

2022 Interim Report

Important Notice

- I. The Board and the Supervisory Committee of the Company and its Directors, Supervisors and senior management warrant that the contents of this interim report are true, accurate and complete without false representations, misleading statements or material omissions, and they severally and jointly accept legal responsibility for the above warranty.
- II. The 41st meeting of the third session of the Board was convened on 29-30 August 2022. All Directors of the Company attended the Board meeting.
- III. The interim financial statement of the Company for the first half of 2022 has been reviewed by Ernst & Young Hua Ming LLP, but has not been audited. Ernst & Young Hua Ming LLP issued a review report with unqualified opinions to the Company.
- IV. Chen Jianguang, the chairman of the Company, Zou Hongying, the vice president and general accountant of the Company, and Fan Wanzhu, the assistant to the president, deputy general accountant and head of the financial department have declared that they warrant the truthfulness, accuracy and completeness of the financial report contained in this interim report.
- V. The proposal for profit distribution or transfer of capital reserve to share capital for the Reporting Period as approved by the Board

Not Applicable

VI. Statement for the risks involved in the forward-looking statements

The forward-looking statements contained in this report regarding the Company's future plans and others do not constitute any substantive commitment to investors and investors are reminded of investment risks.

VII. Is there any misappropriation of funds by the Controlling Shareholder and its related parties for non-operating purpose

No

VIII. Is there any external guarantee made in violation of the required decision-making procedures

Nc

IX. Are there more than half of the Directors unable to guarantee the truthfulness, accuracy and completeness of the interim report disclosed by the Company

No

- X. Warning of major risks
 - 1. INTERNATIONAL AND DOMESTIC MACROECONOMIC TRENDS

In the current period, the international political and economic situation is complex and volatile, the COVID-19 pandemic still hovers at a high level, and there are still certain instabilities and uncertainties. Since all business operations of the Company are affected by the international and domestic macroeconomic environment, the macroeconomic trends inside or outside of China may have an impact on various business segments of the Company, including procurement, production and sale, thereby causing fluctuations in the Company's operating performance. Since the Company's operating income is mainly derived from the domestic market, its business operations may perform differently in various domestic economic cycles.

 CHANGES IN THE POLICIES OF THE INDUSTRIES IN WHICH THE COMPANY WERE INVOLVED AND THE DEMANDS OF ITS DOMESTIC AND OVERSEAS MARKETS

The Company's engineering contracting, property development, resources development and equipment manufacturing businesses were all influenced by the policies of their respective industries. As required by the national policy of carbon emission peak and carbon neutrality, carbon emission restrictions have gradually become more stringent, efforts in environmental remediation and dual control of total energy consumption have intensified on an ongoing basis, and the real estate industry has entered a stable development period. At the same time, there are significant fluctuations in global mineral prices. Changes in the above-mentioned national policies, market changes and periodic fluctuations of the industries and changes in the operating situation of upstream and downstream enterprises of the industries all guide the adjustment of the Company's business segment and the layout of market areas to a certain extent, which thereby affected the Company's internal business structure and in turn affected its financial position.

XI. Others

Unless otherwise specified, all the amounts in this report are denominated in RMB.

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Section I Definitions

In this report, unless the context otherwise requires, the following expressions have the meanings as follows:

"A Share(s)" the domestic shares with a nominal value of RMB1.00 each in the ordinary share

capital of the Company, which are listed on the SSE and traded in RMB

"A Share Listing Rules" the Rules Governing the Listing of Stocks on the Shanghai Stock Exchange

"Articles of Association" the articles of association of Metallurgical Corporation of China Ltd.*

"Board" the board of Directors of Metallurgical Corporation of China Ltd.*

"China Minmetals" China Minmetals Corporation

"Company" or "MCC" Metallurgical Corporation of China Ltd.*

"Controlling Shareholder" or

"CMGC"

China Metallurgical Group Corporation

"Corporate Governance Code" the Corporate Governance Code set out in Appendix 14 of the Hong Kong Listing

Rules

"CSRC" the China Securities Regulatory Commission

"Director(s)" the director(s) of the Company, including all executive, Non-executive and

Independent Non-executive Directors

"general meeting(s)" the general meeting(s) of Metallurgical Corporation of China Ltd.*

"H Share(s)" the overseas listed foreign invested shares with a nominal value of RMB 1.00 each in

the ordinary share capital of the Company, which are listed on the Hong Kong Stock

Exchange and traded in Hong Kong dollars

"Listing Rules of the Hong Kong

Stock Exchange" or "Hong Kong

Listing Rules"

the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong

Limited

"Hong Kong Stock Exchange" The Stock Exchange of Hong Kong Limited

"HK\$" Hong Kong dollars, the lawful currency of Hong Kong, PRC

Section I Definitions

"Independent Director" or "Independent Non-executive

Director"

a Director who is independent of the Shareholders of the Company and is not an employee of the Company, has no material business connections or professional connections with the Company or its management and is responsible for exercising independent judgment over the Company's affairs

"MCC Real Estate" MCC Real Estate Group Co., Ltd.

"Model Code" the Model Code for Securities Transactions by Directors of Listed Issuers set out in

Appendix 10 to the Hong Kong Listing Rules

"Renminbi" or "RMB" Renminbi, the lawful currency of the PRC

"Reporting Period" from 1 January 2022 to 30 June 2022

"SASAC" the State-owned Assets Supervision and Administration Commission of the State

Council

"SFO" or "Securities and Futures

Ordinance"

the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as

amended, supplemented or otherwise modified from time to time

"Shareholder(s)" holder(s) of share(s) of the Company

"SSE" the Shanghai Stock Exchange

"State Council" the State Council of the People's Republic of China

"Supervisor(s)" the supervisor(s) of the Company

"Supervisory Committee" the Supervisory Committee of Metallurgical Corporation of China Ltd.*

"USD" United States dollars, the lawful currency of the United States

Section II Chairman's Statement



Chen Jianguang Chairman

Section II Chairman's Statement

Dear Shareholders.

In the first half of the year, under the complex and severe situation intertwined with multiple pressure points such as increasing economic downward pressure and strict pandemic prevention and control, MCC has united together and fought tenaciously to overcome those difficulties. Its operation quality and economic benefits have improved amid adverse circumstances, and it has delivered a satisfactory mid-term answer sheet with excellent results.

During the Reporting Period, the Company's major operating indicators grew against the trend and reached a new record high, continuing to maintain a good trend of sustained and stable growth. Among them, the operating revenue amounted to RMB 289.202 billion, representing a year-on-year growth of 15.22%. Total profit was RMB 8.648 billion, representing a year-on-year increase of 7.69%, of which the net profit attributable to the parent recorded RMB 5.871 billion, representing a year-on-year increase of 18.91%; the value of newly signed contracts amounted to RMB 647 billion, representing a yearon-year increase of 5.2%. The Company made fruitful achievements in scientific and technological innovation, with 4,992 patents newly applied and 4,323 patents newly granted in the first half of the year, totaling 43,775 effective patents, and further improved the quality of its patents. The Company owned a total of 82 Chinese Patent Excellence Awards (among which, China Patent Award has been awarded for three consecutive years from 2015 to 2017), a total of 27 technological innovation platforms at national level, a total of 55 national science and technology awards since 2000; a total of issuance of 62 international standards and 602 national standards. Since the beginning of this year, the pandemic in key domestic cities such as Changchun, Shanghai, Shenzhen and Beijing has been severe. The Company actively participated in the construction of anti-pandemic projects, sufficiently implementing its business advantages and successively undertook 78 anti-pandemic construction projects and contributed 45,000 units of labor force, among which quarantine points, diversion points and quarantine hotels were constructed in Shanghai, with 1,052,000 square meters of mobile-cabin hospitals and 129,000 beds, demonstrating the responsibility of central state-owned enterprises.

Currently, China's economy is stabilizing and recovering, but the external environment is becoming more complicated and severe, and there is still the pressure of the domestic pandemic. China still needs to work hard to promote its economic stability and recovery. In the second half of the year, we will maintain our strategic focus, and adhere to the central task of "steady growth" to achieve the annual task target with high quality. We will grasp the two basic points of "expanding the market" to take projects and "grasping the implementation" to manage project. We will stick to the five key measures of "promoting the implementation", "controlling risks", "tamping the foundation", "selecting talents" and "strengthening the Party building", i.e. the eight key tasks of "adhering to one center, grasping the two basic points and grasping the five key measures", and firmly conduct our own work.

Firstly, the Company will strengthen its confidence, work hard and make every effort to stabilize growth. The Company will be determined to fulfill its business objectives throughout the year, adhere to the same objectives, tasks and standards, and strive in the second half of the year to ensure high-quality completion of all objectives and tasks throughout the year.

Secondly, the Company will focus on the key points, be brave in making breakthroughs and make every effort to expand the market. The Company will turn internal and external pressure into power, follow closely the national strategy and market situation, take advantage of the situation for development, and look for opportunities to enhance development in the overall situation. The Company will expand its scale and take more orders and high-quality orders on the premise of ensuring the contract quality; the Company will strengthen public investment to gradually change the situation; adjust its structure and strive to adjust and optimize the business structure and regional layout; and the Company will control its bottom line to obtain better quality and quantity of new contracts.

Thirdly, the Company will deeply explore its potential, attach great importance to cultivation of strengths and make every effort to fulfill contracts. The Company will strengthen the concept of "on-site recycling market", project planning, management and business management process, promote the construction and application of project management and control platforms, focus on grasping the development direction of the "five modernizations" in the construction industry, and effectively improve its project performance ability.

Fourthly, the Company will benchmark its performance to be result-oriented, and make every effort to promote implementation. With the style to "do as you decide, do well as you do", the Company will insist on marking the "goal" in the heart, taking "execution" as the iron rule, taking "bearing" as the self-consciousness, doing a good job in the implementation of the key work of the year, implementing the functions of the headquarters department and the annual performance appraisal, carrying out tasks one by one, and accelerating the completion of the tasks one by one.

Section II Chairman's Statement

Fifthly, the Company will strictly adhere to the bottom line, operate in compliance with regulations, and do our best to control risks. With the sense of responsibility of "always worrying", we should build up risk awareness, strengthen the thinking of the bottom line, do a good job in risk prediction, early warning, control and resolution, and effectively improve the enterprise risk prevention and control ability.

Sixthly, the Company will dig deep into its roots, practise its internal skills and lay its foundation with all its strength. Starting from the construction of the "system, organization and personnel" system, efforts will be made to build business systems such as marketing, project management, Party building, finance, human resources, quality and technology, safety and environmental protection, legal affairs, business affairs and discipline inspection and supervision, so as to consolidate basic management in an all-round way and improve the quality and efficiency of enterprise operation.

Seventhly, the Company will be fair and just, scientific and accurate, and go all out to select talents. We will vigorously create a fair and just environment for growth and development, carry out competitive selection and employment, and stimulate the work enthusiasm and subjective initiative of cadres and employees. The Company will stress fairness and create a good atmosphere for employing people; outstanding competition, scientific and accurate competitive selection of cadres; highlight the mobility, and promote rotation and exchange as well as orderly exit of cadres.

Eighthly, the Company will improve its standing position, take on responsibilities and do its utmost to strengthen Party building. We will continue to promote the in-depth integration of Party building work with production and operation in state-owned enterprises, further consolidate and improve the quality of party building work, and effectively transform the Party's political, organizational and institutional advantages into the development and competitive advantages of enterprises.

The road ahead is long and hard. Persist and success is in card. Facing the future, we will shoulder our responsibilities with iron shoulders, work hard and bravely, strive to write a new chapter of high-quality development of "Beautiful MCC", and strive to create new and greater values for the country, shareholders, society and employees!

Chairman: Chen Jianguang



As the largest and the only A+H share listed company under China Minmetals, MCC is the world's largest and strongest metallurgical construction contractor and operation service provider, one of the state-recognized major resource enterprises, one of China's largest steel structure producers, one of the first 16 central state-owned enterprises designated by the SASAC with the main business of real estate development, and the main force of China's infrastructure construction. In the early stages of China's reform and opening-up, MCC created the world-renowned "Shenzhen Speed". It was ranked 6th in ENR's Top 250 Global Contractors in 2022 and 25th in 2022 Fortune China 500.

Adhering to the strategic positioning of "being the world-class national team of metallurgical construction, the main force and pioneer of infrastructure construction, and the front runner and vanguard of emerging industries, and adhering to the road of high-tech and high-quality innovation and development in the long term", MCC assumes the national responsibility of leading China's metallurgical industry to a higher level with its advanced core technology, irreplaceable advantages in the integration of the whole metallurgy industry chain, and the capacity of continuous innovation. Relying on its outstanding scientific research, exploration, design and construction capabilities, MCC speeds up transformation and upgrade, builds a comprehensive business system of "four-beam and eight-pillar", and forges itself to become the leading force of national infrastructure construction. By taking innovation as the new engine and fuel for corporate development, MCC undertakes the important task to innovate and lead China's development of emerging industries, thus constantly upgrades itself with a new "name card" for promoting sustainable development under the new normal.

As a national innovative enterprise, MCC has 5 comprehensive Class A design qualifications and 42 special-grade general contracting construction qualifications. Among its subsidiaries, 5 are granted with four special-grade general contracting construction qualifications, 3 are granted with three special-grade general contracting construction qualifications and 4 are granted with two special-grade general contracting construction qualifications, ranking in the forefront of China. MCC also has 27 national-level scientific research and development platforms and over 43,000 effective patents. Since 2009, it has won 82 China Patent Awards (winning the China Patent Gold Award for 3 consecutive years from 2015 to 2017). Since 2000, it has won 55 National Science & Technology Awards and published 62 international standards and 602 national standards. It has received the Luban Prize for Construction Projects for 126 projects (including participation), the National Quality Engineering Award for 256 projects (including participation), the Tien-yow Jeme Civil Engineering Prize for 24 projects (including participation), and Metallurgy Industry Quality Engineering Excellent Achievement Award and Metallurgy Industry High Quality Engineering Award for 798 projects (including participation). MCC has about 60,000 engineering technicians, 1 academician of the Chinese Academy of Engineering, 13 national exploration and design masters, 5 experts listed on the "National Hundred, Thousand and Ten Thousand" Talent Project", 2 winners of the Grand Skill Award of China, 3 gold medalists of the World Skills Competition, 75 National Technical Experts and 6 national skill master studios.

MCC was listed on the main board of the SSE and the Hong Kong Stock Exchange on 21 September 2009 and 24 September 2009, respectively. At present, the A Shares of the Company have been selected to be a constituent stock of the SSE Central State-owned Enterprises Index, MSCI Concept Index, ESG Leaders Index, 300 Carbon Neutrality Index; while the H Shares have been selected to be a constituent stock of the Hang Seng Composite Index, Hang Seng Stock Connect Hong Kong Index, Hang Seng Mainland Composite Index, Hang Seng Infrastructure Index, etc..

I. CORPORATE INFORMATION

Company name (in Chinese)	中國冶金科工股份有限公司
Abbreviation in Chinese	中國中冶
Company name (in English)	Metallurgical Corporation of China Ltd.*
Abbreviation in English	MCC
Legal representative of the Company	Zhang Mengxing

II. CONTACT PERSONS AND CONTACT METHOD

	Secretary to the Board	Joint Company Secretaries
Name	Zeng Gang	Zeng Gang and Ng Sau Mei
Address	MCC Tower, 28 Shuguang Xili, Chaoyang District, Beijing, PRC	MCC Tower, 28 Shuguang Xili, Chaoyang District, Beijing, PRC
Telephone	+86-10-59868666	+86-10-59868666
Facsimile	+86-10-59868999	+86-10-59868999
E-mail	ir@mccchina.com	ir@mccchina.com

III. CHANGES IN BASIC INFORMATION

Registered address of the Company	28 Shuguang Xili, Chaoyang District, Beijing
Historical change of the registered address of the Company	On 29 June 2010, the 2009 annual general meeting of the Company considered and approved the resolution regarding the Amendments to the Articles of Association, and approved the change of the registered address of the Company from "No.11, Gaoliangqiao Xie Jie, Haidian District, Beijing" to "28 Shuguang Xili, Chaoyang District, Beijing".
Business address of the Company in the PRC	MCC Tower, 28 Shuguang Xili, Chaoyang District, Beijing, PRC
Postal code of the business address of the Company in the PRC	100028
Place of business of the Company in Hong Kong	Room 3205, 32/F Office Tower, Convention Plaza, 1 Harbour Road, Wanchai, Hong Kong
H Share registrar and transfer office	Computershare Hong Kong Investor Services Limited
Address of H Share registrar and transfer office	17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong
Website address of the Company	http://www.mccchina.com
E-mail	ir@mccchina.com
Query index of changes during the Reporting Period	Not applicable

IV. CHANGES IN INFORMATION DISCLOSURE AND PLACE FOR INSPECTION

Name of newspapers for information disclosure designated by the Company	China Securities Journal, Shanghai Securities News, Securities Times and Securities Daily
Website designated by the CSRC for publication of the A Shares interim report	http://www.sse.com.cn
Website designated by the Hong Kong Stock Exchange for publication of the H Shares interim report	http://www.hkexnews.hk
Place where an interim report of the Company is available for inspection	MCC Tower, 28 Shuguang Xili, Chaoyang District, Beijing, PRC
Query index of changes during the Reporting Period	Not applicable

V. SHARES OF THE COMPANY

Types of Shares	Stock exchanges of listing	Stock abbreviation	Stock code
A Shares	Shanghai Stock Exchange	MCC	601618
H Shares	The Stock Exchange of Hong Kong Limited	MCC	01618

VI. OTHER RELEVANT INFORMATION

Auditor appointed by the	Name	Ernst & Young Hua Ming LLP		
Company	Office address	Level 17, Ernst & Young Tower, Oriental Plaza, No. 1 East Chang'an Ave., Dongcheng District, Beijing, China		
	Signing auditors	Zhang Ningning, Zhao Ning		
	Name	CITIC Securities Company Limited		
	Office address	23/F, CITIC Securities Tower, 48 Liangmaqiao Road Chaoyang District, Beijing		
Sponsor performing	Signing representatives of sponsor	Yang Bin, Chen Shumian		
continuous supervisory duty during the Reporting Period	Period of continuous supervision	CITIC Securities Company Limited acted as the sponsor for the initial public offering of A Shares of MCC on 21 September 2009 and the non-public issuance of A Shares of MCC in 2016. As the A Shares proceeds raised by MCC have not been fully utilized, CITIC Securities Company Limited continues to supervise MCC on the use of A Shares proceeds, and performs the relevant continuous supervisory duties after the expiry of the continuous supervisory period.		
PRC legal advisor	Name	Beijing Jia Yuan Law Offices		
appointed by the Company	Office address	F408 Ocean Plaza, 158 Fu Xing Men Nei Avenue, Xicher District, Beijing		
Overseas legal advisor	Name	King & Wood Mallesons		
appointed by the Company	Office address	13/F, Gloucester Tower, The Landmark, 15 Queen's Road Central, Central, Hong Kong		

