstream crude steel markets. Crude steel production in Qinzhou, Beihai and Fangchenggang in Guangxi, Zhanjiang and the Pearl River Delta in Guangdong, Southeast Asia Vietnam, Malaysia, Indonesia and other regions reached a production capacity of nearly 100 million tonnes, and demand for manganese alloys within the regions exceeded 2 million tonnes. Meanwhile, to actively respond to the strategic adjustment of the national steel sector layout and serve the construction of land and sea passages of the “Belt and Road Initiative”, the transfers of steel production capacity from outside the regions were being vigorously undertaken, the technology level of steel sector was improved, weaknesses in total volume of steel sector were refined, and with the steel product variety enriched and steel sector structure optimized. The government of Guangxi Autonomous Region actively promoted the construction of Fangchenggang steel base, which enabled the technology equipment of the steel sector in such autonomous region to reach national advanced standards, the quality and stability of steel products to have significantly improved, and the demand and supply structure to be more balanced. The ferroalloy sector in Guangxi will soon encounter more developing opportunities, and the Group will grasp such opportunity to rapidly enhance the production capacity of silicomanganese alloy products through its technical teams in Qinzhou Ferroalloy Plant and Xingyi Ferroalloy Plant and control of overseas rich ore resources, and cooperate with the government, relying on Qinzhou Port as the largest manganese ore distribution centre in the Southern China, to develop commodity trading platform, integrate trading and industrial production so as to better serve the Pan-Beibuwan steel base that demonstrates broad development prospects.

Our efforts spent on marketing of the Gabon ore in the past several years provide an encouraging result. Demands of our Gabon ore both from China and other new emerging markets are increasing. Our first priority now is to secure the stable production of our ores in Gabon and escalate the scale of our production and transportation, including purchase of additional locomotive and wagons as well as extending the length of our industrial spur. Following our renewal of mining convention with Gabon government, we will allocate more resources in exploration to cover not only the area defined in our mining permit, but also that within our exploration rights of 2,000 square kilometers, so as to control more and higher grade manganese resources for the long term sustainability of Bembélé Manganese Mine.

In terms of financing, we will continue our efforts to improve our liquidity and capital structure by exploring various alternatives from debt to equity and to raise necessary funds to finance our operations. In particular, we will put more weight on longer term financing than short term, taking into account of different pricing of various financing alternatives and due consideration will also be given to equity financing which can reduce our gearing ratio and have the possible advantage of expanding our shareholder base. We integrate Guangxi-Hong Kong supply chain financing activities through our supply chains operations, further enhance our financing abilities in Guangxi and Hong Kong and effectively reduce our finance costs. The Group strongly emphasizes the importance of liquidity and will continue to take measures to secure adequate working capital for our business operations.

### Five Year Financial Summary

A summary of the results and of the assets, liabilities and non-controlling interests of the Group for the latest five financial years has been set out in the section headed “Five Year Financial Summary” of this annual report.



## Mineral and Mining Report



# Mineral and Mining Report

## Resources and Reserves

Below is the information on our mineral resources and ore reserves in accordance with JORC Code as of 31 December 2021:

### Summary of our manganese mineral resources

Mines	Ownership Percentage	JORC Resource Category	Million tonnes	Average Manganese Grade (%)	Million tonnes	Average Manganese Grade (%)
			31.12.2021	31.12.2021	31.12.2020	31.12.2020
Daxin Mine	100%	Measured	3.35	26.03	3.35	26.03
		Indicated	56.28	22.02	57.70	21.85
		Subtotal	59.63	22.24	61.05	22.08
		Inferred	0.43	21.23	0.43	21.23
		Total	60.06	22.23	61.48	22.08
Tiandeng Mine	100%	Measured	0.55	18.26	0.55	18.26
		Indicated	2.55	17.15	2.69	16.85
		Subtotal	3.10	17.35	3.24	17.09
		Inferred	3.46	14.28	3.49	14.28
		Total	6.56	15.73	6.73	15.63
Waifu Manganese Mine	100%	Measured	-	-	-	-
		Indicated	-	-	-	-
		Subtotal	-	-	-	-
		Inferred	1.54	17.52	1.54	17.52
		Total	1.54	17.52	1.54	17.52
Changgou Manganese Mine	64%	Measured	3.19	20.45	3.57	20.45
		Indicated	15.02	20.32	15.02	20.32
		Subtotal	18.21	20.34	18.59	20.34
		Inferred	3.24	20.50	3.24	20.50
		Total	21.45	20.37	21.83	20.37
Bembélé Manganese Mine	51%	Measured	-	-	-	-
		Indicated	8.78	33.53	10.59	32.88
		Subtotal	8.78	33.53	10.59	32.88
		Inferred	12.37	32.74	12.37	32.74
		Total	21.15	33.07	22.96	32.80
Total			110.76		114.54	

Summary of our manganese ore reserves

Mines	Ownership Percentage	JORC Resource Category	Million tonnes	Average Manganese Grade (%)	Million tonnes	Average Manganese Grade
			31.12.2021	31.12.2021	31.12.2020	31.12.2020
Daxin Mine	100%	Proved	3.13	20.75	3.13	20.75
		Probable	53.75	19.26	55.17	19.16
		Total	56.88	19.34	58.30	19.24
Tiandeng Mine	100%	Proved	0.51	15.78	0.51	15.78
		Probable	2.43	15.93	2.57	15.68
		Total	2.94	15.91	3.08	15.70
Waifu Manganese Mine	100%	Proved	–	–	–	–
		Probable	–	–	–	–
		Total	–	–	–	–
Changgou Manganese Mine	64%	Proved	3.19	20.45	3.57	20.45
		Probable	15.02	20.32	15.02	20.32
		Total	18.21	20.34	18.59	20.34
Bembélé Manganese Mine	51%	Proved	–	–	–	–
		Probable	8.77	31.36	10.58	31.14
		Total	8.77	31.36	10.58	31.14
Total			86.80		90.55	

Note: The figures of the aforesaid manganese resources and manganese ore reserves are rounded to two decimal place and these figures may show apparent addition errors.

Assumptions:

The figures of the aforesaid manganese resources and manganese ore reserves are based on the following assumptions:

- (1) (a) The manganese resources and manganese ore reserves for Daxin Mine, Tiandeng Mine and Bembélé Manganese Mine are based on the estimate as per the independent technical review report as shown in the Prospectus. The decreases of the manganese resources and manganese ore reserves in the aforesaid mines during the year were largely due to mining depletion. The year end amounts have been confirmed by our internal experts.
  - (b) The manganese resources and manganese ore reserves for Changgou Manganese Mine are based on the estimate in accordance with 《錳礦礦產資源儲量核實報告》(Manganese Resources Verification Report) newly prepared in July 2020. The increase of manganese resources and manganese ore reserves of the mine during the year were largely due to that the consumption of resources approved in the newly prepared Manganese Resources Verification Report is less than the previous estimated volume. The year end amounts have been confirmed by our internal experts.
  - (c) The manganese resources and manganese ore reserves for Waifu Manganese Mine are based on the estimate in accordance with 《靖西縣湖潤外伏錳礦礦產資源量核實地質報告評審意見書》(Accreditation Opinion of the Verified Geographical Resources Report of Waifu Manganese Mine, Jingxi County) dated 17th July 2004 prepared by 南寧儲偉資源有限責任公司 (Nanning Chu Wei Resources Limited Company). The year end amounts have been confirmed by our internal experts.
- (2) All material assumptions and technical parameters underpinning the estimates as stated in the aforesaid independent technical reports continue to apply and have not been materially changed.



## Mineral and Mining Report

### Exploration, Development and Mining Activities

#### I) Exploration

##### **Overview**

During the year, there were no significant progress in respect of our exploration works and we have not conducted any exploration drilling works in the PRC. Our main focus was to continue to carry out geological exploration work at Bembele Manganese Mine in Gabon and we have achieved certain exploration results.

##### **Daxin Mine**

During the year, we have not entered into any contracts or commitments in respect of exploration work or conducted any exploration work at Daxin Mine.

##### **Tiandeng Mine**

During the year, we have not entered into any contracts or commitments in respect of exploration work or conducted any exploration work at Tiandeng Mine during the year.

##### **Waifu Manganese Mine**

During the year, we have not entered into any contracts or commitments in respect of exploration work or conducted any exploration work at Waifu Manganese Mine.

##### **Changgou Manganese Mine**

During the year, we have not entered into any contracts or commitments in respect of exploration work or conducted any exploration work at Changgou Manganese Mine.

##### **Bembélé Manganese Mine**

During the year, we carried out the following geological exploration work at Bembélé Manganese Mine:

- (1) completion of the geological exploration project under the cliff of line 49-87 within our mining right areas, which has delineated a total of about 1,021.80 thousand tonnes of intrinsic economic manganese ore resources/reserves (332+333), with the average grade of manganese of 26.93% and the average thickness of 2.71 meters;
- (2) further carrying out research on the metallogenetic geological characteristics and metallogenetic regularity in the underground of other parts of our 20 square kilometers mining rights areas and its surrounding region, and entered into the “Phase 1 Geological Exploration and Technical Service Contract in respect of the Geological Delineation and Assessment Survey of Bembélé Manganese Mine” with our subcontractor, striving to have further new breakthrough in exploration works of the mining rights area and surrounding areas;
- (3) entering into the “Service Contract for Manganese Geological Survey No. 95 in the surrounding areas of Bembélé Manganese Mine” with our subcontractor, focusing on the geological survey within 2,000 square kilometers exploration right areas, so as to provide geological data for the detailed survey in the next step.

Save as disclosed above, we have not entered into any contracts or commitments in respect of exploration work or conducted any exploration work at Bembélé Manganese Mine during the year.

### II) Development

#### ***Daxin Mine***

During the year, our outsourced contractor continued the 1,000,000 tonnes/year expansion project for the underground mining at southern mining zone of Daxin Mine. As at 31 December 2021, the tunnel construction works amounted to approximately 9,560 metres in length.

Save as disclosed hereinabove, we have not entered into any contracts or commitments in respect of the infrastructure development (including infrastructure construction, subcontracting arrangements or purchases of equipments) or conducted any infrastructure or development work at Daxin Mine during the year.

#### ***Tiandeng Mine***

During the year, we have not entered into any contracts or commitments in respect of the infrastructure development (including infrastructure construction, subcontracting arrangements or purchases of equipments) or conducted any infrastructure or development work at Tiandeng Mine.

#### ***Waifu Manganese Mine***

During the year, we have not entered into any contracts or commitments in respect of the infrastructure development (including infrastructure constructions, subcontracting arrangements or purchases of equipments) or conducted any infrastructure or development work at Waifu Manganese Mine.

#### ***Changgou Manganese Mine***

During the year, we have not entered into any contracts or commitments in respect of the infrastructure development (including infrastructure constructions, subcontracting arrangements or purchases of equipments) or conducted any infrastructure or development work at Changgou Manganese Mine.

#### ***Bembélé Manganese Mine***

During the year, we carried out or continued the following infrastructure works or projects at the Bembélé Manganese Mine:

- (1) line 3 expansion project of the processing plant so as to enhance the processing capacity of Bembélé Manganese Mine;
- (2) preliminary work for the railway track extension technical transformation project of the Ndjolé transit station, so as to improve the railway transportation capacity from the mine to the Owendo port;
- (3) the preliminary environmental impact assessment of the second-phase tailings expansion project so as to improve our tailings capacity.

Save as disclosed above, we have not entered into any contracts or commitments in respect of the infrastructure development (including infrastructure constructions, subcontracting arrangements or purchases of equipments) or conducted any infrastructure or development work at Bembélé Manganese Mine during the year.



## Mineral and Mining Report

### III) Mining activities

#### (1) Mining operations

##### *Daxin Mine*

	2021	2020
<b>Open pit mining</b>		
Mining production volume (thousand tonnes)	168	226
<b>Underground mining</b>		
Mining production volume (thousand tonnes)	1,596	1,621
Total mining production (thousand tonnes)	1,764	1,847
<b>Average manganese grade</b>		
Manganese carbonate ore	13.3%	13.3%
Manganese oxide ore	21.4%	25.6%

##### *Tiandeng Mine*

	2021	2020
<b>Open pit mining</b>		
Mining production volume (thousand tonnes)	625	498
<b>Average manganese grade</b>		
Manganese carbonate ore	12.1%	12.1%
Manganese oxide	11.7%	12.8%

##### *Waifu Manganese Mine*

During the year, there were no mining production.

##### *Changgou Manganese Mine*

	2021	2020
<b>Underground mining</b>		
Mining production volume (thousand tonnes)	315	251
Average manganese carbonate grade	15.5%	16.0%

##### *Bembélé Manganese Mine*

	2021	2020
<b>Open pit mining</b>		
Mining production volume (thousand tonnes)	1,810	1,546
Average manganese oxide grade	29.7%	29.8%

Note: Figures for mining production are rounded to nearest whole number and figures for manganese grade are rounded to one decimal place and these figures may show apparent addition errors.

(2) **Ore processing operations**

- Concentrating

<b>Production volume (thousand tonnes)</b>	<b>2021</b>	2020
<b>Daxin Concentration Plant</b>		
Manganese carbonate concentrate	<b>977</b>	1,172
Manganese oxide concentrate	<b>103</b>	112
<b>Total</b>	<b>1,080</b>	1,284
<b>Average manganese grade of concentrate</b>		
Manganese carbonate concentrate	<b>19.4%</b>	19.8%
Manganese oxide concentrate	<b>25.9%</b>	25.6%
<b>Tiandeng Concentration Plant</b>		
Manganese carbonate concentrate	<b>320</b>	476
Manganese oxide concentrate	<b>31</b>	52
<b>Total</b>	<b>351</b>	528
<b>Average manganese grade of concentrate</b>		
Manganese carbonate concentrate	<b>12.8%</b>	11.5%
Manganese oxide concentrate	<b>21.0%</b>	21.2%
<b>Bembélé Concentration Plant</b>		
Manganese oxide concentrate	<b>1,115</b>	844
Average manganese grade of concentrate	<b>34.0%</b>	36.1%

- Grinding

<b>Production volume (thousand tonnes)</b>	<b>2021</b>	2020
<b>Daxin Grinding Plant</b>		
Powder produced	<b>938</b>	1,128
<b>Tiandeng Grinding Plant</b>		
Powder produced	<b>303</b>	447

Note: Figures for concentrating and grinding are rounded to nearest whole number and the figures for manganese grade are rounded to nearest one decimal place and these figures may show apparent addition errors.



### IV) Downstream processing operations

#### (1) EMM and alloying materials

- EMM

Our existing EMM production facilities include Daxin EMM Plant, DXML EMM Plant, Tiandeng EMM Plant and Guangxi Start EMM Plant. Details of EMM production are set out below:

Production (thousand tonnes)	2021	2020
Daxin EMM Plant	84.0	112.0
DXML EMM Plant	19.5	21.3
Tiandeng EMM Plant	30.0	37.3
Guangxi Start EMM Plant	14.2	17.5
<b>Total</b>	<b>147.7</b>	<b>188.1</b>

- Manganese briquette

Production (thousand tonnes)	2021	2020
Chongzuo Branch	4.9	5.5
Daxin Branch	14.9	32.4
<b>Total</b>	<b>19.8</b>	<b>37.9</b>

- Silicomanganese alloy

Production (thousand tonnes)	2021	2020
Qinzhou Ferroalloy Plant	58.9	76.7
Xingyi Ferroalloy Plant	119.6	88.7
<b>Total</b>	<b>178.5</b>	<b>165.4</b>

### (2) Battery materials

- EMD

<b>Production (thousand tonnes)</b>	<b>2021</b>	2020
<b>Daxin EMD Plant</b>	<b>30.9</b>	30.0
<b>Huiyuan Manganese</b>	<b>86.6</b>	66.9
<b>Total</b>	<b>117.5</b>	96.9

- Lithium manganese oxide

<b>Production (thousand tonnes)</b>	<b>2021</b>	2020
<b>Chongzuo Branch</b>	<b>5.7</b>	3.1

- Manganese sulfate

<b>Production (thousand tonnes)</b>	<b>2021</b>	2020
<b>Daxin Manganese Sulfate Plant</b>	<b>26.3</b>	27.6

- Ultra high purity manganese sulfate

<b>Production (thousand tonnes)</b>	<b>2021</b>	2020
<b>Daxin Manganese Sulfate Plant</b>	<b>0.8</b>	–
<b>Chongzuo Branch</b>	<b>1.2</b>	2.9
<b>Total</b>	<b>2.0</b>	2.9

Notes: All our other manganese downstream processing products are rounded to nearest one decimal place and these figures may show apparent addition errors.



## Mineral and Mining Report

### V) 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:

(HK\$'000)

	Daxin Mine	Tiandeng Mine	Waifu Manganese Mine	Changgou Manganese Mine	Bembélé Manganese Mine	Total
<b>Exploration activities</b>						
Purchases of assets and equipment	-	-	-	-	1,389	1,389
Drilling and analysis	-	-	-	-	-	-
Staff cost	-	-	-	-	214	214
Transportation	-	-	-	-	-	-
Sub-contracting fee	-	-	-	-	1,870	1,870
Depreciation	-	-	-	-	105	105
Others	-	-	-	-	1,148	1,148
	-	-	-	-	4,726	4,726
<b>Development activities (including mine construction)</b>						
Purchases of assets and equipment	-	5,813	-	16,971	9,782	32,566
Construction of mines, tunnels and roads	-	398	-	-	-	398
Staff cost	-	-	-	-	-	-
Others	267	-	-	-	5,569	5,836
	267	6,211	-	16,971	15,351	38,800
<b>Mining activities*</b>						
Staff cost	3,570	15,064	-	8,897	-	27,531
Consumables	314	16,842	-	5,342	-	22,498
Fuel, electricity, water and other services	4,448	10,833	-	6,424	-	21,705
Transportation	9,438	-	-	-	-	9,438
Sub-contracting fee	258,882	15,920	-	74,771	151,151	500,724
Depreciation	34,749	4,938	-	3,715	8,001	51,403
Others	5,286	11,302	-	13,301	-	29,889
	316,687	74,899	-	112,450	159,152	663,188

(\* Concentrating not included)



## Directors and Senior Management Profiles



# Directors and Senior Management Profiles

## Executive Directors

**Mr. Li Weijian (李維健)**, aged 59, joined in 2010, and is the Chairman, Chief Executive Officer and Executive Director of the Company. He is also a member of Remuneration Committee and Nomination Committee. He is also the Chairman and general manager of South Manganese Group. He is also a director of several subsidiaries of the Group. He graduated from Shenyang Gold Vocational Training College (瀋陽黃金專科學校) with professional qualifications in mining mechanics in 1982. He obtained a Master of Business Administration degree for senior management from Huazhong University of Science and Technology (華中科技大學) in 2008 and was granted the title of the senior engineer at professor grade in mechanical engineering in 2013 by China Iron and Steel Association and received the special subsidy from the State Council. He was granted “the excellent specialist of Guangxi Zhuang Autonomous Region” by the Guangxi Government. He is a member of the International Manganese Institute, the Chairman of its electrolytic products division. He is also a tutor of the doctor degree and the master degree students and a part time professor of various universities. Mr. Li has 36 years of experience in manganese mining and manganese related business, at both the management and operational level and has assumed a wide spectrum of roles in different mining companies.

**Mr. Zhang He (張賀)**, aged 35, joined in 2020 as an Executive Director and vice president of the Company. He is also a member of Remuneration Committee and Nomination Committee. He is also a director of South Manganese Group. He obtained a master’s degree in accounting from Jilin University in 2012. He has held various positions including assistant to the general manager of the seventh business development department in Huarong

Securities Co., Ltd. and China Huarong International Holdings Limited (both are subsidiaries of China Huarong Asset Management Co., Ltd. (“China Huarong”). From 2016 to 2018, he served as the general manager of the risk management department of Huarong International Financial Holdings Limited (Stock Code: 0993.HK) (a subsidiary of China Huarong). Mr. Zhang He is familiar with the rules of domestic and overseas securities markets and the standardized operations of listed companies and has extensive company management work experience.

**Mr. Zhang Zongjian (張宗建)**<sup>Note</sup>, aged 45, joined in 2020 as an Executive Director of the Company. He is currently the general manager of Shandong Rongyuan Power Technology Co., Ltd. He obtained a bachelor’s degree in journalism from Shandong University in 2002. He has held as the general manager of Jinan Houde Hanzhang Economic and Trade Co., Ltd. He has extensive experience in corporate management of electricity power industry.

## Non-Executive Directors

**Mr. Lyu Yanzheng (呂衍蒸)**, aged 54, joined in 2016 as a non-executive Director of the Company. He is the vice president of CITIC Metal Group Limited, a director of CITIC Kazakhstan Limited Liability Partnership and an independent director of JSC Karazhanbasmunai (all these companies are subsidiaries of CITIC Limited (Stock Code: 0267.HK) which is a subsidiary of CITIC Group). He is also the Chairman of CITIC Jinzhou Metal Co., Ltd. and the Vice Chairman of CITIC Titanium Industry Co., Ltd. (all these companies are subsidiaries of CITIC Group). Mr. Lyu holds a Master Degree in Economics at Capital University of Economics and Business. He has held various positions in CITIC Group and his last position was a division director and assistant general manager of Strategic and Development Department of CITIC Group. Mr. Lyu has extensive experience in management.

Note: As detailed in our announcement dated 25 March 2022, Mr. Zhang Zongjian resigned from his position as an executive Director of the Company and Mr. Xu Xiang was appointed as an executive Director of the Company with effect from 25 March 2022.

## Directors and Senior Management Profiles

**Mr. Cheng Zhiwei (程智偉)**, aged 58, joined in 2019 as a non-executive Director of the Company. He was a deputy director and then a director of the supervisory board of State-owned Assets Supervision and Administration Commission of the People's Government of Guangxi Zhuang Autonomous Region ("**SASAC of Guangxi**") (the indirect controlling shareholder of Guangxi Dameng) and a supervisor of various subsidiaries of SASAC of Guangxi (including but not limited to Guangxi Liuzhou Iron and Steel Group Co., Ltd. (formerly known as Guangxi Liuzhou Iron and Steel (Group) Company), Guangxi Liugong Group Co., Ltd., and Guangxi Automobile Group Co., Ltd. (formerly known as Liuzhou Wuling Motors Co., Ltd.)) from 2008 to 2013. He was also a director and general manager of Guangxi Guowei Asset Management Co., Ltd. (a subsidiary of SASAC of Guangxi) from 2013 to 2014. He has been a director and general manager of Guangxi Dameng since September 2014 and was re-designated as its chairman in August 2017 and worked up to and resigned in July 2020. Mr. Cheng graduated from Central South University with a bachelor degree in laws and obtained a postgraduate certificate in philosophy of science and technology (economic development and social management focus) from Guangxi University. He has the senior economist and lawyer professional qualifications in the People's Republic of China.

**Ms. Cui Ling (崔凌)**, aged 46, joined in 2019 as a non-executive Director of the Company. She is also a member of Audit Committee. She is currently a dispatch director and chief financial officer of Guangxi Dameng. Ms. Cui was the head of financial department of Linan Railway Co., Ltd. (an associate company of Guangxi Railway Investment Group Co., Ltd. ("**Guangxi Railway**") (the direct controlling shareholder of Guangxi Dameng)) from 2011 to 2012. She has held many positions in Guangxi Railway and certain of its subsidiaries since May 2012 including the deputy head of finance and planning department of Guangxi Railway from 2014 to 2018. She was re-designated as the deputy general manager and chief financial officer of Guangxi Dameng in July 2018. Ms. Cui graduated from Beijing Jiaotong University with a bachelor degree in accounting and has the certified senior accountant qualification in the People's Republic of China.

### Independent non-executive Directors

**Mr. Zhang Yupeng (張宇鵬)**, aged 41, joined in 2020 as an independent non-executive Director of the Company. He is the Chairman of Nomination Committee and a member of Remuneration Committee and Audit Committee. He obtained a bachelor's degree in civil engineering from China University of Petroleum (East China) in 2003 and a master's degree in engineering from the International School of Software of Wuhan University in 2006. Mr. Zhang has held various positions in the General Office of the People's Government of Shandong Province, China. He is familiar with Chinese government operation procedures as well as the procedures and operations of capital operation projects. He is also conversant with the operation of investment and financing business, and is skillful at market analysis and modern enterprise management.

**Mr. Yuan Mingliang (袁明亮)**, aged 55, joined in 2021 as an independent non-executive Director. He is the Chairman of Remuneration Committee and a member of Nomination Committee and Auditor Committee. He has been a professor of materials science and doctoral supervisor of Central South University since 2003. From 2004 to 2005, Mr. Yuan also worked as a senior visiting scholar at the University of Alberta in Canada for collaborative scientific research. From 2012 to 2017, he has served as a technical consultant successively for Nuokai Chemical Trading (Shanghai) Co., Ltd. (諾凱化工貿易(上海)有限公司), Guangxi Yuanchen New Energy Materials Co., Ltd. (廣西遠辰新能源材料有限責任公司) and Lingshan Jiaofeng Chemical Co., Ltd. (靈山縣驕豐化工有限公司). He was also responsible for the new product development, technology service and technology management as a project leader in partnership with many large domestic manganese processing enterprises such as Chenzhou Jinyitai Manganese Industry Co., Ltd. (郴州金怡泰錳業有限公司), Anhui Xinmengdu Technology Co., Ltd. (安徽新錳都科技有限公司).



## Directors and Senior Management Profiles

**Mr. Lau Wan Ki (劉運祺)**, aged 37, joined in 2021 as independent non-executive Director of the Company. He is also the Chairman of Audit Committee and a member of Nomination Committee and Remuneration Committee. He is a certified public accountant of the Hong Kong Institute of Certified Public Accountants. He has over 14 years of experience in the field of corporate finance and accounting. Mr. Lau currently serves as an executive director of Yue Xiu Capital Limited. From 2007 to 2011, he worked at the audit department of KPMG in Hong Kong with his last position as assistant manager. He then served various positions at China Tonghai Capital Limited (a subsidiary of China Tonghai International Financial Limited (Stock Code: 0952.HK)) from 2011 to 2015 with his last position as senior manager. After that, Mr. Lau served at Lego Corporate Finance Limited (a subsidiary of LFG Investment Holdings Limited (Stock Code: 3938.HK)) from 2016 to 2020 with his last position as executive director.

### Senior Management

**Mr. Leung Chit Yu (梁捷瑜)**, aged 37, joined the Company in 2021. He is a certified public accountant of the Hong Kong Institute of Certified Public Accountants and has the Financial Risk Manager certification offered by Global Association of Risk Professionals. He has over 14 years of experience in accounting, corporate finance, mergers and acquisitions, and risk management.



**Corporate  
Governance  
Report**



# Corporate Governance Report

The Company has always adhered to the core values of “relying on manganese as resources, people as base, to create wealth and life”. We acquire high-quality manganese ore resources through exploration and acquisitions, accelerate technological improvement and product research and development, improve energy saving and environmental protection, strengthen management and scientific research team building, expand supply chain services, increase production capability and international manganese ore trade, in order to practice our strategy of “being a world-class manganese corporation with top-level development, modern technology and integrated whole industry chain”, building South Manganese brand name, promoting manganese industry upgrade, and becoming the leader group in the industry.

The Company is committed to maintaining a good and sensible framework of corporate governance and to complying with applicable statutory and regulatory requirements with a view to assuring the conduct of the management of the Company as well as protecting the interests of all shareholders. We respect and are committed to comply with the laws, rules and regulations of each country and area in which we operate, and we strive to ensure for our people a healthy and safe working environment which is our paramount concern. The Board assumes responsibility for leadership and control of the Company and is collectively responsible for promoting the success of the Company.

## Compliance with the Code on Corporate Governance Practices

The Board is of the view that the Company has, for the year ended 31 December 2021, save for the deviation from the code provision A.2.1 applied the principles and complied with the applicable code provisions, and also complied with certain recommended best practices, of the Code on Corporate Governance Practices (the “CG Code”) as set out in Appendix 14 to the Listing Rules.

## Code Provision A.2.1

### Chairman and Chief Executive Officer

As detailed in the Corporate Governance Report in our 2020 Annual Report, since 22 December 2020, the posts of Chairman and Chief Executive Officer were combined and Mr. Li Weijian, the Chairman of the Board assumed the role of the Chief Executive Officer until his resignation from the Company on 22 December 2020. This arrangement deviates from the code provision A.2.1 of the CG Code. The Board believes that vesting the roles of both the Chairman and the Chief Executive Officer in the same person can facilitate the execution of the Group’s business strategies and boost effectiveness of its operation. The Board further believes that the balance of power and authority for the arrangement will not be impaired and is adequately ensured by the Board which comprises experienced and high caliber individuals with sufficient number thereof being independent non-executive Directors, which can provide sufficient checks to protect the interests of the Company and the Shareholders.

## Board of Directors

As at 31 December 2021, the Board comprises a total of nine members, with three executive Directors, three non-executive Directors and three independent non-executive Directors:

### Executive Directors:

Mr. Li Weijian (Chairman and Chief Executive Officer)  
Mr. Zhang He  
Mr. Zhang Zongjian

### Non-executive Directors:

Mr. Lyu Yanzheng  
Mr. Cheng Zhiwei  
Ms. Cui Ling

### Independent non-executive Directors:

Mr. Zhang Yupeng  
Mr. Yuan Mingliang  
Mr. Lau Wan Ki

The list of directors of the Company and their respective roles and functions are posted on the websites of the Company and the Stock Exchange.

The Board has a balanced composition of executive, non-executive and independent non-executive Directors so that it can effectively exercise independent judgement.

The Board possesses a balance of skills and experience appropriate for requirements of the business of the Company. All Directors take decisions objectively in the interests of the Company. The Directors, individually and collectively, are aware of their responsibilities and accountability to shareholders and for the manner in which the affairs of the Company are managed and operated.

The Group has management expertise in manganese exploration, mining and development as well as ore processing and downstream manganese processing operations. The Board has the required knowledge, experience and capabilities to operate and develop the Group's businesses and implement its business strategies.

The biographies of the Directors and senior management are set out on pages 52 to 54 of this annual report.

The Board determines which functions are reserved to the Board and which are delegated to the management. It delegates appropriate aspects of its management and administrative functions to management. It also gives clear directions as to the powers of management; in particular, with respect to the circumstances where management must report back and obtain prior approval from the Board before making decisions or entering into any commitments on behalf of the Company. These arrangements are reviewed on a periodic basis to ensure they remain appropriate to the needs of the Company.

Important matters are reserved to the Board for its decision, including long-term objectives and strategies, extension of the Group's activities into new business areas, appointments to the Board and the board committees, annual internal controls assessment, annual budgets, material acquisitions and disposals, material connected transactions, announcements of interim and final results and dividend proposal, etc.

### Appointment, Retirement and Re-election of Directors

All Directors are subject to re-election at regular intervals. The Bye-Laws provides that at each annual general meeting, one-third of the Directors shall retire from office by rotation and every Director is subject to retirement at least once every three years. In addition, any Director appointed by the Board to fill a causal vacancy shall hold office only until the next following annual general meeting of the Company and shall be eligible for re-election.

Accordingly, in accordance with the Bye-Laws, Mr. Li Weijian, Mr. Xu Xiang<sup>Note</sup>, Mr. Cheng Zhiwei, Ms. Cui Ling and Mr. Lau Wan Ki will retire by rotation and, being eligible, offer themselves for re-election at the 2022 AGM.

### Board Diversity Policy

The Board has adopted a board diversity policy which sets out the approach to achieve diversity on the Board. The Company recognises that diversity at both the Board and workforce (including senior management) level will support the attainment of the Company's strategic objectives and sustainable development. Further details of our workforce diversity is disclosed in our Human Resources Report.

It also sets out the Board's consideration to gender diversity and other diversity aspects, with the ultimate goal of achieving gender parity on the Board and workforce level (subject to nature of the job position). The Company currently has one female Director, and the Board will take opportunities and consider to increase the proportion of female members over time as and when suitable candidates are identified.

Note: As detailed in our announcement dated 25 March 2022, Mr. Zhang Zongjian resigned from his position as an executive Director of the Company and Mr. Xu Xiang was appointed as an executive Director of the Company with effect from 25 March 2022.



## Corporate Governance Report

The Company seeks to achieve board diversity through the consideration of a number of factors, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and other factors. The Nomination Committee is responsible for reviewing the composition of the Board with reference to these factors and by taking into consideration the Company's business model and specific needs from time to time.

The Nomination Committee is also responsible for reviewing the board diversity policy, measurable objectives and progress achieved thereof to ensure the policy's continued effectiveness from time to time.

### Non-executive Directors and Independent Non-executive Directors

The non-executive Directors and the independent non-executive Directors are seasoned individuals from diversified backgrounds and industries and one of the independent non-executive Directors has an appropriate accounting qualification and related financial management expertise as required by the Listing Rules.

With their expertise and experience, they serve the relevant function of bringing independent judgement and advice on the overall management of the Company. They take the lead where potential conflicts of interests arise. Their responsibilities include maintaining a balance between the interests of minority shareholders and the Company as a whole. All independent non-executive Directors are invited to participate in board meetings so that they are able to provide at such meetings their experience and judgement on matters discussed in the meetings.

Our non-executive Directors, Mr. Cheng Zhiwei and Ms. Cui Ling have entered into service agreement with the Company respectively for a fixed term of three years commencing from 1 July 2019. Our non-executive Director, Mr. Lyu Yanzheng has entered into service agreement with the Company respectively for a fixed term of three years commencing from 30 November 2020.

Our independent non-executive Directors, Mr. Zhang Yupeng, Mr. Yuan Mingliang and Mr. Lau Wan Ki have entered into service agreement with the Company respectively for a fixed term of two years commencing from 22 December 2020, 31 March 2021 and 31 July 2021 respectively.

All independent non-executive Directors serve on the Nomination Committee, Remuneration Committee and Audit Committee. They are invited to participate in board meetings so that they are able to provide at such meetings their experience and judgement on matters discussed in the meetings.

### Independence of Independent Non-executive Directors

In determining the independence of the independent non-executive Directors, the Company makes reference to the criteria of independence as set out in Rule 3.13 of the Listing Rules. Assessments of the independent non-executive Directors' independence are carried out upon their appointment, annually and at any other time as appropriate. The Nomination Committee conducts annual review of the independence of independent non-executive Directors before confirming their independence status to the Board. The relevant independent non-executive Directors will abstain from participating in the assessments of their own independence.

The Company has received an annual confirmation of independence from each of the independent non-executive Directors. The Company is of the view that all the independent non-executive Directors meet the guidelines for assessing independence as set out in rule 3.13 of the Listing Rules and considers them to be independent.

### Directors' Commitments

The Board regularly reviews the contributions required from Directors to perform their responsibilities to the Company, and whether they are spending sufficient time and attention in performing their responsibilities. It also considers whether Directors, who have multiple board representations, are able to and have been devoting sufficient time to discharge their responsibilities as Directors of the Company adequately.

The Company has received confirmation from each Director that he has spent sufficient time and attention to the affairs of the Company during the year.

All Directors have also disclosed to the Company the number and nature of offices held in Hong Kong or overseas listed public companies or organisations and other significant commitments, with the identity of the public companies or organisations. Directors are reminded to notify the Company Secretary in a timely manner any change of such information.

### Responsibilities of Directors

Directors, both collectively and individually, are required to fulfill fiduciary duties and duties of skill, care and diligence to a standard commensurate with the standard established by the laws of Hong Kong. Every Director is required to know his responsibilities as a Director of the Company and of the conduct, business activities and development of the Company.

Independent non-executive Directors and non-executive Directors shall make positive contributions to the development of the Company's strategy and policies through independent, constructive and informed comments.

The Company provides Directors with a directors' and officers' liability insurance coverage to protect them from loss as a result of any legal proceedings against themselves.

### Directors' Interests

To the best of the knowledge of the Company, there is no financial, business, family or other material or relevant relationship among members of the Board or between the Chairman and the Chief Executive Officer.

### Model Code for Securities Transactions by Directors

The Company has adopted the rules of no less stringent than the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") as set out in Appendix 10 to the Listing Rules (the "**Securities Dealings Code**") as its code of conduct for dealings in securities of the Company by the Directors.

All Directors confirmed, following specific enquiry by the Company, that they have complied with the required standards set out in the Securities Dealings Code throughout the year.

### Handling and Dissemination of Inside Information

The Company has in place a policy on handling and dissemination of inside information ("**Policy**"), which has taken into account the requirements of Part XIVA (Disclosure of Inside Information) of the Securities and Futures Ordinance and the Listing Rules in relation to the continuing disclosure obligation of inside information. The Policy sets out the procedures and internal controls for handling and dissemination of inside information in a timely manner in such a way so as not to place any person in a privileged dealing position and to allow time for the market to price the listed securities of the Company with the latest available information.

This Policy also provides guidelines to staff of the Company to ensure proper safeguards exist to prevent the Company from breaching the statutory disclosure requirements. It also includes appropriate internal control and reporting systems to identify and assess potential inside information. Dissemination of inside information of the Company shall be conducted by publication of the relevant information on the websites of the Company and the Stock Exchange, according to the requirements of the Listing Rules.



## Corporate Governance Report

### Supply of and Access to Information

All Directors are provided in a timely manner with appropriate information that enables them to make an informed decision and to discharge their duties and responsibilities as Directors of the Company. To ensure that the Board is well supported by accurate, complete and timely information, Directors have unrestricted access to Board papers, minutes and related materials.

Management is aware that it has an obligation to supply the Board and board committees with adequate information in a timely manner to enable them to make informed decisions. The information supplied must be complete and reliable.

The Board and each Director have separate and independent access to the Company's senior management. In respect of regular Board meetings and board committee meetings and so far as practicable in all other cases, an agenda and accompanying meeting papers are sent in full to the Directors or respective committee members in a timely manner and at least 3 days before the intended date of meeting.

### Continuous Professional Development

All Directors, including non-executive Directors and Independent non-executive Directors, should keep abreast of their collective responsibilities as Directors and of the business and activities of the Group.

All Directors participate in continuous professional development to develop and refresh their knowledge and skills. The Company from time to time keep the Directors updated on areas, including directors' duties and responsibilities, corporate governance and changes in regulatory requirements, to enable them to properly discharge their duties. The Company is responsible for arranging and funding suitable training for Directors. Each of the Directors provides a record of the training he received to the Company on an annual basis.

A summary of trainings attended by the Directors during the year is set out below:

<b>DIRECTORS</b>	<b>TYPES OF CONTINUOUS PROFESSIONAL DEVELOPMENT (NOTES)</b>
<b>Executive Directors</b>	
Mr. Li Weijian (Chairman and Chief Executive Officer)	(1), (2)
Mr. Zhang He	(1), (2)
Mr. Zhang Zongjian	(1), (2)
<b>Non-executive Directors</b>	
Mr. Lyu Yanzheng	(1), (2)
Mr. Cheng Zhiwei	(1), (2)
Ms. Cui Ling	(1), (2)
<b>Independent Non-executive Directors</b>	
Mr. Zhang Yupeng	(1), (2)
Mr. Wang Zhihong (resigned on 31 March 2021)	(1), (2)
Mr. Yuan Minliang (appointed on 31 March 2021)	(1), (2)
Mr. Lin Zhijun (resigned on 31 July 2021)	(1), (2)
Mr. Lau Wan Ki (appointed on 31 July 2021)	(1), (2)

Notes:

- (1) Attending seminars and/or conferences and/or forums and/or in-house trainings
- (2) Reading materials in relation to the roles, functions and duties of a listed company Director and the latest developments in the relevant rules and regulations

## 2021 Directors' Attendance Records at Board Meetings, Committee Meetings and Annual General Meeting

Attendance records of the Directors at Board meetings, Nomination Committee meetings, Remuneration Committee meetings, Audit Committee meetings, chairman's meeting with independent and other non-executive directors and annual general meeting held in 2021 are as follows:

	Number of meetings held during the year							2021 AGM
	Attended / Eligible to attend							
	Board meeting	Chairman's meeting with independent non-executive Directors	Independent non-executive Directors' meeting	Nomination Committee	Remuneration Committee	Audit Committee		
<b>Executive Directors</b>								
Mr. Li Weijian <i>(Chairman and Chief Executive Officer)</i>	7/7	1/1	N/A	4/4	4/4	N/A	1/1	
Mr. Zhang He	7/7	N/A	N/A	4/4	4/4	N/A	1/1	
Mr. Zhang Zongjian	7/7	N/A	N/A	N/A	N/A	N/A	1/1	
<b>Non-executive Directors</b>								
Mr. Lyu Yanzheng	7/7	N/A	N/A	N/A	N/A	N/A	1/1	
Mr. Cheng Zhiwei	2/7	N/A	N/A	N/A	N/A	N/A	1/1	
Ms. Cui Ling	7/7	N/A	N/A	N/A	N/A	4/4	1/1	
<b>Independent non-executive Directors</b>								
Mr. Zhang Yupeng	7/7	1/1	1/1	4/4	4/4	3/4	1/1	
Mr. Wang Zhihong <i>(resigned on 31 March 2021)</i>	1/1	1/1	1/1	1/1	1/1	1/1	N/A	
Mr. Yuan Mingliang <i>(appointed on 31 March 2021)</i>	6/6	N/A	N/A	3/3	3/3	3/3	1/1	
Mr. Lin Zhijun <i>(resigned on 31 July 2021)</i>	4/4	1/1	1/1	3/3	4/4	2/2	1/1	
Mr. Lau Wan Ki <i>(appointed on 31 July 2021)</i>	3/3	N/A	N/A	1/1	N/A	2/2	N/A	
Average attendance rate	92%	100%	100%	100%	100%	94%	100%	



## Corporate Governance Report

### Board Meetings

Under code provision A.1.1 of the CG Code, the Board shall meet regularly and at least four times a year at approximately quarterly intervals. The Board has scheduled to meet at least four times a year in approximately quarterly intervals, either in person or by electronic means of communication.

A total of seven board meetings were held in 2021 to discuss and review, inter alia, the following matters:

- 1) the business development, acquisition and strategies of the Group;
- 2) the financing matters and capital structure of the Group;
- 3) the Group's financial and operational performance;
- 4) the annual and interim results of the Group;
- 5) the Group's cost reduction and efficiency increase measures;
- 6) the dividend proposals;
- 7) the auditor's fees;
- 8) the Group's internal control matters;
- 9) the Group's corporate governance matters including change of directors.

In addition to board meetings, the chairman also holds regular meetings with executive Directors and at least one meeting with independent non-executive Directors annually without the presence of other Directors. The independent non-executive Directors freely provide their independent opinion to the Board.

All Directors are invited to include matters in the agenda for regular board and committee meetings. The Company gives not less than fourteen days prior written notice of a regular board meeting and reasonable prior notice for all other board meetings.

If any Director or his associates have any material interest in any proposed Board resolutions, such Director shall not vote (nor be counted in the quorum) at a meeting of the Directors on any resolutions approving any contract or arrangement or concerning a matter in which he or any of his associates has directly or indirectly a material interest.

All Board meetings involve the active participation, either in person or through other electronic means of communication, of a majority of Directors.

Directors with different views are encouraged to voice their concerns. They are allowed sufficient time for discussion of issues so as to ensure that Board decisions fairly reflect Board consensus. A culture of openness and debate is promoted to facilitate the effective contribution of Non-executive Directors and ensure constructive relations between Executive and non-executive Directors. During the year, the Chairman met with the Independent non-executive Directors and non-executive Directors.

Minutes of the meetings of the Board and board committees record in sufficient detail the matters considered by the Board and the board committees, the decisions reached, including any concerns raised by Directors or dissenting views expressed. Draft and final versions of minutes of the meetings of the Board, the Nomination Committee, the Remuneration Committee and the Audit Committee are sent to all Directors or respective board committee members for their comment and record within a reasonable period after the meetings are held. Minutes of the meetings of the Board, the Nomination Committee, the Remuneration Committee and the Audit Committee are kept by the Company Secretary.

All Directors have access to the advice and services of the Company Secretary with a view to ensuring that board procedures and all applicable rules and regulations are followed. The Directors also have separate and independent access to the senior management of the Company to make further enquiries or to obtain more information where necessary. The Company provides an agreed procedure enabling the Directors to seek independent professional advice at the Company's expense.

### Delegation by the Board

#### 1. Board Committees

The Board has delegated authority to Nomination Committee, Remuneration Committee and Audit Committee with specific roles and responsibilities. Their terms of reference and composition are posted on the websites of the Company and the Stock Exchange and reviewed and updated regularly to ensure that they remain appropriate and reflect changes in good practice and governance.

##### A. Nomination Committee

The Nomination Committee is responsible to the Board for leading the process for Board appointments, its succession planning and for identifying and nominating for the approval of the Board candidates for appointment to the Board and appointment of senior management.

The Nomination Committee is also responsible for reviewing the structure, size and composition (including age, gender, skills, knowledge and experience) of the Board at least annually and making recommendations to the Board regarding any proposed changes, identifying individuals suitably qualified to become board members and selecting or making recommendations to the Board on the selection of individuals nominated for directorships. The Nomination Committee is also responsible for assessing the independence of independent non-executive Directors and making recommendations to the Board on relevant matters relating to the appointment or re-appointment of Directors and plans for succession of Directors.

The Nomination Committee has adopted a board diversity policy which is posted on the website of the Company. The Board has conducted annual review on the policy and considered it sufficient and effective.

The Nomination Committee discusses and agrees annually the relevant measurable objectives that the Board has set for implementing the policy and makes recommendation to the Board for approval. It also monitors the implementation of the policy and reports to the Board on the achievement of the measurable objectives for achieving diversity under the policy.

The criteria for the Nomination Committee to select and recommend a candidate for directorship include the candidate's age, gender, skill, knowledge, experience, integrity and potential contributions to the Board and whether he/she can demonstrate a standard of competence commensurate with his/her position as a director of the Company.

The Nomination Committee is provided with sufficient resources, including the advice of professional firms, if necessary, to discharge its duties.

At the date of this annual report, the members of the Nomination Committee are as follows:

Mr. Zhang Yupeng  
(Independent non-executive Director)  
(Committee Chairman)  
Mr. Yuan Mingliang  
(Independent non-executive Director)  
Mr. Lau Wan Ki  
(Independent non-executive Director)  
Mr. Li Weijian (Executive Director)  
Mr. Zhang He (Executive Director)

During the year, the Nomination Committee had the following changes:

1. On 31 March 2021, Mr. Wang Zhihong resigned as a member of the Nomination Committee.
2. On 31 March 2021, Mr. Yuan Mingliang was appointed as a member of the Nomination Committee.



3. On 31 July 2021, Mr. Lin Zhijun resigned as a member of the Nomination Committee.
4. On 2 August 2021, Mr. Lau Wan Ki He was appointed as a member of the Nomination Committee.

The number of meetings held by the Nomination Committee and the attendance of individual members at such meetings in 2021 is recorded on page 61.

In the meetings, the Nomination Committee considered and approved, inter alia, the followings:

1. the review of the structure, number, composition of the Board;
2. the review of the independence of our independent non-executive Directors;
3. the rotation of the directors at the 2021 AGM; and
4. combination of the posts of Chairman and Chief Executive Officer.

### **B. Remuneration Committee**

The purpose of the Remuneration Committee is to make recommendations to the Board on the remuneration policy and structure for all Directors and senior management remuneration.

The Group's remuneration policy seeks to provide fair market remuneration in a form and value to attract, retain and motivate high quality staff. Remuneration packages are set at levels to ensure comparability and competitiveness with other companies in the industry and market competing for a similar talent pool.

Emoluments are also based on an individual's knowledge, skill, time commitment, responsibilities and performance, contribution to the Group and by reference to the Group's profits and performance.

The Remuneration Committee is provided with sufficient resources, including the advice of professional firms, if necessary, to discharge its duties.

At the date of this annual report, the members of the Remuneration Committee are as follows:

- Mr. Yuan Mingliang  
(Independent non-executive Director)  
(Committee Chairman)
- Mr. Zhang Yupeng  
(Independent non-executive Director)
- Mr. Lau Wan Ki  
(Independent non-executive Director)
- Mr. Li Weijian (Executive Director)
- Mr. Zhang He (Executive Director)

During the year, the Remuneration Committee had the following changes:

1. On 31 March 2021, Mr. Wang Zhihong resigned as the chairman of Remuneration Committee.
2. On 31 March 2021, Mr. Yuan Mingliang was appointed as the chairman of the Remuneration Committee.
3. On 31 July 2021, Mr. Lin Zhijun resigned as the member of the Remuneration Committee.
4. On 2 August 2021, Mr. Lau Wan Ki was appointed as the member of the Remuneration Committee.

The number of meetings held by the Remuneration Committee and the attendance of individual members at such meetings in 2021 was recorded on page 61.

In the meetings, the Remuneration Committee reviewed and approved, inter alia, the followings:

1. the remuneration package of directors and senior management for the year;
2. the general annual revision of the remuneration package of the directors and employees of the Group.

No director was involved in deciding his own remuneration.

Details of emoluments of directors and the five highest paid individuals are set out in notes 9 and 10 to the financial statements.

The remuneration of senior management, by band, for the year ended 31 December 2021 is set out below.

<b>Total Remuneration Bands</b>	<b>Number of Executives</b>
HK\$1,500,001 – HK\$2,000,000	1
HK\$3,000,001 – HK\$3,500,000	1
HK\$15,000,001 – HK\$15,500,000	1

### C. Audit Committee

The purpose of the Audit Committee is to establish formal and transparent arrangements for considering how the Board applies the financial reporting and internal control principles and for maintaining an appropriate relationship with the Company's external auditor.

The Audit Committee is also responsible for making recommendations to the Board on the appointment, re-appointment and removal of the external auditor, approving the remuneration and terms of engagement of the external auditor and considering any questions of resignation or dismissal of such auditor.

The Audit Committee reports to the Board any suspected fraud and irregularities, failure of internal control or suspected infringements of laws, rules and regulations which come to its attention and are of sufficient importance to warrant the attention of the Board. It is authorised by the Board to obtain outside legal or other independent professional advice and to invite the attendance of outsiders with relevant experience and expertise if it considers this necessary.

The Audit Committee is provided with sufficient resources, including the advice of professional firms, if necessary, to discharge its duties.

At the date of this annual report, the members of the Audit Committee are as follows:

- Mr. Lau Wan Ki  
(Independent non-executive Director)  
(Committee Chairman)
- Mr. Yuan Mingliang  
(Independent non-executive Director)
- Mr. Zhang Yupeng  
(Independent non-executive Director)
- Ms. Cui Ling  
(non-executive Director)



## Corporate Governance Report

During the year, the Audit Committee had the following changes:

1. On 31 March 2021, Mr. Wang Zhihong resigned as the member of the Audit Committee.
2. On 31 March 2021, Mr. Yuan Mingliang was appointed as the member of the Audit Committee.
3. On 31 July 2021, Mr. Lin Zhijun resigned as the Chairman of the Audit Committee.
4. On 2 August 2021, Mr. Lau Wan Ki was appointed as the Chairman of the Audit Committee.

Mr. Lau Wan Ki and Ms. Cui Ling possess appropriate professional qualifications and experience in financial matters. None of the committee members is or was a partner of the external auditor.

The Audit Committee meets as and when required to discharge its responsibilities, and at least twice in each financial year. The number of meetings held by the Audit Committee and the attendance of individual members at Audit Committee meetings in 2021 is recorded on page 61.

In the meetings, the Audit Committee together with the senior management considered and reviewed (inter alia) the following matters:

1. the financial statements for the year ended 31 December 2020 and the six months ended 30 June 2021;
2. the Group's financial control, internal control and risk management systems;
3. the major findings on review of internal control system and the management's response;

4. the accounting principles and practices adopted by the Company, statutory compliance and other financial reporting matters.

5. the adequacy of resources, staff qualifications and experience, training programmes and budget of the Group's internal audit and financial reporting functions.

The Audit Committee reports to the Board of their findings and conclusions from the meeting referred to in the preceding paragraph.

In addition to the internal meetings, the Audit Committee members meet with the auditor at least twice a year and in addition, at least annually, in the absence of management, to discuss matters relating to audit fees, any issues arising from the audit and any other matters they and the auditor may raise.

## 2. Management Functions

While the Board is responsible for formulating overall strategy to guide and monitor the performance of the Group, the management of day-to-day operation of the Group has been delegated to the management.

Important matters are reserved to the Board for its decision, which include long-term objectives and strategies, extension of the Group's activities into new business areas, appointments to the Board and the board committees, annual internal controls assessment, annual budgets, material acquisitions and disposals, material connected transactions, announcements of interim and final results and dividend proposal.

## Corporate Governance Functions

The Board has the following responsibilities:

- (a) to develop and review the Company's policies and practices on corporate governance; and to review the compliance with the CG Code and disclosures in the corporate governance report;

- (b) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements;
- (c) to review and monitor the training and continuous professional development of the directors and senior management; and
- (d) to develop, review and monitor the code of conduct applicable to the directors and employees.

### Constitutional Documents

During the year, there was no change to the Company's Memorandum of Association and Bye-laws. A copy of the latest consolidated version of the Memorandum of Association and Bye-laws is posted on the websites of the Company and the Stock Exchange.

### Shareholders' Rights

#### Procedures for shareholders to convene a special general meeting

Shareholders, holding at the date of the requisition not less than 10% of the paid-up capital of the Company carrying the right to vote at general meetings of the Company, shall at all times have the right, by written requisition to the Board or the company secretary, to require a general meeting (the "SGM") to be called by the Board for the transaction of any business specified in such requisition.

The requisitionists must state the purpose of the meeting and contact details in the requisition, sign and deposit the requisition at the principal place of business of the Company for the attention of the company secretary.

The SGM shall be held within two months from the deposit of the requisition. If the Board fails to proceed to convene the SGM within 21 days of such deposit, the requisitionists, or any of them representing more than 50% of the total voting rights of all of them, may convene the SGM by themselves in accordance with the provisions of Section 74(3) of the Companies Act 1981 of Bermuda (as amended), but any SGM so convened shall not be held after the expiration of three months from the deposit of the requisition.

#### Procedures for putting forward proposals at general meetings

Shareholders holding not less than 5% of the total voting rights of all shareholders having a right to vote at the general meeting or not less than 100 shareholders can submit a written request stating a resolution to be moved at the annual general meeting or a statement of not more than 1,000 words with respect to a matter referred to in any proposed resolution or the business to be dealt with at a particular general meeting.

The requisitionists must sign and deposit the written request or statement at the registered office of the Company and the principal place of business of the Company for the attention of the company secretary, not less than six weeks before the annual general meeting in the case of a requisition requiring notice of a resolution and not less than one week before the general meeting in the case of any other requisition.

If the written request is in order, the company secretary will ask the Board to include the resolution in the agenda for the annual general meeting or, as the case may be, to circulate the statement for the general meeting, provided that the requisitionists have deposited a sum of money reasonably determined by the Board sufficient to meet the expenses in serving the notice of the resolution and/or circulating the statement submitted by the requisitionists in accordance with the statutory requirements to all the registered shareholders.

#### Procedures for directing shareholders' enquiries to the Board

Shareholders may at any time send their enquiries and concerns with sufficient contact details to the Board at the principal place of business of the Company for the attention of company secretary or e-mail to "ir@southmn.com".

### Financial Reporting

It is the responsibility of the Board to present a balanced, clear and comprehensible assessment of the Company's performance, position and prospects.



## Corporate Governance Report

Management shall provide sufficient explanation and information to the Board as will enable the Board to make an informed assessment of the financial and other information presented before the Board for approval. It provides the Board with monthly updates giving a balanced and understandable assessment of the Company's performance, position and prospects to assist the Board as a whole and each Director to discharge their duties.

The Directors are responsible for keeping proper accounting records and preparing accounts of each financial period, which give a true and fair view of the state of affairs of the Group and of the results and cash flow for that period.

A statement by the auditor about their reporting responsibilities is included in the Independent Auditor's Report on pages 100 to 102.

### Risk Management and Internal Controls

The Board has overall responsibility for evaluating and determining the nature and extent of the risks it is willing to take in achieving the Group's strategic objectives, and maintaining a sound and effective system of risk management and internal control and for reviewing its effectiveness, particularly in respect of the controls on financial, operational, compliance and risk management, to safeguard shareholders' investment and the Group's assets.

The risk management and internal control systems aim to manage, instead of eliminate, risks of failure in achieving the Company's objectives and to provide reasonable, but not absolute, assurance against material misstatement or loss.

The managers of the internal audit department, with the support and assistance from other divisions and departments, directly report to the Audit Committee in respect of risk management and internal control matters of the Group. For daily administration purpose, the internal audit managers report to the Chief Executive Officer and Chief Financial Officer. The Audit Committee, in turn, communicates any material issues to the Board.

The Board assesses and approves our overall risk appetite, monitors our risk exposure and sets the Group-wide limits, which are reviewed on an ongoing basis. Our current assessment of our risks is based on numerous different factors, which is primarily assessed according to exposure and impact.

To the extent that any of these risks are realised, they may affect, among other matters: our current and future business and prospects, financial position, liquidity, asset values, growth potential, sustainable development (whether as to adverse health, safety, environmental, community effects or otherwise) and reputation. Through our continuous optimisation of corporate governance and proactive management, we are endeavoured to mitigate, where possible, the impacts of the risks should they materialise.

The key procedures and processes that the Board established to oversee the Company's risk management and internal control systems on an ongoing basis and to provide effective risk management and internal controls are as follows:

- A distinct organisation structure exists with defined lines of authority and control responsibilities.
- A comprehensive management accounting system is in place to provide financial and operational performance indicators to the management and the relevant financial information for reporting and disclosure purpose.
- Policies and procedures are designed for safeguarding assets against unauthorised use or disposition; for maintaining proper accounting records; and for ensuring the reliability of financial information used within the business or for publication. The procedures provide reasonable but not absolute assurance against material errors, losses or fraud.
- Systems and procedures are also in place to identify, measure, manage, control and report risks including credit, market, operational, liquidity, interest rate, strategic, legal and reputation risks.

- An internal audit department that, amongst others, carries out the analysis and independent appraisal of the adequacy and effectiveness of the Company's risk management and internal control systems. The internal audit managers report to the Audit Committee of any findings revealed in the course of their daily work including material internal control defects, if any.
- The audit reports (including management letter) submitted by external auditor to the Group's management in connection with annual audit.
- A policy on handling and dissemination of inside information is in place, setting out the guiding principles, procedures and internal controls for the handling and dissemination of inside information in a timely manner.
- A whistle-blowing policy is in place, which encourages employees to raise concerns, in confidence, with the Audit Committee about possible improprieties in any matter related to the Company. The Company treats all information received in confidence and protects the identity and the interests of all whistle-blowers.

During the year, the Board conducted a review of the adequacy and effectiveness of the risk management and internal control systems of the Group by reviewing the work of the internal audit department, the Group's external auditor, and regular reports from management including those on risk management, regulatory compliance and legal matters. The Board considered the risk management and internal control systems of the Group effective and adequate and complied with the code provisions of the CG Code.

### Independent Auditor

The Company's independent auditor is Ernst & Young. For the year ended 31 December 2021, the remuneration payable by the Group to Ernst & Young is set out below:

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#### Services provided by the auditor for the year ended 31 December 2021

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	HK\$
Annual audit services	4,998,000
Taxation services	440,000
<b>Total</b>	<b>5,438,000</b>

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### Communications with Shareholders

We adhere to the principle of good faith and strictly comply with and implement the Listing Rules to disclose discloseable information on a true, accurate, complete and timely basis and all other information that might have significant impact on the decisions of shareholders and other stakeholders in an active and timely manner. In addition, the Company takes efforts in ensuring all shareholders have equal access to information. As such, the Company has performed its statutory obligation in respect of information disclosure.

To enhance transparency, the Company endeavours to maintain on-going dialogues with shareholders through a wide array of channels such as annual general meetings and other general meetings. Shareholders are encouraged to participate in these meetings.

Separate resolution is proposed for each substantially separate issue at a general meeting by the chairman of that meeting, including the election of director as well as re-election of director. The chairman of the Board, the chairman or member of each of the board committees and external auditor attend and answer questions at the annual general meeting. The members of the independent board committee is available to answer questions at any general meeting to approve connected transaction(s) or any other transaction(s) that is subject to independent shareholders' approval.



## Corporate Governance Report

The Company ensures compliance with the requirements about voting by poll contained in the Listing Rules and the Bye-laws. The share registrar of the Company is normally appointed as scrutineer of the votes cast by way of a poll. In relation to votes taken by way of a poll, results are subsequently published on the websites of the Company and the Stock Exchange.

The Board has adopted a shareholders communication policy which is posted on the website of the Company. The Board has conducted annual review on the policy and considered it sufficient and effective.

The Company is committed to providing clear and reliable information on the performance of the Group to shareholders through interim and annual reports. The website of the Company offers timely and updated information of the Group.

### 2021 AGM

All Directors (including the Chairman, all members of Nomination Committee, Remuneration Committee and Audit Committee) together with our auditor Ernst & Young and our senior managements attended the 2021 AGM.

The Company has provided detailed information on the Company's 2021 AGM in a circular to shareholders which included, inter-alia, a notice of the AGM and information on the retiring Directors who were eligible for re-election at the 2021 AGM. At the 2021 AGM, the Company continued its practice of proposing separate resolutions on each substantially separate issue. Matters resolved at the 2021 AGM are set out as follows:

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#### Matters resolved at the 2021 AGM

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1. To receive and consider the audited financial statements and the report of the directors and the independent auditor's report for the year ended 31 December 2020.
  - 2.(a) To re-elect Mr. Zhang He as an executive director of the Company
  - 2.(b) To re-elect Mr. Zhang Zongjian as an executive director of the Company
  - 2.(c) To re-elect Mr. Lyu Yanzheng as a non-executive director of the Company
  - 2.(d) To re-elect Mr. Lin Zhijun as an independent non-executive director of the Company
  - 2.(e) To re-elect Mr. Zhang Yupeng as an independent non-executive director of the Company
  - 2.(f) To re-elect Mr. Yuan Mingliang as an independent non-executive director of the Company
  3. To authorise the board of directors to fix the Directors' remuneration.
  4. To re-appoint Ernst & Young as auditor of the Company and authorise the board of directors to fix the auditor's remuneration.
  - 5A. To grant a general mandate to the Directors to issue new shares of the Company.
  - 5B. To grant a general mandate to the Directors to repurchase shares of the Company.
  - 5C. To increase the general mandate to be given to the Directors to issue new shares of the Company.
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All the resolutions proposed at the 2021 AGM were voted by poll, and except for item numbered 5A and 5C, all were approved by the shareholders of the Company by way of ordinary resolutions. The Company has engaged its share registrar, Computershare Hong Kong Investor Services Limited to act as the scrutineer for the poll voting. The results of the poll voting were posted on the websites of the Stock Exchange and the Company on the respective dates of meetings.

### 2022 AGM

The Company's 2022 AGM is tentatively scheduled to be held on Thursday, 2 June 2022, the notice of which will be sent to shareholders at least 20 clear business days before the meeting. The circular to shareholders for the 2022 AGM is tentatively scheduled to be despatched to the shareholders before 30 April 2022. Any changes to these dates will be published on the website of the Company and the Stock Exchange.

### Investor Relations

Our senior management is dedicated to maintaining an open dialogue with the investment community to ensure thorough understanding of our Company and our business as well as strategies.

We have emphasised the importance of investor relations by establishing and developing a highly effective investor relations department (the "**Investor Relations Department**").

The main function of the Investor Relations Department is to make fair, consistent and transparent disclosures and maintain appropriate communications with global investors.

The Company meets with investment analysts from time to time particularly following the announcement of financial results. Management also participates in investor conferences, one-on-one meetings, forums and conference calls which enable the Company and investors to better understand each other's concerns and expectations.

The Company maintains effective two-way communications with shareholders and potential investors whose feedback is valuable to the Company in enhancing corporate governance, management and competitiveness. Comments and suggestions are welcome and can be sent to the principal place of business of the Company for the attention of the Investor Relations Department or e-mailed to [ir@southmn.com](mailto:ir@southmn.com).



**Human  
Resources  
Report**



# Human Resources Report



The Group promotes a people-oriented corporate culture, provides competitive compensation and benefits for employees, and continuously diversifies training and development opportunities. The Group also endeavors to achieve the growth and development of both employees and enterprises, and strives to establish the sense of responsibility and a sense of accomplishment for all of our employees in their work.

The outbreak of COVID-19 pandemic in 2020 had greatly plagued the economy and our business. In swift response, our management team implemented various measures to assure the health and safety of our employees. The entire organization united together to fight through this time of hardship and managed to overcome the impacts of the pandemic. Currently we think the COVID-19 situation has been held under control in China. Along with the steady administration of vaccines, we have every confidence that China's economy is looking to rebound soon. Although the Pandemic situation remains challenging in other countries, we believe the global economy will eventually go back to normal with strengthened quarantine measures and the increasing coverage of vaccines.