VII. MAJOR ACCOUNTING DATA AND FINANCIAL INDICATORS

(I) Major accounting data

Unit: RMB '000

Major accounting data	The Reporting Period (January – June)	Corresponding period of the previous year	
Operating revenue Net profit attributable to Shareholders of	289,201,742	251,003,187	15.22
the listed company Net profit attributable to Shareholders of the listed company after deducting	5,871,055	4,937,420	18.91
non-recurring profits and losses Net cash flow generated from operating	5,618,568	4,259,279	31.91
activities	167,708	(8,565,449)	N/A Increase/decrease at the end of the
	End of the Reporting Period	End of the previous year	Reporting Period as compared to the end of the previous year (%)
Net assets attributable to Shareholders of the listed company Total assets	111,170,555 610,289,338	107,494,977 543,470,147	3.42 12.29

(II) Major financial indicators

Major financial indicators	The Reporting Period (January – June)	Corresponding period of the previous year	'
Basic earnings per share (RMB/Share)	0.24	0.21	14.29
Diluted earnings per share (RMB/Share) Basic earnings per share after deducting non-recurring profits and losses	0.24	0.21	14.29
(RMB/Share) Weighted average return on net assets	0.22	0.18	22.22 Increased by 0.09
(%) Weighted average return on net assets	5.65	5.56	percentage point
after deducting non-recurring profits and losses (%)	5.36	4.71	Increased by 0.65 percentage point

(III) Financial Highlights

1. Overview

The highlights of the Company's financial position as at 30 June 2022 and the operating results for the six months ended 30 June 2022 are as follows:

- Operating revenue amounted to RMB 289,202 million, representing an increase of RMB 38,199 million or 15.22% from RMB 251,003 million in the first half of 2021.
- Net profit amounted to RMB 7,355 million, representing an increase of RMB 764 million or 11.59% from RMB 6,591 million in the first half of 2021.
- Net profit attributable to the Shareholders of the listed company amounted to RMB 5,871 million, representing an increase of RMB 934 million or 18.91% from RMB 4,937 million in the first half of 2021.
- Basic earnings per share amounted to RMB 0.24, and the basic earnings per share in the first half of 2021 amounted to RMB 0.21.
- As at 30 June 2022, total assets amounted to RMB 610,289 million, representing an increase of RMB 66,819 million or 12.29% from RMB 543,470 million as at 31 December 2021.
- As at 30 June 2022, the Shareholders' equity amounted to RMB 155,871 million, representing an increase of RMB 4,483 million or 2.96% from RMB 151,388 million as at 31 December 2021.
- The value of newly signed contracts amounted to RMB 647,000 million, representing an increase of RMB 31,942 million or 5.19% from RMB 615,058 million in the first half of 2021.

Note: The percentages of increase or decrease are calculated by rounding up to RMB.

2. Operating Revenue from Principal Business Segments

During the Reporting Period, revenue from the principal business segments of the Company is as follows:

(1) Engineering Contracting Business

Operating revenue amounted to RMB 270,795 million, representing an increase of RMB 39,538 million or 17.10% from RMB 231,257 million in the first half of 2021.

(2) Property Development Business

Operating revenue amounted to RMB 9,031 million, representing a decrease of RMB 2,295 million or 20.27% from RMB 11,326 million in the first half of 2021.

(3) Equipment Manufacturing Business

Operating revenue amounted to RMB 6,800 million, representing an increase of RMB 735 million or 12.11% from RMB 6,065 million in the first half of 2021.

(4) Resource Development Business

Operating revenue amounted to RMB 3,593 million, representing an increase of RMB 115 million or 3.31% from RMB 3,478 million in the first half of 2021.

(5) Other Businesses

Operating revenue amounted to RMB 2,762 million, representing a decrease of RMB 366 million or 11.72% from RMB 3,128 million in the first half of 2021.

Note: All statistics of segment operating revenue are figures before inter-segment eliminations; the percentages of increase or decrease are calculated by rounding up to RMB.

3. Summary of financial statements

The following is a summary of the financial information prepared in accordance with China Financial Reporting Standards:

(1) Consolidated Income Statement

Item		Note VII	January to June 2022	January to June 2021
ı.	Operating revenue	51	289,201,742	251,003,187
١.	Less: Operating costs	51	262,190,220	226,557,020
	Taxes and surcharges	52	910,603	1,127,474
	Selling expenses	53	1,227,620	1,156,084
	Administrative expenses	54	4,939,714	5,041,482
	Research and development expenses	55	7,638,329	6,008,195
	Financial expenses	56	109,355	1,060,279
	Including: interest expenses	00	905,550	1,457,533
	Interest income		1,109,460	954,082
	Add: Other income	57	184,731	157,918
	Investment income	58	(813,722)	(690, 195)
	Including: (Losses)/gains from investments in associates	00	(010,122)	(666, 166)
	and joint ventures Losses from derecognition of financial assets at		(91,968)	123,138
	amortised costs (Losses)/gains from changes in fair		(536,947)	(529,008)
	values	59	(130,695)	51,479
	Impairment losses of credit	60	(1,603,202)	(1,028,111)
	Impairment losses of assets	61	(1,315,925)	(1,082,271)
	Gains from disposal of assets	62	103,781	427,710
II.	Operating profit		8,610,869	7,889,183
	Add: Non-operating income	63	116,214	170,451
	Less: Non-operating expenses	64	78,652	28,802
III.	Total profit		8,648,431	8,030,832
	Less: Income tax expenses	66	1,293,702	1,439,925
IV.	Net profit (I) Net profit classified by continuity of		7,354,729	6,590,907
	operation Net profit from continuing operations (II) Net profit classified by ownership ascription Net profit attributable to shoreholders		7,354,729	6,590,907
	Net profit attributable to shareholders of the Company Profit or loss attributable to		5,871,055	4,937,420
	non-controlling interests		1,483,674	1,653,487

Ite	n	Note VII	January to June 2022	January to June 2021
٧.	Other comprehensive income, net of income tax Other comprehensive income attributable	47	413,117	8,578
	to shareholders of the Company, net of income tax (I) Items that will not be reclassified to		369,667	81,130
	profit or loss 1. Re-measurement of defined benefit		(70,183)	(49,801)
	plans 2. Other comprehensive income that cannot be reclassified to profit or		(75,610)	(138,930)
	loss under the equity method 3. Changes in fair value of investments		(26)	-
	in other equity instruments (II) Items that may be reclassified to		5,453	89,129
	profit or loss 1. Other comprehensive income that can be reclassified to profit or loss		439,850	130,931
	under the equity method 2. Changes in fair value of receivables		(26,339)	(18,166)
	at FVTOCI 3. Exchange differences on translating financial statements in foreign		5,340	(42,637)
	currencies Other comprehensive income attributable to		460,849	191,734
	non-controlling interests, net of income tax		43,450	(72,552)
VI.	Total comprehensive income Total comprehensive income attributable to		7,767,846	6,599,485
	shareholders of the Company Total comprehensive income attributable to		6,240,722	5,018,550
	non-controlling interests		1,527,124	1,580,935
VII	 Earnings per share (I) Basic earnings per share (RMB/share) (II) Diluted earnings per share (RMB/share) 	67	0.24 0.24	0.21 0.21

(2) Summary of Consolidated Total Assets and Total Liabilities at the end of June 2022

	30 June 2022 31 December 2021		
Total assets	610,289,338	543,470,147	
Total liabilities	454,418,134	392,082,388	
Total equity	155,871,204	151,387,759	

VIII. DIFFERENCE IN ACCOUNTING DATA BETWEEN DOMESTIC AND OVERSEAS ACCOUNTING STANDARDS

Applicable	✓ Not Applicable
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IX. NON-RECURRING PROFIT AND LOSS ITEMS AND THEIR AMOUNTS

Non-recurring profit and loss items	Amount	Note
Profit or loss on disposal of non-current assets	103,781	XVII1
Tax refund or exemption in relation to documents of unauthorized		
approval or without formal approval or of incidental nature	=	=
Government grants recognized in current profit or loss (except for the		
government grants that are closely related to the normal operating		
business of the Company and received in a certain amount or fixed		
quantity in accordance with the state's regulations)	246,468	XVII1
Fund possession cost paid by non-financial enterprises and recorded		
under current profit and loss	_	-
The excess of the fair value of identifiable net assets acquired over the		
cost for acquisition of subsidiaries, associates and joint ventures	_	_
Profit/loss of non-monetary asset swap	_	_
Profit/loss from entrusted investment or asset management	_	_
Provision for impairment of assets due to force majeure, i.e. natural		
disaster	_	_
Profit/loss from debt restructuring	3,694	XVII1
Corporate restructuring expenses, i.e. expenses on employee		
placement, integration costs, etc.	_	_
Profit/loss from the excess of the fair value of a transaction of unfair		
consideration	_	_
Current net profit/loss of subsidiaries resulting from merger of		
enterprises under common control from the beginning of the period		
to the date of merger	_	_
Profit/loss from contingencies irrelevant to the normal operating		
business of the Company	-	_

Non-recurring profit and loss items	Amount	Note
Profit or loss arising from changes in fair value of trading financial		
assets, derivative financial instruments and other financial assets		
except for those relating to the hedging transactions under the		
company's normal operating business	(130,695)	XVII1
Write back of the provision for impairment of accounts receivable and		
contract assets that is individually tested for impairment	95,632	XVII1
Profit/loss from external entrusted loans	=	-
Profit/loss from changes in fair value of investment properties using the		
fair value model for subsequent measurement	_	_
Effects of one-off adjustment to current profit/loss in accordance with		
laws and regulations on taxation and accounting, etc.	_	_
Income of entrustment fees from entrusted operations	al =	=
Other non-operating income and expenses other than the above items	17,516	XVII1
Other profit or loss items that fall within the meaning of non-recurring		
profit and loss	20,546	XVII1
Less: Impact on income tax	59,397	XVII1
Impact on non-controlling interests (after tax)	45,058	XVII1
Total	252,487	XVII1

Explanation on the identification of non-recurring gain or loss items set out in the "Explanatory Announcement No. 1 on Information Disclosure for Companies Issuing Their Securities to the Public – Non-recurring Gain or Loss Items" as recurring gain or loss items

☐ Applicable ✓ Not Applicable

X. MAJOR FINANCIAL DATA IN 2022 ON A QUARTERLY BASIS

	The first quarter (January–March)	The second quarter (April–June)
		4
Operating revenue	118,026,827	171,174,915
Net profit attributable to Shareholders of the listed company	2,681,072	3,189,983
Net profit attributable to Shareholders of the listed company		
after deducting non-recurring profits and losses	2,581,676	3,036,892
Net cash flow generated from operating activities	(14,542,276)	14,709,984

I. EXPLANATION ON THE INDUSTRIES THAT THE COMPANY ENGAGES IN AND THE PRINCIPAL OPERATING RESULTS DURING THE REPORTING PERIOD

(I) Engineering Contracting Business

1. INDUSTRY OVERVIEW

The construction market experienced severe shocks in the first half of 2022 as a result of the pandemic. According to the National Bureau of Statistics of China, the orders index of the construction industry in April was 45.3%, 4.7 percentage points below the threshold, which was the lowest since the outbreak of COVID-19. Since June, with the implementation of measures related to better coordination of epidemic prevention and control and economic growth, a package of policies to stabilize growth has gradually shown its effects, and the economy has bottomed out and started to climb, it is expected that the national macroeconomic situation will be significantly better in the second half of the year, which is beneficial for enterprises to seize opportunities for development.

In the field of metallurgical construction, under the "Carbon Peak and Carbon Neutrality" policy in the metallurgical industry, domestic steel production and consumption will gradually reach the peak, and the metallurgical construction market will gradually shift from an incremental market to a stock market. In the future, the investment in large-scale new capacity will be significantly reduced, and the traditional steel business will face severe challenges in high-quality development. Mergers and acquisitions in the industry are accelerating, and the rapid formation of top enterprises coexisting with small-scale enterprises will become an inevitable trend in the future. Metallurgical engineering construction and operation services are therefore facing greater competitive pressure. In the future, high-quality steel development along with green, low-carbon and intelligent manufacturing as the two main points will gradually take shape. Global steel is moving towards a greener, lower-carbon and more intelligent direction. Building a low-carbon ecosystem of steel has become the only way, which puts forward higher requirements for technological innovation and service innovation in the metallurgical construction industry, and also opens up space for new growth and development for future markets.

In the field of infrastructure construction, there are still vast market opportunities. In the first half of the year, the central government proposed to strengthen infrastructure construction, announced the implementation of 33 measures in six aspects, including promoting effective investment, and carried out infrastructure investment ahead of schedule, so as to promote the economy to return to the normal track and ensure that it operates within a reasonable range. In the first half of the year, with GDP increasing by 2.5%, infrastructure investment (excluding power, heat, gas and water production and supply industries) increased by 7.1% year on year. With the synergy of structural, regional, social and other policies, the coordinated development of traditional infrastructure and new infrastructure has become an important starting point for stable investment now. "New Infrastructure and New Urbanisation Initiatives and Major Projects" has become the main direction of fixed asset investment in the past two years, bringing broad development potential for the Company's infrastructure business. From the perspective of industry trends, integration and reorganisation are accelerating, resulting in increasing industry concentration, and market regional layout is gradually converging as leading enterprises actively seek integrated layout, diversified development, transformation and upgrade, and new development momentum amid an increasingly fierce competition.

In the field of new energy construction, the industry's focus will gradually shift from heavy asset industries such as petroleum and coal to new energy industries represented by photovoltaic, wind power and hydropower. During the "14th Five-Year Plan" period, wind power and photovoltaic will become the main forces of clean energy growth. By 2025, the total installed capacity of photovoltaic will reach 730 million kW, equivalent to 2.9 times of that at the end of 2020. With the issuance of the medium and long-term development plans for pumped storage and the six measures to accelerate the development and construction of pumped storage, the double effect of superposition of favorable policies and industry demand will continue to accelerate the development of pumped storage, which is expected to become a trillion-level investment market.

2. OPERATING RESULTS OF THE SEGMENT BUSINESS

In the first half of 2022, the Company continued to seize opportunities, improve systems and innovate for improvement. During the Reporting Period, the value of the Company's newly signed contracts continued to grow in high levels, with the value of newly signed engineering contracts amounted to RMB 628.090 billion, representing a year-on-year increase of 6.15%. Among them, the value of newly signed metallurgical engineering contracts amounted to RMB 98.649 billion, accounted for 15.71% of the newly signed engineering contracts, representing a year-on-year increase of 0.55%. The amount of newly signed non-metallurgical engineering contracts amounted to RMB 529.440 billion, and accounted for 84.29% of the newly signed engineering contracts, representing a year-on-year increase of 7.26%. The amount of the Company's newly signed contracts for overseas projects amounted to RMB 16.466 billion, representing a year-on-year decrease of 28.01%. While maintaining the market growth rate, the contract quality of the Company has also been significantly improved, as it has won 5 projects of over RMB 10 billion in amount and more than 100 newly-signed contracts of over RMB 1 billion in amount in the first half of the year, further optimising the order structure.

The overall operating results of the engineering contracting business in the first half of 2022

Unit: RMB'000

	First half of 2022	% of the total	First half of 2021	Year-on-year increase/decrease
Segment operating revenue	270,794,824	92.43%	231,256,834	17.10%
Gross margin (%)	8.55	-	8.37	Increased by 0.18 percentage point

Note: The statistics of segment operating revenue and segment gross margin are figures before inter-segment eliminations.

(1) Metallurgical Engineering Construction Business

In 2022, the Company insisted on an innovation-driven development, accelerated the research and development of key core technologies in the fields of metallurgical core process flow, green development and intelligent manufacturing, and promoted the steady implementation of the "181" key research plans of the 2021-2025 strategic plan. During the Reporting Period, the Company comprehensively started the project approval work of the third batch of R&D projects under the "181 Plan" of the national metallurgical construction team, of which 50 major R&D projects, such as the "Intelligent Monitoring and Early Warning Platform for Building Safety in Metallurgical Industry", have entered the expert review process. In the second half of the year, the Company will continue to increase funding support for major R&D projects, promote the implementation of R&D projects, and create a new development pattern of "One Core and Two Wings (一體兩翼)" by accelerating the extension, reinforcement and expansion of the core process chain, the low-carbon and green chain and the digital intelligence chain, so as to effectively promote the upgrading of industrial capacity, and consolidate the advantages of the national metallurgical construction team.

During the Reporting Period, the Company paid close attention to key areas, followed up with key customers, and focused on key projects, effectively maintaining the continued growth in the contract value of metallurgical construction. The newly signed major construction projects such as Jiangsu Yonggang capacity replacement project, Yukun Iron and Steel bar and wire general contracting project, Sangang Minguang Sanming headquarters blast furnace general contracting project, etc. have continuously consolidated the Company's leading position in nationwide metallurgical construction.

During the Reporting Period, the Company continued to deepen its overseas metallurgical construction business and made important breakthroughs: the Company successfully entered into contracts for the steel-making, sintering, pelletizing and raw material plant of Vietnam Hefarongju sintering project (越南和發榕橘鋼廠煉鋼、燒結、球團、原料廠項目), the coke oven converter rolling line project - steel-making rolling line project of Indian Hiam Group (印度 希亞姆集團焦爐轉爐軋線項目一煉鋼軋線項目), and phase III of Indonesia OBI nickel-cobalt hydrometallurgy beneficiation and smelting project (印尼OBI鎳鈷濕法三期選礦冶煉工程), further expanding the Company's influence in countries along the Belt and Road Initiative.

The operating revenue of the metallurgical engineering construction business of the Company for the recent three years and the proportion accounting for the total contract income of the projects are as follows:

Unit: RMB'000

Item of revenue	First half of 2022 Proportion Amount (%)		First half of 2021 Proportion Amount (%)		First half Amount	of 2020 Proportion (%)
Metallurgical engineering	56,262,888	20.78	47,198,024	20.41	31,763,810	19.42

The statistics of segment revenue are figures before inter-segment eliminations.