## Our Employees

As of the end of December 2021, we have a total of 7,235 employees including management and administration staffs (2020: 7,258), which is mainly located in the Mainland China, representing 99% (2020: 99%). We have a total of 2,192 female employees, accounting for 30.3% of the total number of employees. 31.0% (2020: 32.8%) of employees are in the age below 40. Most of them are general employees. It is contemplated in the future number of years, our workforce composition will remain relatively the same.

Set out below is a summary of our employee structure and the turnover analysis.

Headcount by Location	2021			2020
	Male	Female	Total	Total
Hong Kong	8	7	15	16
Mainland China	5,022	2,175	7,197	7,235
Gabon	13	10	23	7
Total	5,043	2,192	7,235	7,258

Headcount by Age	Hong Kong		Mainland China		Gabon		Group	
	2021	2020	2021	2020	2021	2020	2021	2020
60 and above	1	1	19	19	0	0	20	20
51-59	3	4	1,665	1,490	3	1	1,671	1,495
41-50	4	3	3,287	3,359	7	2	3,298	3,364
31-40	6	5	1,764	1,848	9	4	1,779	1,857
30 and below	1	3	462	519	4	0	467	522
Total	15	16	7,197	7,235	23	7	7,235	7,258



## Human Resources Report

Headcount by Employment Category	Hong Kong		Mainland China		Gabon		Group	
	2021	2020	2021	2020	2021	2020	2021	2020
Senior	3	2	10	6	4	4	17	12
Middle	3	4	108	94	3	1	114	99
Professional	2	3	780	738	2	0	784	741
General	7	7	6,299	6,397	14	2	6,320	6,406
Total	15	16	7,197	7,235	23	7	7,235	7,258

### Employees Remuneration

Compliance with external competitiveness and internal equity principle, the Group regularly reviews its remuneration plan in accordance with the employees' experience, responsibilities and performance, etc to ensure that remuneration is in line with market competitiveness. The Group is committed to providing fair market remuneration in form and value to attract, retain and motivate high quality employees. We offer free dormitory and healthy meals to employees in Gabon.

The Group operates the following retirement schemes for its employees:

- (1) a "five social insurance and one housing fund" retirement pension scheme in accordance with the Retirement Policy of the Chinese Government for PRC employees;
- (2) a defined scheme under the Pension Provisioning Law in Gabon for those employees in Gabon who are eligible to participate; and;
- (3) a defined scheme under the Hong Kong Mandatory Provident Fund Schemes Ordinance for those employees in Hong Kong who are eligible to participate.

The assets of the above schemes are held separately from those of the Group in independently administered funds. The Group's contributions as an employer is implemented in accordance with the Retirement Policy of the Chinese Government, the Pension Provisioning Law of Gabon, the Hong Kong MPF Ordinance and the Company's employee handbook.

The Company operates a share option scheme for the purpose of providing incentives. In January 2011, share options of the Company were granted to Directors and selected employees of the Group for rewarding and retaining talents. The Group also provide training programmes to its directors and eligible employees to enhance staff quality, technical knowledge and team spirit.

## Human Resources Report

The employees of the Group in China and Gabon are members of the state-managed retirement benefit schemes operated by the relevant governments. The Group is required to contribute certain percentage of payroll costs to these schemes to fund the benefits. The only obligation of the Group with respect to these schemes is to make the specified contributions. For employees of the Group in Hong Kong which are members of the MPF scheme, the Group contributes 5% of the relevant payroll costs, up to HK\$18,000 per year for each employee to the MPF scheme, which contribution is matched by the employee. The amount charged to consolidated statement of profit or loss for the year ended 31 December 2021 which amounted to HK\$83,441,000 (2020: HK\$31,408,000) represents contributions payable to the plans by the Group at rates specified in the rules of the plans. At 31 December 2021, there were no forfeited contributions which arose upon employees leaving the retirement plans and which are available to reduce the contributions payable in the future years.

### Employee Turnover

The Group attaches great importance to attracting, nurturing and retaining employees and actively promoting the corporate culture of caring for employees, building a harmonious labor relationship and enhancing staff cohesion. We develop a sound employee remuneration policy based on external competitiveness and internal equity principle to ensure the stability and healthy mobility of key employees. At the same time, we also provide a healthy and positive working environment and sound welfare for our employees. We are also committed to maintaining a balance between work and life to retain and motivate qualified employees. (The turnover number does not include normal retirement.)

	Hong Kong		Mainland China		Gabon		Group	
	2021		2021		2021		2021	
	Male	Female	Male	Female	Male	Female	Male	Female
Employee Turnover Number	3	0	174	116	3	4	180	120
Total	3	3	290	304	7	1	300	308
Employee Turnover Rate	20%	18.75%	4.03%	4.2%	30.4%	14.29%	4.15%	4.24%

### Employee Turnover Number

by Age	Hong Kong		Mainland China		Gabon		Group	
	2021	2020	2021	2020	2021	2020	2021	2020
60 and above	0	0	2	14	0	0	2	14
51-59	1	1	64	69	0	0	65	70
41-50	1	0	83	71	0	1	84	72
31-40	0	2	84	89	3	0	87	91
30 and below	1	0	57	61	4	0	62	61
Total	3	3	290	304	7	1	300	308



## Human Resources Report

### Development and Training

We adhere to the people-oriented policy and attach great importance to personnel training and development, and also pay close attention to invest and add value to human capital. Based on the nature of our employees positions and based on reality, we encourage and provide diversified training and development channels to protect employees' fair and adequate training opportunities so as to continuously enhance the professional competence and performance of our staff and provide a wide range of development opportunities. We offer good platform to add value to the Group's human capital and to obtain sustainable and healthy development.

Set out below is a summary of statistics for the training to our employees.

Percentage of Employees Trained by Employment Category	Hong Kong		Mainland China		Gabon		Group	
	2021	2020	2021	2020	2021	2020	2021	2020
	Senior	100	100	100	100	100	100	100
Middle	67	75	79	76	100	100	79	76
Professional	100	67	83	84	100	0	83	84
General	43	71	85	81	100	50	85	81

Average Training Hours per Employee by Employment Category	Hong Kong		Mainland China		Gabon		Group	
	2021	2020	2021	2020	2021	2020	2021	2020
	Senior	48	15	51	59	104	12	68
Middle	14	7	37	54	104	12	52	24
Professional	19	9	24	25	104	0	49	17
General	72	24	30	18	104	12	69	18



## Environmental, Social and Governance Report



# Environmental, Social and Governance Report

We always adhere to the concept of sustainable development including using scientific design and taking advanced, reasonable and effective measures to exploit mine resources scientifically, orderly, and reasonably. As one of the leaders in the industry, we always maintain the harmony between people and nature, demonstrate a new image of a good and responsible mining company. Now we have about 7,200 employees in Hong Kong, Guangxi, Guizhou, China and Gabon, Africa. In addition to continue our long-term goal to provide quality products to our valuable clients in an environmental friendly manner, we are also keen to establish a quality operation system, to protect the safety and health of our employees and also to provide contribution to the surrounding community in which we have businesses.

## Materiality

The Group keeps publishing the Environmental, Social and Governance (ESG) report in its interim report and annual report. This report has been approved by the Board and set out in the Company's annual report. As part of the preparation for compiling this report, we undertake periodic review of the material topics that have affected and continue to affect our business, and our actions to address them. This process focuses our reporting on the sustainability topics which we consider of interest to our key stakeholders, which include national and regional government, community members, our workforce and business partners.

A matter is considered to be material if, in the view of the Board and senior management, it is of such importance that it will, or potentially could, in the short, medium or long term:

- have a significant influence on, or is of particular attention to, our stakeholders; or
- substantively impact our ability to meet our strategic objectives.

Once identified, each material issue is given a priority level based on the level of concern shown by stakeholders, as well as its actual and/or potential impacts on the business. The issues which we identified as being material are in the following four aspects, in no order of priority:

- Safety Production and Labour Protection;
- Energy Savings and Environmental Protection;
- Quality Operation System Establishment, Employment Training and Growth; and
- Social Contribution, Living Environment and Culture Development

The Group attaches great importance to ESG management and incorporates it into the Company's management process. The Board assumes full responsibility for the Group's ESG strategy and reporting and is responsible for assessing and determining the Group's ESG-related risks and ensuring appropriate and effective ESG risk management and proper implementation of the internal monitoring system.

The Group attaches great importance to the communication with stakeholders, by disseminating the Company's ESG concepts and practices through various channels, understanding the concerns of stakeholders and taking action to meet their reasonable expectations and demands.

## Basis of preparation

Unless otherwise stated, the basis for preparation of this report is same as the past years. The data in this report, covers companies, assets and projects in which we have operational control (where we have full authority to implement our operating policies), but does not cover our associated companies.

## Environmental, Social and Governance Report

### Basis of preparation (continued)

A summary of our key performance indicators in the aforesaid four critical areas during the year is set out in the following table:

Critical Areas	Key performance indicators	2021	2020	2019
Safety Production and Labour Protection	Number of Fatalities (Note 1)	0	0	1
	Number of Injuries	2	7	7
	Number of Lost Days Caused by Injuries (Note 2)	67	426	455
Energy Savings and Environmental Protection	Electricity Consumption (MWh) (Note 3)	2,094,164	2,192,446	1,769,239
	(i) Electricity Intensity of EMM (kWh per tonne) (Note 4)	6,568	6,489	6,649
	(ii) Electricity Intensity of EMD (kWh per tonne) (Note 5)	1,833	1,894	2,104
	(iii) Electricity Intensity of silicomanganese alloy (kWh per tonne) (Note 6)	3,930	3,791	3,600
	Water Consumption (tonne) (Note 7)	4,431,471	5,100,416	5,220,427
	(i) Water Intensity of EMM (m <sup>3</sup> per tonne) (Note 8)	3.60	2.90	2.98
	(ii) Water Intensity of EMD (m <sup>3</sup> per tonne) (Note 9)	2.42	1.66	1.62
	(iii) Water Intensity of silicomanganese alloy (m <sup>3</sup> per tonne) (Note 10)	1.26	0.78	0.52
	Greenhouse Gas Emission (tonne) (Note 11)	157	56	49
	Waste Slag Volume (tonne)	1,707,001	1,137,822	1,312,558
	Non-hazardous Waste Produced (tonne) (Note 12)	887,953	1,182,363	961,680
	Total Packaging Material Used for Finished Products Number	1,200,988	1,599,162	739,505
	Quality Operation System Establishment, Employment Training and Growth	Number of Suppliers	368	176
Number of Complaint against our Products		0	6	4
Number of Complaints and/or Legal Cases regarding Corrupt Practices		0	0	0
Number of Employees		7,235	7,258	7,422
Female Ratio (percentage)		30.3	31.2	31.7
Social Contribution, Living Environment and Culture Development	Donation (HKD)	1,217,000	827,000	626,000



## Environmental, Social and Governance Report

### Basis of preparation (continued)

Notes:

1. Fatality is the death of an employee as a result of an occupational illness/injury/disease incident in the course of employment.
2. An occupational illness/injury/disease sustained by an employee causing him/her to miss one scheduled workday/shift or more after the day of the injury.
3. The figures include the total electricity consumption for all the EMM, EMD and silicomanganese alloy processing plants during the year.
4. The figures include the consolidated average electricity usage (kWh) per EMM (tonne) for our EMM production by our EMM plants for the year.
5. The figures include the average electricity usage (kWh) per EMD (tonne) for EMD production by our EMD plants for the year.
6. The figures include the average electricity usage (kWh) per silicomanganese alloy (tonne) for our silicomanganese alloy production by our silicomanganese alloy plants for the year.
7. The figures include the total water consumption for the EMM, EMD and silicomanganese alloy processing plants during the year.
8. The figures include the consolidated average water usage (m<sup>3</sup>) per EMM (tonne) for our EMM production by our EMM plants for the year.
9. The figures include the average water usage (m<sup>3</sup>) per EMD (tonne) for our EMD production by our EMD plants for the year.
10. The figures include the average water usage (m<sup>3</sup>) per silicomanganese alloy (tonne) for our silicomanganese alloy production by our silicomanganese alloy plants for the year.
11. The figures include the greenhouse gas emission for Qinzhou Ferroalloy Plant and Xingyi Ferroalloy Plant during the year. But no such figures of Xingyi Ferroalloy Plant were collected for the year ended 31 December 2019 and the year ended 31 December 2020.
12. The figures include the tailings produced by Daxin Mine, Tiandeng Mine, Changgou Manganese Mine and Bembélé Manganese Mine during the year. Since Waifu Manganese Mine has not come into formal mining production, therefore no tailings were produced in Waifu Manganese Mine during the year.

## 1. Safety Production and Labour Protection

Safety production and labour protection are our top priority. We insist on safety production and continue to strengthen the safety awareness of our workers.

During the year, our major measures are as follows:

(1) Strict Implementation of the Establishment and Execution of the Safety Production System:

In China, we have completed the annual safety assessment for key enterprises organized by the Emergency Management Department of Guangxi Province, and recorded favourable results.

(2) Strict Implementation of Safety Production Responsibility System:

We strictly implemented the safety production responsibility system, requiring each of our production units to endorse and implement the production safety responsibility commitments, which are also part of our requisite appraisals for our employees, so as to ensure our safety production system are in place at all material times.

(3) Hosting of Safety Production Related Meetings:

(i) We organized safety production management committee meetings, which mainly involved review of the safety and environmental protection work report, reporting on the identification of safety accidents, discussion of the annual safety and environmental protection responsibility goals and assessment methods, etc.; and

(ii) We organized a series of special conferences, including but not limited to symposium on important standards for safety and environmental protection of tailings dam, emergency meeting on safety and fire protection, etc

(4) Further Improvement and perfection of the Safety and Environmental Protection Management System:

(i) We established and revised 63 safety and environmental production management systems such as “Production Safety Incident Reporting and Investigation and Processing System”, “Personal Protective Equipment Issuance and Use and Health Management System”, “Safety Production Risk Management and Control System” and “Safety Risk Warning Report System” and etc.; and

(ii) We compiled “Safety and Environmental Protection Management Personnel Management, Supervision and Evaluation Measures” and “Safety and Environmental Protection Management Objectives and Evaluation Measures”, etc.



## Environmental, Social and Governance Report

### 1. Safety Production and Labor Protection (continued)

#### (5) Reinforcement of Production Safety Concept to Our Employees:

In China, we continued to reinforce the production safety concept and self-protection awareness to our employees, including, inter alia, the following:

- (i) We organized all members of the Group to conduct trainings and examinations on laws and regulations regarding safety production, and propelled all subsidiaries to carry out safety education and trainings;
- (ii) We commenced series of activities regarding safety production such as 2021 “Safety Production Month” activities, safety and environment protection knowledge trainings, safety knowledge competition and first aid rescue etc.; and
- (iii) Since the outbreak of the COVID-19, we have established a staff health monitoring system and ensured the safety of working environments by strictly cleaning and disinfecting workplaces in accordance with national and regional public health authorities’ hygiene management requirements for periods of major infectious diseases.

#### (6) Strict Compliance with Labour Standards:

Our employment policies strictly followed the prevailing laws and regulations regarding the compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.

We prohibited the employment of child, forced or compulsory labour in any of our operations. During the year, we did not identify any of our operation or supplier as having significant risk of child labour, young workers exposed to hazardous work, or forced or compulsory labour.

#### (7) Continuous Investment to the Safety Measures:

We committed to invest in our safety measures for labor protection, including protection accessories, dust prevention and noise removal facilities. During the year, we have conducted a review in respect of our workplaces regarding the existing adverse effect of occupational diseases and occupational diseases testing and enhanced the protection equipments with those dangerous positions so as to protect the health of our employees.

Since the outbreak of COVID-19, we have set up monitoring systems at mining areas, office areas, and living areas and strictly implemented regular disinfection in public areas, in order to create safe and hygienic working environment for the employees. Furthermore, we actively purchased anti-epidemic materials to provide protection for employees’ health.

We strongly believe that our carefully designed safety production system, thoroughly implemented and continuous reassessment, can provide sufficient protection to protect the health and safety of our employees.

### 1. Safety Production and Labor Protection (continued)

As a result of our continuous stringent control in respect of the production safety, we continued to keep the number of fatalities and injuries in respect of our employees at a relatively low level. Set out below is a summary of the number of fatalities and injuries, fatality rate and loss of days caused by injuries during the year:

Number of Fatalities (by Location)	2021	2020	2019
Hong Kong	0	0	0
Mainland China	0	0	1
Gabon	0	0	0
Total	0	0	1

Number of Injuries (by Location)	2021	2020	2019
Hong Kong	0	0	0
Mainland China	2	7	7
Gabon	0	0	0
Total	2	7	7

Fatality Rate (%) (by Location)	2021	2020	2019
Hong Kong	0	0	0
Mainland China	0	0	0.01
Gabon	0	0	0
Total	0	0	0.01

Number of Lost Days Caused by Injuries (by Location)	2021	2020	2019
Hong Kong	0	0	0
Mainland China	67	426	455
Gabon	0	0	0
Total	67	426	455

We had enhanced the training towards such workers and actively implemented and reinforced our production safety measures, in order to protect the safety and health of our employees.



## Environmental, Social and Governance Report

### 1. Safety Production and Labor Protection (continued)

#### Compliance with Safety Production Rules and Regulations and Labour Standards

During the year, we continued to strictly follow all the prevailing laws and regulations regarding safety production and labour standards in Hong Kong, Mainland China and Gabon. To the best of our information and knowledge, there are no material non-compliance with the prevailing laws and regulations regarding safety production and labour standards by the Group during the year.

### 2. Energy Savings and Environmental Protection

#### Strict Supervision of Resource Consumption

Our electricity are provided by the local electricity companies or generated by our electricity generators. Our water are either extracted from the rivers or provided by the water supplies authority of the local regions which we operate. The supply of electricity and water are fit for our operation or production purposes and are provided in a stable and effective manner.

We continued to strictly monitor our resources consumption on an ongoing basis and take effective measures to increase energy efficiency. The electricity consumption (including intensity) and water consumption are our top priorities. During the year, we collected the figures for electricity consumption and water consumption for our EMM, EMD and ferroalloy processing plants. Details are set out in the following table:

	2021	2020	2019
Electricity Consumption (MWh)	<b>2,094,164</b>	2,192,446	1,769,239
(i) Electricity Intensity of EMM (kWh per tonne)	<b>6,568</b>	6,489	6,649
(ii) Electricity Intensity of EMD (kWh per tonne)	<b>1,833</b>	1,894	2,104
(iii) Electricity Intensity of silicomanganese alloy (kWh per tonne)	<b>3,930</b>	3,791	3,600
Water Consumption (Tonnes)	<b>4,431,471</b>	5,100,416	5,220,427
(i) Water Intensity of EMM (m <sup>3</sup> per tonne)	<b>3.60</b>	2.90	2.98
(ii) Water Intensity of EMD (m <sup>3</sup> per tonne)	<b>2.42</b>	1.66	1.62
(iii) Water Intensity of silicomanganese alloy (m <sup>3</sup> per tonne)	<b>1.26</b>	0.78	0.52

As compared with year 2020, the decrease in our electricity and water consumption for our EMM during the year was mainly due to decrease in scale of our EMM production as well as our continuous efforts in cost reduction measures.

### 2. Energy Savings and Environmental Protection (continued)

#### Reduction of Waste Production

Waste is a by-product during the process of our production operation. Due to the different operation processes in our mining and downstream production, different types of waste are generated. Throughout the whole production process from our upstream mining up to downstream operations, the biggest volume of hazardous wastes generated are greenhouse gas, waste water, and waste slag while the biggest volume of non-hazardous wastes generated are tailings. Beyond that, the volume of solid and liquid waste we generate is small and the risk of significant environmental spills or leakages is low. We are committed to reducing our various kinds of waste production through technical innovation, so as to reduce their impact on the natural environment.

#### (1) Greenhouse Gas Emissions

The greenhouse gas emissions are mainly caused through pyrometallurgy progress during the ferroalloy production by Qinzhou Ferroalloy Plant and Xingyi Ferroalloy Plant. Beyond that, the greenhouse gas emissions by our other segment of business is relatively not significant and therefore we have not taken into account. We are committed to reducing our greenhouse gas emissions by improving the production technology, reducing energy consumption and continuously and regularly detecting greenhouse gas emissions, so as to reduce the total amount of greenhouse gas emissions and its impact on the natural environment, and meet the environmental impact assessment implementation standards. Details of our greenhouse gas emissions are set out as follows:

	2021	2020	2019
Greenhouse Gas Emission (Tonnes)	157	56	49

The increase in greenhouse gas emission during the year was mainly due to the addition of figures of Xingyi Ferroalloy Plant which were not recorded for the year end 31 December 2019 and 31 December 2020.

#### (2) Waste Water

Water is mainly used for our upstream mining operation and downstream EMM and EMD production. The largest volume of water we withdraw from water bodies is used for grinding of our manganese ores and electrolysis process of our EMM and EMD. However, the majority of the water is discharged back to their sources after appropriate treatment in accordance with local environmental laws and regulations to ensure no adverse environmental impact is introduced. Depending on site-specific conditions, operational situations and age, some of these were introduced in the design stage, and some were initiated after production.

#### (3) Waste Slag

Waste slags are by products of our various downstream productions. We are committed to reducing our waste slag emissions by strict monitoring and management to ensure such waste slags be processed with proper treatments before disposal. Details of our waste slags are set out as follows:

	2021	2020	2019
Waste Slags Volumes (Tonnes)	1,707,001	1,137,822	1,312,558

The increase in waste slag during the year was mainly due to the increase in our production of the EMD.



## Environmental, Social and Governance Report

### 2. Energy Savings and Environmental Protection (continued)

#### Reduction of Waste Production (continued)

##### (4) Non-hazardous Wastes-Tailings

Tailings are produced during the ore processing process of our upstream mining operation. All these tailings are non hazardous and are directed into our designated tailings dams and tailings storage facilities and when full, replantation will be carried out thereof in order to restore their original ecological structure. Details of tailings produced are set out as follows:

	2021	2020	2019
Tailings Production (Tonnes)	<b>887,953</b>	1,182,363	961,680

The decrease in tailings production during the year was mainly due to decrease in our overall mining activities.

##### (5) Packaging Materials used for our finished products

Packaging bags are used to contain our finished products in accordance with the need of our customers. Details of our packaging bags used are set out as follows:

	2021	2020	2019
Packaging bags (Number)	<b>1,200,988</b>	1,599,162	739,505

The decrease in our packaging bags consumption during the year was mainly due to our usage of larger packing bags according to the requirements of the customers, resulting in decrease in usage of packaging bags.

We will continue to monitor the environmental effect in respect of our production, continuing to reduce our waste production, so as to minimise the impact on the surrounding ecosystem.

#### Environmental Regulation: Compliance and Beyond

In China, the implementation of rules and regulations such as Guangxi Zhuang Autonomous Region Green and Harmonious Mines Construction Management Rules (Trial Version), Guangxi Zhuang Autonomous Region Green and Harmonious Mines Construction Implementation Program and National Land Remediation Plan (2016-2020) and their updated rules and regulations, have enhanced upgrading and reform of the green mine constructions regulations and requirements regarding the legal operation, comprehensive utilization, environmental protection, land reclamation, etc. for the mining companies including the Group.

In Gabon, the local government also enhanced the rules and requirements regarding the environmental protection matters.

### 2. Energy Savings and Environmental Protection (continued)

#### Environmental Regulation: Compliance and Beyond (continued)

Notwithstanding that, during the year, we continued our investment in environmental protection measures in compliance with the relevant rules and regulations. We have not breached any environmental rules or regulations which resulted in material fines or prosecutions. We believe that rule compliance is only the minimum standard – we treat it as the floor to our environmental performance. We are committed to the responsible management of both the short and long-term impacts of our business on the environment. This commitment goes beyond compliance and applies to all stages of our business – from planning, building, operation, maintenance to the decommissioning of our facilities and equipment.

#### Energy Savings and Reduction: Continuous Research and Implementation

By strengthening our management method, improving our production facilities and streamlining our production process, we continued our research upon and implement various energy savings and reduction measures. During the year, we have implemented the following measures:

- (1) Our upstream mining business:
  - (i) We continued to optimize production strategy, ensure raw material supply and improve the mining methods, thereby reducing the mining costs;
  - (ii) We fully utilized the potential of equipment through technical improvement, improving our production efficiency and achieving energy saving;
  - (iii) We continued to strengthen the safety management of underground mining, thereby preventing and reducing production safety accidents and ensuring production efficiency; and
  - (iv) We actively carried out equipment maintenance and promoted the implementation of equipment maintenance management.
- (2) Our downstream business:
  - (i) EMM business:
    - (a) We improved the metal recovery rate during our EMM production process, thereby reducing the unit consumption rate;
    - (b) We carried out safety rectification works in respect of safety and environmental risks for our EMM plants, thereby preventing the happening of safety and environmental accidents; and
    - (c) We jointly held an electrolytic metal manganese technology exchange meetings, so as to strengthen communication with other industrial players, improving our technical level and striving to reduce our production costs.
  - (ii) EMD business:
    - (a) We effectively reduced the rinsing times during our EMD production process, and used the recycled rinse water in a systematic manner, thereby reducing the energy consumption; and
    - (b) We increased the chemical leaching efficiency to ensure our quality of electrolysis.



## Environmental, Social and Governance Report

### 2. Energy Savings and Environmental Protection (continued)

#### Energy Savings and Reduction: Continuous Research and Implementation (continued)

(2) (continued)

(iii) Silicomanganese alloy business:

- (a) We studied the government's policies on electricity and mastered the rules of electricity trading, striving to minimize the electricity cost to the largest extent; and
- (b) We continued to reform and innovate, optimize the current production process, and actively explore new process technologies to reduce electricity consumption.

### 3. Quality Operation System Establishment, Employment Training and Growth

(1) Quality Operation System Establishment

We continued to enhance our quality operation system, so as to increase our operational efficiency and effectiveness.

(i) Supply Chain Management

Our suppliers and contractors provide us a wide range of products and services, including fuel and equipment for our upstream mining operations; electricity and other raw materials for our downstream operations; packaging bags and other related accessories for the sales of our final products as well as underground technology innovation construction service and subcontracting processing services, etc. When selecting suppliers, we will encourage them to use as many environmentally friendly products and services as possible, and we have made relevant green procurement policies. Details of the number of our suppliers are set out as follows:

Number of our suppliers	2021	2020	2019
Hong Kong	1	1	1
Mainland China	360	170	402
Gabon	7	5	6
Total	368	176	409

All our suppliers are required to be assessed for their capabilities to fulfill our business needs and such assessment is based on a combination of different and various factors such as their track record, reputation, production capacity as applicable.

In addition, we continued to keep close supervision in respect of procurement practice of normal operation. Save and except for those special suppliers, all other suppliers and contractors are selected based on public auction with strict comparison and assessment.

Furthermore, we also continued to carry out assessment and internal audit in respect of our suppliers on a regular basis, so as to assess whether such suppliers continue to meet our request.

### 3. Quality Operation System Establishment, Employment Training and Growth (continued)

(1) Quality Operation System Establishment (continued)

(ii) Product Quality Supervision

The whole production process, commencing from procurement, production up to after sales services, are strictly complied with ISO9001: quality management requirement, so as to provide customers with continuous and stable products.

We continued our improvements and researches on our production technique and have applied and were granted various patents licenses thereof. All our products (including but not limited to our product advertisements and labels) strictly meet the national and our sector standards and our client's requirements. Among which, our major products, EMM, EMD and manganese sulfate are rewarded with recognition of "Quality products of Guangxi" several times. Such products have been tested by the relevant quality control departments in the PRC and have passed the inspection standards and requirements by the relevant PRC quality assessment bureau.

We continued to provide our clients with quality after sales service and comply with our stringent products quality and safety control system, e.g. "Customers Satisfaction and Complaints Assessment Procedure" and "Products Recall Procedures" etc.

As a result of our continuous stringent control in respect of the quality of our products, the complaints we received in respect of our products and/or recalled continued to remain at a low level. During the year, the complaints we received in respect of our products and/or recalled are as follows:

	2021	2020	2019
Number of products related complaints received and/or recalled	0	6	4



## Environmental, Social and Governance Report

### 3. Quality Operation System Establishment, Employment Training and Growth (continued)

(1) Quality Operation System Establishment (continued)

(iii) Probity Operating System Establishment

We continued to establish probity operating system, including, inter alia, establishment of anti bribery regulation, inclusion of probity system as annual object responsibility audit and execution of probity agreement with our suppliers, etc. We enhanced the responsibility assessment of the department heads and established rational and effective management mechanism to prevent our employees from being engaged in illegal activities such as bribery, extortion, fraud and money laundering, etc.

During the year, we have not received any complaints and/or any legal cases regarding corruption, details are as follows:

	2021	2020	2019
Number of Complaints and/or Legal Cases regarding Corrupt Practices	0	0	0

(iv) Our Code of Conduct and Personal Privacy Protection

All our management and staff are subject to our code(s) of conduct which we implement and review from time to time and such code(s) places them under specific obligations as to the ethics and principles by which our business is conducted. Non-compliance with the code(s) of conduct results in disciplinary action. Disciplinary measures are decided by the relevant line management. These measures are then subject to review and endorsement by the board of directors, in order to ensure the consistency and fairness of treatment.

We monitor and periodically document any complaints related to breaches of customer privacy and loss of customer data. No customer privacy and data loss cases have been reported or noted during the year.

### 3. Quality Operation System Establishment, Employment Training and Growth (continued)

#### (2) Employment Training and Growth

We arranged trainings at all levels of our employees through multi-channels, multi-formats and multi-levels. The key statistics in respect of our training for our employees are set out in the Human Resources Report. In summary, various different training courses were held during the year, effectively improving the quality of staff, and promoting development of our employees.

During the year, our major training activities and projects are as follows:

- (i) Drill of emergency and rescue plan for production safety accidents;
- (ii) Knowledge training on “Mine Safety Management and Fire Safety Management”;
- (iii) Seminar on “New Developments in Mine Safety Management and Advanced Applicable New Technologies”;
- (iv) Knowledge training on “Implementing the main responsibility of enterprise safety production in accordance with laws and regulations”;
- (v) Knowledge training on “Emergency Management of Environmental Incidents”;
- (vi) “Human and Nature Harmonious Coexistence” environmental protection knowledge training;
- (vii) 2021 “Safety Production Month” and safety production, environmental protection management knowledge training;
- (viii) 2021 Training for Young and Middle-aged Managers;
- (ix) Southern Manganese 2021 Young Employee Golden Ideas Innovation and Effectiveness Competition;
- (x) 2021 “Intellectual Property Rights Standard Implementation Training”;
- (xi) “Southern Manganese Open Course - Civil Code Publicity and Law Popularization Training”;
- (xii) “Southern Manganese Innovation Lecture Hall” and held several scientific research trainings; and
- (xiii) “Reduce, Harmless, and Recycle” seminar on comprehensive utilization of manganese slags.



## Environmental, Social and Governance Report

### 4. Social Contribution, Living Environment and Culture Development

Our community investment activities complement the way in which our core business contributes to society, by improving the quality of life for communities through donation of our skills, expertise and resources. The three focus areas of our community investment initiatives are: social contribution, living environment and cultural development, details of which are as follows:

- (1) In China, we treasured our social contribution in particular the surrounding community of our mines and the improvement of the living environment of our employees as well as the cultural development, including the followings:
  - (i) We continued to carry out various charitable activities and offer series of poverty alleviation works through employment, education, training, etc. and to the villages or associations surrounding our mines and production plants, including:
    - (a) We actively donated materials to the local government to support the development of local new rural areas, transportation, education, culture, and sports;
    - (b) Our subsidiaries organized our employees to actively visit nursing centres and orphanages and carry out various charity poverty alleviation activities; and
    - (c) We set up “Youth Volunteer Service Post” to repair electrical appliances for employees and the surrounding people for free.
  - (ii) We continued to offer our help and assistance to our employees particularly those in need, including the followings:
    - (a) We have established a file of employees with difficulties and carried out “one-on-one” precision poverty alleviation, i.e., each company’s management personnel take care of one of its employee in need, and visited her/him regularly to offer help or assistance;
    - (b) We carried out the “Delivering Cools” event regarding our care to employees by distributing cool drinks and delivering heatstroke prevention and cooling materials to the front-line employees;
    - (c) We launched the “Union Enters Ten Thousands of Homes” event to visit and offer condolence to the employees who were awarded model workers, craftsmen and labour medals in recent years;
    - (d) We provided cooking oil, rice and other welfare materials as well as red banners to our employees during Chinese New Year festival and we offered our condolence to the patients, employees in need and elderly; and
    - (e) Since the outbreak of COVID-19, we have continued to actively implement various epidemic prevention measures and provide anti-epidemic materials for all employees.