During the Reporting Period, the key metallurgical engineering construction projects newly bid and entered into by the Company are as follows:

No.	Name of Project (Contract)	Contractual Amount (RMB100 million)
Dome	stic Projects	
1	Capacity replacement and ancillary facilities renovation project of Jiangsu Yonggang Group Co., Ltd. (江蘇永鋼產能置換及配套設施改造項目)	50.0
2	General Contracting Contract for the Copper Bars of the Transformation, Upgrading and Renovation Project for Capacity Replacement of Yukun Iron and Steel Group Co., Ltd. in Yuxi, Yunnan Province (雲南玉溪玉昆鋼鐵集團有限公司產能置換轉型升級改造項目棒線工程總承包合同)	23.4
3	EPC Contract for Project of Steel Capacity in Fujian Sansteel Minguang Co., Ltd., Replacing Blast Furnace in Sanming Headquarters (福建三鋼閩光股份有限公司鋼鐵產能置換三明本部高爐工程EPC總承包工程合同)	19.7
4	Engineering Contract for Phase II of Production Base Project of HBIS Laoting Iron and Steel Co., Ltd (河鋼樂亭鋼鐵基地項目二期工程合同)	14.6
5	Aluminum Equivalent Technology Transformation Project in Anshun, Guizhou Province (貴州安順鋁業等量技術改造工程項目)	14.1
6	1.68 million tonnes of Heat Recovery Coking and Ancillary Projects and PC Contract For Coking Section of Henan Angang Zhoukou Iron and Steel Co., Ltd. Plant (河南安鋼周口鋼鐵有限責任公司168萬噸熱回收煉焦及配套項目煉焦標段PC總承包項目)	13.9
7	Iron Production & Steelmaking EPC Project for Capacity Reduction & Replacement in Jishan County of Mingfu Steel Products Co., Ltd.* (稷山縣銘福鋼鐵製品有限公司產能減量置換煉鐵、煉鋼總承包項目)	13.9
8	Iron Production & Steelmaking EPC Project for Inner Mongolia Xin Jiyu Iron and Steel Co., Ltd. (內蒙古新吉宇鋼鐵有限責任公司煉鐵、煉鋼EPC總承包工程合同)	12.0
9	Tsingtuo 1,780 mm Hot Rolled Sheet Project (青拓1,780mm熱軋項目)	9.5
10	Operation and Maintenance Contract for flue-gas desulfurization and denitrification of 1# sintering machine in HBIS Laoting Steel Co., Ltd. (河鋼樂亭鋼鐵有限公司1#燒結機煙氣脱硫脫硝運維承包合同)	8.3

No.	Name of Project (Contract)	Contractual Amount (RMB100 million)
Overs	seas Projects	
1	EPC Contract for 2*2,500 Blast Furnace of Hoa Phat Dung Quat Integrated Steel Project Phase 2 in Vietnam (越南和發2榕桔鋼廠2*2,500高爐EPC合同)	14.1
2	Contract for Supply of Equipment and Technical service of 2X300T BOF Converter Shop Package of Hoa Phat Dung Quat Integrated Steel Project Phase 2 in Vietnam (越南和發2榕桔鋼廠煉鋼EPC合同)	12.8

(2) Non-Steel Engineering Construction Business

① Housing Construction and Infrastructure Construction

The Company seized the current market opportunity of increased infrastructure investment, strived to increase its scale, expand its field and build its brand in the field of infrastructure business, and focused on strengthening high-end leadership, optimising top-level design, improving its own advantages, innovating business models and improving assessment and incentive systems to continuously increase its business share. In the first half of 2022, the Company continued to promote the market strategic arrangement of "1+M+N", focused on high-quality markets, high-quality projects and high-quality owners, made a systematic deployment of its work in the core areas comprising urban agglomeration of Beijing-Tianjin-Hebei, Guangdong-Hong Kong-Macao Greater Bay Area, Yangtze River Delta, urban agglomeration in central China, and urban agglomeration in Chengdu and Chongqing with due consideration to key areas in key cities in northwest China and southwest China, fostered its development in popular areas of infrastructure investment to improve its regional influence and control, and strove to explore the domestic engineering market.

During the Reporting Period, the Company's "1+M+N" regional market layout has achieved preliminary results, with the headquarter's market primacy ratio and the market position in key cultivation provinces being strengthened and the market concentration being further improved. In the first half of the year, the contract value of new construction projects of the Company reached another record high in the same period, and maintained a momentum of rapid growth. The key projects won in succession included: Infrastructure Construction Project (Scientific and Technological Innovation Area and Smart Business Area) of Deyang Tianfu Jingcheng Area in Sichuan Province (四川德陽天府旌城片區基礎設施建設(科技創新片區、智創商務片區)項目), Section V Xinhua District Urban Village Reconstruction (Northern Area) Project of Cangzhou City Central Urban Renewal Project (滄州市中心城區城市更新項目五標段新華區城中村改造(北部片區)工程), and Urban Renewal Unit Project of Fengnanhu West District in Tangshan City (唐山市豐南湖西區城市更新單元工程), etc., making continuous improvement in its market influence.

In addition, the Company continues to innovate its business model to promote the development of contracting model towards high-end, systematization and integration, and actively expands its business such as urban renewal and reconstruction, and area-based overall development. Therefore, it successfully opened up the whole project life cycle of the industrial chain which contains the investment, financing, design, construction and operation of an integration of or various business models, and gained new competitive advantages.

The operating revenue of the non-steel engineering construction business of the Company for the recent 3 years and the proportion accounting for the total contract income of the projects are as follows:

Unit: RMB'000

Items of revenue	First half (of 2022 Proportion	First half of 2021 Proportion		First half of 2020 Proportion	
	Amount	(%)	Amount	(%)	Amount	(%)
Housing construction engineering	137,894,743	50.92	114,878,950	49.68	83,477,320	51.04
Transportation infrastructure Other engineering	53,051,997 23,585,196	19.59 8.71	47,569,418 21,610,442	20.57 9.34	32,043,668 16,252,472	19.59 9.95

Note: The statistics of segment revenue are figures before inter-segment eliminations.

During the Reporting Period, the key projects in the fields of housing construction and infrastructure construction entered into by the Company are as follows:

No.	Name of Project (Contract)	Contractual Amount (RMB100 million)
Housi	ng Construction Projects	
1	Engineering Contract for Xinhua District Urban Village Renovation (Northern Area) of Urban Renewal Project (Section 5) in the Central District of Cangzhou City (滄州市中心城區城市更新項目五標段新華區城中村改造(北部片區)工程合同)	119.7
2	Construction Project of Relocation Housing in Four Land Parcels of Zhencheng Construction Co., Ltd.* in Dafeng District, Yancheng City (鹽城市大豐區振城建設有限公司四個地塊拆遷安置房建設項目)	49.3
3	ABO District Comprehensive Development Project (Second Contract Section) of Southern new district in Xuzhou District, Yibin City (宜賓市 敘州區南部新區ABO片區綜合開發項目(二標段))	49.0
4	EPC Contract for PPP Project of Tuanjiehu Big Data Intelligent Industrial Park, Chongqing City (重慶市團結湖大資料智慧產業團PPP項目EPC工程總承包合同)	41.3
5	"Investor + EPC" Project for the regional development of Jian'an District of the demonstration zone of mass entrepreneurship and innovation in Xuchang City (許昌市雙創宜居示範區建安區區域開發「投資人+EPC」項目)	31.3
6	General Contract for engineering and construction for project package of (Phase II) Chengdu University of Technology Industrial Technology College Project and (Phase II) Lingang Industry-Education Integration Training Base Construction Project of Yibin College (成都理工大學產業技術學院項目(二期)、宜賓學院臨港產教融合實訓基地建設項目(二期)項目包設計施工總承包合同)	30.8
7	General Contract for XDG-2021-68 Plot Development and Construction Project in Wuxi City (無錫市XDG-2021-68號地塊開發建設項目工程總承包合同)	29.6
8	General Contract for Infrastructure Construction Project Package 1 of Huangshi Airport Economic Zone (黃石臨空經濟區基礎設施建設項目包1 工程總承包合同)	29.0
9	General Construction Contract for Gongyi Longquan Xianglian Field Complex (鞏義龍泉香蓮田園綜合體建設施工總承包合同)	28.7
10	Project of Linyi Jinan Railway Logistics Park (臨沂濟鐵物流園項目)	28.0

No.	Name of Project (Contract)	Contractual Amount (RMB100 million)
Trans	portation and Municipal Infrastructure Construction Projects	
1	Infrastructure Construction Project (Smart Business Area) of Deyang Tianfu Jingcheng Area (德陽天府旌城片區基礎設施建設(智創商務片區)	75.4
2	項目) Development Project of Yichang Highspeed Railway New City (宜昌高鐵 新城建設項目)	65.5
3	EPC Contract for 9 Sub-projects, including Shantytown Renovation Project in Hongta District, Yuxi City from 2021 to 2022 (2021-2022年玉溪市紅塔區棚戶區改造項目等9個子項目EPC總承包合同)	27.8
4	Chaling-Changning (including Anren Branch Line) Expressway Project in Hunan Province (湖南省茶陵至常甯(含安仁支線)高速公路項目)	25.0
5	General Contract for PPP project (Section I) of Xinhua-Xinning Section of G59 Hohhot-Beihai Highway (G59呼北高速公路新化至新寧段工程PPP項目第一標段施工總承包合同)	23.0
6	General Contract for PPP project (Section II) of Xinhua-Xinning Section of G59 Hohhot-Beihai Highway (G59呼北高速公路新化至新寧段工程PPP項目第二標段施工總承包合同)	23.0
7	日第二原秋旭工総界と日刊) General Contract for Survey, Design and Construction of Infrastructure Project (Phase II) in Wullilang Area, Santai County (三台縣五里梁片區基 礎設施二期項目勘察、設計、施工總承包合同)	16.9
8	では他一州項目创宗・改訂・他工総界包合刊) Construction Contract for PPP Project of S28 Lingtai-Huating Expressway (Phase II) and S28 Lingtai-Huating Expressway East Extension Line (Changwu-Lingtai) (S28慶台至華亭高速公路二期及S28靈台至華亭高速 公路東延線(長武至靈台)PPP項目施工合同)	15.0
9	2022 Municipal Urban Construction Project Contract in Xinxiang City (新郷市2022年市政城建項目合同)	14.4
10	EPC Project for Inner Ring Speed-up Renovation Phase II Project (Inner Ring South Line) in Xiangyang City (襄陽市內環提速改造二期工程(內環南線)EPC工程總承包合同)	13.5
	Projects	
1	PC Project for Huanggang Chenming Differentiated Cellulose Fiber and Ancillary Chemicals (Phase I) (黃岡晨鳴差別化纖維素纖維及配套化學品總承包工程(一期PC) 項目)	63.0
2	General Contract for Construction of Gongzhuling Beef Cattle Breeding and Integration Industrial Demonstration Park Project (公主嶺肉牛良種繁育融合示範產業園區項目工程總承包合同)	24.0
3	EPC Contract for Huanggang Chenming Pulp & Paper Improvement and Transformation Project with Annual Output of 800,000 Tonnes/Year of High-grade Packaging Paper (黃岡晨鳴漿紙提升改造年產80萬噸/年高檔包裝紙項目總承包工程合同)	18.4
4	General Contract for the Construction Project of Fenglian Venture Space Science and Technology Industrial Park (蜂聯創業空間科技產業園項目施工總承包合同)	18.0
5	EPC Contract for mine construction and exploration project for fluorite in Fangcheng by Yingao Mining Co., Ltd. (銀高礦業有限公司方城螢石礦建設開採項目EPC合同)	11.0
6	成例來項目EFC目间) Public Infrastructure Project (Public Facilities) of Modern Coal Chemical Industry Park in Huainan, Anhui (安徽淮南現代煤化工產業園公共基礎設 施項目(公共設施))	11.0
7	Engineering Project for Wuhan Qianzi Mountain Circular Economy Industrial Park Domestic Waste Incineration Power Plant (Phase II) (武漢市千子山迴圈經濟產業團生活垃圾焚燒發電項目二期工程合同)	9.9
8	Production Line Building Project for Integration Composite Plate Products and A Grade Flame Retardant Insulation Material Products of Tangshan Chenhuan Energy Saving Technology Co., Ltd.* (唐山宸桓節	9.9
9	能科技有限公司新建一體化複合板材、A級阻燃保溫材料製品生產線項目) General Contract for Construction Project of Design, Procurement, Construction of Qinchuangyuan-Shuiguang Intelligent Manufacturing Industrial Base Project (秦創原•水光智造產業基地項目設計、採購、施工	9.7
10	總承包建設合同) Newly-built 100,000-tonne Ternary Precursor Project in Wuhu, Anhui (安徽蕪湖新建10萬噸三元前驅體項目)	8.1

2 Emerging Industries

During the Reporting Period, in accordance with the strategic positioning of "being the front runner and vanguard of emerging industries", relying on the leading professional and technical advantages of the professional technology research institute, and relying on the unique technical advantages accumulated in the fields of iron and steel metallurgy and infrastructure, the Company continued to develop emerging industries, undertook the important task to innovate and lead the development of emerging industries, made remarkable achievements in the fields of ecological environmental protection, cultural and tourism project, new energy project, etc., constantly upgrading itself with a new "name card" for promoting sustainable development.

In terms of eco-environmental protection industry, the Company firmly implemented the concept of "lucid waters and lush mountains are invaluable assets (綠水青山就是金山銀山)". Relying on its advantages in the field of energy conservation and environmental protection, the Company focused on the development of the ecological and environmental protection market, seized the national strategic opportunity to achieve the goal of "fundamental improvement of the ecological environment by 2035", and made every effort to build the Company's ecological and environmental protection brand. The Company has established a subsidiary named MCC Ecological Environmental Protection Group Co., Ltd. (中冶生態環保集團有限公 司) for professional ecological and environmental protection, and seized the favorable opportunity of green and low-carbon development. Relying on leading technological advantages, we gained scale advantages in water and solid waste treatment, mine restoration, ecological and environmental management etc., and expanded our market share. During the Reporting Period, the Company successfully signed contracts for a number of representative projects, including the EPC General Contracting Contract for No. 1 Waste Water Treatment Plant Project in Jinghe New Town (涇河新城第一污 水處理廠工程EPC總承包), the EPC General Contracting Contract for the Ecological Environment and Water Treatment Project in Binhu New District of Hengshui City (衡 水市濱湖新區生態環境水系治理項目EPC總承包), and the Section Two Project of EPC General Contracting Contract for Design, Procurement and Construction of Jiushui Lianxin Landscape Project in Jiaxing City (嘉興市九水連心景觀工程設計採購施工總承包 二標段工程).

In terms of cultural tourism projects, MCC, the world's largest contractor for theme park construction and the only professional design institute for theme parks in China, is the country's one and only enterprise qualified for both theme park design and the execution of the entire construction project. During the Reporting Period, the Company successfully signed contracts for a series of theme park projects, including Comprehensive Development and Construction Project of Quanjiao Qilin Lake (Smart Town) Urban Park (全椒麒麟湖(智慧小鎮)城市公園綜合開發建設項目), Luoyang Sunshine Industrial Park Project Phase I Project (洛陽陽光工業遊園項目一期工程), and Naxigou Leisure Park Project (納溪溝休閑公園工程), which demonstrate the Company's brand influence and industry competitiveness in the field of theme parks.

In terms of new energy industry, the Company actively seized the new opportunities brought by energy transformation and low-carbon economy, accelerated the development and construction of clean energy businesses such as photovoltaic and wind power, and promoted the realization of the national "dual-carbon" goal while achieving its own business development. In terms of photovoltaic and wind power generation, the Company has newly signed a number of large-scale projects, including the EPC General Contracting Contract for Shaogang Photovoltaic Project (Plant Phase I) (韶鋼光伏項目廠房一期)EPC總承包), the Main Works of China Resources Zhongwei Shapotou District Xinjinggou 50MW Decentralized Wind Power Project (華潤中衛沙坡頭區新井溝50MW分散式風電項目主體工程), and the Zhaowang New Energy Wulatzhongqi Bayin Wulanyuan Grid Charge Storage Integration 50MW Wind Storage Heating Project (照旺新能源烏拉特中旗巴音烏蘭源網荷儲一體化50MW風儲供熱項目). The Company's market share has been continuously increasing.

During the Reporting Period, the newly signed key emerging industry projects of the Company are as follows:

No.	Name of Project (Contract)	Contractual Amount (RMB100 million)
Eco-e	environmental Protection Project	
1	Comprehensive Development and Construction Project (Section I) of Eco-Smart City of Economic Development Zone in Eastern Part of Dazhou City (達州東部經開區生態智慧城綜合開發建設項目(一標段))	48.6
Healt	hcare and Senior Care Projects	
1	General Contract for EPC Engineering for Zhongjing Wellness Area Project in Nanyang City (南陽仲景康養片區項目EPC 工程 總承包合同)	186.8
2	Project of International Health Service Centre (Phase I) for Tianfu Airport(天府機場國際健康服務中心 (一期) 項目)	11.8
Snooi	ial Town and Cultural Tourism Construction Projects	
1	Upgrading of Infrastructure and Overall Renovation of the Historic and Cultural District in the Old City District of Luoyang City (洛陽老城區歷史文化街區基礎設施提升和整體改造項目)	42.4
2	Upgrading and Renovation Project of Jianchunmen Area in the Old City District, Luoyang City (洛陽市老城區建春門片區提升改造項目) Contract	21.1
3	General Contract for Design-Construction of Cultural and Tourism Complex Project in Old Libo Ancient City (老荔波古城 文旅綜合體項目(設計、施工)總承包合同)	11.7

(II) Property Development Business

1. INDUSTRY OVERVIEW

Since 2022, the real estate financial supervision has continued to be strict, and the "Three Red Lines" pressure superimposed on the centralized land supply mode has posed a huge challenge to the short-term funds of real estate enterprises. The pilot introduction of the property tax has further slowed down the pace of home purchase by property buyers, market expectations have changed, and the national real estate market has cooled rapidly. Under the pressure of the "Two Concentration" policy and the superposition of the "Three Red Lines", the pressure on enterprises to control liabilities and reduce leverage has increased. With the corresponding decrease in investment and expansion momentum, performance growth is under pressure, and the target growth rate is slowing down. Housing development has shifted from the short-term extensive growth in pursuit of excessive profits to the long-term sustainable development direction of rational land acquisition, efficiency improvement and quality improvement. Under the assumption that the regulation policy and financing environment of the real estate industry will remain strict, the rising threshold of real estate enterprises at all levels also brings certain challenges and investment risks.

2. THE OPERATING RESULTS OF THE SEGMENT BUSINESS

In terms of real estate layout, the Company continues to adhere to the land acquisition principle of giving priority to first-tier cities with the three economic circles of "Beijing-Tianjin-Hebei, Yangtze River Delta and Guangdong-Hong Kong-Macao Greater Bay Area" as the center, strictly abide by the "Three Red Lines", make more careful calculations, control the pace of land acquisition, properly relieve inventory risk, take strict control of increment as a mandatory requirement, step up its destocking efforts, and improve the ability to collect money. Utilizing the real estate advantages of central state-owned enterprises, the Company adheres to the transformation to "urban comprehensive development, operation and development service provider", and takes the quality development path of giving priority to benefits and appropriate scale. During the Reporting Period, in the face of the pressure of "reducing the unsold houses (去庫存)" and the policy regulation of "restrictions on property purchase and credit grant (限購限貸)", the Company continued to adopt different policies that were tailored to the characteristics of each category and each city, steadily promoted the development of real estate business, and successfully acquired 2 land parcels through market tender with site area and permissible gross floor area of 17,500 sg.m. and 30,300 sq.m. respectively. During the Reporting Period, the amount invested by the Company in property development was RMB6.48 billion, representing a decrease of 27% as compared with that in the corresponding period of last year. The new construction area was 1,128,000 sq.m., representing a year-on-year increase of 57.7% as compared with that in the corresponding period of last year, while the completed area was 2,557,000 sq.m., representing an increase of 70% as compared with that in the corresponding period of last year.

During the Reporting Period, MCC Real Estate, a subsidiary of the Company was ranked 36th among the Top 100 real estate enterprises in China in 2022, Top 10 in terms of profitability, and Top 10 in terms of brand value of Chinese real estate companies, and was awarded the titles of "Excellent Enterprise in China's Urban Development and Operation", "Annual Social Responsibility Enterprise of Chinese Real Estate" and "Outstanding Real Estate Product Capability Enterprise in China". In 2022, MCC Real Estate won the honors of "China's Top 100 Property Service Enterprises" and "Property Management Companies in China in terms of Social Responsibility". The brand value of MCC Real Estate reaches RMB 26.8 billion, and its main long-term credit was rated as the highest AAA by domestic authoritative credit rating agencies.

The overall operating results of the property development business in the first half of 2022

Unit: RMB'000

	First half of 2022	% of the total	First half of 2021	Year-on-year increase/decrease
Segment operating revenue	9,030,921	3.08%	11,326,380	-20.27%
Gross margin (%)	10.97	-	20.74	Decreased by 9.77 percentage points

Note: The statistics of segment operating revenue and gross margin are figures before inter-segment

(III) Equipment Manufacturing Business

1. INDUSTRY OVERVIEW

To achieve the goal of carbon emission peak and carbon neutrality, the iron and steel industry, as a key industry for carbon emission reduction, shifts its main development direction to green and low-carbon, energy saving and environmental protection, and intelligent development, with new requirements on upgrading existing steel capacity equipment, therefore the core metallurgy equipment represented by electric furnaces is embracing new development opportunities. Empowering the manufacturing of equipment with new technologies such as big data and the internet has also become the development trend of the metallurgy equipment manufacturing industry in China. Meanwhile, with the rapid development of construction industrialisation and steel structure housing industrialisation in China, the industrialisation, standardisation and greening of the construction industry represented by fabricated steel structures has become the main development direction of the steel structure industry of China in the future.

2. THE OPERATING RESULTS OF THE SEGMENT BUSINESS

The business of the Company's equipment manufacturing segment, relying on multiple subordinate core manufacturing bases, mainly includes equipment manufacturing and steel structure business, covering R&D, design, manufacturing, sales, installation, fine-tuning, inspection and repair of metallurgical and civil construction equipment and its spare parts, steel structures and other metal and building materials, as well as other relevant services.

The Company's equipment manufacturing segment mainly focuses on metallurgical equipment, and has multiple core manufacturing bases including MCC CISDI Equipment Base, MCC Shaanxi Pressure Equipment Base, MCC Changtian Heavy Industry Base, and MCC WISDRI Equipment Base, with products covering key process equipment of metallurgy such as sintering and pelletizing, ironmaking and steel-making, casting and rolling. These products are widely used in international and domestic large steel engineering projects. The equipment manufacturing business closely keeps pace with layout adjustment and industrial upgrading of China's steel industry. By adopting energy conservation and environmental protection, green manufacturing and smart manufacturing as breakthrough points, the Company gives full play to the three functions of core equipment base in respect of R&D pilot test, core manufacturing and final assembly integration, so as to continuously facilitate the productization and industrialization of core technologies.

During the Reporting Period, the Company won the bid for the intelligent transformation project of Daye Yangxin Hongsheng slag yard, and undertook the intelligent and unmanned transformation project of Guangxi Jinchuan slag pot carrier equipment, the first intelligent and unmanned transformation project of slag pot carrier equipment in the metallurgical industry; continued to accelerate the pace of scientific and technological innovation in terms of comprehensive utilization of steel slag, and made new breakthroughs in the application of steel slag micronization technology products; successfully developed over-the-horizon intelligent scrapers and loaders in terms of research and development and exploitation of intelligent equipment, and successfully cultivated mining machinery as a new market growth point for the equipment manufacturing industry.

The overall operating results of the equipment manufacturing business in the first half of 2022

Unit: RMB'000

	First half of 2022	% of the total	First half of 2021	Year-on-year increase/decrease
Segment operating revenue	6,799,675	2.32%	6,065,257	12.11%
Gross margin (%)	12.04	HG I	13.83	Decreased by 1.79 percentage points

Note: The statistics of segment operating revenue and gross margin are figures before inter-segment eliminations.

3. STEEL STRUCTURE BUSINESS

The Company is the founder of China's steel structure engineering and one of the pioneers of China's steel structure business, and has important R&D platforms and the most influential professional associations in the industry such as the "National Steel Structures Engineering Technology Research Centre" and the "China Steel Structure Association". It has edited and assisted in editing almost all domestic steel structure national and industry standards, and is in the leading position in comprehensive technology of steel structures in China. It has full industry chain consolidation advantages featuring the integration of R&D, design, manufacturing, installation and testing, and has built a series of famous brands with brand influence and reputation, including the Olympic Bird's Nest, the Yanqi Lake APEC Exhibition Centre, the Shanghai World Expo Theme Pavilion, Shanghai Disney Resort and Universal Beijing Resort.

As one of the largest steel structure manufacturing enterprises in China, the Company has established 32 steel structure manufacturing bases with a design capacity of 1.65 million tonnes in economic hot spots in China, with capacity, industrial scale and manufacturing volume ranking among the top in the same industry in China. Among them, MCC (Shanghai) Steel Structure Technology Co., Ltd., as the representative enterprise of the Company's steel structure business segment, continued to maintain steady development in the first half of 2022, and won the bid and implemented major projects such as steel structure construction phase III expansion for T3 terminal of Qinghai Xining Caojiabao Airport (青海西寧曹家堡機場三期擴建T3航站樓鋼結構工程), steel structure construction (phase II) for Zhuhai Hengqin Headquarter Building (珠海橫琴總部大廈(二期)鋼結構工程), roof steel structure of Yellow River National Museum (黃河國家博物館屋面鋼結構), steel structure construction for Baoding Diangu Financial Centre (保定電谷金融中心鋼結構工程), roof rack of steel structure construction (phase I) for Guilin International Convention and Exhibition Centre (桂林國際會展中心鋼結構工程屋面網架) and steel structure construction for the second section of Nanjing Jiangbei New Financial Centre (南京江北新金融中心一期項目二標段鋼結構工程).

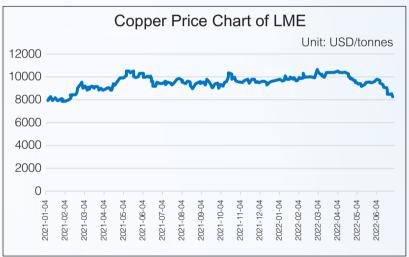
(IV) Resources Development Business

1. INDUSTRY OVERVIEW

Since 2022, the international political and economic situation has been complex and volatile. On the one hand, affected by the continuous fermentation and escalation of the Russian-Ukrainian crisis, the risk of global "stagflation" has increased significantly, the international financial market has been volatile, the geopolitical pattern has accelerated differentiation, and the world has started a new round of interest rate hike cycle. On the other hand, the domestic epidemic prevention and control measures have become more stringent. The Omicron variant has a strong transmission capacity. Since March, the epidemic has spread in many places, and epidemic control measures have been constantly introduced and upgraded. Due to the long duration and great impact of the epidemic in the first half of the year, it had a great impact on both ends of the economic supply and demand, especially the impact of the epidemic in Shanghai on the national and even the global industrial chain.

Under the impact of a variety of unexpected factors at home and abroad, the prices of bulk commodities, including non-ferrous metals such as copper, nickel, lead and zinc, will remain high and volatile, especially nickel. In March this year, the London Metal Exchange had a short squeeze, which led to abnormal trading of nickel futures, abnormal price increased, domestic and foreign prices distortion, disrupting the nickel spot trading market. In addition to the impact of the epidemic, the downstream market demand fell sharply, and the nickel price fluctuated dramatically in a short period of time. In the first half of 2022, the closing average prices of nickel, copper, zinc and lead on the London Metal Exchange reached US\$28,593/ton, US\$9,749/ton, US\$3,794/ton and US\$2,262/ton respectively, representing an increase of 63.3%, 7.3%, 33.1% and 8.5% respectively as compared with the average price in the first half of 2021, and representing an increase of 47.4%, 2.7%, 20.1% and -1.1% respectively as compared with the average price in the second half of 2021.









Source: WIND, LME

2. OPERATING RESULTS OF THE SEGMENT BUSINESS

During the Reporting Period, the Company's three key overseas mining projects under development, namely the Ramu Nico Laterite Mine, Papua New Guinea, Saindak Copper-Gold Mine and Duddar Lead-Zinc Mine, Pakistan, strove to overcome the pressure and negative impact of overseas pandemic prevention and control and security and anti-terrorism measures, insisted on zero infection in pandemic prevention and control, zero accidents in safety and environmental protection, zero injury in personnel safety, strictly implemented the principles of production and operation, i.e. "fast mining and fast selling, full production and sales", continued to optimize various technical indicators of production, and focused on cost control. In this way, we completed the production and operation tasks in the first half of the year, achieving a total operating revenue of RMB 2.72 billion and a net profit of RMB1.02 billion.

The overall operating results of the resource development business in the first half of 2022

Unit: RMB'000

	First half of 2022	% of the total	First half of 2021	Year-on-year increase/decrease
Segment operating				
revenue	3,592,811	1.23%	3,477,786	3.31% Increased by 3.89
Gross margin (%)	46.30	-	42.41	percentage points

Note: The statistics of segment operating revenue and gross margin are figures before inter-segment eliminations.

The specific progress of key mineral resource projects under development is as follows:

(1) Papua New Guinea Ramu Nico Project

At the end of the Reporting Period, the project was estimated to have a reserve of 150 million tonnes of resources, with an average nickel grade of 0.85% and an average cobalt grade of 0.09%, equivalent to 1.2896 million tonnes of nickel metal and 135,200 tonnes of cobalt metal, which may satisfy the need for the stable operation of the project for 40 years. The project achieved an average production rate of 103.6% in the first half of the year. The project produced nickel hydroxide, which contained 16,884 tons of nickel and 1,525 tons of cobalt, representing a year-on-year increase of 2% in the output of nickel. The project sold nickel hydroxide, which contained 9,960 tons of nickel and 932 tons of cobalt, representing a substantially year-on-year decrease of 49% in the sales of nickel. However, due to the high average prices of nickel and cobalt in the first half of the year, the operating revenue and net profit decreased by only 23% and 10% year-on-year, respectively. The main reason for the decline in the project's performance was due to the weakened demand from downstream customers, the lower-than-expected project sales and higher product inventories as a result of the dual impact of the short squeeze event in the LME nickel futures market and the regional pandemic in China. Now the sales strategies have been dynamically updated and optimized, and more efforts have been made on sales and destocking.

(2) Pakistan Duddar Lead-Zinc Mine Project

At the end of the Reporting Period, the project was estimated to have a reserve of 854,100 tonnes of zinc metal and 395,000 tonnes of lead metal, with an average zinc grade of 7.81% and an average lead grade of 3.61%, which may satisfy the need for the stable operation of the project for 20 years. At the same time, the North Duddar mining area has a great potential for mineralization. During the 14th Five-Year Plan period, we plan to further explore the mine, and it is expected to have a greater potential to double the resource amount of lead and zinc. In the first half of the year, the project produced zinc concentrate ore containing 23,404 tons of zinc and lead concentrate ore containing 4,875 tons of lead, representing a year-on-year increase of 13% and 18%, respectively. Meanwhile, the project sold zinc concentrate ore containing 18,669 tons of zinc and lead concentrate ore containing 4,316 tons of lead, representing a year-on-year increase of 3% and 34%, respectively. With significant year-on-year growth in output and sales and lead and zinc prices, the project achieved a year-on-year increase of 27% and 48% in operating income and net profit in the first half of the year.

(3) Pakistan Saindak Copper-Gold Mine Project

At the end of the Reporting Period, the eastern mine ore body of the project was estimated to have a reserve of 348 million tonnes of resources, with an average copper grade of 0.36%, equivalent to 1.2896 million tonnes of copper metal. The project had 75.49 million tonnes of reserves, with an average copper grade of 0.375%, equivalent to 283,100 tonnes of copper metal. Its reserves may satisfy the need for the stable operation of the project for 20 years. In the first half of the year, in order to grasp the favorable market opportunity brought by the high copper price, the project completed the annual overhaul of the smelter ahead of schedule and resumed crude copper smelting and refining production on 1 May. As of the end of June, it has produced 3,858 tons of crude copper. It has sold an aggregate of 8,925 tons of crude copper in the first half of the year, accounting for 53% of the annual plan, and achieved an operating income of RMB 650 million, 53% of the annual plan, and a dividend profit of RMB 110 million, 74% of the annual plan.

In the second half of the year, the Company will continue to implement the guiding principles of production and operation, i.e. "fast mining and fast selling" for each key mineral resource project under development, and comprehensively carry out pandemic prevention and control measures, security and anti-terrorism as well as safe production. The Company will spare no effort to boost production, speed up sales and reduce inventory to better achieve the production and operation targets for the year, effectively play a profit-raising role and make positive contributions to the Company's steady growth.

II. ANALYSIS ON CORE COMPETITIVENESS DURING THE REPORTING PERIOD

In the metallurgical construction field, the Company is the world's largest and most powerful metallurgical construction contractor and metallurgical enterprise operation service provider. With top-notch core technologies, incessant reformational and innovation capabilities as well as irreplaceable whole-industry chain integration advantage in metallurgical construction, the Company shoulders the state's responsibility of leading China to a higher level of development of metallurgy and is the best and the largest "national team" of metallurgical construction and operational services in the world. In the domestic market, the Company's technical level, engineering performance, construction effect and owner satisfaction of environmental protection raw material site, coking, sintering and pelletizing, iron-making, steel-making and continuous casting, hot rolled flat wood, hot rolled long wood and cold rolling business are in an absolute leading position. In the foreign market, the Company always stands at the international high-level and setting its eyes on the growth of metallurgical industry, adheres to the innovation-driven strategy, constantly develops new core technologies and creates new competitive advantages overseas. The Company is highly competitive in terms of high-end consulting and overall design capabilities in ferrous metallurgy field, as well as technical competitiveness in eight major business parts of iron and steel engineering, which fully represents China's strength and level in technological development and engineering construction in ferrous metallurgy field.

In the engineering contracting field, the Company, as one of the world's largest engineering contracting companies, has strong construction and technical advantages in housing construction, prefabricated buildings, real estate, municipal infrastructure, comprehensive industrial engineering construction, equipment installation. The Company has 12 Class A scientific research and design institutes, 16 large-scale construction enterprises, and 5 regional branches, with 5 comprehensive Class A design qualifications and 42 general contracting construction special-grade qualifications, 7 for highway engineering construction, 7 for municipal utilities engineering construction and 14 for architectural engineering construction. The Company has the system integration capability of the whole industry chain in housing construction, transportation and municipal infrastructure construction business, and a comprehensive industrial chain for project construction covering technological research and development, consulting and planning, surveying and mapping, project design, project supervision, civil construction, installation and adjustment, equipment manufacturing and integration, technological service and import and export trade. Compared to general engineering design enterprises, engineering construction enterprises or equipment manufacturing enterprises, the Company can integrate all resources in the entire industry chain to provide a more comprehensive service to its customers.

In the emerging industry field, in recent years, the Company has made continuous efforts in emerging industries such as ecological and environmental protection, feature themes engineering, beautiful countryside and smart city, healthcare and senior care, and has achieved a leading position in the industry. The Company has a large number of patented technologies and proprietary technologies with independent intellectual property rights in areas of energy and environmental protection such as sewage treatment, water environment treatment, air pollution treatment, soil remediation, solid waste treatment, waste incineration, and comprehensive utilization of resources of waste heat and pressure. The Company completed the first municipal sewage treatment project in China to achieve the highest discharge standard. The Company accounts for 60% of the market share in the field of largescale incineration power generation consulting and design in China. The Company has 27 national technological research and development platforms and technology research institutes involving pipeline and galleries, sponge cities, beautiful countryside and smart city, theme park, water environment, and healthcare and senior care. The Company has more than 43,000 active patents in total. In particular, the Institute for Theme Park Studies in China, the sole professional design institute of theme park, was entirely "made in China" in terms of theme park design, raw materials and construction, with the manufacturing capacity of the strong steel structure and especially the figure steel. In addition, the Company has mastered a number of domestic and international leading mining processes and core technologies in the field of mineral resource development, and established a design institute with the strongest comprehensive strength in nonferrous metallurgy in China, possessing well-developed mining and smelting processes and equipment technologies of copper, lead, zinc, nickel, cobalt and plenty of other metal, and having developed digital measurement and geographic information system and geotechnical engineering investigation technology for complicated geological conditions. In terms of metallurgical mining, the Company plays a leading role in large scale underground iron ore mining technology and large-scale open mining technology in China.