### 4. Social Contribution, Living Environment and Culture Development

(1) (continued)

(iii) We continued to host or organise various cultural or sports activities to our employees or the surrounding villagers, including the followings:

- (a) We organized and carried out a new year’s garden tour and brisk walking activity on the eve of the Spring Festival;
- (b) We held a theme event of “Praise the Party, Show Demeanor, Show Power” on Women’s Day;
- (c) We organized youth employees to carry out series of theme events of “Learning Party’s History under the Monument” on May 4th; and
- (d) We organized the “South Manganese Cup” football match .

(2) In Gabon, we continued to focus on the local community development and actively participate in various social activities.

We treasure serving our community and therefore, we spent money into the community where our businesses are situated. During the year, our cash donations to charities reached HK\$1,217,000. Details are as follows:

	2021	2020	2019
Donation (HKD)	<b>1,217,000</b>	827,000	626,000

Given the geographical diversity of our business, we take a site-specific or tailored approach to our various social engagements or construction works. As with any investment that the Company makes, we need to be careful that our resources are allocated to community initiatives in a disciplined and systematic way and that this leads to positive, sustainable outcomes as opposed to having a disruptive effect on a community or the local environment. We are confident that selected community initiatives, carefully chosen, thoroughly implemented and carefully monitored, do enhance the Company’s reputation and relationships and do enjoy the support of our shareholders and other stakeholders.



**Shareholding  
Analysis and  
Information for  
Shareholders**

# Shareholding Analysis and Information for Shareholders



## Our Share Information and Our Shareholding Structure

As at 31 December 2021, a summary of our share information is set out below:

<b>Our Share Information as at 31 December 2021</b>	
Authorised Share Capital	HK\$1,000,000,000
Issued Share Capital	HK\$342,845,900
Board Lot	1,000 shares
Market Capitalisation	HK\$4,045,581,620
Number of Issued Shares	3,428,459,000
Closing Price	HK\$1.18

As at 31 December 2021, a summary of our shareholding structure is set out below:

<b>Our shareholding structure as at 31 December 2021</b>				
Size of Registered Shareholdings	No. of Shareholders	Approximate % of Shareholders	No. of Shares	Approximate % of Issued Share Capital
0 – 1,000	1,146	50.42	1,085,945	0.03
1,001 – 5,000	1,066	46.90	2,799,466	0.08
5,001 – 10,000	36	1.58	270,281	0.01
10,001 – 100,000	24	1.06	569,647	0.02
More than 100,001	1	0.04	3,423,733,661	99.86
Total	2,273	100.00	3,428,459,000	100.00

As at 31 December 2021, the Company has over 2,200 registered shareholders. The actual number of investors in the Company's shares is much greater when taking into account the people and organisations that have indirect interest in the Company's shares through intermediaries such as nominees, investment funds and the Central Clearing and Settlement System (CCASS) of Hong Kong.

The Company's largest shareholders are Youfu Investment Co., Ltd. and Guangxi Dameng which hold 29.00% and 22.64% of the Company's shares respectively. The remaining 48.36% of the Company's shares are held by a wide range of institutional or corporate investors based in North America, Europe and Asia, as well as a considerable number of retail investors, most of whom are residents in Hong Kong.



## Shareholding Analysis and Information for Shareholders

### Major Events of the Company and the Tentative Dates in 2022

Set out below are major events of the Company and the tentative dates in 2022 in which shareholders or investors need to pay attention to:

<b>Date</b>	<b>Event</b>
25 March 2022	Announcement of 2021 final results
2 June 2022	2022 AGM
2 August 2022	Announcement of 2022 interim results

Any changes to these dates will be published on the website of the Company and the Stock Exchange.

# Independent Auditor's Report



**To the shareholders of South Manganese Investment Limited**  
*(Incorporated in Bermuda with limited liability)*

## Opinion

We have audited the consolidated financial statements of South Manganese Investment Limited (the “Company”) and its subsidiaries (the “Group”) set out on pages 103 to 190, 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, the consolidated statement of changes in equity and the 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 disclosure requirements of the Hong Kong Companies Ordinance.

## Basis for opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing (“HKSA”) 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 judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor’s responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.



## Independent Auditor's Report

### To the shareholders of South Manganese Investment Limited (continued)

(Incorporated in Bermuda with limited liability)

### Key audit matters (continued)

Key audit matter	How our audit addressed the key audit matter
<i>Impairment of long-term assets</i>	
<p>As at 31 December 2021, the suspension of and reduction in production of certain subsidiaries are factors which heighten the risk of impairment associated with the Group's long-term assets, including property, plant and equipment ("PPE"), right-of-use assets, intangible assets and long-term prepayments. The associates recorded losses and net current liabilities in 2021, which also increases the risk of impairment regarding the Group's investment in associates. During the year ended 31 December 2021, the Group recognised impairment of HK\$69.5 million, HK\$166.9 million, and HK\$15.3 million for PPE, intangible assets and investments in associates, respectively.</p> <p>Management measured the recoverable amount which is the higher of the fair value less costs of disposal of the corresponding cash-generating unit ("CGU") and its value in use with the assistance from independent third party valuation specialists.</p> <p>Recoverability of these CGUs is dependent on macro-economic assumptions about future prices of manganese, lead and zinc products, market demand and discount rate as well as internal assumptions related to the future production capacity and volume and operating costs. The assessment of impairment involves significant estimation uncertainty, subjective assumptions and the application of significant judgement.</p> <p>Relevant disclosures are included in notes 3, 4, 14, 16, 17, and 18 to the consolidated financial statements.</p>	<ul style="list-style-type: none"> <li>• Evaluated management's impairment assessment of these CGUs by comparing the carrying values with their recoverable amounts, and assessed the assumptions and methodologies, including long-term growth rate and forecasted prices based on market trend and forecasted sales quantity based on the existing production capacity adopted by management;</li> <li>• Compared the future revenues and operating results included in the forecasts with the historic performance of the respective CGUs and the business development plan;</li> <li>• Evaluated the discount rate and the methodology used in the calculation of the recoverable amounts of the CGUs, with the assistance of our internal valuation specialists; and,</li> <li>• Assessed the adequacy of impairment related disclosures in the consolidated financial statements.</li> </ul>

**To the shareholders of South Manganese Investment Limited (continued)**

*(Incorporated in Bermuda with limited liability)*

**Key audit matters (continued)**

Key audit matter	How our audit addressed the key audit matter
<i>Impairment provision on trade and notes receivables and other receivables</i>	
<p>As at 31 December 2021, the balance of trade and notes receivables amounted to HK\$1,455 million after a provision of HK\$305 million which was material to the Group, among which a balance of HK\$232 million with an impairment provision of HK\$232 million was due from a single customer and its subsidiaries. Besides, balance of other receivables amounted to HK\$2,058 million, among which an impairment provision of HK\$158 million has been provided.</p> <p>The calculation of the expected credit losses (“ECLs”) for trade and notes receivables and other receivables, including the assessment of the historical observed default rates and forecast economic conditions, involves significant management judgements and estimates. Specific factors which management would consider include the ageing of the balances, existence of disputes, past collection history and other available information related to the forecast economic conditions. The amount of ECLs are sensitive to changes in circumstances and forecast economic conditions.</p> <p>Related disclosures are included in notes 3, 4, 21 and 22 to the consolidated financial statements.</p>	<ul style="list-style-type: none"> <li>• Evaluated the Group’s credit control policy and tested controls over the Group’s receivable collection processes; and</li> <li>• Evaluated the Group’s assessment of ECLs at the end of the reporting period by checking the correctness of the ageing of trade and notes receivables and other receivables, and assessing the repayment history of the debtors and the information related to the forecast economic conditions.</li> </ul>



## Independent Auditor's Report

### To the shareholders of South Manganese Investment Limited (continued)

*(Incorporated in Bermuda with limited liability)*

### Other information included in the Annual Report

The directors of the Company are responsible for the other information. The other information comprises the information included in the Annual Report, other than 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 the directors 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 disclosure requirements of 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 of the Company 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 of the Company either intend to liquidate the Group or to cease operations or have no realistic alternative but to do so.

The directors of the Company are assisted by the Audit Committee in discharging their responsibilities 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. Our report is made solely to you, as a body, in accordance with section 90 of the Bermuda Companies Act 1981, 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 HKSAAs 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 HKSAAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

### To the shareholders of South Manganese Investment Limited (continued)

*(Incorporated in Bermuda with limited liability)*

### Auditor's responsibilities for the audit of the consolidated financial statements (continued)

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

We communicate with the Audit Committee 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.



## Independent Auditor's Report

### To the shareholders of South Manganese Investment Limited (continued)

*(Incorporated in Bermuda with limited liability)*

### Auditor's responsibilities for the audit of the consolidated financial statements (continued)

We also provide the Audit Committee 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 the Audit Committee, 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 this independent auditor's report is Ms. Lee Mee Kwan, Helena.

#### **Ernst & Young**

*Certified Public Accountants*

27/F, One Taikoo Place

979 King's Road

Quarry Bay, Hong Kong

25 March 2022

# Consolidated Statement of Profit or Loss and Other Comprehensive Income

Year ended 31 December 2021

	Notes	2021 HK\$'000	2020 HK\$'000
<b>REVENUE</b>	6	<b>12,830,762</b>	4,367,563
Cost of sales		<b>(10,491,823)</b>	(3,791,058)
Gross profit		<b>2,338,939</b>	576,505
Other income and gains	6	<b>158,422</b>	248,297
Selling and distribution expenses		<b>(135,371)</b>	(104,626)
Administrative expenses		<b>(597,465)</b>	(381,350)
Impairment losses on property, plant and equipment and mining rights	14, 17	<b>(236,425)</b>	(22,166)
Impairment losses on financial assets, net	8	<b>(158,663)</b>	(145,618)
Impairment loss on an investment in an associate	8	<b>(15,325)</b>	(295,781)
Finance costs	7	<b>(219,533)</b>	(213,865)
Other expenses		<b>(252,296)</b>	(12,121)
Share of profits and losses of:			
– Associates	8	<b>(297,347)</b>	(131,914)
– A joint venture	8	–	1,793
		<b>584,936</b>	(480,846)
Gain on bargain purchase from further acquisition of equity interest in a joint venture	8	–	69,411
Loss on deemed disposal of partial interest in an associate	8	–	(92,375)
<b>PROFIT/(LOSS) BEFORE TAX</b>	8	<b>584,936</b>	(503,810)
Income tax (expense)/credit	11	<b>(208,751)</b>	45,956
<b>PROFIT/(LOSS) FOR THE YEAR</b>		<b>376,185</b>	(457,854)
<b>OTHER COMPREHENSIVE INCOME:</b>			
<i>Other comprehensive income that may be reclassified to profit or loss in subsequent periods:</i>			
– Changes in fair value of financial assets at fair value through other comprehensive income		<b>1,127</b>	1,182
– Exchange differences on translation of foreign operations		<b>112,905</b>	147,845
– Share of other comprehensive income of an associate		–	449
– Cash flow hedges, net of tax		<b>3,286</b>	691
<b>TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR</b>		<b>493,503</b>	(307,687)

## Consolidated Statement of Profit or Loss and Other Comprehensive Income

Year ended 31 December 2021

	Note	2021 HK\$'000	2020 HK\$'000
Profit/(loss) attributable to:			
Owners of the parent		466,185	(437,929)
Non-controlling interests		(90,000)	(19,925)
		<b>376,185</b>	(457,854)
Total comprehensive income/(loss) attributable to:			
Owners of the parent		589,531	(284,755)
Non-controlling interests		(96,028)	(22,932)
		<b>493,503</b>	(307,687)
<b>EARNINGS/(LOSS) PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT</b>	12		
Basic		<b>HK\$0.1360</b>	HK\$(0.1277)
Diluted		<b>HK\$0.1360</b>	HK\$(0.1277)

# Consolidated Statement of Financial Position

31 December 2021



	Notes	2021 HK\$'000	2020 HK\$'000
<b>NON-CURRENT ASSETS</b>			
Property, plant and equipment	14	3,574,493	3,354,950
Investment properties	15	114,284	115,394
Right-of-use assets	16(a)	662,257	676,101
Intangible assets	17	367,902	478,014
Investments in associates	18	92,608	306,245
Deferred tax assets	19	12,897	87,896
Prepayments and other assets	22	293,917	68,000
Total non-current assets		5,118,358	5,086,600
<b>CURRENT ASSETS</b>			
Inventories	20	1,399,096	528,237
Trade and notes receivables	21	1,454,714	1,428,827
Prepayments, other receivables and other assets	22	1,764,201	817,400
Due from related companies	36	1,560	4,217
Due from associates	18	–	17,880
Tax recoverable		505	504
Pledged deposits	23	200,547	45,495
Cash and cash equivalents	23	1,045,362	1,129,543
Total current assets		5,865,985	3,972,103
<b>CURRENT LIABILITIES</b>			
Trade and notes payables	24	1,300,221	683,757
Other payables and accruals	25	2,009,900	919,595
Derivative financial instruments	26	–	3,286
Interest-bearing bank and other borrowings	27	3,623,953	2,675,964
Due to related companies	36	1,376	1,873
Tax payable		206,723	3,136
Total current liabilities		7,142,173	4,287,611
<b>NET CURRENT LIABILITIES</b>		<b>(1,276,188)</b>	<b>(315,508)</b>
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>		<b>3,842,170</b>	<b>4,771,092</b>
<b>NON-CURRENT LIABILITIES</b>			
Interest-bearing bank and other borrowings	27	489,942	1,893,415
Deferred tax liabilities	19	140,669	220,295
Other long-term liabilities	28	112,456	47,111
Deferred income	29	54,527	59,198
Total non-current liabilities		797,594	2,220,019
Net assets		3,044,576	2,551,073



## Consolidated Statement of Financial Position

31 December 2021

	Notes	2021 HK\$'000	2020 HK\$'000
<b>EQUITY</b>			
<b>Equity attributable to owners of the parent</b>			
Issued capital	30	<b>342,846</b>	342,846
Reserves	32	<b>2,764,519</b>	2,174,988
		<b>3,107,365</b>	2,517,834
<b>Non-controlling interests</b>			
		<b>(62,789)</b>	33,239
Total equity		<b>3,044,576</b>	2,551,073

**Li Weijian**

*Director*

**Zhang He**

*Director*

# Consolidated Statement of Changes in Equity

Year ended 31 December 2021



Notes	Attributable to owners of the parent												Total equity HK\$'000
	Issued share HK\$'000	Contributed surplus HK\$'000	Hedging reserve HK\$'000	Share option reserve HK\$'000	Fair value reserve of financial assets at fair value through other comprehensive income HK\$'000	Reserve funds HK\$'000	Exchange fluctuation reserve HK\$'000	Capital redemption reserve HK\$'000	Investment related reserve HK\$'000	Accumulated losses HK\$'000	Total HK\$'000	Non-controlling interests HK\$'000	
At 1 January 2020	342,846	2,453,063	(3,977)	41,804	(5,332)	169,342	(39,333)	312	1,602	(156,588)	2,803,739	34,687	2,838,426
Loss for the year	-	-	-	-	-	-	-	-	-	(437,929)	(437,929)	(19,925)	(457,854)
Other comprehensive income/(loss) for the year:													
- Changes in fair value of financial assets at fair value through other comprehensive income, net of tax	-	-	-	-	1,182	-	-	-	-	-	1,182	-	1,182
- Exchange differences on translation of foreign operations	-	-	-	-	-	-	150,852	-	-	-	150,852	(3,007)	147,845
- Share of other comprehensive income of an associate	-	-	-	-	-	-	-	-	449	-	449	-	449
- Cash flow hedges, net of tax	-	-	691	-	-	-	-	-	-	-	691	-	691
Total comprehensive income/(loss) for the year	-	-	691	-	1,182	-	150,852	-	449	(437,929)	(284,755)	(22,932)	(307,687)
Provision of special reserve	32(a)	-	-	-	-	50,103	-	-	-	(50,103)	-	-	-
Utilisation of special reserve	32(a)	-	-	-	-	(42,038)	-	-	-	42,038	-	-	-
Transfer from retained profits	32(a)	-	-	-	-	8,816	-	-	-	(8,816)	-	-	-
Transfer of share option reserve upon forfeiture of share options	-	-	-	(1,217)	-	-	-	-	-	1,217	-	-	-
Acquisition of additional equity interests in a subsidiary	-	-	-	-	-	-	(671)	-	-	(8,665)	(9,336)	5,233	(4,103)
Capital contribution from shareholders	-	8,186	-	-	-	-	-	-	-	-	8,186	16,251	24,437
At 31 December 2020 and 1 January 2021	342,846	2,461,249	(3,286)	40,587	(4,150)	186,223	110,848	312	2,051	(618,846)	2,517,834	33,239	2,551,073

## Consolidated Statement of Changes in Equity

Year ended 31 December 2021

Notes	Attributable to owners of the parent												
	Issued share HK\$'000	Contributed surplus HK\$'000	Hedging reserve HK\$'000	Share option reserve HK\$'000	Fair value reserve of financial assets at fair value through other comprehensive income HK\$'000	Reserve funds HK\$'000	Exchange fluctuation reserve HK\$'000	Capital redemption reserve HK\$'000	Investment related reserve HK\$'000	Accumulated losses HK\$'000	Total HK\$'000	Non-controlling interests HK\$'000	Total equity HK\$'000
At 31 December 2020 and 1 January 2021	342,846	2,461,249	(3,286)	40,587	(4,150)	186,223	110,848	312	2,051	(618,846)	2,517,834	33,239	2,551,073
Profit/(loss) for the year	-	-	-	-	-	-	-	-	-	466,185	466,185	(90,000)	376,185
Other comprehensive income/(loss) for the year:													
- Changes in fair value of financial assets at fair value through other comprehensive income, net of tax	-	-	-	-	1,127	-	-	-	-	-	1,127	-	1,127
- Exchange differences on translation of foreign operations	-	-	-	-	-	-	118,933	-	-	-	118,933	(6,028)	112,905
- Cash flow hedges, net of tax	-	-	3,286	-	-	-	-	-	-	-	3,286	-	3,286
Total comprehensive income/(loss) for the year	-	-	3,286	-	1,127	-	118,933	-	-	466,185	589,531	(96,028)	493,503
Provision of special reserve 32(a)	-	-	-	-	-	40,590	-	-	-	(40,590)	-	-	-
Utilisation of special reserve 32(a)	-	-	-	-	-	(42,374)	-	-	-	42,374	-	-	-
Transfer from retained profits 32(a)	-	-	-	-	-	22,454	-	-	-	(22,454)	-	-	-
Transfer of share option reserve upon forfeiture of share options	-	-	-	(40,587)	-	-	-	-	-	40,587	-	-	-
At 31 December 2021	342,846	2,461,249*	-	-	(3,023)*	206,893*	229,781*	312*	2,051*	(132,744)*	3,107,365	(62,789)	3,044,576

\* These reserve accounts comprise the consolidated reserves of HK\$2,764,519,000 (2020: HK\$2,174,988,000) in the consolidated statement of financial position.

# Consolidated Statement of Cash Flows

Year ended 31 December 2021



	Notes	2021 HK\$'000	2020 HK\$'000
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Profit/(loss) before tax		584,936	(503,810)
Adjustments for:			
Finance costs	7	219,533	213,865
Bank and other interest income	6	(6,308)	(26,037)
Loss/(gain) on disposal of items of property, plant and equipment	8	36,031	(15,293)
Deferred income from government grants	29	(13,970)	(10,297)
Changes in fair value of investment properties	8	4,243	(121)
Depreciation of property, plant and equipment	8	456,131	381,194
Depreciation of right-of-use assets	8	71,438	58,864
Amortisation of intangible assets	8	19,404	20,407
Write-down/(write-back) of inventories to net realisable value, net	8	3,103	(249)
Impairment of trade and notes receivables, net	8	122,662	46,182
Impairment of financial assets included in prepayments, other receivables and other assets	8	24,555	66,424
Impairment of amounts due from associates	8	11,446	33,012
Impairment of an investment in an associate	8	15,325	295,781
Impairment of non-financial assets included in prepayments, other receivables and other assets	8	–	4,226
Impairment loss on property, plant and equipment	8	69,572	3,582
Impairment loss on mining rights	8	166,853	18,584
Loss on deemed disposal of partial interest in an associate	8	–	92,375
Gain on bargain purchase from the acquisition of a subsidiary	8	–	(69,411)
Share of losses of associates	8	297,347	131,914
Share of profits of a joint venture	8	–	(1,793)
		<b>2,082,301</b>	739,399
(Increase)/decrease in inventories		(845,108)	101,678
(Increase)/decrease in trade and notes receivables		(613,724)	408,257
Increase in prepayments, other receivables and other assets		(1,073,325)	(411,415)
Decrease in amounts due from related companies		2,728	13,139
Decrease in an amount due from a joint venture		–	43,779
Increase/(decrease) in trade and notes payables		587,577	(40,148)
Increase/(decrease) in other payables and accruals		1,473,431	(244,432)
Decrease in amounts due to related companies		(540)	(2,098)
Cash generated from operations		<b>1,613,340</b>	608,159
Tax paid		(18,284)	(11,382)
Net cash flows from operating activities		<b>1,595,056</b>	596,777

## Consolidated Statement of Cash Flows

Year ended 31 December 2021

	Notes	2021 HK\$'000	2020 HK\$'000
Net cash flows from operating activities		<b>1,595,056</b>	596,777
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Interest received		<b>6,308</b>	26,177
Receipt of government grants for property, plant and equipment	29	<b>7,760</b>	7,492
Purchases of items of property, plant and equipment		<b>(669,793)</b>	(435,692)
Proceeds from disposal of items of property, plant and equipment		<b>2,413</b>	48,616
Additions to an investment property		–	(578)
Additions to right-of-use assets		<b>(35,272)</b>	(13,866)
Additions to intangible assets		<b>(1,325)</b>	(23,608)
Repayment from/(advance to) an associate, net		<b>6,626</b>	(17,880)
Investment in an associate	18(a)	<b>(91,883)</b>	–
Acquisition of a subsidiary, net of cash acquired		–	(131,048)
Net cash flows used in investing activities		<b>(775,166)</b>	(540,387)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Increase in pledged deposits	37(b)	<b>(151,240)</b>	(9,879)
Proceeds from sales and leaseback arrangements	37(b)	<b>38,060</b>	–
Principal portion of lease payments	37(b)	<b>(48,842)</b>	(65,651)
Drawdown of bank and other borrowings	37(b)	<b>2,271,841</b>	4,241,766
Repayment of bank and other borrowings	37(b)	<b>(2,841,287)</b>	(4,017,781)
Borrowing interest paid	37(b)	<b>(218,002)</b>	(207,031)
Lease liabilities interest paid	37(b)	<b>(1,531)</b>	(6,834)
Net cash flows used in financing activities		<b>(951,001)</b>	(65,410)
<b>NET DECREASE IN CASH AND CASH EQUIVALENTS</b>			
Cash and cash equivalents at beginning of year		<b>1,129,543</b>	1,103,606
Effect of foreign exchange rate changes, net		<b>46,930</b>	34,957
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>		<b>1,045,362</b>	1,129,543
<b>ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS</b>			
Cash and bank balances	23	<b>1,245,909</b>	1,175,038
Less: Pledged deposits	23	<b>(200,547)</b>	(45,495)
Cash and cash equivalents at end of year		<b>1,045,362</b>	1,129,543

# Notes to Financial Statements

31 December 2021



## 1. Corporate and Group information

The Company was incorporated in Bermuda on 18 July 2005 as an exempted company with limited liability under Section 14 of the Companies Act 1981 of Bermuda (as amended). The registered office of the Company is located at Clarendon House, 2 Church Street, Hamilton HM 11, Bermuda. The principal place of business of the Company is located at Room A02, 35th Floor, United Centre, 95 Queensway, Admiralty, Hong Kong. The Company's shares were listed on the Main Board of The Stock Exchange.

The principal activity of the Company is investment holding. The principal activities of the subsidiaries comprise manganese mining, ore processing and downstream processing operations in Mainland China, manganese mining and ore operations in Gabon, as well as the trading of manganese ores, manganese alloys and related raw materials.

### Information about subsidiaries

Particulars of the Company's principal subsidiaries are set out below:

Name of company	Place and date of incorporation/ establishment	Issued ordinary share/ registered capital	Percentage of equity interests attributable to the Company		Principal activities/ place of operation
			Direct	Indirect	
South Manganese Holdings Limited	BVI 18 May 2005	US\$1	100.00	–	Investment holding and trading of manganese ore/Hong Kong
Dameng International Resources Limited	Hong Kong 28 October 2005	HK\$10,000	–	51.00	Trading of manganese ore/Hong Kong
Huazhou Mining Investment Limited ("Huazhou BVI") (華州礦業投資有限公司)	BVI 6 July 2007	US\$5,820,000	–	60.00	Investment holding/ Hong Kong
Companie Industrielle et Commerciale des Mines de Huazhou (Gabon) ("CICMHZ")	Gabon 24 August 2005	XAF1,000 million	–	51.00	Mining and sale of manganese ore/Gabon
South Manganese Group Limited ("South Manganese Group") (南方錳業集團有限責任公司)^#	PRC 19 August 2005	RMB1,539,710,100	–	100.00	Mining, processing and sale of manganese related products/PRC
Guangxi Start Manganese Materials Co., Ltd. ("Guangxi Start") (廣西斯達特錳材料有限公司)^	PRC 18 April 2001	RMB24,280,000	–	71.17	Processing and sale of manganese related products/PRC
Tiandeng Dameng Manganese Materials Co., Ltd. ("Tiandeng Dameng") (天等大錳錳材料有限公司)^	PRC 27 March 2003	RMB50,000,000	–	60.00	Manufacture and sale of manganese related products/PRC
Guangxi Daxin Dabao Ferroalloy Co., Ltd. ("Guangxi Dabao") (廣西大新縣大寶鐵合金有限公司)^	PRC 28 April 2002	RMB2,680,000	–	60.00	Manufacture and sale of manganese related products/PRC
Qinzhou Dameng New Materials Co., Ltd. ("Qinzhou New Materials") (欽州大錳新材料有限公司)^	PRC 26 November 2003	RMB30,000,000	–	70.00	Manufacture and sale of manganese related products/PRC
Dameng Investment Limited (大錳投資有限責任公司)^	PRC 1 February 2008	RMB50,000,000	–	100.00	Investment holding, sale of manganese related products and trading of metals/PRC

## Notes to Financial Statements

31 December 2021

### 1. Corporate and Group information (continued)

#### Information about subsidiaries (continued)

Particulars of the Company's principal subsidiaries are set out below: (continued)

Name of company	Place and date of incorporation/ establishment	Issued ordinary share/ registered capital	Percentage of equity interests attributable to the Company		Principal activities/ place of operation
			Direct	Indirect	
Chongzuo Dameng New Materials Co., Limited ("Chongzuo New Materials") (崇左大錳新材料有限公司) <sup>^</sup>	PRC 21 May 2008	RMB20,000,000	–	100.00	Processing and sale of manganese/PRC
Beihai Dameng New Materials Co., Ltd. ("Beihai New Materials") (北海大錳新材料有限公司) <sup>^</sup>	PRC 30 July 2008	RMB20,000,000	–	100.00	Processing and sale of manganese related products/PRC
Tiandong Dameng New Materials Co., Ltd. ("Tiandong New Materials") (田東大錳新材料有限公司) <sup>^</sup>	PRC 15 April 2008	RMB20,000,000	–	100.00	Processing and sale of manganese related products/PRC
South Manganese Group Zunyi Co., Ltd. (Formerly known as "Guizhou Zunyi Hui Xing Ferroalloy Co., Ltd.") ("Zunyi Company") (南方錳業集團遵義有限公司，前稱「貴州遵義匯興鐵合金有限責任公司」) <sup>^</sup>	PRC 20 December 2007	RMB500,000,000	–	64.00	Mining, processing and sale of manganese related products/PRC
Zunyi Hui Xing Equipment Manufacture and Installation Co., Ltd. ("Zunyi Manufacture") (遵義匯興設備製造安裝有限公司) <sup>^</sup>	PRC 7 September 2011	RMB5,000,000	–	64.00	Manufacture and sale of equipment/PRC
Guizhou Zunyi Longmai Real Estate Co., Ltd. ("Longmai Real Estate") (貴州遵義龍麥置業有限責任公司) <sup>^</sup>	PRC 20 October 2011	RMB50,000,000	–	64.00	Property development, investment and management/PRC
Zunyi Hui Xing Changgou Manganese Mine Co., Ltd. ("Changgou Manganese") (遵義匯興長溝錳礦有限公司) <sup>^</sup>	PRC 18 May 2020	RMB50,000,000	–	64.00	Mining, processing and sale of manganese related products/PRC
Daxin Dameng Manganese Limited Company ("Daxin Manganese") (大新大錳錳業有限公司) <sup>^</sup>	PRC 7 October 2004	RMB11,800,000	–	100.00	Mining, processing and sale of manganese related products/PRC
Guangxi Nanning Lingshui Mining Industries Co., Ltd. ("Nanning Lingshui") (廣西南寧市靈水礦業有限責任公司) <sup>^</sup>	PRC 16 April 2012	RMB5,000,000	–	100.00	Mining, processing and sale of manganese related products/PRC
Daxin Guinan Huagong Limited Company ("Guinan Huagong") (大新桂南化工有限責任公司) <sup>^</sup>	PRC 22 June 2005	RMB30,307,059	–	90.10	Production of sulphuric acid and steam/PRC
Dameng Mining (Hong Kong) Logistic Company Limited	Hong Kong 18 January 2012	HK\$10,000	–	100.00	Trading of manganese ore/Hong Kong

## 1. Corporate and Group information (continued)

### Information about subsidiaries (continued)

Particulars of the Company's principal subsidiaries are set out below: (continued)

Name of company	Place and date of incorporation/ establishment	Issued ordinary share/ registered capital	Percentage of equity interests attributable to the Company		Principal activities/ place of operation
			Direct	Indirect	
Qinzhou Dameng Manganese Co., Ltd. ("Qinzhou Mining") (欽州大錳錳業有限責任公司) <sup>^</sup>	PRC 16 December 2014	RMB10,000,000	–	100.00	Manufacture and sale of manganese related products/PRC
Shenzhen Blue Ocean Strategy Trading Co., Ltd. ("Blue Ocean Strategy") (深圳藍海策略貿易有限公司) <sup>#</sup>	PRC 17 May 2016	RMB100,000,000	–	100.00	Trading of manganese ore, manganese alloy and related raw materials/PRC
Ningbo Dameng Management Partnership (Limited Partnership) ("Ningbo Dameng") (寧波大錳投資管理合夥企業(有限合夥)) <sup>^</sup>	PRC 1 June 2018	RMB201,000,000	–	100.00	Investment holding and management/PRC
Guangxi Huiyuan Manganese Industry Co., Ltd. ("Huiyuan Manganese") (廣西匯元錳業有限責任公司) <sup>^</sup>	PRC 14 October 2003	RMB1,220,440,000	–	100.00	Manufacture and sale of EMD/PRC
Guangxi Daxin Huiyuan New Energy Technology Co., Ltd. (“Huiyuan New Energy”) (廣西大新匯元新能源科技有限責任公司) <sup>^</sup>	PRC 30 September 2021	RMB92,971,890	–	100.00	Manufacture and sale of battery and related raw materials/PRC
South Manganese Group (Shanghai) International Trading Co., Ltd. (“South Manganese Shanghai”) (南方錳業集團(上海)國際貿易有限公司) <sup>^</sup>	PRC 22 July 2021	RMB90,000,000	–	70.00	Trading of manganese ore, manganese alloy and related raw materials/PRC

The English names of the Company's PRC subsidiaries represent management's best efforts at translating the Chinese names of these companies as no English names have been registered.

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results of the Group for the reporting period or formed a substantial portion of the net assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, result in particulars of excessive length.

# Foreign investment enterprises incorporated under the Law of the PRC on Sino-foreign equity joint ventures

<sup>^</sup> Limited liability/limited partnership companies under the Company Law of the PRC



## Notes to Financial Statements

31 December 2021

### 2.1 Basis of preparation

These financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (“HKFRSs”) (which include all Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (“HKASs”) and Interpretations) issued by the Hong Kong Institute of Certified Public Accountants (“HKICPA”), accounting principles generally accepted in Hong Kong and the disclosure requirements of the Hong Kong Companies Ordinance. They have been prepared under the historical cost convention, except for investment properties, financial assets at fair value through other comprehensive income and derivative financial instruments which have been measured at fair value. These financial statements are presented in Hong Kong dollars (“HK\$”) and all values are rounded to the nearest thousand except when otherwise indicated.

As at 31 December 2021, the Group had net current liabilities of HK\$1,276,188,000 (2020: HK\$315,508,000), out of which HK\$3,602,687,000 represented bank loans repayable within one year.

In preparing the consolidated financial statements, the directors of the Company have given careful consideration to the future liquidity of the Group in light of the Group’s net current liabilities position as at 31 December 2021. Subsequent to the year end, the Group has i) successfully renewed or obtained new bank loans of HK\$1,117.9 million during the period from 1 January 2022 up to the date of this report; and ii) obtained confirmations from certain PRC banks which had confirmed in writing to the Group to renew their short-term loans totaling HK\$882.1 million (equivalent to RMB720.0 million) on repayment when due. The directors of the Company, also after taking into account the expected sales and internally generated funds from its operations and the successful renewals of the bank loans during the year and after the reporting date, are of the opinion that the Group has sufficient working capital for its present requirements for the next twelve months from the end of the reporting period. Accordingly, the consolidated financial statements have been prepared on a going concern basis.

## 2.1 Basis of preparation (continued)

### Basis of consolidation

The consolidated financial statements include the financial statements of the Group for the year ended 31 December 2021. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e. existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- (a) the contractual arrangement with the other vote holders of the investee;
- (b) rights arising from other contractual arrangements; and
- (c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

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 described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises (i) the assets (including goodwill) and liabilities of the subsidiary, (ii) the carrying amount of any non-controlling interest and (iii) the cumulative translation differences recorded in equity; and recognises (i) the fair value of the consideration received, (ii) the fair value of any investment retained and (iii) any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

## 2.2 Changes in accounting policies and disclosures

The Group has adopted the following revised HKFRSs for the first time for the current year's financial statements.

Amendments to HKFRS 9,  
HKAS 39, HKFRS 7,  
HKFRS 4 and HKFRS 16  
Amendment to HKFRS 16

*Interest Rate Benchmark Reform – Phase 2*

*Covid-19-Related Rent Concessions  
beyond 30 June 2021*



## Notes to Financial Statements

31 December 2021

### 2.2 Changes in accounting policies and disclosures (continued)

The nature and the impact of the revised HKFRSs are described below:

- (a) Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16 address issues not dealt with in the previous amendments which affect financial reporting when an existing interest rate benchmark is replaced with an alternative risk-free rate (“RFR”). The amendments provide a practical expedient to allow the effective interest rate to be updated without adjusting the carrying amount of financial assets and liabilities when accounting for changes in the basis for determining the contractual cash flows of financial assets and liabilities, if the change is a direct consequence of the interest rate benchmark reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis immediately preceding the change. In addition, the amendments permit changes required by the interest rate benchmark reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued. Any gains or losses that could arise on transition are dealt with through the normal requirements of HKFRS 9 to measure and recognise hedge ineffectiveness. The amendments also provide a temporary relief to entities from having to meet the separately identifiable requirement when an RFR is designated as a risk component. The relief allows an entity, upon designation of the hedge, to assume that the separately identifiable requirement is met, provided the entity reasonably expects the RFR risk component to become separately identifiable within the next 24 months. Furthermore, the amendments require an entity to disclose additional information to enable users of financial statements to understand the effect of interest rate benchmark reform on an entity’s financial instruments and risk management strategy. The Group had certain interest-bearing bank borrowings denominated in Renminbi based on the China Loan Prime Rate (“LPR”) as at 31 December 2021. The Group expects that LPR will continue to exist and the interest rate benchmark reform has not had an impact on the Group’s LPR-based borrowings.
- (b) Amendment to HKFRS 16 issued in April 2021 extends the availability of the practical expedient for lessees to elect not to apply lease modification accounting for rent concessions arising as a direct consequence of the covid-19 pandemic by 12 months. Accordingly, the practical expedient applies to rent concessions for which any reduction in lease payments affects only payments originally due on or before 30 June 2022, provided the other conditions for applying the practical expedient are met. The amendment is effective retrospectively for annual periods beginning on or after 1 April 2021 with any cumulative effect of initially applying the amendment recognised as an adjustment to the opening balance of retained profits at the beginning of the current accounting period. Earlier application is permitted. The amendment did not have any impact on the financial position and performance of the Group as the Group did not obtain any rent concessions.

### 2.3 Issued but not yet effective Hong Kong Financial Reporting Standards

The Group has not applied the following new and revised HKFRSs, that have been issued but are not yet effective, in these financial statements.

Amendments to HKFRS 3	<i>Reference to the Conceptual Framework<sup>1</sup></i>
Amendments to HKFRS 10 and HKAS 28 (2011)	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture<sup>3</sup></i>
HKFRS 17	<i>Insurance Contracts<sup>2</sup></i>
Amendments to HKFRS 17	<i>Insurance Contracts<sup>2, 5</sup></i>
Amendments to HKAS 1	<i>Classification of Liabilities as Current or Non-current<sup>2, 4</sup></i>
Amendments to HKAS 1 and HKFRS Practice Statement 2	<i>Disclosure of Accounting Policies<sup>2</sup></i>
Amendments to HKAS 8	<i>Definition of Accounting Estimates<sup>2</sup></i>
Amendments to HKAS 12	<i>Deferred Tax related to Assets and Liabilities arising from a Single Transaction<sup>2</sup></i>
Amendments to HKAS 16	<i>Property, Plant and Equipment: Proceeds before Intended Use<sup>1</sup></i>
Amendments to HKAS 37	<i>Onerous Contracts - Cost of Fulfilling a Contract<sup>1</sup></i>
<i>Annual Improvements to HKFRSs 2018-2020</i>	Amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41 <sup>1</sup>

<sup>1</sup> Effective for annual periods beginning on or after 1 January 2022

<sup>2</sup> Effective for annual periods beginning on or after 1 January 2023

<sup>3</sup> No mandatory effective date yet determined but available for adoption

<sup>4</sup> As a consequence of the amendments to HKAS 1, Hong Kong Interpretation 5 Presentation of Financial Statements - Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause was revised in October 2020 to align the corresponding wording with no change in conclusion

<sup>5</sup> As a consequence of the amendments to HKFRS 17 issued in October 2020, HKFRS 4 was amended to extend the temporary exemption that permits insurers to apply HKAS 39 rather than HKFRS 9 for annual periods beginning before 1 January 2023

Further information about those HKFRSs that are expected to be applicable to the Group is described below.

Amendments to HKFRS 3 are intended to replace a reference to the previous Framework for the Preparation and Presentation of Financial Statements with a reference to the Conceptual Framework for Financial Reporting issued in June 2018 without significantly changing its requirements. The amendments also add to HKFRS 3 an exception to its recognition principle for an entity to refer to the Conceptual Framework to determine what constitutes an asset or a liability. The exception specifies that, for liabilities and contingent liabilities that would be within the scope of HKAS 37 or HK(IFRIC)-Int 21 if they were incurred separately rather than assumed in a business combination, an entity applying HKFRS 3 should refer to HKAS 37 or HK(IFRIC)-Int 21 respectively instead of the Conceptual Framework. Furthermore, the amendments clarify that contingent assets do not qualify for recognition at the acquisition date. The Group expects to adopt the amendments prospectively from 1 January 2022. Since the amendments apply prospectively to business combinations for which the acquisition date is on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

Amendments to HKFRS 10 and HKAS 28 (2011) address an inconsistency between the requirements in HKFRS 10 and in HKAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss resulting from a downstream transaction when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The previous mandatory effective date of amendments to HKFRS 10 and HKAS 28 (2011) was removed by the HKICPA in January 2016 and a new mandatory effective date will be determined after the completion of a broader review of accounting for associates and joint ventures. However, the amendments are available for adoption now.



## Notes to Financial Statements

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### 2.3 Issued but not yet effective Hong Kong Financial Reporting Standards (continued)

Amendments to HKAS 1 *Classification of Liabilities as Current or Non-current* clarify the requirements for classifying liabilities as current or non-current. The amendments specify that if an entity's right to defer settlement of a liability is subject to the entity complying with specified conditions, the entity has a right to defer settlement of the liability at the end of the reporting period if it complies with those conditions at that date. Classification of a liability is unaffected by the likelihood that the entity will exercise its right to defer settlement of the liability. The amendments also clarify the situations that are considered a settlement of a liability. The amendments are effective for annual periods beginning on or after 1 January 2023 and shall be applied retrospectively. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 1 *Disclosure of Accounting Policies* require entities to disclose their material accounting policy information rather than their significant accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. Amendments to HKFRS Practice Statement 2 provide non-mandatory guidance on how to apply the concept of materiality to accounting policy disclosures. Amendments to HKAS 1 are effective for annual periods beginning on or after 1 January 2023 and earlier application is permitted. Since the guidance provided in the amendments to HKFRS Practice Statement 2 is non-mandatory, an effective date for these amendments is not necessary. The Group is currently assessing the impact of the amendments on the Group's accounting policy disclosures.

Amendments to HKAS 8 clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 12 narrow the scope of the initial recognition exception so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognise a deferred tax asset and a deferred tax liability for temporary differences arising from these transactions. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and shall be applied to transactions related to leases and decommissioning obligations at the beginning of the earliest comparative period presented, with any cumulative effect recognised as an adjustment to the opening balance of retained profits or other component of equity as appropriate at that date. In addition, the amendments shall be applied prospectively to transactions other than leases and decommissioning obligations. Earlier application is permitted.

The Group has applied the initial recognition exception and did not recognise a deferred tax asset and a deferred tax liability for temporary differences for transactions related to leases. Upon initial application of these amendments, the Group will recognise a deferred tax asset and a deferred tax liability for deductible and taxable temporary differences associated with right-of-use assets and lease liabilities, and recognise the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained profits at the beginning of the earliest comparative period presented.

Amendments to HKAS 16 prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling any such items, and the cost of those items, in profit or loss. The amendments are effective for annual periods beginning on or after 1 January 2022 and shall be applied retrospectively only to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

### 2.3 Issued but not yet effective Hong Kong Financial Reporting Standards (continued)

Amendments to HKAS 37 clarify that for the purpose of assessing whether a contract is onerous under HKAS 37, the cost of fulfilling the contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract include both the incremental costs of fulfilling that contract (e.g., direct labour and materials) and an allocation of other costs that relate directly to fulfilling that contract (e.g., an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract as well as contract management and supervision costs). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendments are effective for annual periods beginning on or after 1 January 2022 and shall be applied to contracts for which an entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments. Earlier application is permitted. Any cumulative effect of initially applying the amendments shall be recognised as an adjustment to the opening equity at the date of initial application without restating the comparative information. The amendments are not expected to have any significant impact on the Group's financial statements.

*Annual Improvements to HKFRSs 2018-2020* sets out amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41. Details of the amendments that are expected to be applicable to the Group are as follows:

- *HKFRS 9 Financial Instruments*: clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendment is effective for annual periods beginning on or after 1 January 2022. Earlier application is permitted. The amendment is not expected to have a significant impact on the Group's financial statements.
- *HKFRS 16 Leases*: removes the illustration of payments from the lessor relating to leasehold improvements in Illustrative Example 13 accompanying HKFRS 16. This removes potential confusion regarding the treatment of lease incentives when applying HKFRS 16.

## 3. Summary of significant accounting policies

### Investments in associates and a joint venture

An associate is an entity in which the Group has a long term interest of generally not less than 20% of the equity voting rights and over which it is in a position to exercise significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The Group's investments in associates and a joint venture are stated in the consolidated statement of financial position at the Group's share of net assets under the equity method of accounting, less any impairment losses. Adjustments are made to bring into line any dissimilar accounting policies that may exist. The Group's share of the post-acquisition results and other comprehensive income of associates and a joint venture is included in the consolidated statement of profit or loss and other comprehensive income. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and its associates or joint venture are eliminated to the extent of the Group's investments in the associates or joint venture, except where unrealised losses provide evidence of an impairment of the assets transferred. Goodwill arising from the acquisition of associates or a joint venture is included as part of the Group's investments in associates or a joint venture.



## Notes to Financial Statements

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### 3. Summary of significant accounting policies (continued)

#### Investments in associates and a joint venture (continued)

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

#### Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets includes an input and a substantive process that together significantly contribute to the ability to create outputs.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

### 3. Summary of significant accounting policies (continued)

#### Fair value measurement

The Group measures its investment properties, derivative financial instruments and financial assets at fair value through other comprehensive income at fair value at the end of each reporting period. 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. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 – based on quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly

Level 3 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

#### Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets, financial assets and investment properties), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs. In testing a cash-generating unit for impairment, a portion of the carrying amount of a corporate asset (e.g., a headquarters building) is allocated to an individual cash-generating unit if it can be allocated on a reasonable and consistent basis or, otherwise, to the smallest group of cash-generating units.

### 3. Summary of significant accounting policies (continued)

#### Impairment of non-financial assets (continued)

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. 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. An impairment loss is charged to profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to profit or loss in the period in which it arises.

#### Related parties

A party is considered to be related to the Group if:

- (a) the party is a person or a close member of that person's family and that person
  - (i) has control or joint control over the Group;
  - (ii) has significant influence over the Group; or
  - (iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

- (b) the party is an entity where any of the following conditions applies:
  - (i) the entity and the Group are members of the same group;
  - (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);
  - (iii) the entity and the Group are joint ventures of the same third party;
  - (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
  - (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
  - (vi) the entity is controlled or jointly controlled by a person identified in (a);
  - (vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and
  - (viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

### 3. Summary of significant accounting policies (continued)

#### Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Other than mining structures and exploration and evaluation assets, depreciation is calculated on straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Buildings	3%-20%
Motor vehicles, plant, machinery, tools and equipment	10%-20%
Furniture and fixtures	10%-20%
Leasehold improvements	10%-20% or over the unexpired lease terms, whichever is shorter

Mining structures mainly comprise the open-pit quarries, auxiliary mine shafts and underground tunnels. Depreciation of mining structures is provided to write off the cost of the mining structures using the unit-of-production ("UOP") method based on reserves estimated to be recovered from existing facilities.

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress represents a building under construction, which is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

#### Exploration and evaluation assets

Exploration and evaluation assets are stated at cost less any impairment losses. Exploration and evaluation assets include costs that are directly attributable to conducting topographical and geological surveys, exploratory drilling, sampling and trenching, and activities in relation to commercial and technical feasibility studies, and expenditure incurred to secure further mineralisation in existing ore bodies and to expand the capacity of a mine. Exploration expenditure incurred prior to acquiring legal rights to explore an area is written off as incurred. When the technical feasibility and commercial viability of extracting the ore are demonstrable, exploration and evaluation assets are amortised using the unit-of-production method.

If any project is abandoned during the evaluation stage, the total expenditures thereon are written off when the event occurs. If an indication of impairment arises, the recoverable amount is estimated and an impairment loss is recognised to the extent that the recoverable amount is lower than the carrying amount.



## Notes to Financial Statements

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### 3. Summary of significant accounting policies (continued)

#### Investment properties

Investment properties are interests in land and buildings (including the leasehold property held as a right-of-use assets which would otherwise meet the definition of an investment property) held to earn rental income and for capital appreciation, rather than for use in the production or supply of goods or services or for administrative purposes; or for sale in the ordinary course of business. Such properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value, which reflects market conditions at the end of the reporting period.

Gains or losses arising from changes in the fair values of investment properties are included in profit or loss in the year in which they arise.

Any gains or losses on the retirement or disposal of an investment property are recognised in profit or loss in the year of the retirement or disposal.

#### Mining rights

Mining rights are stated at cost less accumulated amortisation and any impairment losses. The mining rights are amortised over the estimated useful lives of the mines in accordance with the production plan of the entities concerned and the proven and probable reserves of the mines using the UOP method.

#### Intangible assets (other than goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

#### Computer software

Computer software is stated at cost less any impairment losses and is amortised on the straight-line basis over its estimated useful life of five years.

#### Research and development costs

All research costs are charged to profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

#### Leases

The Group assesses at contract inception whether a contract is, or contains, 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.

#### Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

### 3. Summary of significant accounting policies (continued)

#### Leases (continued)

##### Group as a lessee (continued)

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Leasehold land	10 to 30 years
Motor vehicles, plant and machinery, tools and equipment	5 to 10 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate the lease. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g. a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

The Group's lease liabilities are included in interest-bearing bank and other borrowings.

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (that is those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the recognition exemption for leases of low-value assets to leases of office equipment and laptop computers that are considered to be of low value. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

##### Group as a lessor

When the Group acts as a lessor, it classifies at lease inception (or when there is a lease modification) each of its leases as either an operating lease or a finance lease.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. Rental income is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss and other comprehensive income due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases that transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, are accounted for as finance leases.



## Notes to Financial Statements

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### 3. Summary of significant accounting policies (continued)

#### Investments and other financial assets

##### Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under HKFRS 15 in accordance with the policies set out for "Revenue recognition" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

##### Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

##### *Financial assets at amortised cost (debt instruments)*

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

##### *Financial assets at fair value through other comprehensive income (debt instruments)*

For debt investments at fair value through other comprehensive income, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the statement of profit or loss and other comprehensive income and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to the statement of profit or loss and other comprehensive income.

Gains and losses on these financial assets are never recycled to the statement of profit or loss and other comprehensive income. Dividends are recognised as other income in the statement of profit or loss and other comprehensive income when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income. Equity investments designated at fair value through other comprehensive income are not subject to impairment assessment.

### 3. Summary of significant accounting policies (continued)

#### Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e. removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

#### Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

#### General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, 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 and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

For debt investments at fair value through other comprehensive income, the Group applies the low credit risk simplification. At each reporting date, the Group evaluates whether the debt investments are considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group reassesses the external credit ratings of the debt investments. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.



## Notes to Financial Statements

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### 3. Summary of significant accounting policies (continued)

#### Impairment of financial assets (continued)

##### General approach (continued)

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Debt investments at fair value through other comprehensive income and financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs

Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs

Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs

##### Simplified approach

For trade receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

#### Financial liabilities

##### Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as loans and borrowings or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings, net of directly attributable transaction costs.

The Group's financial liabilities include trade and notes payables, other payables, derivative financial instruments, interest-bearing bank and other borrowings and amounts due to related companies.

##### Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

##### *Financial liabilities at amortised cost (loans and borrowings)*

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in profit or loss.

### 3. Summary of significant accounting policies (continued)

#### Financial liabilities (continued)

##### Subsequent measurement (continued)

##### *Financial guarantee contracts*

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. A financial guarantee contract is recognised initially as a liability at its fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequent to initial recognition, the Group measures the financial guarantee contracts at the higher of: (i) the ECL allowance determined in accordance with the policy as set out in "Impairment of financial assets"; and (ii) the amount initially recognised less, when appropriate, the cumulative amount of income recognised.

#### Derecognition of financial liabilities

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

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

#### Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

#### Derivative financial instruments and hedge accounting

##### Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as forward currency contracts, interest rate swap and cross currency interest rate swaps to hedge its foreign currency risks and interest rate risks. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Any gains or losses arising from changes in fair value of derivatives are taken directly to profit or loss, except for the effective portion of cash flow hedges, which is recognised in other comprehensive income and later reclassified to profit or loss when the hedged item affects profit or loss.

For the purpose of hedge accounting, hedges are classified as:

- fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment; or
- cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction, or a foreign currency risk in an unrecognised firm commitment; or
- Hedges of net investment in a foreign operation.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting, the risk management objective and its strategy for undertaking the hedge.



## Notes to Financial Statements

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### 3. Summary of significant accounting policies (continued)

#### Derivative financial instruments and hedge accounting (continued)

##### Initial recognition and subsequent measurement(continued)

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is “an economic relationship” between the hedged item and the hedging instrument.
- The effect of credit risk does not “dominate the value changes” that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges which meet the qualifying criteria for hedge accounting are accounted for as follows:

##### *Cash flow hedges*

The effective portion of the gain or loss on the hedging instrument is recognised directly in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the statement of profit or loss and other comprehensive income. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The amounts accumulated in other comprehensive income are accounted for, depending on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the amount accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and will not be recognised in other comprehensive income for the period. This also applies where the hedged forecast transaction of a non-financial asset or non-financial liability subsequently becomes a firm commitment to which fair value hedge accounting is applied.

For any other cash flow hedges, the amount accumulated in other comprehensive income is reclassified to the statement of profit or loss and other comprehensive income as a reclassification adjustment in the same period or periods during which the hedged cash flows affect the statement of profit or loss and other comprehensive income.

If cash flow hedge accounting is discontinued, the amount that has been accumulated in other comprehensive income must remain in accumulated other comprehensive income if the hedged future cash flows are still expected to occur. Otherwise, the amount will be immediately reclassified to the statement of profit or loss and other comprehensive income as a reclassification adjustment. After the discontinuation, once the hedged cash flow occurs, any amount remaining in accumulated other comprehensive income is accounted for depending on the nature of the underlying transaction as described above.

### 3. Summary of significant accounting policies (continued)

#### Derivative financial instruments and hedge accounting (continued)

##### Initial recognition and subsequent measurement(continued)

###### *Fair value hedges*

The change in the fair value of a hedging instrument is recognised in the statement of profit or loss and other comprehensive income as other expenses. The change in the fair value of the hedged item attributable to the risk hedged is recorded as a part of the carrying amount of the hedged item and is also recognised in the statement of profit or loss and other comprehensive income as other expenses.

For fair value hedges relating to items carried at amortised cost, the adjustment to carrying value is amortised through the statement of profit or loss and other comprehensive income over the remaining term of the hedge using the effective interest rate method. Effective interest rate amortisation may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged. If the hedged item is derecognised, the unamortised fair value is recognised immediately in the statement of profit or loss and other comprehensive income.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in the statement of profit or loss and other comprehensive income. The changes in the fair value of the hedging instrument are also recognised in the statement of profit or loss and other comprehensive income.

###### *Current versus non-current classification*

Derivative instruments that are not designated as effective hedging instruments are classified as current or non-current or separated into current and non-current portions based on an assessment of the facts and circumstances (i.e., the underlying contracted cash flows).

- Where the Group expects to hold a derivative as an economic hedge (and does not apply hedge accounting) for a period beyond 12 months after the end of the reporting period, the derivative is classified as non-current (or separated into current and non-current portions) consistently with the classification of the underlying item.
- Embedded derivatives that are not closely related to the host contract are classified consistently with the cash flows of the host contract.
- Derivative instruments that are designated as, and are effective hedging instruments, are classified consistently with the classification of the underlying hedged item. The derivative instruments are separated into current portions and non-current portions only if a reliable allocation can be made.



## Notes to Financial Statements

31 December 2021

### 3. Summary of significant accounting policies (continued)

#### Inventories

Inventories are stated at the lower of cost and net realisable value. Cost of raw materials is determined on the first-in, first-out basis and work in progress and finished goods on a weighted average basis. In the case of work in progress and finished goods, cost comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Inventories of auxiliary materials, spare parts, fuels and small tools which are consumed in the process of mining operations are stated at the lower of cost and net realisable value, if necessary, for obsolescence.

#### Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short-term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, which are not restricted as to use.

#### Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in profit or loss.

Provisions for the Group's obligations for land reclamation are based on estimates of required expenditure at the mines in accordance with the PRC rules and regulations. The Group estimates its liabilities for final reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash expenditure to perform the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligations. The Group records a corresponding asset in the period in which the liability is incurred. The asset is depreciated using the UOP method over its expected life and the liability is accreted to the projected expenditure date. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligations and the asset are recognised using the appropriate discount rates.

#### Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

### 3. Summary of significant accounting policies (continued)

#### Income tax (continued)

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

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

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

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 profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

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

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.



## Notes to Financial Statements

31 December 2021

### 3. Summary of significant accounting policies (continued)

#### Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, for which it is intended to compensate, are expensed.

When the grant relates to an asset, the fair value is credited to a deferred income account and is released to the statement of profit or loss and other comprehensive income over the expected useful life of the relevant asset by equal annual instalments or deducted from the carrying amount of the asset and released to the statement of profit or loss and other comprehensive income by way of a reduced depreciation charge.

Where the Group receives grants of non-monetary assets, the grants are recorded at the fair value of the non-monetary assets and released to the statement of profit or loss and other comprehensive income over the expected useful lives of the relevant assets by equal annual instalments.

#### Revenue recognition

##### *Revenue from contracts with customers*

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

When the contract contains a financing component which provides the customer with a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group with a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in HKFRS 15.

##### Sale of goods

Revenue from the sale of goods is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods.

##### *Revenue from other sources*

Rental income is recognised on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are incurred.

##### *Other income*

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

### 3. Summary of significant accounting policies (continued)

#### Contract liabilities

A contract liability is recognised when a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

#### Share-based payments

The Company operates a share option scheme for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments ("equity-settled transactions").

The cost of equity-settled transactions with employees for grants after 7 November 2002 is measured by reference to the fair value at the date at which they are granted. The fair value is determined by an external valuer using a binomial model, further details of which are given in note 31 to the financial statements.

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.



## Notes to Financial Statements

31 December 2021

### 3. Summary of significant accounting policies (continued)

#### Other employee benefits

##### Pension scheme

The Group contributes on a monthly basis to various defined contribution retirement benefit plans organised by the relevant municipal and provincial governments in the PRC. The municipal and provincial governments undertake to assume the retirement benefit obligations payable to all existing and future retired employees under these plans and the Group has no further obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred.

##### Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

##### Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting.

##### Foreign currencies

These financial statements are presented in Hong Kong dollars, which is the Company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of the reporting period. Differences arising on settlement or translation of monetary items are recognised in profit or loss.

Differences arising on settlement or translation of monetary items are recognised in the statement of profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognised in other comprehensive income until the net investment is disposed of, at which time the cumulative amount is reclassified to the statement of profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in other comprehensive income.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

The functional currencies of certain overseas subsidiaries and associates are currencies other than the Hong Kong dollar. As at the end of the reporting period, the assets and liabilities of these entities are translated into Hong Kong dollars at the exchange rates prevailing at the end of the reporting period and their profits or losses are translated into Hong Kong dollars at the exchange rates that approximate to those prevailing at the dates of the transactions.

### 3. Summary of significant accounting policies (continued)

#### Foreign currencies (continued)

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in profit or loss.

For the purpose of the consolidated statement of cash flows, the cash flows of overseas subsidiaries are translated into Hong Kong dollars at the exchange rates prevailing at the dates of the cash flows. Frequently recurring cash flows of overseas subsidiaries which arise throughout the year are translated into Hong Kong dollars at the weighted average exchange rates for the year.

### 4. Significant accounting judgements and estimates

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

#### Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the financial statements:

#### Property lease classification – Group as lessor

The Group has entered into commercial property leases on its investment property portfolio. The Group has determined, based on an evaluation of the terms and conditions of the arrangements, such as the lease term not constituting a major part of the economic life of the commercial property and the present value of the minimum lease payments not amounting to substantially all the fair value of the commercial property, that it retains substantially all the significant risks and rewards incidental to ownership of these properties which are leased out and accounts for the contracts as operating leases.

#### Tax

Determining income tax provisions requires the Group to make judgements on the future tax treatment of certain transactions. The Group carefully evaluates tax implications of transactions in accordance with prevailing tax regulations and makes tax provisions accordingly.

#### Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below.

#### Provision for expected credit losses on trade and notes receivables

The Group uses a provision matrix to calculate ECLs for trade and notes receivables. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by geography, product type, customer type and rating, and coverage by letters of credit and other forms of credit insurance).

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic products) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.



## Notes to Financial Statements

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### 4. Significant accounting judgements and estimates (continued)

#### Estimation uncertainty (continued)

##### Provision for expected credit losses on trade and notes receivables (continued)

The assessment of the correlation among historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of a customer's actual default in the future. The information about the ECLs on the Group's trade and notes receivables is disclosed in note 21 to the financial statements.

##### Leases – Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate ("IBR") to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group "would have to pay", which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when it needs to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

##### Estimation of fair value of investment properties

In the absence of current prices in an active market for similar properties, the Group considers information from a variety of sources, including:

- (a) current prices in an active market for properties of a different nature, condition or location, adjusted to reflect those differences;
- (b) recent prices of similar properties on less active markets, with adjustments to reflect any changes in economic conditions since the date of the transactions that occurred at those prices; and
- (c) discounted cash flow projections based on reliable estimates of future cash flows, supported by the terms of any existing lease and other contracts and (when possible) by external evidence such as current market rents for similar properties in the same location and condition, and using discount rates that reflect current market assessments of the uncertainty in the amount and timing of the cash flows.

The carrying amount of investment properties at 31 December 2021 was HK\$114,284,000 (2020: HK\$115,394,000). Further details, including the key assumptions used for fair value measurement and a sensitivity analysis, are given in note 15 to the financial statements.

##### Mineral reserves

Engineering estimates of the Group's mineral resources are inherently imprecise and represent only approximate amounts because of the assumptions involved in developing such information.

There are authoritative guidelines regarding the engineering criteria that have to be met before estimated mineral reserves can be designated as "proven" and "probable". Proven and probable mineral reserve estimates are updated on a regular basis and have taken into account recent production and technical information about each mine. In addition, as prices and cost level change from year to year, the estimate of proven and probable mineral reserves also changes. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depreciation/amortisation rates.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation/amortisation expenses and impairment losses. Depreciation/amortisation rates of the mining structures and mining rights are determined based on the proven and probable mineral reserve quantity (the denominator) and the mining quantities (the numerator).

#### 4. Significant accounting judgements and estimates (continued)

##### Estimation uncertainty (continued)

###### Provision for rehabilitation

The provision for rehabilitation costs has been determined by the directors based on their best estimates. The directors estimated this liability for final restoration and mine closure based upon detailed calculations of the amount and timing of future cash flows to be incurred in performing the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. However, in so far as the effect on the land and environment from current mining activities becomes apparent in future periods, the estimate of the associated costs may be subject to revision in the future. The provision is reviewed at least annually to verify that it properly reflects the present value of the obligation arising from the current and past mining activities. Further details are included in note 28 to the financial statements.

###### Useful lives of property, plant and equipment

In determining the useful lives of property, plant and equipment, the Group has to consider various factors, such as expected usage of the asset, expected physical wear and tear, the care and maintenance of the asset, and legal or similar limits on the use of the asset. The estimation of the useful life of the asset is made based on the experience of the Group with similar assets that are used in a similar way. Depreciation charge is revised if the estimated useful lives of items of property, plant and equipment are different from the previous estimation. Useful lives are reviewed, at each financial year end date, based on changes in circumstances.

###### Impairment of non-financial assets

The Group assesses whether there are any indicators of impairment for all non-financial assets (including the right-of-use assets) at the end of each reporting period. Non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows. Further details are given in notes 14, 16, 17 and 18 to the financial statements.

###### Deferred tax assets

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The carrying value of deferred tax relating to recognised losses as at 31 December 2021 was HK\$16,609,000 (2020: HK\$43,971,000). The amount of unrecognised tax losses as at 31 December 2021 was HK\$1,016,684,000 (2020: HK\$815,768,000). Further details are contained in note 19 to the financial statements.



## Notes to Financial Statements

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### 5. Operating segment information

For management purposes, the Group is organised as a mixture of both business products and geographical locations based on their products and services and has four reportable operating segments as follows:

(a) **Manganese mining segment (PRC and Gabon)**

The manganese mining segment engages in the mining and production of manganese products including principally, through the Group's integrated processes, the mining, beneficiation, concentrating, grinding and the production of manganese concentrates and natural discharging manganese powder and sand;

(b) **EMM and alloying materials production segment (PRC)**

The EMM and alloying materials production segment comprises mining and processing ores used in hydrometallurgical processing for/and production of Electrolytic Manganese Metal ("EMM") and manganese briquette, and pyrometallurgical processing for production of silicomanganese alloys;

(c) **Battery materials production segment (PRC)**

The battery materials production segment engages in the manufacture and sale of battery materials products, including Electrolytic Manganese Dioxide ("EMD"), manganese sulfate, lithium manganese oxide and lithium nickel cobalt manganese oxide; and

(d) **Other business segment (PRC and HK)**

The other business segment comprises, principally, the trading of various commodities such as manganese ores, EMM, manganese alloys and non-manganese metals, sales of scraps and rental of investment properties and leasehold lands and investments in companies engaged in the mining and production of non-manganese metals and trading business.

Management monitors the results of the Group's operating segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on reportable segment profit/loss, which is a measure of adjusted profit/loss before tax from continuing operations. The adjusted profit/loss before tax is measured consistently with the Group's profit/loss before tax except that interest income, non-lease-related finance costs, fair value gain/loss from the Group's financial instruments as well as head office and corporate expenses are excluded from such measurement.