In the integrated real estate field, the status of the Company in the industry has been continuously improving, and its brand impact has also been increasing steadily. The Company ranked 40th in the "Top 100 Real Estate Developers in China" for four consecutive years, and was awarded "Top 10 in Profitability" and "Top 10 in Stability", and won "Outstanding Enterprise in Urban Development and Operation in China", "Annual Social Responsibility Enterprises of Property Services in China", and "Real Estate Enterprise with Excellent Products in China". The Company was awarded "China Leading Property Management Companies in terms of Marketisation of Business", "China Leading Property Companies in terms of Technology Empowerment", and "Leading Brand Enterprises in Specialized Operation of Property Service in China". The Company has been upgraded from a real estate developer to an urban development operator. Adhering to the technology-led development strategy of "one main engine with multi-wheels", the Company focuses on the overall goal of "green building, technological residence, smart home and smart community" and brand positioning to create the next-generation high-end smart health residences.

During the Reporting Period, there were no material changes in the core competitiveness of the Company.

III. DISCUSSION AND ANALYSIS OF OPERATIONS

During the Reporting Period, the operating revenue of the Company amounted to RMB 289,201,742 thousand, representing a year-on-year growth of 15.22%, the total profit amounted to RMB 8,648,431 thousand, representing a year-on-year growth of 7.69% and the net profit attributable to Shareholders of the listed company amounted to RMB 5,871,055 thousand, representing a year-on-year growth of 18.91%.

Significant changes in the operation of the Company, and matters that have a significant impact on the operation of the Company and are expected to have a significant impact in the future during the Reporting Period

Applicable	✓	Not applicable
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IV. PRINCIPAL OPERATION RESULTS DURING THE REPORTING PERIOD

- (I) Analysis on major operating business
 - 1. Analysis on the changes in the relevant items in financial statement

Items	Amount for the current year	Amount for the same period of the previous year	Change in Proportion (%)
Operating revenue	289.201.742	251.003.187	15.22
Operating costs	262,190,220	226,557,020	15.73
Selling expenses	1,227,620	1,156,084	6.19
Administrative expenses	4,939,714	5,041,482	-2.02
Financial expenses	109,355	1,060,279	-89.69
Research and development expenses	7,638,329	6,008,195	27.13
Net cash flows from operating activities	167,708	(8,565,449)	N/A
Net cash flows from investing activities	(1,594,881)	(7,039,963)	N/A
Net cash flows from financing activities	22,233,423	14,125,446	57.40

Explanation of change in operating revenue: Increase in operating revenue was due to active expansion in the market by the Company.

Explanation of change in operating costs: Increased correspondingly along with the increase in operating revenue and at the same time, impacted by the increase in costs including raw materials in the market and labor costs.

Explanation of change in selling expenses: Mainly due to the increase in market development expenses such as staff expenses and sale services fees.

Explanation of change in administrative expenses: Mainly due to the Company's strengthening of expense control and the year-on-year decrease in travelling expenses, office expenses and other expenses.

Explanation of change in financial expenses: Due to continuous optimization of the Company's interest-bearing liability structure, and the decrease in financial expenses as a result of the impact of exchange rate changes.

Explanation of change in research and development expenses: Mainly due to the increase in investment in research and development by the Company, leading to the increase in research and development expenses.

Explanation of change in net cash flows from operating activities: Mainly due to the decrease in cash paid for operating activities.

Explanation of change in net cash flows from investing activities: Mainly due to the decrease in cash from the payment of investment activities.

Explanation of change in net cash flows from financing activities: Mainly due to the increase in cash inflow from borrowings.

2. Analysis on revenue and costs

(1) Analysis on the factors causing the changes in business revenue:

The Company's financial position and business performance were subject to the combined impact of multiple factors, including changes in international and domestic macroeconomic environment and China's financial and monetary policies and the development status of the industry in which the Company was operating in and the implementation of adjustment and control measures of the industry imposed by the state:

1) Trend of macro-economy internationally and domestically

At present, the international political and economic situation remains complicated and volatile, and the COVID-19 pandemic remains elevated, with many unstable and uncertain factors. The Company's various business operations are affected by the international and domestic macroeconomic environment, and business links such as procurement, production and sales of the Company may also be affected by the trend of international and domestic macroeconomy, which further leads to fluctuations in the results of operations of the Company. The business income of the Company are derived primarily from the PRC. In different domestic economic cycles, the Company may experience different performance in its business operations.

 Changes in the policies of industry in which the Company was involved and demands of its domestic and overseas markets

The Company's engineering contracting, property development, resources development and equipment manufacture businesses were all influenced by the policies of the industry. With the national policy requirements of "carbon emission peak and carbon neutrality", carbon emission limits have been gradually upgraded, environmental protection and energy consumption control efforts have been continuously strengthened, and the real estate industry has gradually returned to a rational and stable development stage. At the same time, there was a significant fluctuation of the global mineral product price. Changes in the above-mentioned national policies, market changes and periodic fluctuations of the industries and changes in the operating situation of upstream and downstream enterprises of the industries all guide the adjustment of the Company's business segment and the layout of market areas to a certain extent, which thereby affected the Company's internal business structure and in return affected its financial position.

Both items 1) and 2) above were the major risk factors that impacted the Company's performance in the first half of 2022.

- 3) Changes in the State's tax policy and exchange rates
 - ① Impact from changes in the tax policy

The Company's operating results and financial position were influenced by changes in the state's tax policy through the impact of tax burdens of the Company and its subsidiaries. The preferential tax policy for the development of the western regions and the preferential tax policies for high-tech enterprises currently enjoyed by some of the Company's subsidiaries, as well as the resources tax may undergo some changes following the changes in the PRC's tax policies. Changes in the relevant preferential tax policies would affect the Company's financial performance.

② Impact of the fluctuations in exchange rate and monetary policy

Part of the Company's business revenue came from overseas markets. Changes in the exchange rates may bring exchange rate risks to the Company's overseas business revenue and currency settlement. In addition, adjustment in banks' deposit reserve ratio and changes in the benchmark interest rates for deposits and loans would impact on the Company's financing costs and interest income.

4) Overseas tax policies and their changes

The Company has business operations in many overseas countries and regions and pays various taxes. Since the tax policies and environments are different in various places and the regulations of the various taxes, including enterprise income tax, tax of foreign contractors, individual income tax and interest tax, are complicated and diversified, the Company's overseas business may incur corresponding risks due to tax policies and the changes thereof. Meanwhile, the tax treatment for transactions and matters related to certain operating activities may require enterprises to make corresponding judgment because of the uncertainty of such tax treatment.

5) Changes in major raw materials prices

The Company's engineering contracting, resource development and property development businesses require raw materials including steel, wood, cement, explosive initiators, waterproof materials, geometrical and additive agents while the Company's equipment manufacture business requires steel and electronic parts, etc. Changes in the prices of the aforementioned raw materials due to factors such as supply, market conditions, costs and pandemic prevention and control policies on materials will impact the Company's costs of the corresponding raw materials and consumables.

6) Construction subcontracting expenses

The Company may, according to the different situations of engineering contracting projects, subcontract non-crucial construction parts to subcontractors. On one hand, subcontracting boosted the Company's capacity to undertake large-scale projects and to fulfil contracts flexibly. On the other hand, the management of subcontractors and the control of subcontracting costs may also affect profit on projects of the Company.

7) Enhancement in the quality of operational management

The quality of operational management will significantly affect the results of the Company. The Company will continue to "Highlight the Theme of Reform and Focus on Core Business", further improve the corporate governance and operation of internal control, strengthen the operation management and risk control, raise management quality and effectiveness, and perfect the assessment and incentive systems of the Company. The Company will continue to deepen the design and operation of "macro environment, major customers and large-scale projects", through systematic reform and innovation, as well as scientific decision-making to stimulate the Company's vitality and creativity, and achieve a simple, efficient and effective management and control system. Whether these management objectives can be effectively implemented will also influence, to quite a large extent, the improvement in the operating results of the Company.

8) Uneven distribution of revenue

The Company's operating revenue mainly comes from the engineering contracting business. Since the income of such business is affected by factors such as government's project approval, public holidays and the "freeze period" in the north, the business revenue of the Company is usually higher in the second half of the year than the first half, leading to an uneven distribution of revenue.

(2) Major business by segment and region

1) Major business by segment

Unit: RMB'000

	Major Business by Segment Increase or							
Segments	Operating revenue	Operating costs	Gross margin (%)	decrease in the operating revenue as compared to that of last year (%)	Increase or decrease in the operating costs as compared to that of last year (%)	Increase or decrease in the gross margin as compared to that of last year		
Engineering						Increased by 0.18		
contracting	270,794,824	247,642,999	8.55	17.10	16.86	percentage point Decreased by 9.77		
Property development Equipment	9,030,921	8,040,299	10.97	-20.27	-10.44	percentage points Decreased by 1.79		
manufacturing Resources	6,799,675	5,980,936	12.04	12.11	14.43	percentage points Increased by 3.89		
development	3,592,811	1,929,190	46.30	3.31	-3.67	percentage points		

Note: The statistics of segment revenue and costs are figures before inter-segment eliminations.

① Engineering contracting business

Engineering contracting business is the traditional core business of the Company which is mainly carried out by way of EPC contract and general financing and construction contracting contract, and is currently the major source of income and profits of the Company. The gross profit margins of the engineering contracting business for the first half of 2022 and 2021 were 8.55% and 8.37%, respectively, with a year-on-year increase of 0.18 percentage point.

The proportion of the operating revenue accounting for the total amount of engineering contracting in each sub-segment of the Company for the corresponding period during the recent three years are as follows:

Unit: RMB'000

	In the first h	In the first half of 2022		In the first half of 2021		In the first half of 2020	
Items of revenue	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)	
Metallurgical engineeri Housing construction	ng 56,262,888	20.78	47,198,024	20.41	31,763,810	19.42	
engineering Transportation	137,894,743	50.92	114,878,950	49.68	83,477,320	51.04	
infrastructure	53,051,997	19.59	47,569,418	20.57	32,043,668	19.59	

Note: The statistics of segment revenue are figures before inter-segment eliminations.

2 Property development business

For the first half of 2022 and 2021, the total gross profit margins of the Company's property development business were 10.97% and 20.74% respectively, with a year-on-year decrease of 9.77 percentage points.

3 Equipment manufacturing business

The Company's equipment manufacturing business mainly included metallurgical equipment, steel structures and other metal products. For the first half of 2022 and 2021, the gross profit margins of the Company's equipment manufacturing business were 12.04% and 13.83%, respectively, representing a year-on-year decrease of 1.79 percentage points.

4 Resource development business

The Company's resource development business included mining and processing. MCC Tongsin Resources Limited (MCCT) (中冶集團銅鋅有限公司) and MCC-JJJ Mining Development Company Limited (中冶金吉礦業開發有限公司), among others, were mainly engaged in the mining business while China Silicon Co., Ltd. (洛陽中硅高科技有限公司), the polysilicon manufacturing enterprise, was mainly engaged in the processing business. For the first half of 2022 and 2021, the gross profit margins of the Company's resource development business were 46.30% and 42.41%, respectively, representing a year-on-year increase of 3.89 percentage points, mainly due to changes in international commodity prices.

2) Major business by region

For details, please refer to the Part 1 information in Note 15 to "Financial Report" section X of this report.

(3) Table of analysis on costs

Unit: RMB'000

	By Segment							
Segment	Costs component items Amount for the current period		Proportion of the amount for the current period to the total costs (%)	Amount for the same period in the previous year	Proportion of the amount for the same period in the previous year to the total cost (%)	Percentage change in the amount for the current period as compared to that for same period in the previous year (%)		
Engineering contracting	Operating costs	247,642,999	93.18	211,909,292	91.87	16.86		
Property development	Operating costs	8,040,299	3.03	8,977,852	3.89	-10.44		
Equipment manufacturing	Operating costs	5,980,936	2.25	5,226,656	2.27	14.43		
Resource development	Operating costs	1,929,190	0.73	2,002,779	0.87	-3.67		

Note: The statistics of segment cost are figures before inter-segment eliminations.

Description of other results in the analysis on costs:

The major components of costs of construction projects of the Company for the same period of the first half of recent three years are as follows:

Unit: RMB'000

	In the first half of 2022		In the first ha	If of 2021	In the first half of 2020	
Items of costs	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)
Subcontracting expenses	119,174,278	48.12	102,841,725	48.53	72,169,168	48.81
Materials expenses	93,694,791	37.83	78,846,057	37.21	54,184,012	36.65
Labour costs	13,382,222	5.40	11,813,345	5.57	8,182,285	5.53
Machinery usage fees	4,228,699	1.71	3,940,599	1.86	2,789,954	1.89
Others	17,163,009	6.94	14,467,566	6.83	10,522,362	7.12
Total engineering cost	247,642,999	100.00	211,909,292	100.00	147,847,781	100.00

The major components of costs of construction projects of the Company are subcontracting expenses, materials expenses, labour costs and machinery usage fees. The proportion of each component of costs to operating costs is relatively stable.

(4) Information of major customers and major suppliers

The sales of top five customers amounted to RMB 11,300,452 thousand, accounting for 3.90% of the total sales during the Reporting Period; among them, no sales of top five customers is derived from sales to related parties.

Unit: RMB'000

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Customer's name	Operating revenue	total operating revenue
Unit 1	3,175,996	1.10
Unit 2	2,668,883	0.92
Unit 3	1,942,797	0.67
Unit 4	1,795,763	0.62
Unit 5	1,717,013	0.59
Total	11,300,452	3.90

The procurement of top five suppliers amounted to RMB 3,213,094 thousand, accounting for 1.22% of the operating costs during the Reporting Period; among them, the procurement from related parties under the procurement of top five suppliers amounted to RMB 1,657,492 thousand, accounting for 0.63% of total procurement of the Reporting Period.

Unit: RMB'000

Supplier's name	Procurement for the current period	Proportion of the total operating costs (%)
Unit 1	1,657,492	0.63
Unit 2	494,276	0.19
Unit 3	370,800	0.14
Unit 4	369,455	0.14
Unit 5	321,071	0.12
Total	3,213,094	1.22

3. Analysis on expenses

(1) Selling expenses

The Company's selling expenses mainly include employee compensation costs, travelling expenses, transportation expenses, advertising and sale services expenses. In the first half of 2022 and 2021, the Company's selling expenses were RMB 1,227,620 thousand and RMB 1,156,084 thousand respectively, representing a year-on-year increase of 6.19%.

(2) Administrative expenses

The Company's administrative expenses mainly include employee compensation costs, depreciation expenses, office expenses and travelling expenses. In the first half of 2022 and 2021, the Company's administrative expenses were RMB 4,939,714 thousand and RMB 5,041,482 thousand respectively, representing a year-on-year decrease of 2.02%.

(3) Financial expenses

The Company's financial expenses include costs of borrowing, exchange gains or losses, and bank charges incurred in business operation. In the first half of 2022 and 2021, the Company's financial expenses were RMB 109,355 thousand and RMB 1,060,279 thousand respectively, representing a year-on-year decrease of 89.69%.

4. Research and development expenditure

The research and development expenditure of the Company is as follows:

Unit: RMB'000

Research and development expenditure for the current period Total research and development expenditure	7,638,329 8,259,007
Proportion of total research and development	0.00
expenditure to operating income (%)	2.86

5. Cash flows

The cash flows of the Company are as follows:

Unit: RMB'000

Items	From January to June 2022	From January to June 2021
Net cash flows from operating activities	167,708	(8,565,449)
Net cash flows from investing activities Net cash flows from financing activities	(1,594,881) 22,233,423	(7,039,963) 14,125,446

(1) Operating activities

In the first half of 2022 and 2021, the Company's net cash flows generated from operating activities amounted to RMB 167,708 thousand and RMB -8,565,449 thousand respectively. In the first half of 2022 and 2021, the cash inflow generated from operating activities mainly came from the cash received from the sale of goods and the rendering of service. The Company's cash outflow generated from operating activities mainly consisted of cash payments for goods purchased and services received, cash payments to and on behalf of employees and payments of various types of taxes.

(2) Investing activities

In the first half of 2022 and 2021, the Company's net cash flows generated from investing activities amounted to RMB -1,594,881 thousand and RMB -7,039,963 thousand. The investing activities of the Company mainly came from engineering contracting and property development business. The Company's cash inflow generated from investing activities mainly consisted of cash received from recovery of investments, investment income and disposal of assets. Cash outflow mainly included cash payments to acquire or construct fixed assets, intangible assets and other long-term assets and cash payments to acquire investments.

(3) Financing activities

In the first half of 2022 and 2021, the Company's net cash flows generated from financing activities amounted to RMB 22,233,423 thousand and RMB 14,125,446 thousand respectively. The Company's cash inflow from financing activities mainly consisted of cash received from capital contributions and net cash inflow from interest-bearing liabilities in accordance with the needs of operation and management. Cash outflow mainly consisted of cash on repayment of debts and interest.

	6.	Detailed statement of the major changes in the Company's business types, profits structure or profits sources:
		Applicable V Not applicable
(II)	Desc	ription of material changes in profits from non-major business
		Applicable V Not applicable

(III) Analysis on assets and liabilities

1. Status of assets and liabilities

Unit: RMB'000

Items	Amount at the end of the current period	Proportion of the amount at the end of the current period to the total assets/total liabilities (%)	Amount at the end of the previous year	Proportion of the amount at the end of the previous year to the total assets/total Liabilities (%)	Proportion change in the amount at the end of the current period as compared to that at the end of the previous year (%)
Current assets	475,531,511	77.92	412,315,644	75.87	15.33
Cash and bank balances	63,153,944	10.35	41,824,464	73.67	51.00
Accounts receivable	94,556,643	15.49	83,881,695	15.43	12.73
Inventories	70,158,705	11.50	61,847,522	11.38	13.44
Contract assets	117,841,333	19.31	91,185,630	16.78	29.23
Non-current assets	134,757,827	22.08	131,154,503	24.13	2.75
Intangible assets	22,333,888	3.66	20,878,147	3.84	6.97
Total Assets	610,289,338	100.00	543,470,147	100.00	12.29
Current liabilities	416,207,368	91.59	358,889,666	91.53	15.97
Short-term borrowings	46,429,353	10.22	21,395,848	5.46	117.00
Bills payable	39,873,937	8.77	37,616,532	9.59	6.00
Accounts payable	190,266,025	41.87	155,265,041	39.60	22.54
Contract liabilities	72,603,641	15.98	87,092,166	22.21	-16.64
Non-current liabilities	38,210,766	8.41	33,192,722	8.47	15.12
Long-term borrowings	29,179,206	6.42	25,332,533	6.46	15.18
Total Liabilities	454,418,134	100.00	392,082,388	100.00	15.90

Analysis on assets and liabilities

(1) Analysis on the structure of assets

Cash and bank balances

As at 30 June 2022 and 31 December 2021, the balances of cash and bank balances of the Company were RMB 63,153,944 thousand and RMB 41,824,464 thousand, respectively, representing an increase of 51.00% from the beginning of the year.

As at 30 June 2022 and 31 December 2021, the restricted cash and bank balances of the Company were RMB 10,863,574 thousand and RMB 10,607,640 thousand, respectively, which accounted for 17.20% and 25.36% of the cash and bank balances, respectively. The restricted cash and bank balances mainly included cash deposits of acceptance bill, deposit for letter of guarantee, wage deposit for migrant workers and special fund, etc..

Accounts receivable

As at 30 June 2022 and 31 December 2021, the carrying value of the Company's accounts receivable were RMB 94,556,643 thousand and RMB 83,881,695 thousand, respectively, representing an increase of 12.73% from the beginning of the year, which was mainly due to an increase in accounts receivable related to engineering contracting services.

Inventories

The inventories of the Company mainly consisted of properties under development, completed properties held for sale, raw materials, work in process and finished goods, etc. The inventory structure of the Company reflected the characteristics of the engineering and contracting, property development, equipment manufacturing and resources development businesses in which the Company was engaged.

As at 30 June 2022 and 31 December 2021, the Company's net inventories were RMB 70,158,705 thousand and RMB 61,847,522 thousand, respectively, representing an increase of 13.44% from the beginning of the year.

Contract assets

Contract assets of the Company are mainly completed and unsettled inventories and construction quality guarantee deposits with regard to the engineering contracting service contracts. As at 30 June 2022 and 31 December 2021, the net contract assets of the Company amounted to RMB 117,841,333 thousand and RMB 91,185,630 thousand, respectively, representing an increase of 29.23% from the beginning of the year, which was mainly due to an increase in contract assets related to engineering contracting services.

Intangible assets

As at 30 June 2022 and 31 December 2021, the aggregated carrying value of the Company's intangible assets were RMB 22,333,888 thousand and RMB 20,878,147 thousand respectively, representing an increase of 6.97% from the beginning of the year. The Company's intangible assets mainly included land use rights, franchise right, patent and proprietary technology, as well as mining rights etc..

(2) Analysis on the structure of liabilities

Long-term and short-term borrowings

Long-term and short-term borrowings of the Company mainly consisted of credit loans, pledge loans and guaranteed loans from commercial banks and other financial organizations. As at 30 June 2022 and 31 December 2021, the carrying value of the Company's short term borrowings were RMB 46,429,353 thousand and RMB 21,395,848 thousand, respectively, representing an increase of 117.00% from the beginning of the year. As at 30 June 2022 and 31 December 2021, the carrying value of the Company's long-term borrowings were RMB 29,179,206 thousand and RMB 25,332,533 thousand, respectively, representing an increase of 15.18% from the beginning of the year.

During the Reporting Period, the short-term borrowings and long-term borrowings repaid by the Company amounted to RMB 32,034,871 thousand and RMB 9,692,063 thousand, respectively. As at the end of the Reporting Period, the balances of fixed-rate short-term borrowings and fixed-rate long-term borrowings amounted to RMB 34,059,077 thousand and RMB 11,827,446 thousand, respectively.

Accounts payable

Accounts payable mainly included material costs payable to suppliers and engineering costs payable to subcontractors by the Company. As at 30 June 2022 and 31 December 2021, the Company's carrying value of accounts payable were RMB 190,266,025 thousand and RMB 155,265,041 thousand, respectively, representing an increase of 22.54% from the beginning of the year.

Contract liabilities

Contract liabilities mainly comprises contract liabilities related to engineering contracting services and sales contracts. As at 30 June 2022 and 31 December 2021, the Company's carrying value of contract liabilities amounted to RMB 72,603,641 thousand and RMB 87,092,166 thousand, respectively, representing a decrease of 16.64% from the beginning of the year.

2. Overseas assets

(1) Asset size

Among them: overseas assets 40,682,620 (Unit: RMB'000), accounting for 7% of the total assets.

- (2) Relevant explanations for the relatively high proportion of overseas assets
 - Applicable Not applicable
- 3. Restrictions on major assets as of the end of the Reporting Period

For details, please refer to Note VII70 to "Financial Report" Section X of this report.

- (IV) Analysis on the operational information in the construction industry
 - 1. Inspection and acceptance on completion of construction projects during the Reporting Period

Unit: RMB'000

Sub-segment	Housing construction	Infrastructure construction	Metallurgical engineering	Others	Total
Number of projects (Unit)	2,320	782	2,038	411	5,551
Total amount	9,629,880	4,063,164	9,852,504	2,013,730	25,559,278

Unit: RMB'000

Project location	Domestic	Overseas	Total
Number of projects (Unit)	5,278	273	5,551
Total amount	24,910,006	649,272	25,559,278

2. Projects under construction during the Reporting Period

Unit: RMB'000

Sub-segment	Housing construction	•		Others	Total		
Number of projects (Unit)	5,160	1,592	4,484	1,384	12,620		
Total amount	139,142,101	48,711,615	54,155,795	13,353,001	255,362,512		

Unit: RMB'000

Project location	Domestic	Overseas	Total		
Number of projects (Unit)	12,297	323	12,620		
Total amount	249,942,865	5,419,647	255,362,512		

3. Major projects under construction

Applicable Not applicable

4. Overseas projects during the Reporting Period

Unit: RMB'000

Project location	Number of projects <i>(Unit)</i>	Total amount
Asia	40.4	F F00 F70
Asia	494	5,599,579
Africa	37	153,534
South America	19	88,881
Europe	31	216,386
Oceania	11	8,190
North America	4	2,349
Tatal	500	0.000.010
Total	596	6,068,919

Note: The statistics above are figures before inter-segment eliminations.

5. Relevant information on financing arrangements of the Company

(1) Debt financing and financing by other equity instruments of the Company

As at the end of the Reporting Period, the balance of debt financing and financing by other equity instruments of the Company amounted to RMB 123.117 billion, representing an increase of 30.49% as compared to the beginning of the period, which better satisfied the capital needs for enterprise development and industrial structure adjustment. In particular, the balances of debt financing and financing by other equity instruments amounted to RMB 89.053 billion and RMB 34.064 billion, respectively, which contributed to further optimization of financing structure; the balance of financing due within one year and the long-term financing balance amounted to RMB 57.968 billion and RMB 65.149 billion, respectively.

(V) Investment analysis

1. Overall analysis on external equity investments

As at 30 June 2022 and 31 December 2021, the net assets of the Company's trading financial assets were RMB 139,942 thousand and RMB 1,107 thousand, respectively, representing an increase of 138,835 thousand from the beginning of the year. As at 30 June 2022 and 31 December 2021, the net long-term equity investments of the Company were RMB 29,853,017 thousand and RMB 30,328,766 thousand, respectively, representing a decrease of 1.57% from the beginning of the year. As at 30 June 2022 and 31 December 2021, the net investment in other equity instruments of the Company amounted to RMB 881,681 thousand and RMB 786,855 thousand, respectively, representing an increase of 12.05% from the beginning of the year. As at 30 June 2022 and 31 December 2021, the Company's other net investment in non-current financial assets amounted to RMB 4,719,881 thousand and RMB 4,711,041 thousand, respectively, representing an increase of 0.19% from the beginning of the year.

	(1)	Substantial equity investments
		Applicable Not applicable
	(2)	Substantial non-equity investment
		Applicable Not applicable
	(3)	Financial assets measured at fair value
		For details, please refer to note XI to "Financial Statements" of this report.
(VI)	Disposal of n	naterial assets and equity
	Applicab	le 🗸 Not applicable

(VII) Analysis on holding company and joint stock company

Unit: RMB'000

No.	Name of subsidiary	Business scope	Place of establishment/ incorporation	Registered capital	Total assets	Net assets	Net profit
_	·						
1	China MCC 5 Group Co., Ltd.	Engineering contracting	Chengdu	5,004,178	53,554,741	9,839,065	1,152,731
2	WISDRI Engineering & Research Incorporation Limited	Design, scientific research, EPC	Wuhan	3,350,000	28,034,336	9,003,389	808,924
3	Shanghai Baoye Group Co., Ltd.	Engineering contracting	Shanghai	5,285,230	54,057,850	10,327,479	794,886
4	MCC-JJJ Mining Development Company Limited	Resource development	Beijing	3,095,703	9,490,439	1,221,011	729,926
5	China MCC 17 Group Co., Ltd.	Engineering contracting	Ma'anshan	2,050,000	29,299,356	6,584,015	689,901
6	China First Metallurgical Group Co., Ltd.	Engineering contracting	Wuhan	2,019,027	28,336,269	6,023,114	658,255
7	MCC Baosteel Technology Services Co., Ltd.	Repair work	Shanghai	1,200,000	7,398,297	4,707,267	391,212
8	CISDI Group Co., Ltd.	Design, service	Chongqing	2,300,000	21,342,513	5,469,553	387,110
9	China Metallurgical Construction Engineering Group Co., Ltd.	Engineering contracting	Chongqing	2,100,000	22,716,155	5,559,776	377,157
10	MCC Capital Engineering & Research Incorporation Limited	Design, scientific research, EPC	Beijing	3,283,104	22,145,448	4,934,731	364,476
11	China Second Metallurgical Group Corporation Limited	Engineering contracting	Baotou	1,500,000	21,080,762	3,143,622	348,070
12	MCC TianGong Group Corporation Limited	Engineering contracting	Tianjin	2,050,000	30,081,174	4,789,485	323,409
13	China Non-ferrous Engineering Co., Ltd.	Design, scientific research, EPC	Beijing	2,346,730	13,480,003	4,990,351	294,103
14	China MCC 19 Group Co., Ltd.	Engineering contracting	Panzhihua	3,010,000	23,822,731	4,609,349	273,298
15	China 22MCC Group Co., Ltd.	Engineering contracting	Tangshan	2,780,000	29,789,873	4,741,100	267,962
16	Central Research Institute of Building and Construction Co., Ltd.	Design, scientific research, EPC	Beijing	2,905,110	14,079,988	4,639,164	229,272
17	MCC Communication Construction Group Co., Ltd	Engineering contracting	Beijing	9,312,258	28,953,993	9,542,276	167,926
18	MCC Chang Tian International Engineering Co., Ltd.	Design, scientific research, EPC	Changsha	677,301	6,469,534	2,619,304	140,075
19	China MCC 20 Group Co., Ltd.	Engineering contracting	Shanghai	2,050,000	34,641,220	5,048,088	138,322
20	ACRE Coking & Refractory Engineering Consulting Corporation, MCC	Design, scientific research, EPC	Anshan	1,296,600	8,645,035	2,464,427	134,701

Subsidiaries with net profit of subsidiaries accounted for more than 10% of the consolidated net profit

Unit: RMB'000

No.	Name of entity	Operating revenue	Operating cost	Operating profit	Net profit	attributable to the parent company
			68586	Jan Barran	VANA VANA	
1	China MCC 5 Group Co., Ltd.	40,064,986	36,636,928	1,350,670	1,152,731	1,150,303
2	WISDRI Engineering & Research Incorporation Limited	14,605,523	13,274,247	933,466	808,924	759,355
3	Shanghai Baoye Group Co., Ltd.	33,831,040	31,618,818	852,307	794,886	789,918

(VIII) Structured entities controlled by the Company

For details, please refer to Note to the Financial Statements IX 3 to "Financial Report" section X of this report.

V. OTHER DISCLOSURES

(I) Possible Risks and Response Measures

1. RISKS ASSOCIATED WITH MACRO-ECONOMY

The Company's main businesses are greatly affected by the national macroeconomic situation, fixed asset investment in the steel industry, development in the construction industry, urbanization and other external factors. In the first half of 2022, the new downward pressure on the economy was further increased by a complex and severe international environment, the impact of domestic pandemic and other factors are beyond expectation. However, the fundamentals of the Chinese economy characterized by strong resilience, sufficient potential, ample room for maneuver and long-term sustainability remained unchanged. With the overall improvement of the domestic pandemic, the effect of the policy measures to stabilize growth gradually shown, and the economy showed momentum of recovery. The profound changes in business environment in which enterprises operate, will be a challenge for both their risk appetite and their daily operation ability and ability to respond to challenges.

The Company will make reasonable expectations and adjust its business strategy in due course, make full use of positive development conditions, seize opportunities, effectively avoid risks, and promote high-quality development.

2. RISKS ASSOCIATED WITH TRADITIONAL METALLURGICAL ENGINEERING BUSINESS SEGMENT

Greenization and decarbonization are the main trends of the steel industry during the "14th Five-Year Plan" period, while the digital transformation and the merger and reorganization of the steel industry will continue to be carried out in depth. The steel industry has gradually entered into a new stage of quality and efficiency adjustment from a scale adjustment, and the digital transformation of the steel industry has brought new opportunities. Firstly, a series of national, provincial and municipal policies and measures have been issued to support the development of digital economy, and the benefits of the policies will soon be realized. Secondly, the implementation of major projects such as the relocation, transformation and upgrading of the steel industry has brought about the digital reform of production equipment and processes. Thirdly, the growing personalized needs of steel enterprise users lead to the transformation from the inherent essence of "large scale and standardization" of the steel industry to the new demand for "small batch and multiple varieties", and digital transformation will become an important way to rely on. Fourthly, the implementation of "new infrastructure" is initiated, and the construction of intelligent information facilities is accelerated. The new generation of intelligent technology provides new technical support for digital transformation and upgrading of the traditional steel industry.

In order to cope with the above changes, the Company persistently adheres to the guideline of "building up a world-class national team for metallurgical construction". While focusing on new production capacity, the Company has paid attention to the technological transformation of its existing production capacity, and continuously stepped up its market coordination efforts to consolidate and enhance the metallurgical market and safeguard the reasonable interests of the Company. At the same time, the Company continuously enhanced its transformation efforts, optimized and improved the housing construction market, expanded and improved the infrastructure market, continued to expand its share in the non-steel market, successfully completed business transformation and effectively defused the risk associated with metallurgical engineering market.

3. RISKS ASSOCIATED WITH THE NON-STEEL ENGINEERING SEGMENT

In the first half of 2022, in the face of the ongoing challenges of the pandemic and the uncertainty of the external environment, China coordinated and promoted normalized pandemic prevention and control measures as well as economic and social development, expedited the fostering of a new development architecture, which means its growth will rely on both domestic and international economic cycles, with the domestic cycle as the mainstay. The economic operation continued to recover steadily, and the momentum of development continued to grow. While grasping the policy opportunities, the Company should pay more attention to risk prevention and control. The concentration of the infrastructure industry is getting higher and higher, the regional layout of the market is gradually becoming the same, and the competition is becoming more intense.

Under this situation, the Company will continuously focus on the key tone of the market development of "quality markets, quality customers and quality projects", continuously improve management efficiency, innovate business models, strive to grasp development opportunities, and advance in both traditional advantage field and emerging field to achieve higher quality development.

4. RISKS ASSOCIATED WITH THE PROPERTY DEVELOPMENT BUSINESS SEGMENT

Since 2022, financial regulation of real estate has continued to tighten, and the pressure of the "three financial ratios (三道紅線)" combined with the centralised land supply model has posed a huge challenge to the short-term funding of real estate enterprises. The introduction of the pilot real estate tax has further weakened home buyers' willingness to purchase. The market expectations have changed, and the national real estate market has cooled rapidly. In this situation, the Company's real estate business adheres to the policy of "houses are for living in but not for speculative investment (房 住不炒)", and the Company scientifically studies the policy and market, makes advance layout and actively responds to the current cooling trend of the real estate market, and strengthens the study of the long-term real estate mechanism represented by real estate tax and financing control policies. The Company closely follows the market trend, and actively guides its subsidiaries to scientifically study regional and city development plans, coordinate investment and management strategies with policy guidance and market trends, fully implement the development concept of "quick turnover, low cost, high quality, high profit", and effectively implement the guideline of "controlling the total volume, reducing the inventory and preventing the risk". The Company will actively explore new ideas and methods of destocking, make great efforts to revitalize projects at hand to effectively reduce inventory, vigorously revitalise low-end assets and withdraw from high-risk projects, and continuously improve the anti-risk capacity of projects, so as to effectively respond to risks associated with the real estate development business segment.

5. RISKS ASSOCIATED WITH THE FINANCIAL SEGMENT

Since 2022, the global financial market has been facing severe challenges. Events such as repeated resurgence of the COVID-19 pandemic, superimposed inflation across countries, intensified conflicts between Russia and Ukraine and significant increase in interest rate by the Federal Reserve, has led to the volatility in the international financial market, and the exchange rate of RMB against the US dollar showed a material two-way fluctuation trend.

The Company will continue to optimise its financing structure, strengthen the cooperation with the financial institutions, pay close attention to changes in foreign exchange rates, strengthen management and control of foreign exchange risk exposure, carry out foreign exchange hedging business only for the purpose of hedging. It is determined not to engage in speculative arbitrage, and meanwhile takes multiple measures to save financial costs and increase capital efficiency.

6. RISKS ASSOCIATED WITH BULK COMMODITY PRICES

The market prices of bulk commodities, such as engineering raw materials and metal mineral resources relevant to the Company's business, may be affected by changes in the international and domestic macroeconomic environment and market demand, and may be subject to varying degrees of volatility, which may in turn affect the production and operation costs, income and profits of the Company.

The Company will enhance its research and forecast on the changing trend and policies in response to the fluctuation in the market prices of bulk commodities, and adjust its procurement and sales strategies. At the same time, we will intensify our efforts in process improvement, further increase our output, strengthen cost control and management, further reduce energy consumption, and adopt all possible measures to reduce various costs such as production and operation costs.

7. RISKS ASSOCIATED WITH INTERNATIONAL OPERATIONS

The operating businesses of the Company in various countries and regions may be affected by local politics, economy, public security and public health events, cultural differences, contractual laws, foreign exchange and its exchange rates, international public opinion and other environmental factors, which may pose certain risks to the Company, such as inability to complete overseas construction projects on time, disputes arising from claims due to increase in expenses, and even suspension of construction. In mining production and operation, there may be situations such as increase in cost and severe security issues.