Segment assets exclude deferred tax assets, tax recoverable, pledged deposits, cash and cash equivalents and other unallocated head office and corporate assets as these assets are managed on a group basis.

Segment liabilities exclude derivative financial instruments, interest-bearing bank and other borrowings (other than lease liabilities), deferred tax liabilities, tax payable and other unallocated head office and corporate liabilities as these liabilities are managed on a group basis.

Intersegment sales are transacted with reference to the selling prices used for sales made to third parties at the then prevailing market prices.

## 5. Operating segment information (continued)

	Manganese mining PRC HK\$'000	Gabon HK\$'000	EMM and alloying materials production PRC HK\$'000	Battery materials production PRC HK\$'000	Other business PRC and HK HK\$'000	Total HK\$'000
<b>Year ended 31 December 2021</b>						
<b>Segment revenue (note 6)</b>						
Sales to external customers	134,391	587,303	4,510,502	1,673,925	5,924,641	12,830,762
Intersegment sales	-	78,123	-	-	46,719	124,842
Other revenue	15,591	9,147	57,846	27,686	41,844	152,114
	149,982	674,573	4,568,348	1,701,611	6,013,204	13,107,718
<i>Reconciliation:</i>						
Elimination of intersegment sales						(124,842)
Revenue from operations						12,982,876
<b>Segment results</b>	(137,317)	(43,313)	894,967	292,783	(45,001)	962,119
<i>Reconciliation:</i>						
Interest income						6,308
Corporate and other unallocated expenses						(165,489)
Finance costs (other than interest on lease liabilities)						(218,002)
Profit before tax						584,936
Income tax expense						(208,751)
<b>Profit for the year</b>						376,185
<b>Assets and liabilities</b>						
<b>Segment assets</b>	767,345	504,709	3,984,040	2,284,238	2,074,841	9,615,173
<i>Reconciliation:</i>						
Corporate and other unallocated assets						1,369,170
<b>Total assets</b>						10,984,343
<b>Segment liabilities</b>	465,063	447,371	743,355	866,522	796,540	3,318,851
<i>Reconciliation:</i>						
Corporate and other unallocated liabilities						4,620,916
<b>Total liabilities</b>						7,939,767
<b>Other segment information:</b>						
Depreciation and amortisation	23,015	35,761	300,666	175,275	8,003	542,720
Unallocated depreciation and amortisation						4,253
Total depreciation and amortisation						546,973
Capital expenditure <sup>#</sup>	73,834	61,192	317,354	343,267	24,016	819,663
Unallocated capital expenditure						414
Total capital expenditure						820,077
Impairment losses recognised in profit or loss	167,445	13,280	86,634	5,093	137,961	410,413
(Loss)/gain on disposal of items of property, plant and equipment	(1,107)	-	(19,690)	(16,878)	1,644	(36,031)
Investments in associates	-	-	-	-	92,608	92,608
Share of losses of associates	-	-	(288,900)	-	(8,447)	(297,347)
Settlement expense with a subcontractor	-	(166,045)	-	-	-	(166,045)

<sup>#</sup> Capital expenditure consists of additions to property, plant and equipment, investment properties, right-of-use assets and intangible assets.

## Notes to Financial Statements

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### 5. Operating segment information (continued)

	Manganese mining PRC HK\$'000	Gabon HK\$'000	EMM and alloying materials production PRC HK\$'000	Battery materials production PRC HK\$'000	Other business PRC and HK HK\$'000	Total HK\$'000
<b>Year ended 31 December 2020</b>						
<b>Segment revenue (note 6)</b>						
Sales to external customers	105,064	–	3,089,155	918,448	254,896	4,367,563
Intersegment sales	–	–	–	–	21,089	21,089
Other revenue	25,473	84,267	51,768	9,519	51,233	222,260
	130,537	84,267	3,140,923	927,967	327,218	4,610,912
<i>Reconciliation:</i>						
Elimination of intersegment sales						(21,089)
Revenue from operations						4,589,823
<b>Segment results</b>	8,549	78,342	147,490	163,964	(568,984)	(170,639)
<i>Reconciliation:</i>						
Interest income						26,037
Corporate and other unallocated expenses						(152,177)
Finance costs (other than interest on lease liabilities)						(207,031)
Loss before tax						(503,810)
Income tax credit						45,956
<b>Loss for the year</b>						(457,854)
<b>Assets and liabilities</b>						
<b>Segment assets</b>						
	879,504	154,721	4,130,451	1,633,363	928,088	7,726,127
<i>Reconciliation:</i>						
Corporate and other unallocated assets						1,332,576
<b>Total assets</b>						9,058,703
<b>Segment liabilities</b>						
	395,044	73,327	904,127	375,878	4,045	1,752,421
<i>Reconciliation:</i>						
Corporate and other unallocated liabilities						4,755,209
<b>Total liabilities</b>						6,507,630
<b>Other segment information:</b>						
Depreciation and amortisation	18,161	10,334	329,535	92,965	5,971	456,966
Unallocated depreciation and amortisation						3,499
Total depreciation and amortisation						460,465
Capital expenditure	32,918	–	229,182	690,345	10,941	963,386
Unallocated capital expenditure						3,581
Total capital expenditure						966,967
Impairment losses recognised in profit or loss	17,710	–	25,380	13,659	411,042	467,791
(Loss)/gain on disposal of items of property, plant and equipment	(1,844)	–	3,892	(14)	13,259	15,293
Investments in associates	–	–	281,769	–	24,476	306,245
Share of losses of associates	–	–	(24,495)	–	(107,419)	(131,914)
Share of profits of a joint venture	–	–	–	1,793	–	1,793

**5. Operating segment information (continued)**

## Geographical information

**(a) Revenue from external customers**

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Mainland China	<b>11,939,795</b>	4,237,886
Asia (excluding Mainland China)	<b>612,554</b>	104,845
Europe	<b>35,890</b>	12,587
North America	<b>242,523</b>	12,245
	<b>12,830,762</b>	4,367,563

The revenue information above is based on the locations of the customers.

**(b) Non-current assets**

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Segment assets		
Mainland China	<b>5,026,005</b>	4,951,294
Africa	<b>79,456</b>	47,410
	<b>5,105,461</b>	4,998,704

The non-current asset information above is based on the locations of assets and excludes deferred tax assets.

## Information about a major customer

Revenue of approximately HK\$2,303,832,000 (2020: approximately HK\$549,675,000) was derived from sales by trading sales to a single customer, including sales to a group of entities which are known to be under common control with that customer.

**6. Revenue, other income and gains**

An analysis of revenue is as follows:

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Revenue from contracts with customers	<b>12,830,762</b>	4,367,563

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### 6. Revenue, other income and gains (continued)

Revenue from contracts with customers

(a) Disaggregated revenue information

For the year ended 31 December 2021

#### Segments

	Manganese mining HK\$'000	EMM and alloying materials production HK\$'000	Battery materials production HK\$'000	Other business HK\$'000	Total HK\$'000
<b>Sale of goods</b>	721,694	4,510,502	1,673,925	5,924,641	12,830,762
<b>Geographical markets</b>					
Mainland China	296,196	4,073,060	1,645,898	5,924,641	11,939,795
Asia (excluding Mainland China)	425,498	182,049	5,007	–	612,554
Europe	–	34,054	1,836	–	35,890
North America	–	221,339	21,184	–	242,523
Total revenue from contracts with customers	721,694	4,510,502	1,673,925	5,924,641	12,830,762
<b>Timing of revenue recognition</b>					
Goods transferred at a point in time with customers	721,694	4,510,502	1,673,925	5,924,641	12,830,762

For the year ended 31 December 2020

#### Segments

	Manganese mining HK\$'000	EMM and alloying materials production HK\$'000	Battery materials production HK\$'000	Other business HK\$'000	Total HK\$'000
<b>Sale of goods</b>	105,064	3,089,155	918,448	254,896	4,367,563
<b>Geographical markets</b>					
Mainland China	105,064	2,979,629	900,940	252,253	4,237,886
Asia (excluding Mainland China)	–	100,682	4,163	–	104,845
Europe	–	7,407	5,180	–	12,587
North America	–	1,437	8,165	2,643	12,245
Total revenue from contracts with customers	105,064	3,089,155	918,448	254,896	4,367,563
<b>Timing of revenue recognition</b>					
Goods transferred at a point in time with customers	105,064	3,089,155	918,448	254,896	4,367,563

**6. Revenue, other income and gains (continued)**

## Revenue from contracts with customers (continued)

## (a) Disaggregated revenue information (continued)

Set out below is the reconciliation of the revenue from contracts with customers to the amounts disclosed in the segment information:

For the year ended 31 December 2021

Segments	Manganese mining HK\$'000	EMM and alloying materials production HK\$'000	Battery materials production HK\$'000	Other business HK\$'000	Total HK\$'000
Revenue from contracts with customers					
Sales to external customers	721,694	4,510,502	1,673,925	5,924,641	12,830,762

For the year ended 31 December 2020

Segments	Manganese mining HK\$'000	EMM and alloying materials production HK\$'000	Battery materials production HK\$'000	Other business HK\$'000	Total HK\$'000
Revenue from contracts with customers					
Sales to external customers	105,064	3,089,155	918,448	254,896	4,367,563

The following table shows the amounts of revenue recognised in the current reporting period that were included in the contract liabilities at the beginning of the reporting period and recognised from performance obligations satisfied in previous periods:

	2021 HK\$'000	2020 HK\$'000
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:		
Sale of goods	30,761	44,305

## (b) Performance obligations

Information about the Group's performance obligations is summarised below:

*Sale of goods*

The performance obligation is satisfied upon delivery of the commodities and payment is generally due within one to three months from the invoice date, except for new customers, where payment in advance is normally required.

The amounts of transaction prices allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December are as follows:

	2021 HK\$'000	2020 HK\$'000
Amounts expected to be recognised as revenue:		
Within one year	681,603	30,761

All the amounts of transaction prices allocated to the remaining performance obligations are expected to be recognised as revenue within one year.

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### 6. Revenue, other income and gains (continued)

An analysis of other income and gains is as follows:

	Note	2021 HK\$'000	2020 HK\$'000
Other income and gains			
Bank and other interest income		6,308	26,037
Gain on disposal of items of property, plant and equipment		–	15,293
Subsidy income*		54,594	65,413
Net subcontracting income#		–	85,279
Sale of scraps		35,734	9,660
Gross rental income from investment property operating leases:			
Lease payments, including fixed payments	16	24,455	25,920
Fair value gains on investment properties		–	121
Others		37,331	20,574
		<b>158,422</b>	248,297

\* The amount mainly represented government grants of subsidy and compensation for electricity costs, research and development costs and relocation costs in Mainland China. Conditions or contingencies relating to these grants are fulfilled and they are not deducted from related costs which they are intended to compensate, but recorded in other income.

# Pursuant to the subcontracting agreement entered into between the Group and a third party, the Group subcontracted the operation of a mine located in Gabon and is entitled to receive subcontracting income which included a fixed income per annum and a variable income dependent on the sales of ores produced by the subcontractor.

### 7. Finance costs

An analysis of finance costs is as follows:

	2021 HK\$'000	2020 HK\$'000
Interest on loans wholly repayable within five years	197,264	199,811
Finance costs for discounted notes receivable	20,464	7,204
Interest on lease liabilities (note 16(b))	1,531	6,834
Other finance costs	274	16
	<b>219,533</b>	213,865

## 8. Profit/(loss) before tax

The Group's profit/(loss) before tax is arrived at after charging/(crediting):

	Notes	2021 HK\$'000	2020 HK\$'000
Cost of inventories sold <sup>#</sup>		<b>10,488,720</b>	3,791,307
Depreciation of property, plant and equipment	14	<b>456,131</b>	381,194
Depreciation of right-of-use assets	16(a)	<b>71,438</b>	58,864
Amortisation of intangible assets	17	<b>19,404</b>	20,407
Research and development costs		<b>72,265</b>	43,102
Lease payments not included in the measurement of lease liabilities	16(c)	<b>8,049</b>	7,874
Auditor's remuneration		<b>4,998</b>	3,266
Employee benefit expense (excluding directors' and chief executive's remuneration (note 9)):			
Wages and salaries		<b>682,517</b>	490,696
Pension scheme contributions		<b>83,441</b>	31,408
Other employee welfare		<b>77,155</b>	72,071
		<b>843,113</b>	594,175
Loss/(gain) on disposal of items of property, plant and equipment*		<b>36,031</b>	(15,293)
Foreign exchange differences, net*		<b>33,142</b>	3,075
Share of profits and losses of:			
Associates		<b>297,347</b>	131,914
Joint venture		<b>-</b>	(1,793)
Impairment/(reversal of impairment) of inventories, net <sup>#</sup>		<b>3,103</b>	(249)
Impairment losses on financial assets, net:			
Impairment of trade and notes receivables, net***	21	<b>122,662</b>	46,182
Impairment of financial assets included in prepayments, other receivables and other assets		<b>24,555</b>	66,424
Impairment of an amount due from an associate		<b>11,446</b>	33,012
		<b>158,663</b>	145,618
Impairment loss on property, plant and equipment	14	<b>69,572</b>	3,582
Impairment loss on mining rights	17	<b>166,853</b>	18,584
Impairment loss on non-financial assets included in prepayments, other receivables and other assets*		<b>-</b>	4,226
Impairment loss on an investment in an associate		<b>15,325</b>	295,781
Loss on deemed disposal of partial interest in an associate**		<b>-</b>	92,375
Gain on bargain purchase from an acquisition of a subsidiary		<b>-</b>	(69,411)
Settlement expense with a subcontractor***		<b>166,045</b>	-
Fair value losses/(gains) on investment properties*	15	<b>4,243</b>	(121)

<sup>#</sup> HK\$10,491,823,000 (2020: HK\$3,791,058,000) included in "Cost of sales" in the consolidated statement of profit or loss and other comprehensive income.

\* Nil (2020: HK\$15,414,000) included in "Other income and gains" (note 6) and HK\$73,416,000 (2020: HK\$7,301,000) included in "Other expenses" in the consolidated statement of profit or loss and other comprehensive income.

\*\* In February 2020, the Group recorded a non-cash extraordinary loss of HK\$92,375,000 resulting in dilution in the Group's shareholding from 29.99% to 23.99% as the Group did not participate in GMG's rights issue.

\*\*\* During the year ended 31 December 2021, Huazhou BVI and a shareholder of an associate of the Group entered a mutual offsetting agreement to net off the mutual debts via transferring assets and liabilities of the shareholder of an associate of the Group. Huazhou BVI recognised the relevant expense of HK\$20,570,000 and HK\$166,045,000 in "Impairment losses on financial assets, net" and "Other expenses", respectively.

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### 9. Directors' and chief executive's remuneration

Directors' and chief executive's remuneration for the year, disclosed pursuant to the Listing Rules, section 383(1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation, is as follows:

	2021 HK\$'000	2020 HK\$'000
Fees	2,391	1,818
Other emoluments		
Salaries, allowances and benefits in kind	5,746	6,098
Performance related bonuses	11,700	4,185
Pension scheme contributions	191	562
	17,637	10,845
	20,028	12,663

#### (a) Independent non-executive directors

The fees paid to independent non-executive directors during the year were as follows:

Fees	2021 HK\$'000	2020 HK\$'000
Mr. Lin Zhijun (resigned on 31 July 2021)	175	300
Mr. Wang Zhihong (resigned on 30 March 2021)	365	300
Mr. Zhang Yupeng	300	8
Mr. Lau Wan Ki (appointed on 31 July 2021)	126	–
Mr. Yuan Mingliang (appointed on 31 March 2021)	225	–
Mr. Tan Zhuzhong (resigned on 22 December 2020)	–	300
	1,191	908

There were no other emoluments payable to the independent non-executive directors during the year (2020: Nil).

## 9. Directors' and chief executive's remuneration (continued)

## (b) Executive directors, non-executive directors and the chief executive

	Fees HK\$'000	Salaries, allowances and benefits in kind HK\$'000	Performance related bonuses HK\$'000	Pension scheme contributions HK\$'000	Total HK\$'000
<b>2021</b>					
<b>Executive directors:</b>					
Mr. Zhang He	300	694	2,215	8	3,217
Mr. Zhang Zongjian	300	-	-	-	300
	600	694	2,215	8	3,517
<b>Non-executive director:</b>					
Mr. Lyu Yanzheng	300	-	-	-	300
<b>Chief executive and executive director:</b>					
Mr. Li Weijian	300	5,052	9,485	183	15,020
	1,200	5,746	11,700	191	18,837
<b>2020</b>					
<b>Executive directors:</b>					
Mr. Li Weijian	292	2,722	2,058	77	5,149
Mr. Zhang He (appointed on 22 December 2020)	8	-	-	-	8
Mr. Zhang Zongjian (appointed on 22 December 2020)	8	-	-	-	8
	308	2,722	2,058	77	5,165
<b>Non-executive director:</b>					
Mr. Lyu Yanzheng	300	-	-	-	300
<b>Chief executive and executive directors:</b>					
Mr. Li Weijian (re-designated as Chief Executive Officer on 22 December 2020)	9	77	59	2	147
Mr. Guo Aimin (resigned on 22 December 2020)	293	3,299	2,068	483	6,143
	302	3,376	2,127	485	6,290
	910	6,098	4,185	562	11,755

There was no other arrangement under which a director or the chief executive waived or agreed to waive any remuneration during the year.

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### 10. Five highest paid employees

The five highest paid employees for the year ended 31 December 2021 include two directors including the chief executive of the Company (2020: two directors including the chief executive), details of whose remuneration are set out in note 9. Details of the remuneration for the year of the remaining three (2020: three) highest paid employees who are neither a director nor chief executive of the Company, are as follows:

	2021 HK\$'000	2020 HK\$'000
Salaries, allowances and benefits in kind	9,036	8,695
Performance related bonuses	690	3,322
Pension scheme contributions	134	590
	<b>9,860</b>	12,607

The number of non-director and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	2021	2020
Number of employees by remuneration band:		
HK\$1,500,001 – HK\$2,000,000	1	–
HK\$2,500,001 – HK\$3,000,000	1	–
HK\$3,000,001 – HK\$3,500,000	–	1
HK\$4,500,001 – HK\$5,000,000	–	2
HK\$5,000,001 – HK\$5,500,000	1	–
	<b>3</b>	3

### 11. Income tax

The Group is subject to income tax on an entity basis and assessable based on tax rates prevailing in the jurisdictions in which members of the Group operate.

	Note	2021 HK\$'000	2020 HK\$'000
Current – PRC			
Charge for the year		174,636	7,672
Current – Gabon			
Charge for the year		39,094	–
Deferred	19	(4,979)	(53,628)
Total tax expense/(credit) for the year		<b>208,751</b>	(45,956)

#### Hong Kong profits tax

No provision for Hong Kong profits tax has been made as the Group had utilised unrecognised tax losses brought forward from prior years to set off against the current year's taxable profits.

#### PRC corporate income tax ("CIT")

Pursuant to the PRC Income Tax Law and the respective regulations, except for the preferential tax treatment available to South Manganese Group and Huiyuan Manganese which are recognised as High and New Technology Enterprises and were entitled to a preferential CIT rate of 15% up to 2022 and 2023 respectively, and Guangxi Start, which was entitled to a preferential CIT rate of 15% for Developing Western China for which the policy will expire in 2030 and the related benefit will be subject to review by tax authorities every year thereafter, other companies of the Group which operate in Mainland China are subject to CIT at a rate of 25% on their respective taxable income.

**11. Income tax (continued)****Gabon corporate income tax**

Pursuant to the Gabon Income Tax Law, a company which engages in mining operations in Gabon is subject to CIT at the higher of 35% of its taxable income or 1% of its revenue.

A reconciliation of the income tax expense/(credit) applicable to profit/(loss) before tax at the statutory rate for the country in which the Company and the majority of its subsidiaries are principally domiciled to the income tax expense/(credit) at the effective tax rate is as follows:

	2021 HK\$'000	2020 HK\$'000
Profit/(loss) before tax	584,936	(503,810)
Tax at the statutory PRC corporate income tax rate	146,234	(125,953)
Different tax rates for specific provinces or enacted by local authority	(54,153)	4,489
Profits and losses attributable to associates and a joint venture	73,843	23,402
Income not subject to tax	(2,907)	(7,330)
Expenses not deductible for tax	67,580	92,025
Tax losses not recognised	38,166	31,560
Tax losses recognised	–	(41,470)
Tax losses utilised from previous periods	(60,012)	(22,679)
Tax charge/(credit) reported in profit or loss	208,751	(45,956)
Effective income tax rate	35.7%	9.1%

The share of tax expense attributable to associates amounting to nil (2020: HK\$882,000) and that of tax credit attributable to a joint venture amounting to nil (2020: HK\$161,000), respectively, are included in "Share of profits and losses of associates and a joint venture" in profit or loss.

**12. Earnings/(loss) per share attributable to ordinary equity holders of the parent**

The calculation of the basic earnings/(loss) per share amounts is based on the profit/(loss) for the year attributable to ordinary equity holders of the parent and the weighted average number of ordinary shares of 3,428,459,000 (2020: 3,428,459,000) in issue during the year.

The Group had no potentially dilutive ordinary shares in issue during the year ended 31 December 2021. No adjustment has been made to the basic earnings/(loss) per share amounts presented for the year ended 31 December 2020 in respect of a dilution as the impact of the share options outstanding had an anti-dilutive effect on the basic earnings/(loss) per share amounts presented.

The calculations of basic and diluted earnings/(loss) per share are based on:

	2021 HK\$'000	2020 HK\$'000
<b>Earnings/(loss)</b>		
Earnings/(loss) attributable to ordinary equity holders of the parent, used in the basic earnings/(loss) per share calculation	466,185	(437,929)
	<b>Number of shares</b>	
<b>Shares</b>		
Weighted average number of ordinary shares in issue during the year used in the basic earnings/(loss) per share calculation	3,428,459,000	3,428,459,000

**13. Dividends**

The board does not recommend the payment of any dividend for the year ended 31 December 2021 (2020: Nil).

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### 14. Property, plant and equipment

31 December 2021	Note	Buildings and mining structures HK\$'000	Motor vehicles, plant, machinery, tools and equipment HK\$'000	Furniture and fixtures HK\$'000	Leasehold improvements and exploration and evaluation assets HK\$'000	Construction in progress HK\$'000	Total HK\$'000
At 1 January 2021:							
Cost		3,507,637	2,304,828	72,938	155,396	283,487	6,324,286
Accumulated depreciation and impairment		(1,590,958)	(1,240,865)	(51,457)	(79,846)	(6,210)	(2,969,336)
Net carrying amount		1,916,679	1,063,963	21,481	75,550	277,277	3,354,950
At 1 January 2021, net of accumulated depreciation and impairment		1,916,679	1,063,963	21,481	75,550	277,277	3,354,950
Additions		31,741	235,375	3,805	40,616	404,617	716,154
Depreciation provided during the year	8	(189,874)	(249,494)	(2,733)	(14,030)	-	(456,131)
Impairment	8	(40,758)	(6,083)	-	(22,731)	-	(69,572)
Disposals		(24,355)	(17,093)	(1,239)	(36,225)	(761)	(79,673)
Transfers		149,568	133,228	156	-	(282,952)	-
Exchange realignment		56,512	40,943	203	1,559	9,548	108,765
At 31 December 2021, net of accumulated depreciation and impairment		1,899,513	1,200,839	21,673	44,739	407,729	3,574,493
<b>At 31 December 2021:</b>							
Cost		3,712,725	2,662,071	63,416	121,084	414,086	6,973,382
Accumulated depreciation and impairment		(1,813,212)	(1,461,232)	(41,743)	(76,345)	(6,357)	(3,398,889)
Net carrying amount		1,899,513	1,200,839	21,673	44,739	407,729	3,574,493

## 14. Property, plant and equipment (continued)

31 December 2020	Note	Buildings and mining structures HK\$'000	Motor vehicles, plant, machinery, tools and equipment HK\$'000	Furniture and fixtures HK\$'000	Leasehold improvements and exploration assets HK\$'000	Construction in progress HK\$'000	Total HK\$'000
At 1 January 2020:							
Cost		2,925,820	1,637,015	63,819	117,427	262,162	5,006,243
Accumulated depreciation and impairment		(1,238,914)	(978,213)	(47,377)	(64,882)	(5,893)	(2,335,279)
Net carrying amount		1,686,906	658,802	16,442	52,545	256,269	2,670,964
At 1 January 2020, net of accumulated depreciation and impairment		1,686,906	658,802	16,442	52,545	256,269	2,670,964
Additions		1,370	94,731	1,774	20,639	289,440	407,954
Acquisition of a subsidiary		101,945	255,512	1,372	6,898	71,125	436,852
Depreciation provided during the year	8	(156,703)	(213,958)	(1,451)	(9,082)	-	(381,194)
Impairment	8	(3,582)	-	-	-	-	(3,582)
Disposals		(13,696)	(18,164)	(109)	-	(547)	(32,516)
Transfers		183,000	169,982	2,977	-	(355,959)	-
Exchange realignment		117,439	117,058	476	4,550	16,949	256,472
At 31 December 2020, net of accumulated depreciation and impairment		1,916,679	1,063,963	21,481	75,550	277,277	3,354,950
<b>At 31 December 2020:</b>							
Cost		3,507,637	2,304,828	72,938	155,396	283,487	6,324,286
Accumulated depreciation and impairment		(1,590,958)	(1,240,865)	(51,457)	(79,846)	(6,210)	(2,969,336)
Net carrying amount		1,916,679	1,063,963	21,481	75,550	277,277	3,354,950

At 31 December 2021, the Group was in the process of applying for the building ownership certificates of certain of its buildings with an aggregate net carrying amount of approximately HK\$154,320,000 (2020: HK\$152,733,000). The directors are of the opinion that the aforesaid matter will not have any significant impact on the Group's financial position as at 31 December 2021.

During the course of the Group's major modifications since year 2021 in accordance with the Group's overall strategy to adjust the product mix and shift more to manganese-related battery materials production, certain items of equipment and machinery became idle and an impairment of HK\$69,572,000 (2020: HK\$3,582,000) was recognised to write down to their recoverable amount in 2021.

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### 15. Investment properties

	Note	2021 HK\$'000	2020 HK\$'000
Carrying amount at 1 January		115,394	94,931
Additions		–	13,562
Net (loss)/gain from a fair value adjustment	8	(4,243)	121
Exchange realignment		3,133	6,780
Carrying amount at 31 December		114,284	115,394

The Group's investment properties are commercial properties situated in Mainland China.

The Group's investment properties with a carrying amount of HK\$114,284,000 as at 31 December 2021 were stated at the 2021 valuation performed by independent third parties.

#### Fair value hierarchy

The investment properties are leased to a related party and third parties under operating leases, further summary details of which are included in note 16 to the financial statements.

The following table illustrates the fair value measurement hierarchy of the Group's investment properties:

Recurring fair value measurement for:	Fair value measurement as at 31 December 2021 using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Commercial properties	–	–	114,284	114,284

Recurring fair value measurement for:	Fair value measurement as at 31 December 2020 using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
Commercial properties	–	–	115,394	115,394

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 (2020: Nil).

**15. Investment properties (continued)**

Reconciliation of fair value measurement categorised within Level 3 of the fair value hierarchy:

	Note	Commercial properties HK\$'000
Carrying amount at 1 January 2020		94,931
Additions		13,562
Net gain from a fair value adjustment	8	121
Exchange realignment		6,780
Carrying amount at 31 December 2020 and 1 January 2021		<b>115,394</b>
Net loss from a fair value adjustment	8	<b>(4,243)</b>
Exchange realignment		<b>3,133</b>
Carrying amount at 31 December 2021		<b>114,284</b>

Below is a summary of the valuation technique used and a summary of the key inputs to the valuation of the investment properties:

	Valuation technique	Significant unobservable inputs	Range or weighted average	
			2021	2020
Commercial properties with a carrying amount of HK\$86,744,000 (2020: HK\$87,484,000)	Discounted cash flow method	Estimated rental value (per sq.m. and per month) Rent growth (p.a.) Long term vacancy rate Discount rate	<b>RMB116 to RMB158</b> <b>5.0%</b> <b>2.0%</b> <b>9.0%</b>	RMB110 to RMB150 5.0% 2.0% 8.5%
Commercial properties with a carrying amount of HK\$27,540,000 (2020: HK\$27,910,000)	Discounted cash flow method	Estimated rental value (per sq.m. and per month) Rent growth (p.a.) Long term vacancy rate Discount rate	<b>RMB11 to RMB15</b> <b>0%</b> <b>2.0%</b> <b>5.0% to 5.5%</b>	RMB11 to RMB15 0% 2.0% 5.0% to 5.5%

Under the discounted cash flow method, fair value is estimated using assumptions regarding the benefits and liabilities of ownership over the asset's life including an exit or terminal value. This method involves the projection of a series of cash flows on a property interest. A market-derived discount rate is applied to the projected cash flow in order to establish the present value of the income stream associated with the asset. The exit yield is normally separately determined and differs from the discount rate.

The duration of the cash flows and the specific timing of inflows and outflows are determined by events such as rental reviews, lease renewal and related reletting, redevelopment or refurbishment. The appropriate duration is driven by market behaviour that is a characteristic of the class of property. The periodic cash flow is estimated as gross income less vacancy, non-recoverable expenses, collection losses, lease incentives, maintenance costs, agent and commission costs and other operating and management expenses. The series of periodic net operating income, along with an estimate of the terminal value anticipated at the end of the projection period, is then discounted.

A significant increase/(decrease) in the estimated rental value and the market rent growth rate per annum in isolation would result in a significant increase/(decrease) in the fair value of the investment properties. A significant increase/(decrease) in the long term vacancy rate and the discount rate in isolation would result in a significant decrease/(increase) in the fair value of the investment properties. Generally, a change in the assumption made for the estimated rental value is accompanied by a directionally similar change in the rent growth per annum and the discount rate and an opposite change in the long term vacancy rate.

## Notes to Financial Statements

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### 16. Leases

#### The Group as a lessee

The Group has lease contracts for various items of plant and machinery, motor vehicles and other equipment used in its operations. Lump sum payments were made upfront to acquire the leased land from the owners with lease periods of 30 to 69 years, and no ongoing payments will be made under the terms of these land leases. Leases of plant and machinery generally have lease terms between 5 and 10 years, while motor vehicles generally have lease terms between 5 and 10 years. Other equipment generally has lease terms of 12 months or less and/or is individually of low value. Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group.

#### (a) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements during the year are as follows:

	Note	Leasehold land HK\$'000	Motor vehicles, plant machinery, tools and equipment HK\$'000	Total HK\$'000
As at 1 January 2020		441,730	170,756	612,486
Addition		4,359	15,965	20,324
Acquisition of a subsidiary		64,667	–	64,667
Depreciation	8	(15,513)	(43,351)	(58,864)
Disposal		–	(4,934)	(4,934)
Exchange realignment		33,551	8,871	42,422
At 31 December 2020 and 1 January 2021		528,794	147,307	676,101
Addition		8,790	30,812	39,602
Depreciation	8	(37,399)	(34,039)	(71,438)
Exchange realignment		14,202	3,790	17,992
At 31 December 2021		514,387	147,870	662,257

#### (b) Lease liabilities

The carrying amount of lease liabilities (included under interest-bearing bank and other borrowings) and the movements during the year are as follows:

	Notes	2021 HK\$'000	2020 HK\$'000
Carrying amount at 1 January		39,515	101,362
New leases		48,414	6,458
Accretion of interest recognised during the year	7	1,531	6,834
Payments		(50,373)	(72,485)
Disposal		–	(5,059)
Exchange realignment		3,520	2,405
Carrying amount at 31 December		42,607	39,515
Analysed into:			
Current portion	27	21,266	35,778
Non-current portion	27	21,341	3,737

The maturity analysis of lease liabilities is disclosed in note 40 to the financial statements.

**16. Leases (continued)**

## The Group as a lessee (continued)

(c) The amounts recognised in profit or loss in relation to leases are as follows:

	Note	2021 HK\$'000	2020 HK\$'000
Interest on lease liabilities		1,531	6,834
Depreciation charge of right-of-use assets		71,438	58,864
Expense relating to short-term leases and other leases with remaining lease terms ended on or before 31 December 2021 (included in cost of sales)	8	174	126
Expense relating to leases of low-value assets (included in administrative expenses)	8	2,467	799
Variable lease payments not included in the measurement of lease liabilities (included in cost of sales)	8	5,408	6,949
<b>Total amount recognised in profit or loss</b>		<b>81,018</b>	<b>73,572</b>

(d) Variable lease payments

The Group has lease contracts for power transformers that contain variable payments based on the actual volume of electricity consumed. These terms are negotiated by management without steady customer demand. Management's objective is to align the lease expense with the volume of electricity consumed and revenue earned. The following provides information on the Group's variable lease payments, including the magnitude in relation to fixed payments:

**Year ended 31 December 2021**

	Fixed payments HK\$'000	Variable payments HK\$'000	Total HK\$'000
Fixed rent	116	–	116
Variable rent only	–	5,408	5,408
	<b>116</b>	<b>5,408</b>	<b>5,524</b>

**Year ended 31 December 2020**

	Fixed payments HK\$'000	Variable payments HK\$'000	Total HK\$'000
Fixed rent	116	–	116
Variable rent only	–	6,297	6,297
	<b>116</b>	<b>6,297</b>	<b>6,413</b>

A 10% increase in the volume of electricity consumed for the relevant products would increase the total lease payments by 10%.