The Company will urge all subsidiaries and overseas institutions to conduct in-depth research on the policies, regulations and human environment where overseas projects are located, establish good cooperative relationship with local governments and property owners, speed up the pace of localization, and take all pandemic prevention and control work and personnel safety work seriously to reduce the adverse impact of the pandemic and safety issues; continue to conduct risk review for major overseas projects before bidding and contracting, implement hierarchical risk management during the implementation process, and improve the emergency plan for overseas projects. In the context of the normalization of the pandemic, the Company will stick to the contract and do its best to fulfill the contract and production on schedule. In addition, it will balance the relationship between operation and safety to ensure the safety of personnel and assets.

8. ENVIRONMENTAL AND SAFETY PRODUCTION RISKS

The Company, as a construction and production enterprise, is engaged in a number of industries, including engineering contracting, property development, equipment manufacturing and resource development. For its numerous subsidiaries and respective projects, safety production risks and environmental protection production risks may exist in all aspects of the Company's production and operating activities. Unsafe behavior by human beings, unsafe state of things, defects of management and unsafe environmental factors, and other factors, which may lead to safety production accidents and failure in meeting environmental protection emission standards and mismanagement on hazardous and chemical waste may lead to environmental protection accidents, harm to the health and the safety of employees, and cause certain economic losses to the enterprise, and even affect the reputation of the enterprise. These may impose higher requirements on the production safety management of the Company.

To effectively avoid environmental risks, the Company will continue to actively practice the green development ideology that "Lucid Waters and Lush Mountains are Invaluable Assets (綠水青山就是金山銀山)", continuously pay attention to the launch of environmental protection supervision, continuously improve environmental management efforts, carry out environmental protection supervision and inspection with "no notice, no greeting, no report, no accompanying reception, straight to the grassroots level, and direct access to the scene (四不兩直)", and conduct energy saving environmental protection training to raise eco-friendly awareness. In terms of production safety, the Company will completely discharge the responsibility of production safety for the entire personnel, strengthen the establishment of safety team, make full use of the experts for every system, improve the effectiveness of hidden danger investigation and governance, strengthen the control and management of hazardous chemicals and explosive products, take effective measures in flood prevention and ensure the safety, to promote the standardization of safety production continuously.

9. RISKS ASSOCIATED WITH DATA FRAUD OR THEFT

In order to guard state secrets and protect commercial secrets, the Company has formulated sets of relatively comprehensive confidentiality policies. The Company adopts various promotional and educational measures regularly in order to raise awareness of information confidentiality of the employees. The Company randomly assesses the information confidentiality of its subsidiaries on site every year, and adopts the forms of interview, inspection of recorded documents, retrieval of confidential documents and on-site inspection to supervise and inspect the operation of the confidentiality management system.

During the Reporting Period, the Company was not involved in any data fraud and theft cases.

10. CYBER RISKS AND SECURITY

Following the in-depth application of "Internet +" in informatization domain, network topology of enterprises becomes increasingly complicated. The number of information systems is surging, resulting in a higher possibility of internet disruptions and system breakdown. Besides, the Company endeavors to expand into overseas markets for gradual enhancement in international influence. The risk from cyber-attacks to the information system has subsequently increased. Any occurrences of the risk events may cause adverse impacts on the production and operating activities of the Company.

In order to effectively prevent cyber risks, in accordance with the requirements of the supervisory units, the Company persistently optimizes and improves the information network system, upgrades the capability of protection and emergency response, forms a professional team for security of network and information system, implements real-time network monitoring, carries out upgrade protection and major security general inspection regularly, and develops a more comprehensive safety protection system. Thus, the Company will make the utmost effort to prevent cyber risks and avoid the occurrence of security incidents.

I. CORPORATE GOVERNANCE AND GOVERNANCE OF THE COMPANY

During the Reporting Period, adhering to the two "consistent implementation principles", the Company further promoted the unification of strengthening the overall Party leadership and completion of the Company's governance, established a modern enterprise system with Chinese characteristics, continued to comply strictly with the laws and regulations including the Company Law, the Securities Law, the relevant requirements of regulatory authorities such as the CSRC, as well as the relevant requirements of the SSE and the Hong Kong Stock Exchange, continuously strengthened the establishment of governance mechanisms such as general meetings, the Board, the Supervisory Committee, as well as the management and the subsidiaries of the Company and standardized those operation. As an important composition of the governance structure of the Company, the Board, the Party committee, the Supervisory Committee and the management performed their respective duties, took up their respective responsibilities and communicated in a timely and effective manner, and formed a standardized mechanism that coordinated decision-making, management and supervision sections and operated effectively. During the Reporting Period, the corporate governance level of the Company has further improved, laying a favorable foundation for promoting the Company's development and improving shareholder value.

At the beginning of 2022, the members of the third session of the Board were: Mr. Guo Wenqing as the Chairman, Mr. Zhang Mengxing as an executive Director, Mr. Zhou Jichang, Mr. Yu Hailong and Mr. Ng, Kar Ling Johnny as Independent Non-executive Directors, and Mr. Yan Aizhong as an employee representative Director. On 26 January 2022, Mr. Guo Wenqing resigned from the positions of an executive Director, the chairman of the Board and a special committee of the Board of the Company due to the needs of work. Mr. Yu Hailong retired from his position as an independent Director and the members of the relevant special committees of the Board due to the expiration of his term of office. On the same day, Mr. Chen Jianguang was elected as an executive Director of the third session of the Board at the first extraordinary general meeting of the Company in 2022. Mr. Lang Jia was elected as a Non-executive Director of the third session of the Board. Mr. Liu Li was elected as an Independent Non-executive Director of the third session of the Board. Mr. Chen Jianguang was elected as the chairman of the third session of the Board at the 35th meeting of the Board.

As of the end of the Reporting Period, members of the third session of the Board include Chen Jianguang as the Chairman, Zhang Mengxing as Executive Director, Zhou Jichang as Independent Non-executive Director, Liu Li as Independent Non-executive Director, Mr. Ng, Kar Ling Johnny as Independent Non-executive Director and Mr. Yan Aizhong as employee representative Director of the Company.

During the Reporting Period, the convening of each general meeting, Board meeting and meeting of the Supervisory Committee is in compliance with the relevant requirements of the Company Law and the Articles of Association. During the Reporting Period, the Company convened 2 general meetings, 6 Board meetings, 3 special meetings presided over by the Chairman, 9 meetings of Special Committees, and 2 meetings of Supervisory Committee in total.

The Company has adopted the Model Code as the code governing the dealings in the Company's securities by the Directors and Supervisors. Having made specific enquiries with all the Directors and Supervisors, the Company is of the view that all Directors and Supervisors fully complied with the Model Code and requirements set out thereof during the six months ended 30 June 2022.

II. **SUMMARY OF THE GENERAL MEETINGS**

Sessions of the meeting	Convening date	Enquiry index of the designated website for the publication of the resolutions	Date of publication of the resolutions	Resolutions of the meeting
MCC's 2022 First Extraordinary General Meeting	2022/1/26	www.sse.com.cn www.hkexnews.hk	2022/1/26	To consider and approve the resolution on the election of the non-independent Directors of the third session of the Board of the Company, the resolution on the election of independent Director of the third session of the Board of the Company.
MCC's 2021 Annual General Meeting	2022/6/30	www.sse.com.cn www.hkexnews.hk	2022/6/30	To consider and approve 11 resolutions including the Proposal in Relation to the "Work Report of the Board of MCC for the Year 2021", the Proposal in Relation to the "Work Report of the Supervisory Committee of MCC for the Year 2021", the Proposal in Relation to the Report on Final Accounts of the Company for the Year 2021, the Proposal in Relation to the Profit Distribution Plan of the Company for the Year 2021, the Proposal in Relation to the Emoluments of Directors and Supervisors of the Company for the Year 2021 and the Proposal in Relation to the Plan of Guarantees to be Provided by the Company for the Year 2022.

Shareholders c	of preferred	shares	whose	voting	rights	have	been	restored	request	to	convene	an	extraor	dinary
general meeting	g													

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Applicable	/	Not applicable

Description of General Meeting

On 26 January 2022, the Company convened the 2022 first extraordinary general meeting, where Mr. Zhang Mengxing, Mr. Yan Aizhong and Mr. Yu Hailong, all being Directors of the Company, Mr. Chen Jianguang, Mr. Lang Jia and Mr. Liu Li, all being Directors-designate, Mr. Yin Sisong, Ms. Zhang Yandi and Mr. Zhu Zhiqi, being Supervisors and Mr. Zeng Gang, being the secretary to the Board, attended the meeting. Two ordinary resolutions were considered and approved at the meeting, including the resolution on the election of the non-independent Directors of the third session of the Board of the Company and the resolution on the election of Independent Director of the third session of the Board of the Company.

On 30 June 2022, the Company convened the 2021 annual general meeting, where Mr. Chen Jianguang and Mr. Liu Li, being Directors of the Company, Mr. Yin Sisong and Mr. Chu Zhiqi, being Supervisors of the Company, and Mr. Zeng Gang, being the secretary to the Board, attended the meeting. 11 resolutions were considered and approved at the meeting, including the proposal in relation to the "Work Report of the Board of MCC for the Year 2021", the proposal in relation to the "Work Report of the Supervisory Committee of MCC for the Year 2021", the proposal in relation to the report on final accounts of the Company for the year 2021, the proposal in relation to the profit distribution plan of the Company for the year 2021, the proposal in relation to the emoluments of Directors and Supervisors of the Company for the year 2021, the proposal in relation to the plan of guarantees to be provided by the Company for the year 2022, the proposal in relation to the plan, the registration and issuance of domestic bond of the headquarters of MCC, the proposal in relation to the Financial Services Agreement entered into between the Company and Minmetals Group Finance Co., Ltd. and the annual caps for the year 2022 to 2024, the proposal in relation to the Company's revision and setting of the annual caps for the routine connected transactions/continuing connected transactions for the years of 2022 and 2023 and renew the Mutual Supply of Comprehensive Raw Materials, Products and Services Agreement, the proposal in relation to the grant of general mandate to the Board to issue shares and the proposal in relation to the Appointment of the Auditor of the Financial Report and Internal Control Auditor of the Company for the Year 2022. The "Work Report of Independent Non-executive Directors of Metallurgical Corporation of China Ltd. for the Year 2021" was heard at the meeting.

III. CHANGES OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT OF THE COMPANY

Name	Position	Change
Chen Jianguang	Executive Director, Chairman	Elected
Lang Jia	Non-executive Director	Elected
Liu Li	Independent Non-executive Director	Elected
Guo Wenqing	Executive Director, Chairman	Resigned
Yu Hailong	Independent Director	Resigned

Description of changes of Directors, Supervisors and senior management of the Company

On 26 January 2022, the Board of the Company received the written resignation of Mr. Guo Wenqing. Mr. Guo resigned from the positions of an executive Director, the chairman of the Board and a special committee of the Board of the Company due to the needs of work.

On 26 January 2022, Mr. Chen Jianguang was elected as an executive Director of the third session of the Board at the first extraordinary general meeting of the Company in 2022. Mr. Lang Jia was elected as a Non-executive Director of the third session of the Board and Mr. Liu Li was elected as an Independent Non-executive Director of the third session of the Board. On the same day, Mr. Chen Jianguang was elected as the chairman of the third session of the Board at the 35th meeting of the Board.

Mr. Yu Hailong has served as an Independent Non-executive Director of the Company since 13 November 2014 until the expiry of his term of office on 12 November 2020 with a term of six consecutive years. As the resignation of Mr. Yu upon the expiration of his term of office would result in the number of independent Directors falling below the statutory minimum requirement, pursuant to the relevant requirements of the "Guidelines for Introducing Independent Directors to the Board of Directors of Listed Companies" (《關於在上市公司建立獨立董事制度的指導意見》) and the "Filing and Training Guidelines of Independent Directors of Companies Listed on the Shanghai Stock Exchange"*(《上海證券交易所上市公司獨立董事備案及培訓工作指引》),Mr. Yu continued to perform the duties of independent Directors and the relevant position of the Board according to the applicable laws and regulations and the Articles of Association. On 26 January 2022, new independent Directors were elected at the first extraordinary general meeting of the Company in 2022, and Mr. Yu resigned from his position as an independent Director and the members of the relevant special committees of the Board. For details, please refer to the relevant announcement dated 27 January 2022 issued by the Company.

As of the end of the Reporting Period, members of the third session of the Board include Chen Jianguang as the Chairman, Zhang Mengxing as Executive Director, Zhou Jichang as Independent Non-executive Director, Liu Li as Independent Non-executive Director, Mr. Ng, Kar Ling Johnny as Independent Non-executive Director and Mr. Yan Aizhong as employee representative Director of the Company.

Save as disclosed above, as of the end of the Reporting Period, the Company was not aware of any changes in the information of Directors or Supervisors required to be disclosed pursuant to Rule 13.51B(1) of the Hong Kong Listing Rules.

IV. PROPOSALS ON PROFIT DISTRIBUTION OR TRANSFER OF CAPITAL RESERVE

Proposal for profit distribution and transfer of capital reserve to share capital for the first half of the year

Any distribution or transfer: No

V. EQUITY INCENTIVE PLAN, EMPLOYEE STOCK OWNERSHIP PLAN OR OTHER EMPLOYEE INCENTIVE MEASURES OF THE COMPANY AND THEIR IMPACT

THE	EIR IMPACT
(I)	Relevant equity incentive events disclosed in temporary announcements without further development or change in subsequent implementation
	Applicable Not applicable
(II)	Incentive events not disclosed in temporary announcements or with subsequent progress
	Equity incentives
	Applicable Not applicable
	Employee stock ownership plan
	Applicable Mot applicable
	Other incentives measures
	During the Paparting Pariod, CISDI Crown Changing Information and Taghnalogy Co., Ltd. (a subsidiary

During the Reporting Period, CISDI Group Chongqing Information and Technology Co., Ltd. (a subsidiary of the Company) continued to promote employee shareholding-related work in accordance with laws and regulations. WISDRI Engineering & Research Incorporation Limited has continued carrying out the dividend sharing work for positions in science and technology enterprises during the Reporting Period with the approval of the competent authorities.

The Company will conscientiously learn to comprehend the "1 + N" series of documents for the reform of state-owned enterprises and the "Guidelines on Implementation of Equity Incentives for Listed Companies of Central Enterprises" (中央企業控股上市公司實施股權激勵工作指引) in accordance with the overall deployment and guidance requirements of the SASAC. The incentive scheme is still in the formulation stage, and the specific content and schedule of the schemes are yet to be finalized. After the relevant proposals are finalized, the SASAC and the higher authorities of the State Council are required to approve the implementation. The Company will timely fulfill its information disclosure obligations according to the progress of its work.

VI. REVIEW OF INTERIM RESULTS BY THE FINANCE AND AUDIT COMMITTEE

The finance and audit committee has reviewed the unaudited interim results of the Company for the six months ended 30 June 2022. The committee was of the opinion that the unaudited interim results for the six months ended 30 June 2022 had been in compliance with the applicable accounting principles as well as laws and regulations, and had made proper disclosures.

I. INFORMATION ON ENVIRONMENTAL PROTECTION OF THE COMPANY

(I) Environmental protection of the Company and its subsidiaries categorised as major sewage discharge enterprises as published by the environmental protection department

In accordance with the List of Enterprises under Special Supervision and Enterprises with Significant Waste Disposal in the first half of 2022 published by the state, provincial and municipal and environmental protection departments, among all subsidiaries of MCC, Xiangyang Enfi Environmental Protection Energy Co., Ltd. (襄陽恩菲環保能源有限公司), a subsidiary of China Nonferrous Engineering Co., Ltd. (hereinafter referred to as China Non-ferrous), Ganzhou Enfi Environmental Protection Energy Co., Ltd. (贛州恩菲環保能 源有限公司), Gu'an Enfi Environmental Protection Energy Co., Ltd. (固安恩菲環保能源有限公司), Enfi Urban Solid Waste (Xiaogan) Co., Ltd. (恩菲城市固廢(孝感)有限公司) and China City New Energy Development Dafeng Co., Ltd. (都市環保新能源開發大豐有限公司), a subsidiary of WISDRI Engineering & Research Incorporation Limited (hereinafter referred to as "WISDRI"), were included in the list of enterprises under special supervision of exhaust gas. China Silicon Corporation Ltd. (洛陽中硅高科技有限公司), a subsidiary of China Non-ferrous, Gu'an Enfi Environmental Protection Energy Co., Ltd. and Enfi Urban Solid Waste (Xiaogan) Co., Ltd. were included in the list of enterprises under special supervision of wastewater treatment plants. 34 sewage treatment plants under China Non-ferrous, WISDRI, MCC Huatian Engineering & Technology Co., Ltd. and MCC Ecological Environmental Protection Group Co., Ltd. were included in the list of enterprises under special supervision of sewage treatment. During the Reporting Period, each environmental protection facility of all units under the Name List of Enterprises with Significant Waste Disposal operated normally, and the emission of key pollutants reached the emission standard without excessive emission, achieving the objective of total emission reduction.

The Company has been adhering to the guidance of Xi Jinping's ecological civilization thought, firmly establishing the concept of greenery development of "Lucid Waters and Lush Mountains are Invaluable Assets (綠水青山就是金山銀山)", constantly promoting structural reform, transformation and upgrading. Regarding the concept of greenery development as a long-term goal, the Company formulated the "Administrative Measures for Energy Conservation and Ecological Environmental Protection of MCC" (《中國中冶能源節約與生態環境保護管理辦法》), the "Implementation Rules for Energy Conservation and Ecological Environmental Protection Responsibility System of MCC" (《中國中冶能源節約與生態環境保 護責任制實施細則》), the "Implementation Rules for Energy Conservation and Environmental Protection Inspections of MCC" (《中國中治節能環保檢查實施細則》), the "Implementation Rules for Energy Conservation and Ecological Environmental Protection Reports of MCC" (《中國中冶能源節約與生態環境保護報告實施細 則》), the "Implementation Rules for Responsibility Investigation of Safety and Environmental Protection Accidents of MCC" (《中國中冶安全環保事故責任追究實施細則》), the "Integrated Emergency Response Plan of Environmental Emergencies of MCC"(《中國中冶突發環境事件綜合應急預案》) and the "Green Construction Demonstration Atlas of MCC" (《中國中冶綠色施工示範圖集》) and other documents, which cover contents such as overall requirements of energy conservation and environmental protection management, supervision and inspection, responsibility of reporting, education and training, assessment, rewards and punishment, as well as integrated emergency response management of environmental emergencies. Such rules and regulations could satisfy the latest national requirements on energy conservation and environmental protection management, proactively advocate energy conservation and emission reduction of the Company, and promote green construction and related work, so as to fully accomplish the management objectives on energy conservation and environmental protection during the year. Having proactively devoted itself to environmental governance and environmental protection and advocated the concept of environmental protection for years, the Company strived to enhance the efficiency of energy utilization and establish a resource-conserving and environment-friendly enterprise.