(e) The total cash outflow for leases is disclosed in note 37(c) to the financial statements.



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### 16. Leases (continued)

#### The Group as a lessor

The Group leases its investment properties (note 15) and certain of its plant and machinery under operating lease arrangements. The terms of the leases generally require the tenants to pay security deposits and provide for periodic rent adjustments according to the then prevailing market conditions. Rental income recognised by the Group during the year was HK\$24,455,000 (2020: HK\$25,920,000), details of which are included in note 6 to the financial statements.

At 31 December 2021, the total undiscounted minimum lease payments receivable by the Group in future periods under non-cancellable operating leases with its tenants are as follows:

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Within one year	<b>3,113</b>	9,842
After one year but within two years	<b>40</b>	3,410
After two years but within three years	<b>–</b>	46
	<b>3,153</b>	13,298

## 17. Intangible assets

<b>31 December 2021</b>	<b>Note</b>	<b>Mining rights HK\$'000</b>	<b>Other intangible assets HK\$'000</b>	<b>Total HK\$'000</b>
Cost at 1 January 2021, net of accumulated amortisation and impairment		467,935	10,079	478,014
Additions		64,321	–	64,321
Amortisation provided during the year	8	(18,184)	(1,220)	(19,404)
Impairment during the year	8	(166,853)	–	(166,853)
Exchange realignment		10,953	871	11,824
At 31 December 2021		358,172	9,730	367,902
<b>At 31 December 2021</b>				
Cost		1,035,093	17,874	1,052,967
Accumulated amortisation and impairment		(676,921)	(8,144)	(685,065)
Net carrying amount		358,172	9,730	367,902
<b>31 December 2020</b>				
Cost at 1 January 2020, net of accumulated amortisation and impairment		454,841	9,252	464,093
Additions		22,673	935	23,608
Amortisation provided during the year	8	(19,682)	(725)	(20,407)
Impairment during the year	8	(18,584)	–	(18,584)
Exchange realignment		28,687	617	29,304
At 31 December 2020		467,935	10,079	478,014
<b>At 31 December 2020</b>				
Cost		924,039	17,430	941,469
Accumulated amortisation and impairment		(456,104)	(7,351)	(463,455)
Net carrying amount		467,935	10,079	478,014

On 27 October 2016, the Group entered into an agreement with a subcontractor, which is also the major shareholder of an associate of the Group, entrusting it with certain rights to operate the Group's Bembélé Manganese Mine in Gabon under the supervision of the Group and subject to certain conditions for a period of five years commencing from 1 March 2017. On 30 March 2021, the Group and the subcontractor reached an agreement to terminate the subcontracting agreement with effect from 31 December 2020 and the Group began to run the mining operation on its own in 2021. As at 31 December 2021, the net book value of this mining right after amortisation and impairment amounted to HK\$200,000 (2020: HK\$400,000).

As at 31 December 2021, due to the alternation of the Group's expansion plan of Changgou Manganese Mine owned by Zunyi Group, an impairment of HK\$166,853,000 (2020: HK\$18,584,000) on its mining right was recognised to write down to the recoverable amount of the mining right and its related infrastructure and plant and machinery ("CGU") of HK\$423,281,000 (2020: HK\$410,605,000). The recoverable amount is determined by discounting the future cash flows generated from the continuous use of the CGU. The future cash flows of the CGU are estimated mainly based on an average ore selling price of HK\$502 per tonne (equivalent to RMB417 per tonne) (2020: HK\$527 per tonne, equivalent to RMB442 per tonne) over the remaining useful life of the mining right discounting at a pre-tax discount rate of 11.1% (2020: 9.7%).

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### 18. Investments in associates and amounts due from associates

	Notes	2021 HK\$'000	2020 HK\$'000
Share of net assets	(a)	403,714	601,909
Less: Impairment		(311,106)	(295,781)
Loan to an associate		–	117
		<b>92,608</b>	306,245
<b>Amounts due from associates:</b>	(b)		
Repayable within one year		55,106	25,167
Repayable after one year		–	35,006
		<b>55,106</b>	60,173
Less: Impairment		(55,106)	(42,293)
		–	17,880

Notes:

- (a) As at 31 December 2021, the Group had contributed HK\$91,883,000 (equivalent to RMB75,000,000) to a limited partnership Qingdao Manganese Investment Partnership (Limited Partnership) (“Qingdao Manganese”, “青島錳系投資合夥企業(有限合夥)”) established in the PRC, which represented 16.35% of its equity interests. The Group retains significant influence over this investment as the Group obtained one seat over seven in its Management Committee, this investment is accounted for as an associate under the equity method.
- (b) As at 31 December 2021, included in the amounts due from associates were loans to subsidiaries of Greenway Mining Group Limited (“GMG”) of HK\$47,616,000 (2020: HK\$52,886,000) which carried interest at 8% (2020: 8%) per annum. The remaining balances at 31 December 2021 and 2020 represented other receivable due from Dushan Jinmeng Manganese Industry Co., Ltd. (“Dushan Jinmeng”).

As at 31 December 2021, an expected credit loss allowance of HK\$47,616,000 (2020: HK\$35,006,000) was recognised in respect of an amount due from GMG and an expected credit loss allowance of HK\$7,490,000 (2020: HK\$7,287,000) was recognised in respect of an amount due from Dushan Jinmeng.

The Group’s trade and notes receivables due from associates are disclosed in note 36 to the financial statements.

Particulars of the associates as at 31 December 2021 are as follows:

Company name	Place and date of incorporation/ establishment	Issued ordinary share/ registered capital	Percentage of equity interests attributable to the Group		Principal activities
			Direct	Indirect	
GMG	Cayman Islands 30 November 2009	HK\$45,372	–	23.99%	Mining, ore processing and sale of lead-silver concentrates and zinc-silver concentrates
Dushan Jinmeng	PRC 19 July 2001	RMB758,657,900	–	33.00%	Manganese ferroalloy production and processing and trading of manganese ferroalloy and related raw materials
Qingdao Manganese	PRC 19 January 2021	RMB458,700,000	–	16.35%	Trading of nonferrous metals and investment

The Group’s interests in the associates represent equity interests held by wholly-owned subsidiaries of the Company.

**18. Investments in associates and amounts due from associates (continued)**

The following table illustrates the summarised financial information of associates, after adjustments for any differences in accounting policies and reconciled to the carrying amount in the consolidated financial statements.

	GMG		Dushan Jinmeng		Qingdao Manganese
	2021 HK\$'000	2020 HK\$'000	2021 HK\$'000	2020 HK\$'000	2021 HK\$'000
Current assets	<b>104,768</b>	79,527	<b>1,090,376</b>	728,942	<b>575,984</b>
Non-current assets	<b>2,200,205</b>	2,192,298	<b>1,469,506</b>	1,876,355	<b>120</b>
Current liabilities	<b>(404,397)</b>	(358,451)	<b>(1,873,949)</b>	(1,302,712)	<b>(9,695)</b>
Non-current liabilities	<b>(415,232)</b>	(404,013)	<b>(685,933)</b>	(448,740)	<b>-</b>
Net assets	<b>1,485,344</b>	1,509,361	<b>-</b>	853,845	<b>566,409</b>
Non-controlling interests	<b>(188,529)</b>	(174,889)	<b>-</b>	-	<b>-</b>
	<b>1,296,815</b>	1,334,472	<b>-</b>	853,845	<b>566,409</b>
Reconciliation to the Group's interests in the associates:					
Proportion of the Group's ownership	<b>23.99%</b>	23.99%	<b>33.00%</b>	33.00%	<b>16.35%</b>
Group's share of net assets of the associates	<b>311,106</b>	320,140	<b>-</b>	281,769	<b>92,608</b>
Impairment of an investment in an associate	<b>(311,106)</b>	(295,781)	<b>-</b>	-	<b>-</b>
Carrying amount of the investments	<b>-</b>	24,359	<b>-</b>	281,769	<b>92,608</b>
Fair value of the Group's investments	<b>N/A</b>	24,359	<b>N/A</b>	N/A	<b>N/A</b>
Revenue	<b>35,521</b>	58,485	<b>1,792,673</b>	1,293,655	<b>83,016</b>
(Loss)/profit for the year attributable to:					
Shareholders	<b>(210,503)</b>	(445,140)	<b>(875,453)</b>	(74,708)	<b>4,436</b>
Non-controlling interests	<b>(23,754)</b>	(27,302)	<b>-</b>	-	<b>-</b>
Other comprehensive income	<b>-</b>	1,870	<b>-</b>	-	<b>-</b>
Total comprehensive (loss)/income attributable to:					
Shareholders	<b>(210,503)</b>	(443,270)	<b>(875,453)</b>	(74,708)	<b>4,436</b>
Non-controlling interests	<b>(23,754)</b>	(27,302)	<b>-</b>	-	<b>-</b>

## Notes to Financial Statements

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### 19. Deferred tax

The movements in deferred tax assets and liabilities of the Group are as follows:

#### Deferred tax assets

	Note	Impairment of financial assets HK\$'000	Losses available for offsetting against future taxable profits HK\$'000	Total HK\$'000
At 1 January 2020		30,251	–	30,251
Deferred tax credited to profit or loss during the year	11	4,098	41,470	45,568
Exchange realignment		9,576	2,501	12,077
At 31 December 2020 and 1 January 2021		43,925	43,971	87,896
Deferred tax credited/(charged) to profit or loss during the year	11	15,222	(28,110)	(12,888)
Exchange realignment		4,331	748	5,079
At 31 December 2021		63,478	16,609	80,087

#### Deferred tax liabilities

	Note	Fair value adjustments arising from acquisition of subsidiaries HK\$'000	Withholding taxes HK\$'000	Fair value adjustments on investment properties HK\$'000	Depreciation allowance in excess of related depreciation and others HK\$'000	Total HK\$'000
At 1 January 2020		136,153	12,692	7,192	35,704	191,741
Acquisition of a subsidiary		13,275	–	–	–	13,275
Deferred tax (credited)/charged to profit or loss during the year	11	(16,368)	–	(1,432)	9,740	(8,060)
Exchange realignment		20,039	–	383	2,917	23,339
At 31 December 2020 and 1 January 2021		153,099	12,692	6,143	48,361	220,295
Deferred tax (credited)/charged to profit or loss during the year	11	(44,874)	–	(303)	27,310	(17,867)
Exchange realignment		3,462	–	166	1,803	5,431
At 31 December 2021		111,687	12,692	6,006	77,474	207,859

**19. Deferred tax (continued)****Deferred tax liabilities (continued)**

Pursuant to the PRC Corporate Income Tax Law, a 10% withholding tax is levied on dividends declared to foreign investors from the foreign investment enterprises established in Mainland China. The requirement is effective from 1 January 2008 and applies to earnings after 31 December 2007. A lower withholding tax rate may be applied if there is a tax treaty between Mainland China and the jurisdiction of the foreign investors. For the Group, the current applicable rate is 10%. The Group is therefore liable for withholding taxes on dividends distributed by those subsidiaries established in Mainland China in respect of earnings generated from 1 January 2008.

For presentation purposes, certain deferred tax assets and liabilities have been offset in the statement of financial position. The following is an analysis of the deferred tax balances of the Group for financial reporting purposes:

	<b>2021</b> <b>HK\$'000</b>
Net deferred tax assets recognised in the consolidated statement of financial position	<b>12,897</b>
Net deferred tax liabilities recognised in the consolidated statement of financial position	<b>(140,669)</b>
	<b>(127,772)</b>

There are no income tax consequences attaching to the payment of dividends by the Company to its shareholders.

Deferred tax assets have not been recognised in respect of the following items:

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Tax losses	<b>1,016,684</b>	815,768
Deductible temporary differences	<b>46,926</b>	49,674
	<b>1,063,610</b>	865,442

The Group has tax losses arising in Hong Kong of HK\$567,646,000 (2020: HK\$317,580,000) that are available indefinitely for offsetting against future taxable profits of the respective companies the losses relate to.

The Group also has tax losses arising in Mainland China of HK\$449,038,000 (2020: HK\$498,188,000) that will expire within five years for offsetting against future taxable profits of the respective companies the losses relate to.

Deferred tax assets have not been recognised in respect of these losses as they have arisen in the Group companies that have been loss-making for some time and it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

**20. Inventories**

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Raw materials	<b>827,224</b>	342,962
Work in progress	<b>25,051</b>	4,231
Finished goods	<b>612,453</b>	249,698
	<b>1,464,728</b>	596,891
Less: Inventory provision	<b>(65,632)</b>	(68,654)
	<b>1,399,096</b>	528,237

## Notes to Financial Statements

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### 21. Trade and notes receivables

	2021 HK\$'000	2020 HK\$'000
Trade receivables	1,136,324	1,020,549
Notes receivable	623,637	589,525
	<b>1,759,961</b>	1,610,074
Less: Impairment	<b>(305,247)</b>	(181,247)
	<b>1,454,714</b>	1,428,827

The Group's trading terms with its customers are mainly on credit, except for new customers, where payment is required either in advance or upon delivery. Credit periods allowed are determined according to relevant business practice and the relevant type of goods and generally are in the range of one to three months from the invoice date and cash realisation may be further extended by three to six months for those customers paying by bank acceptance notes. Each customer has a maximum credit limit. The Group seeks to maintain strict control over its outstanding receivables and has a credit control department to minimise credit risk. Overdue balances are reviewed and followed up regularly by senior management.

Included in trade and notes receivables, nil (2020: HK\$268,365,000) was due from an associate and balance of HK\$28,392,000 (2020: HK\$16,720,000) was due from a related company (note 36).

Except for trade receivables of HK\$231,642,000 (2020: HK\$392,317,000) with a provision of HK\$231,642,000 (2020: HK\$110,625,000) due from a single customer and its subsidiaries, the remaining trade and notes receivables relate to a large number of diversified customers.

As at 31 December 2021, notes receivable of nil was pledged to issue certain bank acceptance notes (2020: HK\$90,840,000).

**21. Trade and notes receivables (continued)**

An ageing analysis of the trade receivables of the Group as at the end of the reporting period, based on the invoice date and net of loss allowance, is as follows:

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Within one month	<b>507,505</b>	382,677
One to two months	<b>237,332</b>	85,516
Two to three months	<b>50,496</b>	57,887
Over three months	<b>35,744</b>	313,222
	<b>831,077</b>	839,302

The Group normally offers credit terms of one month to three months to its established customers.

Notes receivables represent bank acceptance notes issued by banks in Mainland China maturing before December 2022. An ageing analysis of the notes receivables of the Group as at the end of the reporting period, based on the receipt date of the notes and net of loss allowance, is as follows:

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Within one month	<b>203,168</b>	209,109
One to two months	<b>282,866</b>	141,664
Two to three months	<b>64,498</b>	68,362
Over three months	<b>73,105</b>	170,390
	<b>623,637</b>	589,525

**Transferred financial assets that are derecognised in their entirety**

At 31 December 2021, the Group endorsed certain notes receivable accepted by banks in Mainland China (the "Derecognised Notes") to certain of its suppliers in order to settle the trade payables due to such suppliers with a carrying amount in aggregate of RMB317,342,000 (equivalent to HK\$388,776,000) (2020: RMB449,876,000, equivalent to HK\$536,252,000). The Derecognised Notes had a maturity of one to six months at the end of the reporting period. In accordance with the Law of Negotiable Instruments in the PRC, the holders of the Derecognised Notes have a right of recourse against the Group if the PRC banks default (the "Continuing Involvement"). In the opinion of the directors, the Group has transferred substantially all risks and rewards relating to the Derecognised Notes. Accordingly, it has derecognised the full carrying amounts of the Derecognised Notes and the associated trade payables. The maximum exposure to loss from the Group's Continuing Involvement in the Derecognised Notes and the undiscounted cash flows to repurchase these Derecognised Notes are equal to their carrying amounts. In the opinion of the directors, the fair values of the Group's Continuing Involvement in the Derecognised Notes are not significant.

During the year ended 31 December 2021, the Group has not recognised any gain or loss on the date of transfer of the Derecognised Notes. No gains or losses were recognised from the Continuing Involvement, both during the year or cumulatively. The endorsement has been made evenly throughout the year.

## Notes to Financial Statements

31 December 2021

### 21. Trade and notes receivables (continued)

The movements in the loss allowance for impairment of trade and notes receivables are as follows:

	Note	2021 HK\$'000	2020 HK\$'000
At beginning of year		<b>181,247</b>	126,219
Impairment losses, net	8	<b>122,662</b>	46,182
Acquisition of a subsidiary		-	4,303
Amount written off as uncollectible		<b>(638)</b>	(1,799)
Exchange realignment		<b>1,976</b>	6,342
At end of year		<b>305,247</b>	181,247

Increase in the loss allowance of HK\$122,662,000 (2020: HK\$46,182,000) was as a result of an increase in trade and notes receivables which were past due.

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing information for groupings of various customer segments with similar loss patterns (i.e., by geographical region, product type, customer type and rating, and coverage by letters of credit or other forms of credit insurance). The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, trade receivables are written off if past due for more than one year and are not subject to enforcement activity.

Set out below is the information about the credit risk exposure on the Group's trade and notes receivables using a provision matrix:

#### As at 31 December 2021

	Ageing				Total
	Less than 1 year	1 to 2 years	2 to 3 years	Over 3 years	
Expected credit loss rate	<b>0.5%</b>	<b>73.8%</b>	<b>98.7%</b>	<b>100.0%</b>	<b>17.3%</b>
Gross carrying amount (HK\$'000)	<b>1,449,252</b>	<b>34,850</b>	<b>230,067</b>	<b>45,792</b>	<b>1,759,961</b>
Expected credit losses (HK\$'000)	<b>6,626</b>	<b>25,717</b>	<b>227,112</b>	<b>45,792</b>	<b>305,247</b>

#### As at 31 December 2020

	Ageing				Total
	Less than 1 year	1 to 2 years	2 to 3 years	Over 3 years	
Expected credit loss rate	0.5%	59.0%	83.4%	99.1%	11.3%
Gross carrying amount (HK\$'000)	1,345,251	216,550	8,465	39,808	1,610,074
Expected credit losses (HK\$'000)	6,913	127,843	7,056	39,435	181,247

**22. Prepayments, other receivables and other assets**

## Non-current portion

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Prepayments	<b>239,910</b>	894
Deposits	<b>54,007</b>	67,106
	<b>293,917</b>	68,000

## Current portion

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Prepayments	<b>1,690,704</b>	771,353
Deposits and other receivables	<b>231,614</b>	181,282
	<b>1,922,318</b>	952,635
Impairment allowance	<b>(158,117)</b>	(135,235)
	<b>1,764,201</b>	817,400

Deposits and other receivables mainly represent rental deposits and deposits with suppliers. An impairment analysis is performed at each reporting date by considering the probability of default. Expected credit losses are estimated by applying a loss rate approach with reference to the historical loss record of the Group. The loss rate is adjusted to reflect the current conditions and forecasts of future economic conditions, as appropriate. Except for certain receivables for which the counterparty failed to make demanded payment within the credit term and the Group has made provision ("default receivables") of HK\$158,117,000 (2020: HK\$135,235,000), the other balances are normally settled within the credit term with no historical default and past due amounts. Except for the default receivables, the Group estimated that the expected credit loss rate for the other receivables is minimal.

## Notes to Financial Statements

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### 23. Cash and cash equivalents and pledged deposits

	2021 HK\$'000	2020 HK\$'000
Cash and bank balances	1,245,909	1,175,038
Less: Pledged deposits – Pledged for bank acceptance notes	(200,547)	(45,495)
Cash and cash equivalents as stated in the consolidated statement of financial position	1,045,362	1,129,543
Cash and cash equivalents as stated in the consolidated statement of cash flows	1,045,362	1,129,543

As at 31 December 2021, cash and bank balances of the Group denominated in RMB amounting to HK\$1,122,270,000 (2020: HK\$1,027,822,170) were deposited in Mainland China. The RMB is not freely convertible in the PRC into other currencies, however, under Mainland China's Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest at floating rates based on daily bank deposit rates. The bank balances and pledged deposits are deposited with creditworthy banks with no recent history of default.

### 24. Trade and notes payables

An ageing analysis of the trade and notes payables as at the end of the reporting period, based on the invoice date, is as follows:

	2021 HK\$'000	2020 HK\$'000
Within one month	786,111	388,836
One to two months	369,383	102,932
Two to three months	29,747	61,302
Over three months	114,980	130,687
	1,300,221	683,757

The trade payables are non-interest-bearing and are normally settled on 60-day terms.

Included in trade and notes payables, nil (2020: HK\$1,452,000) was due to related companies (note 36).

### 25. Other payables and accruals

	Notes	2021 HK\$'000	2020 HK\$'000
Contract liabilities	(a)	681,603	30,761
Other payables	(b)	890,856	540,532
Accruals		424,536	330,505
Financial guarantee contracts	(c)	12,905	17,797
		2,009,900	919,595

**25. Other payables and accruals (continued)**

Notes:

- (a) Details of contract liabilities are as follows:

	<b>31 December 2021 HK\$'000</b>	<b>31 December 2020 HK\$'000</b>	<b>1 January 2020 HK\$'000</b>
<i>Short-term advances received from customers</i>			
Sale of goods	<b>681,603</b>	30,761	44,305

Contract liabilities represent short-term advances received to deliver products.

- (b) Other payables are non-interest-bearing and have an average term of three months.
- (c) The financial guarantee contracts represent guarantees given (i) to a bank in connection with banking facilities granted to an associate, and (ii) to Guangxi Dameng in connection with loan facilities granted by it to a company (the "Borrower") in which the Group holds 10% equity interest.
- (i) The associate's banking facilities granted by the bank amounted to HK\$980.1 million (2020: HK\$953.6 million), of which HK\$685.9 million (2020: HK\$673.4 million) was utilised by the associate. The associate's banking facilities were secured by the associate's lands and property, plant and equipment and guaranteed by the Group and the holding company of the associate, according to the shareholding percentage on a several basis. As at 31 December 2021, an ECL allowance of HK\$11,817,000 (2020: HK\$15,679,000) was provided.
- (ii) The loan facilities granted by Guangxi Dameng amounted to HK\$122.5 million (2020: HK\$119.2 million), of which HK\$61.3 million (2020: HK\$101.3 million) was utilised by the Borrower. The loan facilities were guaranteed by the Group and the major shareholder of the Borrower according to the shareholding percentage on a several basis. As at 31 December 2021, an ECL allowance of HK\$1,088,000 (2020: HK\$2,118,000) was provided.

The Group does not provide financial guarantees except for the above limited circumstances.

The financial guarantee contracts are measured at the higher of the ECL allowance and the amount initially recognised less the cumulative amount of income recognised. The ECL allowance is measured by estimating the cash shortfalls, which are based on the expected payments to reimburse the holders for a credit loss that it incurs less any amounts that the Group expects to receive from the debtors.

The credit exposure of the financial guarantee contracts is classified as stage 1. During the year, there were no transfers between stages (2020: Nil).

**26. Derivative financial instruments**

	<b>2021</b>		2020	
	<b>Assets HK\$'000</b>	<b>Liabilities HK\$'000</b>	Assets HK\$'000	Liabilities HK\$'000
Interest rate swap	-	-	-	3,286

Certain subsidiaries of the Group enter into derivative financial instruments in the normal course of business in order to hedge their exposure to fluctuations in interest rate and foreign exchange rate.

As at 31 December 2021, derivative financial instruments have expired and the financial liabilities have been derecognised.

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### 27. Interest-bearing bank and other borrowings

	31 December 2021			31 December 2020		
	Effective Interest Rate (%)	Maturity	HK\$'000	Effective Interest Rate (%)	Maturity	HK\$'000
<b>Current</b>						
Lease liabilities (note 16 (b))	5.20-7.30	2022	21,266	5.20-8.70	2021	35,778
Bank loans – unsecured	0.91-5.50	2022	2,301,018	2.62-4.35	2021	2,102,631
Current portion of long-term bank loans – unsecured	4.30-5.23	2022	1,301,669	4.50-5.46, LIBOR+2.30	2021	537,555
			<b>3,623,953</b>			2,675,964
<b>Non-current</b>						
Lease liabilities (note 16 (b))	5.20-7.30	2023	21,341	5.20	2023	3,737
Bank loans – unsecured	4.50-5.23	2023	468,601	3.85-5.46	2022-2023	1,889,678
			<b>489,942</b>			1,893,415
			<b>4,113,895</b>			4,569,379

	2021 HK\$'000	2020 HK\$'000
<b>Analysed into:</b>		
Bank loans repayable:		
Within one year or on demand	<b>3,602,687</b>	2,640,186
In the second year	<b>468,601</b>	1,430,758
In the third to fifth years, inclusive	<b>–</b>	458,920
	<b>4,071,288</b>	4,529,864
Other loans and lease liabilities:		
Within one year or on demand	<b>21,266</b>	35,778
In the second year	<b>9,545</b>	3,737
In the third to fifth years, inclusive	<b>11,796</b>	–
	<b>42,607</b>	39,515
	<b>4,113,895</b>	4,569,379

Note:

As at 31 December 2021, except for bank and other borrowings of HK\$53,021,000 (2020: HK\$438,621,000) which were denominated in United States dollars, all borrowings were denominated in Renminbi.

**28. Other long-term liabilities**

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Rehabilitation liabilities (note)	<b>50,746</b>	47,111
Other payable	<b>61,710</b>	–
	<b>112,456</b>	47,111

Note:

The movements of rehabilitation liabilities are as follows:

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
At beginning of year	<b>47,111</b>	42,572
Increase in discounted amounts arising from the passage of time	<b>2,309</b>	2,224
Exchange realignment	<b>1,326</b>	2,315
At end of year	<b>50,746</b>	47,111

The balance represents the provision for rehabilitation estimated by management of the restoration costs to be incurred on mine closure. The estimation basis is reviewed on an ongoing basis and revised where appropriate.

**29. Deferred income**

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
At beginning of year	<b>59,198</b>	57,078
Addition	<b>7,760</b>	7,492
Acquisition of a subsidiary	–	1,161
Amortised during the year	<b>(13,970)</b>	(10,297)
Exchange realignment	<b>1,539</b>	3,764
At end of year	<b>54,527</b>	59,198

Deferred income represents the receipt of government grants for the construction of certain equipment, which has been credited as a non-current liability on the consolidated statement of financial position. Such deferred income is amortised on the straight-line basis to profit or loss over the expected useful lives of the relevant assets acquired.

**30. Issued capital****Shares**

	<b>2021</b> <b>HK\$'000</b>	<b>2020</b> <b>HK\$'000</b>
Issued and fully paid: 3,428,459,000 (2020: 3,428,459,000) ordinary shares of HK\$0.10 each	<b>342,846</b>	342,846

There was no movement in the Company's issued capital during 2021.

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### 31. Share option scheme

The Company operates a share option scheme (the “Scheme”) for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group’s operations. On 11 January 2011, the Company granted 103,000,000 share options to the directors and other employees of the Group under the Scheme upon payment of a nominal consideration of HK\$1 by each grantee. The share options became effective on 11 January 2011 and, unless otherwise cancelled or amended, will remain in force for 10 years from that date.

Share options do not confer rights on the holders to dividends or to vote at shareholders’ meetings.

The following share options were outstanding under the Scheme during the year:

	2021		2020	
	Weighted average exercise price HK\$ per share	Number of options '000	Weighted average exercise price HK\$ per share	Number of options '000
At 1 January	2.81	34,500	2.81	35,500
Forfeited during the year	2.81	(34,500)	2.81	(1,000)
At 31 December	–	–	2.81	34,500

The exercise price and exercise periods of the share options outstanding as at the end of 2020 are as follows:

2020:

Number of share options outstanding '000	Exercise price HK\$ per share	Exercise period
8,375	2.81	11 January 2012 to 10 January 2021
8,375	2.81	11 January 2013 to 10 January 2021
17,750	2.81	11 January 2014 to 10 January 2021
34,500		

There are no outstanding share options as at 31 December 2021 (2020: fair value at HK\$41,055,000 and weighted average fair value of HK\$1.19 each). No share option expense has been recognised by the Group during the year as all share options have been vested in 2014.

### 32. Reserves

The amounts of the Group's reserves and the movements therein are presented in the consolidated statement of changes in equity on pages 107 to 108 of the financial statements.

	Note	2021 HK\$'000	2020 HK\$'000
Contributed surplus		2,461,249	2,461,249
Hedging reserve		–	(3,286)
Reserve funds	(a)	206,893	186,223
Fair value reserve of financial assets at fair value through other comprehensive income		(3,023)	(4,150)
Share option reserve		–	40,587
Investment related reserve		2,051	2,051
Exchange fluctuation reserve		229,781	110,848
Capital redemption reserve		312	312
Accumulated losses		(132,744)	(618,846)
		<b>2,764,519</b>	2,174,988

Note:

- (a) In accordance with the Company Law of the PRC, each of the subsidiaries of the Company that was registered in the PRC is required to:
- (i) appropriate 10% of the annual statutory profit after tax (after offsetting any prior years' losses), determined in accordance with PRC GAAP, to the statutory reserve until the balance of the reserve funds reaches 50% of the entity's registered capital. The statutory reserve can be utilised to offset prior years' losses, or to increase capital, provided the remaining balance of the statutory reserve is not less than 25% of the registered capital; and
  - (ii) pursuant to the relevant regulation in the PRC, provide for the safety fund based on the volume of ore excavated and the turnover of ferroalloy in prior years.

## Notes to Financial Statements

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### 33. Partly-owned subsidiaries with material non-controlling interests

Details of the Group's subsidiaries that have material non-controlling interests are set out below:

	2021	2020
Percentage of equity interest held by non-controlling interests:		
Zunyi Group	36%	36%
Qinzhou New Materials	30%	30%
	<b>2021</b>	<b>2020</b>
	<b>HK\$'000</b>	<b>HK\$'000</b>
(Loss)/profit for the year allocated to non-controlling interests:		
Zunyi Group	<b>(60,790)</b>	(19,639)
Qinzhou New Materials	<b>3,494</b>	1,605
	<b>(57,296)</b>	(18,034)
Accumulated balances of non-controlling interests at the reporting dates:		
Zunyi Group	<b>86,257</b>	139,083
Qinzhou New Materials	<b>(41,895)</b>	(45,390)
	<b>44,362</b>	93,693

The following table illustrates the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations:

	Zunyi Group		Qinzhou New Materials	
	2021 HK\$'000	2020 HK\$'000	2021 HK\$'000	2020 HK\$'000
Revenue, other income and gains	<b>132,455</b>	119,678	<b>598,236</b>	621,362
Total expenses	<b>301,316</b>	174,231	<b>586,588</b>	616,012
(Loss)/profit for the year	<b>(168,861)</b>	(54,553)	<b>11,648</b>	5,350
Total comprehensive (loss)/income for the year	<b>(168,359)</b>	(49,077)	<b>12,467</b>	7,317
Current assets	<b>96,952</b>	62,772	<b>211,242</b>	172,337
Non-current assets	<b>728,373</b>	821,508	<b>24,356</b>	27,605
Current liabilities	<b>439,133</b>	348,712	<b>372,212</b>	344,311
Non-current liabilities	<b>145,194</b>	134,016	<b>304</b>	415
Net cash flows from/(used in)				
operating activities	<b>4,273</b>	(13,874)	<b>16,602</b>	186,621
Net cash flows (used in)/from investing activities	<b>(16,336)</b>	10,657	<b>(459)</b>	(7)
Net cash flows from/(used in)				
financing activities	<b>4,044</b>	–	<b>(16,930)</b>	(185,169)
Net (decrease)/increase in cash and cash equivalents	<b>(8,019)</b>	(3,217)	<b>(787)</b>	1,445

### 34. Contingent liabilities

At the end of the reporting period, contingent liabilities were as follows:

	Notes	2021 HK\$'000	2020 HK\$'000
Guarantees given to a bank in connection with facilities granted to an associate	(a)	323,426	314,688
Guarantees given to Guangxi Dameng Manganese Industry Group Co., Ltd. ("Guangxi Dameng") in connection with facilities provided to an investee	(b)	12,251	11,920

Notes:

- (a) As at 31 December 2021, the outstanding banking facilities of an associate in which the Group has a 33% equity interest, were secured by the associate's lands and property, plant and equipment and guaranteed by the Group and the holding company of the associate according to the shareholding percentage on a several basis.

As at 31 December 2021, the associate's banking facilities guaranteed by the Group and the holding company of the associate amounted to RMB800,000,000 (equivalent to HK\$980,080,000) (2020: RMB800,000,000, equivalent to HK\$953,600,000) and were utilised to the extent of RMB559,900,000 (equivalent to HK\$685,933,000) (2020: RMB564,900,000, equivalent to HK\$673,361,000) by the associate.

- (b) As at 31 December 2021, the loan facilities provided by Guangxi Dameng to a company (the "Borrower"), in which the Group has a 10% equity interest, were guaranteed by the Group and the major shareholder of the Borrower according to the shareholding percentage on a several basis.

As at 31 December 2021, the loan facilities guaranteed by the Group and the holding company of the Borrower amounted to RMB100,000,000 (equivalent to HK\$122,510,000) (2020: RMB100,000,000, equivalent to HK\$119,200,000) and RMB50,000,000 (equivalent to HK\$61,255,000) was utilised (2020: RMB85,000,000, equivalent to HK\$101,320,000) by the Borrower.

- (c) As at 31 December 2021 and 2020, these contingent liabilities have been provided for as financial guarantee contracts in the financial statements (note 25(c)).

### 35. Commitments

The Group had the following capital commitments at the end of the reporting period:

	2021 HK\$'000	2020 HK\$'000
Capital expenditure in respect of acquisitions of items of property, plant and equipment	484,454	474,013

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### 36. Related party transactions

Guangxi Dameng, a shareholder of the Company, exercises significant influence over the Group. Therefore, Guangxi Dameng and its subsidiaries are considered to be related parties of the Group. On 21 December 2020, due to the change of equity interest in the Company held by CITIC Group, CITIC Group was no longer a Controlling Shareholder of the Company since 21 December 2020 but it remains a related party of the Group as it retain significant influence over the Group.

- (a) In addition to the transactions detailed elsewhere in these financial statements, the Group had the following transactions with related parties during the year:

	Notes	2021 HK\$'000	2020 HK\$'000
Sales of finished goods to related companies	(i)	191,219	118,218
Sales of finished goods to a joint venture	(i)	–	22,731
Sales of finished goods to a related company	(iii)	–	233
Purchases of finished goods from Guangxi Dameng	(ii)	56,831	42,300
Purchases of raw materials from subsidiaries of Guangxi Dameng	(ii)	870	3,564
Purchases of niobium products from CITIC Metal (Ningbo) Co., Ltd.	(i)	9,448	3,433
Provision of water and electricity to Guangxi Dameng	(iv)	–	3
Rental income received from a related company	(v)	1,508	1,407
Maximum balance of bank deposits with related companies during the year	(vi)	98,270	384
Interest income on deposits placed with related companies	(vi)	16	–
Maximum balance of loans to an associate	(vii)	49,156	52,886
Interest income on loans provided to an associate	(vii)	–	1,537
Receipt of a guarantee fee from a joint venture	(viii)	–	936

**36. Related party transactions (continued)**

- (a) In addition to the transactions detailed elsewhere in these financial statements, the Group had the following transactions with related parties during the year: (continued)

Notes:

- (i) These sales and purchases were made at prices based on the mutual agreements between the parties.
- (ii) These sales and purchases were made at prices based on the mutual agreements between the parties.
- (iii) These sales and purchases were made at prices based on the mutual agreements between the parties.
- (iv) Reimbursement of electricity and water was based on actual costs incurred plus mark-up.
- (v) The rental income was earned at rent based on the mutual agreement between the parties.
- (vi) Maximum bank deposits with related companies during the year and the related interest income received were in the usual and ordinary course of business of the Group.
- (vii) The loans to an associate carried interest at 8% (2020: 8%) per annum, as further detailed in note 18 to the financial statements.
- (viii) The Group is entitled to receive a guarantee fee income of HK\$936,000 from the joint venture during the year 2020. On 31 March 2020, the Group further acquired a 65.17% partnership interest in the joint venture, Ningbo Dameng Group. Upon completion of the further acquisition, Ningbo Dameng Group ceased to be a joint venture and became a wholly-owned subsidiary of the Group.

The related party transactions for the year 2021 above, save for those in notes (i), (iii), (v), (vi), (vii) and (viii), also constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules. Transactions in note (iv) above are fully exempted under Chapter 14A of the Listing Rules.

- (b) Outstanding balances with related parties

	<b>2021</b>	<b>2020</b>
	<b>HK\$'000</b>	<b>HK\$'000</b>
(i) Due from related companies		
Trade receivables	<b>28,392</b>	16,720
Prepayments and other receivables	<b>1,560</b>	4,217
	<b>29,952</b>	20,937
(ii) Due to related companies		
Trade payables	–	1,452
Other payables	<b>1,376</b>	421
	<b>1,376</b>	1,873
(iii) Bank balances with related companies	<b>2,306</b>	100
(iv) Due from associates		
Trade and notes receivables (note 21)	–	268,365
Loans to an associate (note 18)	–	17,880
	–	286,245

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### 36. Related party transactions (continued)

(b) Outstanding balances with related parties (continued)

Trade receivables from the Group's related companies are unsecured, non-interest-bearing and repayable on similar credit terms to those offered to independent third party customers of the Group. Trade receivables from an associate within the credit period are non-interest-bearing while overdue trade receivable balances are interest-bearing at 7.0% per annum. The Group's prepayments and other receivables from related companies and associates as at 31 December 2021 and 2020 are unsecured, non-interest-bearing and had no fixed terms of repayment.

Trade payables and other payables to the Group's related companies are non-interest-bearing and have no fixed terms of repayment.

(c) Compensation of key management personnel of the Group

	2021 HK\$'000	2020 HK\$'000
Salaries, allowances and benefits in kind	24,265	12,904
Bonuses	12,920	5,404
Pension scheme contributions	967	879
Total compensation paid to key management personnel	38,152	19,187

Further details of directors' and the chief executive's emoluments are included in note 9.

(d) At 31 December 2021, the Group had guaranteed banking facilities granted to an associate amounting to HK\$323,426,000 (2020: HK\$314,688,000), as further detailed in note 34(a) to the financial statements.

**37. Notes to the consolidated statement of cash flows**

- (a) During the year, the Group had non-cash additions to right-of-use assets and lease liabilities of HK\$10,354,000 (2020: HK\$6,458,000) and HK\$10,354,000 (2020: HK\$6,458,000), respectively, in respect of lease arrangements for plant and equipment.

During the year, the Group entered into an offsetting agreement with a shareholder of an associate of the Group, to offset the amounts of trade receivables against trade payables and other payables of HK\$505,750,000 in aggregate.

- (b) Changes in assets/liabilities arising from financing activities

2021

	Pledged deposits HK\$'000	Interest payables HK\$'000	Bank and other loans HK\$'000	Lease liabilities HK\$'000
At 31 December 2020	45,495	1,986	4,529,864	39,515
Changes from financing cash flows	151,240	(218,002)	(569,446)	(50,373)
New leases	–	–	–	10,354
Proceeds from sales and leaseback arrangement	–	–	–	38,060
Foreign exchange movement	3,812	55	110,870	3,520
Disposal	–	–	–	–
Interest expense	–	218,002	–	1,531
At 31 December 2021	200,547	2,041	4,071,288	42,607

2020

	Pledged deposits HK\$'000	Interest payables HK\$'000	Bank and other loans HK\$'000	Lease liabilities HK\$'000
At 31 December 2019	35,616	2,039	4,056,745	101,362
Changes from financing cash flows	9,879	(207,031)	223,985	(72,485)
New leases	–	–	–	6,458
Acquisition of a subsidiary	–	–	110,180	–
Foreign exchange movement	–	(53)	138,954	2,405
Disposal	–	–	–	(5,059)
Interest expense	–	207,031	–	6,834
At 31 December 2020	45,495	1,986	4,529,864	39,515

- (c) Total cash outflow for leases

The total cash outflow for leases included in the statement of cash flows is as follows:

	2021 HK\$'000	2020 HK\$'000
Within operating activities	(8,049)	(7,874)
Within investing activities	(35,272)	(13,866)
Within financing activities	(50,373)	(72,485)
	(93,694)	(94,225)

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### 38. Financial instruments by category

The carrying amounts of each of the categories of financial instruments as at the end of the reporting period are as follows:

2021

#### Financial assets

	Financial assets at fair value through other comprehensive income HK\$'000	Financial assets at amortised cost HK\$'000	Total HK\$'000
Trade and notes receivables	623,637	831,077	1,454,714
Financial assets included in prepayments, other receivables and other assets	–	67,811	67,811
Due from related companies	–	1,560	1,560
Pledged deposits	–	200,547	200,547
Cash and cash equivalents	–	1,045,362	1,045,362
	<b>623,637</b>	<b>2,146,357</b>	<b>2,769,994</b>

#### Financial liabilities

	Financial liabilities at fair value through other comprehensive income HK\$'000	Financial liabilities at amortised cost HK\$'000	Total HK\$'000
Trade and notes payables	–	1,300,221	1,300,221
Financial liabilities included in other payables and accruals	–	904,244	904,244
Interest-bearing bank and other borrowings	–	4,113,895	4,113,895
Due to related companies	–	1,376	1,376
Other long-term liabilities	–	61,710	61,710
	<b>–</b>	<b>6,381,446</b>	<b>6,381,446</b>

**38. Financial instruments by category (continued)**

The carrying amounts of each of the categories of financial instruments as at the end of the reporting period are as follows: (continued)

2020

## Financial assets

	<b>Financial assets at fair value through other comprehensive income HK\$'000</b>	<b>Financial assets at amortised cost HK\$'000</b>	<b>Total HK\$'000</b>
Trade and notes receivables	589,525	839,302	1,428,827
Financial assets included in prepayments, other receivables and other assets	–	108,328	108,328
Due from related companies	–	4,217	4,217
Due from associates	–	17,880	17,880
Pledged deposits	–	45,495	45,495
Cash and cash equivalents	–	1,129,543	1,129,543
	589,525	2,144,765	2,734,290

## Financial liabilities

	<b>Financial liabilities at fair value through other comprehensive income HK\$'000</b>	<b>Financial liabilities at amortised cost HK\$'000</b>	<b>Total HK\$'000</b>
Trade and notes payables	–	683,757	683,757
Financial liabilities included in other payables and accruals	–	558,503	558,503
Derivative financial instruments	3,286	–	3,286
Interest-bearing bank and other borrowings	–	4,569,379	4,569,379
Due to related companies	–	1,873	1,873
	3,286	5,813,512	5,816,798

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### 39. Fair value and fair value hierarchy of financial instruments

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values, are as follows:

#### Financial assets

	Carrying amounts		Fair values	
	2021 HK\$'000	2020 HK\$'000	2021 HK\$'000	2020 HK\$'000
Notes receivable	623,637	589,525	623,637	589,525

#### Financial liabilities

	Carrying amounts		Fair values	
	2021 HK\$'000	2020 HK\$'000	2021 HK\$'000	2020 HK\$'000
Derivative financial instruments	-	3,286	-	3,286

Management has assessed that the fair values of cash and cash equivalents, pledged deposits, trade receivables, trade and notes payables, financial assets included in prepayments, other receivables and other assets, financial liabilities included in other payables and accruals, amounts due from/to related companies, the guarantees given to banks in connection with facilities granted to an associate and the borrower approximate to their carrying amounts largely due to the short-term maturities of these instruments. The fair value of financial assets at fair value through profit or loss is based on quoted market prices.

The Group's management is responsible for determining the policies and procedures for the fair value measurement of financial instruments. At each reporting date, management analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

The fair values of notes receivable measured at fair value through other comprehensive income and interest-bearing bank and other borrowings have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities. The changes in fair value as a result of the Group's own non-performance risk for notes receivable and interest-bearing bank and other borrowings as at 31 December 2021 were assessed to be insignificant.

**39. Fair value and fair value hierarchy of financial instruments (continued)**

## Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments.

Assets and liabilities measured at fair value:

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
As at 31 December 2021				
Assets:				
Notes receivable	–	623,637	–	623,637
As at 31 December 2020				
Assets:				
Notes receivable	–	589,525	–	589,525
Liabilities:				
Derivative financial instruments	–	3,286	–	3,286

During the year, there were no transfers of fair value measurement between Level 1 and Level 2 and no transfers into or out of Level 3 for both financial assets and financial liabilities (2020: Nil).

Liabilities for which fair values are disclosed:

	Fair value measurement using			Total HK\$'000
	Quoted prices in active markets (Level 1) HK\$'000	Significant observable inputs (Level 2) HK\$'000	Significant unobservable inputs (Level 3) HK\$'000	
2021				
Interest-bearing bank borrowings (other than lease liabilities)	–	4,071,288	–	4,071,288
2020				
Interest-bearing bank borrowings (other than lease liabilities)	–	4,529,864	–	4,529,864

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### 40. Financial risk management objectives and policies

The Group's principal financial instruments, other than derivatives, comprise financial liabilities which are mainly interest-bearing bank and other borrowings, and financial assets which are mainly cash and short-term bank deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities, such as trade and notes receivables and trade and notes payables, which arise directly from its operations.

The Group also enters into derivative transactions, including principally an interest rate swap, cross currency interest rate swaps and forward currency contracts. The purpose is to manage the interest rate and currency risks arising from the Group's operations and its sources of finance.

The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk, credit risk and liquidity risk. The board of directors reviews and agrees policies for managing each of these risks and they are summarised below. The Group's accounting policies in relation to derivatives are set out in note 3 to the financial statements.

#### Interest rate risk

The Group's income and operating cash flows are not substantially affected by changes in market interest rates. In addition, the Group has no significant interest-bearing assets and liabilities except for cash and cash equivalents, and interest-bearing bank and other borrowings. Borrowings carried at floating rates expose the Group to cash flow interest rate risk whereas those carried at fixed rates expose the Group to fair value interest rate risk.

The Group's policy is to manage its interest expenses using a mix of fixed and floating rate debts. To manage this mix in a cost-effective manner, the Group enters into an interest rate swap contract, in which the Group agrees to exchange, at specified intervals, the difference between fixed and floating rate interest amounts calculated by reference to an agreed-upon notional principal amount. The swap contract is designated to hedge against the interest rate exposure of the underlying debt obligations.

The effective interest rates and terms of repayment of the bank loans of the Group are set out in note 27.

The following table demonstrates the sensitivity to a reasonably possible change in the RMB and US\$ interest rates, with all other variables held constant, of the Group's profit/(loss) before tax (through the impact on floating rate borrowings).

	<b>Increase/ (decrease) in basis points</b>	<b>Decrease/ (increase) in profit before tax HK\$'000</b>
Year ended 31 December 2021		
RMB	<b>100</b>	<b>7,812</b>
RMB	<b>(100)</b>	<b>(7,812)</b>
Year ended 31 December 2020		
RMB	100	16,744
RMB	(100)	(16,744)
US\$	100	1,378
US\$	(100)	(1,378)

**40. Financial risk management objectives and policies (continued)****Foreign currency risk**

Foreign currency risk is the risk that the value of a financial instrument fluctuates because of the changes in foreign exchange rates.

The Group's monetary assets, loans and transactions are principally denominated in RMB, US\$ and HK\$. The Group is exposed to foreign currency risk mainly arising from the exposure of HK\$ against RMB.

The Group will constantly review the economic situation and its foreign exchange risk profile, and will consider appropriate hedging measures in future as may be necessary.

The Group has transactional currency exposures. Such exposures arise from the sales or purchases by operating units in currencies other than the units' functional currencies. The Group assesses the respective exposures of each of its operating units.

The following table demonstrates the sensitivity at the end of the reporting period to a reasonably determined possible change in the RMB exchange rate, with all other variables held constant, of the Group's profit/(loss) before tax (due to changes in the fair value of monetary assets and liabilities).

	<b>Increase/ (decrease) in exchange rate %</b>	<b>Increase/ (decrease) in profit before tax HK\$'000</b>
31 December 2021		
If HK\$ weakens against RMB	<b>1</b>	<b>1</b>
If HK\$ strengthens against RMB	<b>(1)</b>	<b>(1)</b>
31 December 2020		
If HK\$ weakens against RMB	1	2
If HK\$ strengthens against RMB	(1)	(2)

**Credit risk**

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group will request credit enhancements from customers and implement other necessary measures to contain the risk if payments were default.

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### 40. Financial risk management objectives and policies (continued)

Credit risk (continued)

#### Maximum exposure and year-end staging

The tables below show the credit quality and the maximum exposure to credit risk based on the Group's credit policy, which is mainly based on past due information unless other information is available without undue cost or effort, and year-end staging classification as at 31 December.

The amounts presented are gross carrying amounts for financial assets and the exposure to credit risk for the financial guarantee contracts.

As at 31 December 2021

	12-month	Lifetime ECLs			Total HK\$'000	
	ECLs	Stage 1 HK\$'000	Stage 2 HK\$'000	Stage 3 HK\$'000		Simplified approach HK\$'000
Trade and notes receivables*	–	–	–	–	1,759,961	1,759,961
Financial assets included in prepayments, other receivables and other assets**	67,811	–	–	–	–	67,811
Due from related companies	1,560	–	–	–	–	1,560
Pledged deposits	200,547	–	–	–	–	200,547
Cash and cash equivalents	1,045,362	–	–	–	–	1,045,362
Guarantees given to a bank/a related party in connection with facilities granted to an associate/an investee						
– Facilities not yet drawn	103,194	–	–	–	–	103,194
– Facilities drawn						
– Not yet past due	232,483	–	–	–	–	232,483
	1,650,957	–	–	–	1,759,961	3,410,918

**40. Financial risk management objectives and policies (continued)**

Credit risk (continued)

**Maximum exposure and year-end staging (continued)**

As at 31 December 2020

	12-month ECLs		Lifetime ECLs		Total HK\$'000
	Stage 1 HK\$'000	Stage 2 HK\$'000	Stage 3 HK\$'000	Simplified approach HK\$'000	
Trade and notes receivables*	–	–	–	1,610,074	1,610,074
Financial assets included in prepayments, other receivables and other assets**	108,328	–	–	–	108,328
Due from related companies	4,217	–	–	–	4,217
Due from associates	17,880	–	–	–	17,880
Pledged deposits	45,495	–	–	–	45,495
Cash and cash equivalents	1,129,543	–	–	–	1,129,543
Guarantees given to a bank/a related party in connection with facilities granted to an associate/a joint venture/an investee					
– Facilities not yet drawn	94,267	–	–	–	94,267
– Facilities drawn					
– Not yet past due	232,341	–	–	–	232,341
	1,632,071	–	–	1,610,074	3,242,145

\* For trade and notes receivables to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in note 21 to the financial statements.

\*\* The credit quality of the financial assets included in prepayments, other receivables and other assets is considered to be “normal” when they are not past due and there is no information indicating that the financial assets had a significant increase in credit risk since initial recognition. Otherwise, the credit quality of the financial assets is considered to be “doubtful”.

The Group determines the concentration of credit risk by monitoring the locations of its customers. The table below shows an analysis of credit risk exposures of trade and notes receivables which constituted approximately 53% of the Group's total financial assets as at 31 December 2021 (2020: 52%):

	2021 HK\$'000	2020 HK\$'000
By location:		
Mainland China	1,373,035	1,404,969
Asia (excluding Mainland China)	20,502	19,328
North America	54,251	–
Europe	6,926	4,530
	1,454,714	1,428,827

In addition, approximately 11% of the Group's trade and notes receivables were due from the Group's five largest customers as at 31 December 2021 (2020: approximately 9%).

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### 40. Financial risk management objectives and policies (continued)

#### Liquidity risk

The Group's policy is to maintain sufficient cash and cash equivalents and have available funding through bank and other borrowings to meet its working capital requirements and capital expenditure.

The maturity profile of the Group's financial liabilities at the end of the reporting period, based on the contractual undiscounted payments, is as follows:

	2021					Total HK\$'000
	On demand HK\$'000	Less than 3 months HK\$'000	3 to less than 12 months HK\$'000	1 to 5 years HK\$'000	More than 5 years HK\$'000	
Trade and notes payables	-	1,300,221	-	-	-	1,300,221
Financial liabilities included in other payables and accruals	-	904,244	-	-	-	904,244
Interest-bearing bank and other borrowings (excluding lease liabilities)	-	1,523,912	2,176,685	488,015	-	4,188,612
Lease liabilities	-	1,852	25,315	18,888	-	46,055
Due to related companies	1,376	-	-	-	-	1,376
Other long-term liabilities	-	-	-	38,841	37,978	76,819
Guarantees given to a bank/a related party in connection with facilities granted to an associate/an investee	232,483	-	-	-	-	232,483
	233,859	3,730,229	2,202,000	545,744	37,978	6,749,810

	2020					Total HK\$'000
	On demand HK\$'000	Less than 3 months HK\$'000	3 to less than 12 months HK\$'000	1 to 5 years HK\$'000		
Trade and notes payables	-	683,757	-	-	-	683,757
Financial liabilities included in other payables and accruals	-	558,503	-	-	-	558,503
Derivative financial instruments	-	3,286	-	-	-	3,286
Interest-bearing bank and other borrowings (excluding lease liabilities)	-	1,170,011	1,627,893	1,932,248	-	4,730,152
Lease liabilities	-	36,852	7,411	3,548	-	47,811
Due to related companies	1,873	-	-	-	-	1,873
Guarantees given to a bank/a related party in connection with facilities granted to an associate/a joint venture/an investee	232,341	-	-	-	-	232,341
	234,214	2,452,409	1,635,304	1,935,796	-	6,257,723

#### Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios in order to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies or processes for managing capital during the years ended 31 December 2021 and 2020.

**40. Financial risk management objectives and policies (continued)****Capital management (continued)**

The Group monitors capital using a net gearing ratio, which is net debt divided by equity attributable to owners of the parent. Net debt is calculated as the sum of interest-bearing bank and other borrowings, less cash and cash equivalents and pledged deposits. The net gearing ratios at the end of the reporting periods were as follows:

	<b>31 December 2021 HK\$'000</b>	<b>31 December 2020 HK\$'000</b>
Interest-bearing bank and other borrowings (note 27)	<b>4,113,895</b>	4,569,379
Less: Cash and cash equivalents	<b>(1,045,362)</b>	(1,129,543)
Less: Pledged deposits	<b>(200,547)</b>	(45,495)
Net debt	<b>2,867,986</b>	3,394,341
Equity attributable to owners of the parent	<b>3,107,365</b>	2,517,834
Net gearing ratio	<b>92.3%</b>	134.8%

**Dividend policy**

The Company adopts a dividend policy pursuant to which the Board at its discretion regularly proposes to shareholders for approval of a distribution of dividend, if any, on a semi-annual basis taking into consideration the following factors: (a) the Company's overall results of operation; (b) the Company's financial position; (c) the Company's capital requirements; (d) the Company's shareholders' interests; (e) the Company's future prospects; and (f) other factors that the Board deems relevant. Any declaration and payment as well as the amount of dividends will be subject to the Company's constitutional documents and the Companies Act, including, inter alia, the approval of the Company's shareholders. In addition, subject to shareholders' approval at general meeting, the Company may also declare special distributions.

**41. Events after the reporting period**

No significant events that require additional disclosure or adjustments occurred after the reporting period.

## Notes to Financial Statements

31 December 2021

### 42. Statement of financial position of the Company

Information about the statement of financial position of the Company at the end of the year is as follows:

	2021 HK\$'000	2020 HK\$'000
<b>NON-CURRENT ASSET</b>		
Investment in a subsidiary	-	5,912
<b>CURRENT ASSETS</b>		
Other receivables	775	728
Amounts due from subsidiaries	2,539,419	2,545,174
Cash and cash equivalents	1,172	1,086
	<b>2,541,366</b>	2,546,988
<b>CURRENT LIABILITIES</b>		
Other payables and accruals	12,380	10,918
	<b>12,380</b>	10,918
<b>NET CURRENT ASSETS</b>	<b>2,528,986</b>	2,536,070
<b>NET ASSETS</b>	<b>2,528,986</b>	2,541,982
<b>EQUITY</b>		
Issued capital	342,846	342,846
Reserves (note)	2,186,140	2,199,136
<b>TOTAL EQUITY</b>	<b>2,528,986</b>	2,541,982

Note:

A summary of the Company's reserves is as follows:

	Contributed surplus HK\$'000	Share option reserve HK\$'000	Capital redemption reserve HK\$'000	Accumulated losses HK\$'000	Total HK\$'000
At 1 January 2020	2,618,617	41,804	312	(215,887)	2,444,846
Loss for the year	-	-	-	(245,710)	(245,710)
Transfer of share option reserve upon forfeiture of share options	-	(1,217)	-	1,217	-
At 31 December 2020 and at 1 January 2021	<b>2,618,617</b>	<b>40,587</b>	<b>312</b>	<b>(460,380)</b>	<b>2,199,136</b>
Loss for the year	-	-	-	(12,996)	(12,996)
Transfer of share option reserve upon forfeiture of share options	-	(40,587)	-	40,587	-
<b>At 31 December 2021</b>	<b>2,618,617</b>	<b>-</b>	<b>312</b>	<b>(432,789)</b>	<b>2,186,140</b>

### 43. Approval of the financial statements

The financial statements were approved and authorised for issue by the board of directors on 25 March 2022.

# Past Performance and Forward Looking Statements



Performance and results of the operations of the Company for previous years described within this annual report are historical in nature. Past performance is no guarantee of the future results of the Company. This annual report may contain forward-looking statements and opinions, and therefore risks and uncertainties are involved. Actual results may differ materially from expectations discussed in such forward-looking statements and opinions. None of the Company, the Directors, employees or agents assumes (a) any obligation to correct or update any forward looking statements or opinions contained in this Annual Report; and (b) any liability arising from any forward looking statements or opinions that do not materialise or prove to be incorrect.



# Glossary of Terms

2021 AGM	the annual general meeting of the Company held on 4 June 2021 (Friday) at 2:30 pm at Meeting Room, Regus Conference Centre, 35th Floor, Central Plaza, 18 Harbour Road, Wanchai, Hong Kong
2022 AGM	the annual general meeting of the Company which is tentatively scheduled to be held on 2 June 2022 (Thursday)
Audit Committee	audit committee of the Company
Bembélé Concentration Plant	the concentration plant associated with Bembélé Manganese Mine
Bembélé Manganese Mine	a manganese mine located in Bembélé, Moyen-Ogooue Province, Gabon, the exploration rights and mining rights of which are owned by Compagnie Industrielle et Commerciale des Mines de Huazhou (Gabon) (華州礦業(加蓬)工貿有限公司), a company in which we indirectly hold 51% equity interest
Board or Board of Directors	our board of directors
BVI	the British Virgin Islands
Bye-laws	the bye-laws of our Company, as amended from time to time
Changgou Manganese Mine	貴州遵義匯興鐵合金有限責任公司長溝錳礦 (Guizhou Zunyi Hui Xing Ferroalloy Limited Company Changgou Manganese Mine)
China or PRC	the People's Republic of China, but for the purpose of this annual report, excluding the Hong Kong Special Administrative Region, Macau Special Administrative Region and Taiwan
Chongzuo Branch	南方錳業集團有限責任公司崇左分公司(South Manganese Group Limited Chongzuo Branch)
CITIC Group	中國中信集團有限公司 (CITIC Group Corporation), a company incorporated under the laws of the PRC on 4 October 1979, and, except where the context may otherwise require, all of its subsidiaries, which is a shareholder of our Company

## Glossary of Terms

Company or our Company	South Manganese Investment Limited, which is listed on the Stock Exchange (Stock Code: 1091.HK)
Controlling Shareholder	has the meaning ascribed to it under the Listing Rules
Daxin EMD Plant	an EMD production plant located in Daxin county, Guangxi, owned and operated by a wholly owned subsidiary of the Group
Daxin Manganese Sulfate Plant	a manganese sulfate production plant located in Daxin county, Guangxi, owned and operated by a wholly owned subsidiary of the Group
Director(s)	the director(s) of our Company
Dushan Jinmeng	獨山金孟錳業有限公司 (Dushan Jinmeng Manganese Limited Company)
DXML	大新大錳錳業有限公司 (Daxin Dameng Manganese Limited Company)
EMD	electrolytic manganese dioxide
EMM	electrolytic manganese metal
EMM Products	EMM and manganese briquette
Gabon	the Gabonese Republic
GMG	Greenway Mining Group Limited (信盛礦業集團有限公司) (Stock Code:2133.HK), a limited liability company incorporated under the laws of the Cayman Islands on 30 November 2009
Group, we or us	the Company and its subsidiaries
Guangxi	Guangxi Zhuang Autonomous Region, the PRC
Guangxi Dameng	廣西大錳錳業集團有限公司 (Guangxi Dameng Manganese Industry Group Co., Ltd.), a state-owned limited liability company established under the laws of the PRC on 30 July 2001. Guangxi Dameng is indirectly wholly-owned by the government of Guangxi, PRC



## Glossary of Terms

Guangxi Start	廣西斯達特錳材料有限公司 (Guangxi Start Manganese Materials Co., Ltd.)
Hong Kong or HK	the Hong Kong Special Administrative Region of the PRC
Huazhou BVI Group	Huazhou Mining Investment Limited together with its subsidiaries (including Compagnie Industrielle et Commerciale des Mines de Huazhou)
Huiyuan Manganese	廣西滙元錳業有限公司 (Guangxi Huiyuan Manganese Industry Co., Ltd)
IPO	the initial public offering and listing of Shares of the Company on the main board of the Stock Exchange on 18 November 2010
JORC	the Joint Ore Reserves Committee of the Australian Institute of Mining and Metallurgy
JORC Code	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 edition, which is used to determine resources and reserves, and is published by JORC of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia
Listing Rules	the Rules Governing the Listing of Securities on the Stock Exchange (as amended from time to time)
NCM	Lithium Nickel Cobalt Manganese Oxide
Ningbo Dameng	寧波大錳投資管理合夥企業(有限合伙) (Ningbo Dameng Management Partnership (Limited Partnership))
Ningbo Dameng Group	Ningbo Dameng together with its subsidiary Huiyuan Manganese
Nomination Committee	nomination committee of the Company
Prospectus	the prospectus of the Company dated 8 November 2010
Qingdao Manganese	青島錳系投資合夥企業(有限合伙) (Qingdao Manganese Investment Cooperative Enterprise (Limited Partnership)), a limited partnership in which we indirectly hold 16.35% equity interest

## Glossary of Terms

Qinzhou Ferroalloy Plant	the ferroalloy production plant located near Qinzhou port and owned and operated by 欽州大錳新材料有限公司 (Qinzhou Dameng New Materials Co., Ltd.), a company in which we indirectly hold 70% equity interest
Remuneration Committee	remuneration committee of the Company
Securities and Futures Ordinance or SFO	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)
Shares	ordinary shares in the share capital of the Company, with a nominal value of HK\$0.10 each
South Manganese Group	南方錳業集團有限責任公司 (South Manganese Group Limited)
South Manganese Holdings	南方錳業控股有限公司 (South Manganese Holdings Limited), a direct wholly owned subsidiary of the Company
Stock Exchange	the Stock Exchange of Hong Kong Limited
substantial shareholder	has the meaning ascribed to it under the Listing Rules
Tiandeng Mine	南方錳業集團有限責任公司天等錳礦 (South Manganese Group Limited Tiandeng Manganese Mine)
tonne	metric tonne
Waifu Manganese Mine	大新大錳錳業集團有限公司外伏錳礦 (Daxin Dameng Manganese Co., Ltd Waifu Manganese Mine)
XAF	Central African CFA franc
Xingyi Ferroalloy Plant	a ferroalloy production plant located in Xingyi, Guizhou, leased and operated by a wholly owned subsidiary of the Group



## Glossary of Terms

Zunyi Company	南方錳業集團遵義有限公司 (South Manganese Group Zunyi Co., Ltd.), formerly known as 貴州遵義匯興鐵合金有限責任公司 (Guizhou Zunyi Hui Xing Ferroalloy Limited Company)
Zunyi Group	Zunyi Company together with its subsidiaries

Note: The English names of the PRC entities mentioned hereinabove are translated from their Chinese names. If there are any inconsistencies, the Chinese names shall prevail.

**LUCID WATERS AND LUSH MOUNTAINS ARE INVALUABLE**