I. Information about pollution discharge

34 enterprises under special supervision of sewage treatment

No.	Company name	Discharge vent	Major pollutants and characteristic pollutants	Executive standard	Emission standard (mg/L) ^{rote}	Actual emission (mg/L)	Total emission rate (10,000t/day)	Discharge flow	
1	Chuzhou Huatian Water Corporation MCC	Main vent from Chuzhou Huatian Water	COD	Discharge Standard of Pollutants for	50	23.67	16.10	Qingliu River	
	(滁州市中冶華天水務有限公司)	Corporation MCC WS-01904	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.45		(清流河)	
2	Lai'an Huatian Water Corporation MCC	Lai'an Huatian Water Corporation MCC	COD	Discharge Standard of Pollutants for	50	22.59	5.00	Lai River	
	(來安縣中冶華天水務有限公司)	(來安縣中冶華天水務有限公司) 污水排放口WS-06998	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.39		(來河)	
3	MCC Qinhuangdao Water Co., Ltd.	Vent from Shanhaiguan Water	COD	Discharge Standard of Pollutants for	50	16.80	3.06	Chao River	
	(中沿秦皇島水務有限公司)	Treatment Plant (山海關污水處理廠 出水口)	5水處理廠 Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.20		(潮河)	
4	Shouguang North Water Corporation MCC (素	F Shouguang North Water Corporation	COD	The main indicators of effluent (CODCr,	30	21.62		Zhangseng River	
	光市城北中冶水務有限公司)	MCC (壽光市城北中冶水務有限公司) 外排口WS-37078304	Ammoniacal nitrogen	ammoniacal nitrogen, total phosphorus) were raised to the class IV standard of surface water, and that of the total nitrogen was raised to 12mg/L. Other indicators were in accordance with the Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	1.5	0.53		(張僧河)	
5	Tianchang Huatian Water Corporation MCC		COD	Discharge Standard of Pollutants for	40	14.40	6.39	Chuanqiao River	
	(Tianchang Wastewater Treatment Plant) (天長市中冶華天水務有限公司(天長市污水處理廠))		Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	2(3)	0.38		(川橋河)	
6	Qinlan Wastewater Treatment Plant of	Mixed inflow of sewage emission in	COD	Discharge Standard of Pollutants for	50	15.78	0.60	Qinlan River	
	Tianchang Huatian Water Corporation MCC (天長市中冶華天水務有限公司(秦欄 鎮污水處理廠))	Qinlan Town and Jiangwei County of Tianchang City	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.24		(秦欘河)	
7	Yangcun Water Treatment Plant of	Mixed inflow of sewage emission in	COD	Discharge Standard of Pollutants for	50	20.19	_	0.49	Yangcun River
	Tianchang Huatian Water Corporation MCC (天長市中冶華天水務有限公司 (楊村鎮污水處理廠))	Yangcun Wastewater Treatment Plant of Tianchang City	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.63		(楊村河)	

No.	Company name	Discharge vent	Major pollutants and characteristic pollutants	Executive standard	Emission standard (mg/L) ^{yate}	Actual emission (mg/L)	Total emission rate (10,000t/day)	Discharge flow
8	Wastewater Treatment Plant of Tianchang	Vent No. WS-04303	COD	Discharge Standard of Pollutants for	50	24.58	2.00	New Chuanqiao
	Economic Development Zone of Tianchang Huatian Water Corporation MCC (天長市中治華天水務有限公司 (天長市經濟開發區污水處理廟))		Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	1.15		River (新川橋河)
9	Tongcheng Water Treatment Plant of	Vent No. WS-04305	COD	Discharge Standard of Pollutants for	50	24.15	0.50	Tonglong River
	Tianchang Huatian Water Corporation MCC (天長市中冶華天水務有限公司 (銅城鎮污水處理廠))		Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.42		(銅龍河)
10	MCC Xinglong Water Co., Ltd.	Vent of disinfecting tank WS-001	COD	Discharge Standard of Pollutants for	50	15.85	2.26	Liu Rive (柳河 Maqiao Rive (馬橋河
	(興隆縣中冶水務有限公司)		Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.35		(柳河)
11	MCC Dingyuan Water Co., Ltd.	Wastewater discharge vent	COD	Discharge Standard of Pollutants for	50	16.00	5.04	Maqiao River
	(定遠縣中治水務有限公司)	治水務有限公司) WS-50004	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	5(8)	0.47		(時情冽)
12	Lu'an Water Corporation MCC	Main vent WS00075	COD	Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	50	15.03	2.17	**
	(六安市中冶水務有限公司)		Ammoniacal nitrogen		5(8)	1.02		(蘇大堰)
13	Cha He Water Treatment Plant of Lai'an	Vent from Cha He Water Treatment	COD	Discharge Standard of Pollutants for	50	20.40	2.02	Chu River
	Huatian Water Corporation MCC (來安縣中冶華天水務有限公司汊河 污水處理廠)	Plant (汉河污水處理廠污水排放口) WS-06902	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	5(8)	0.68		(滁河)
14	Ma'anshan Water Corporation MCC	Ma'anshan Water Corporation MCC	COD	Discharge Standard of Pollutants for	50	8.43	1.70	Xiangcheng River
	(馬鞍山市中治水務有限公司)	(馬鞍山市中治水務有限公司)WS- 090801	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	5(8)	0.18		(襄城河)
15	Huangshi Water Corporation MCC	Vent from Huangshi Water Corporation	COD	Discharge Standard of Pollutants for	50	13.00	3.69	Ci-hu Lake
	(黄石市中冶水務有限公司)	MCC (黄石市中冶水務有限公司) DW001	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	5(8)	0.70		(磁湖)

No.	Company name	Discharge vent	Major pollutants and characteristic pollutants	Executive standard	Emission standard (mg/L) ^{pote}	Actual emission (mg/L)	Total emission rate (10,000t/day)	Discharge flow
16	Shouguang MCC Huatian Water Co., Ltd.	Vent from Shouguang MCC Huatian	COD	The main indicators of effluent (CODcr.	30	30.40	11.86	Xiaoqing River
10	(壽光市中冶華天水務有限公司)	Water Co., Ltd. WS-37078309	Ammoniacal nitrogen	ammoniacal nitrogen, total phosphorus) were raised to the class IV standard of surface water, and that of the total nitrogen was raised to 12mg/L. Other indicators were in accordance with the Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	1.5	0.44	11.00	Alduquing niver (小清河)
17	Qinhuangdao Funing District MCC Water	Vent from Qinhuangdao Funing District	COD	Discharge Standard of Pollutants for	50	23.68	4.80	Discharged into
	Co., Ltd. Wastewater (秦皇島市撫寧區中冶水務有限公司)	中冶水務有限公司) DW001 Pla		Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.27		artificial river
18	Fuzhou MCC Changle District Water	O- 1-1 (福州学 E 機 G 中 公 小 功)	COD	Discharge Standard of Pollutants for	50	24.76	5.57	Min River
			Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918-2002) Level I Standard A	5(8)	0.23		(閩江)
19	MCC Xuancheng Water Co., Ltd.	Mixed inflow of sewage emission in	COD	Discharge Standard of Pollutants for	50	16.78	1.47	Shuiyang River
	(宣城市中冶水務有限公司)	Xuancheng Shuangqiao Sewage Treatment Plant No.: 341802022	Ammoniacal nitrogen	Municipal Wastewater Treatment Plant (GB18918–2002) Level I Standard A	5(8)	0.46		(水陽江)
20	Beijing Zhongshe Water Treatment	Main vent (Phase I)	COD	Discharge Standard of Pollutants for	20	15.00	6.21	Ciwei River
	Co., Ltd. (北京中設水處理有限公司)		Ammoniacal nitrogen	Municipal Wastewater Treatment	1.0(1.5)	0.35		(刺猬河)
			Total phosphorus	Plant (Level 1 Standard A of current wastewater plant) DB11/890-2012	0.2	0.14		
		Main vent (Phase II)	COD	Discharge Standard of Pollutants for	20	13.00	4.23	
			Ammoniacal nitrogen	Municipal Wastewater Treatment	1.0(1.5)	0.28		
			Total phosphorus	Plant (Level 1 Standard A of new wastewater plant) DB11/890-2012	0.2	0.11		
21	Lanzhou Zhongtou Water Corporation	Main vent	COD	Discharge Standard of Pollutants for	60	19.42	22.40	Yellow River
	(蘭州中投水務有限公司)		Ammoniacal nitrogen	Municipal Wastewater Treatment	8(15)	0.54		
			Total phosphorus	Plant (GB18918–2002) Level I	1	0.10		

No.	Company name	Discharge vent	Major pollutants and characteristic pollutants	Executive standard	Emission standard (mg/L) ^{nute}	Actual emission (mg/L)	Total emission rate (10,000t/day)	Discharge flow
22	Xiaogan Zhongshe Water Co., Ltd.	Main vent	COD	Discharge Standard of Pollutants for	50	14.00	12.70	Gunzi River
	(孝感中設水務有限公司)		Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	1.22		(滾子河)
			Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.31		
23	Wenxian Zhongtou Water Co., Ltd.	Main vent of the First Wastewater	COD	Discharge Standard of Pollutants for	50	15.45	3.07	Rongyou River
	(溫縣中投水務有限公司)	Treatment Plant	Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	0.34		2.70 Gunzi River (滾子河) 3.07 Rongyou River (榮翰河) 2.19 New Mang River (新韓河) 2.15 Cailing Port (採菱港) 1.62 Lao River in District 2 and 4 (二四區澇河) 1.22 Ma Hong Trunk Sewers (馬洪幹渠)
			Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.25		
		Main vent of the Second Wastewater	COD	Discharge Standard of Pollutants for	50	26.83	2.19	New Mang River
		Treatment Plant	Ammoniacal nitrogen	niacal nitrogen Municipal Wastewater Treatment 5(8) 0.30		(新蟒河)		
			Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.22		
24	Changzhou Enfi Water Co., Ltd.	Main vent	COD	Discharge Standard of Main Water	60	45.63	2.15	Cailing Port
	(常州恩菲水務有限公司)		Ammoniacal nitrogen	Pollutants for Municipal Wastewater	5	0.37		(採菱港)
			Total phosphorus	Treatment Plant & Key Industries of Taihu (DB32/1072-2018)	0.5	0.11		
25	Wuzhi County Zhongshe Water Co., Ltd.	unty Zhongshe Water Co., Ltd. Main vent	COD	Discharge Standard of Pollutants for	50	39.55	1.62	Lao River
	(武陟縣中設水務有限公司)		Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	0.29		
			Total phosphorus	Plant (GB18918–2002) Level I Standard A	0.5	0.17		(二四區澇河)
26	Pingyuan Zhongshe Water Co., Ltd.	Main vent	COD	Discharge Standard of Pollutants for	50	26.60	4.22	Ma Hong Trunk
	(平原中設水務有限公司)		Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	0.27		
			Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.20		(馬洪幹条)
27	Luanping Zhongshe Environmental	Main vent	COD	Level II of Environmental Quality Standard	15	6.68	0.05	Huodoushan River
	Protection Co., Ltd.		Ammoniacal nitrogen	for Surface Water (《地表水環境質量	0.5	0.02		(火鬥山河)
	(灤平中設環保有限公司)		Total phosphorus	標準》) (GB3838-2002)	0.1	0.03		
28	Zhuozhou Zhongshe Water Treatment	Main vent	COD	Water Pollution Discharge Standard of Daqing River Basin (DB13/275/2018)	30	13.42	2.00	
	Co., Ltd. (涿州中設水處理有限公司)	-	Ammoniacal nitrogen		1.5(2.5)	0.05		South Branch (北拒馬
			Total phosphorus		0.3	0.08		河南支)

No.	Company name	Discharge vent	Major pollutants and characteristic pollutants	Executive standard	Emission standard (mg/L) ^{note}	Actual emission	Total emission rate (10,000t/day)	Discharge flow
29	Zhuozhou Zhongshe Environmental	Main vent of the West Plant	COD	Water Pollution Discharge Standard of	30	12.90	4.00	North Juma River
	Protection Co., Ltd. (涿州中設環保		Ammoniacal nitrogen	Daqing River Basin (DB13/275/2018)	1.5(2.5)	0.07		(北拒馬河)
	有限公司)		Total phosphorus	_	0.3	0.11		
		Main vent of the East Plant	COD	Water Pollution Discharge Standard of	30	13.55	4.00	North Drainage
			Ammoniacal nitrogen	Daqing River Basin (DB13/275/2018)	1.5(2.5)	0.08	-	Channel into
			Total phosphorus		0.3	0.10		Baigou River (北排幹渠道入 白溝河)
		Main vent of the Development	COD	Water Pollution Discharge Standard of	30	11.69	2.00	North Drainage
		Zone Plant	Ammoniacal nitrogen	Daqing River Basin (DB13/275/2018)	1.5(2.5)	0.03		Channel into
			Total phosphorus		0.3	0.04		Baigou River (北排幹渠道入 白溝河)
30	Wuhan Urban Environmental Water	Vent from Wuhan Baoxie Wastewater	COD	Discharge Standard of Pollutants for	50	8.70	5.2472	Yangtze River
	Co., Ltd. (都市環保武漢水務有限公司)	Treatment Plant (武漢市豹澥	Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	0.05		(長江)
		污水處理廠廢水排放口)	Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.28		
31		Main vent of Zuoling Wastewater	COD	- Otanda d A	50	12.50	8.7767	
		Treatment Plant of Wuhan Urban	Ammoniacal nitrogen		5(8)	0.2		
		Environmental Water Co., Ltd. (都市環保武漢水務有限公司左嶺 污水處理廠廢水總排口)	Total phosphorus	_	0.5	0.33		
32	Zhuxi Urban Environmental Water	Vent from Zhuxi County Dongcheng	COD	Discharge Standard of Pollutants for	50	17.4	0.85	Zhuxi River
	Co., Ltd. (都市環保竹溪縣水務有限公司)	New District Wastewater	Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	1.13		(竹溪河)
		Treatment Plant (竹溪縣東城新區 污水處理廠排放口)	Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.28		
33	Macheng Urban Environmental Water	Vent from Macheng Urban	COD	Discharge Standard of Pollutants for	50	13.99	0.852	Jushui River
	Co., Ltd. (都市環保麻城水務有限公司)	Environmental Wastewater	Ammoniacal nitrogen	Municipal Wastewater Treatment	5(8)	0.24		(舉水河)
		Treatment Plant (都市環保麻城 污水處理廠廢水排放口)	Total phosphorus	Plant (GB18918-2002) Level I Standard A	0.5	0.05		人 Zhuxi Rive (竹溪河 P Jushui Rive (舉水河
34	Lai'an MCC Huatian Water Environment Investment Co., Ltd. (Second Wastewater Treatment Plant)	Main vent of wastewater DW001	COD	Level II of Integrated Wastewater Discharge Standards (《污水綜合排放 標準》) (GB8978-1996)	120	87.36	1.60	Lai'an County Wastewater Treatment
	(來安縣中冶華天水環境投資有限公司 (第二污水處理廠))		Ammoniacal nitrogen	Level II of Integrated Wastewater Discharge Standards (《污水綜合排放 標準》) (GB8978-1996)	25	3.64		Plant (來安縣污水處 理廠)

Note: The values outside the brackets of the standard GB18918–2002 represent control objectives when water temperature is higher than 12 degrees Celsius. The value inside the brackets of the standard GB18918–2002 is control objectives whose water temperature is equal to or below 12 degrees Celsius.

I. Information about pollution discharge (Continued)

Enterprises under special supervision of exhaust gas (5 enterprises)

No.	Company name	Discharge vent	Name of main pollutant and characteristi pollutant	i	Emission standard	Actual emission	Total emission rate (kg/h)	Discharge flow
1	Xiangyang Enfi Environmental Protection Energy Co., Ltd. (new exhaust vent #4) (襄陽恩菲環保能源 有限公司)	Xiangyang Enfi Municipal Solid Waste Incineration Power Plant (sewage vent)	COD	Integrated wastewater discharge standard(GB8978-1996) Level Three Emission limit	500mg/L	29.95	0.49	Wastewater Treatment Plant of Yujiahu
			PH	Integrated wastewater discharge standard(GB8978-1996) Level Three Emission limit	6~9	7.14	I	
	Xiangyang Enfi Waste Incineratio Power Plant Exhaust vent #2 fror Xiangyang Enfi Waste Incineratio Power Plant Exhaust vent #3 fror Xiangyang Enfi	Waste Incineration	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	22.61	1.79	Atmosphere
			NOx	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	300mg/Nm ³	147.24	11.70	
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm ³	5.73	0.45	
		Waste Incineration	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	30.24	1.80	
		Power Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485-2014)	300mg/Nm ³	168.63	8.30	
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485-2014)	30mg/Nm ³	5.73	0.37	
		Exhaust vent #3 from Xiangyang Enfi Waste Incineration	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485-2014)	100mg/Nm ³	30.16	2.20	
		Power Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485-2014)	300mg/Nm ³	172.72	13.20	
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm ³	1.11	0.06	-
		Exhaust vent #4 from Xiangyang Enfi Waste Incineration	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485-2014)	100mg/Nm ³	26.52	1.41	
		Power Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485-2014)	300mg/Nm ³	151.89	7.10	4
			Smoke and dust	Standard for pollution control on the municipal solid waste	30mg/Nm ³	3.83	0.08	

incineration (GB18485-2014)

No.	Company name	Discharge vent	Name of main pollutant and characteristic pollutant		Emission standard	Actual emission	Total emission rate (kg/h)	Discharge flow
2	Ganzhou Enfi Environmental Protection Energy Co., Ltd. (贛州恩 菲環保能源有限公司)	Ganzhou Enfi Waste Incineration Power Plant	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	3.73	0.73	Atmosphere
			NOx	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	300mg/Nm ³	139.54	12.71	
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm ³	6.25	1.18	
		Exhaust vent #2 from Ganzhou Enfi Waste Incineration Power	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	5.23	0.47	.30
		Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	300mg/Nm ³	171.35	17.30	
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm ³	5.33	0.56	
		Exhaust vent #3 from Ganzhou Enfi Waste Incineration Power	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	6.56	0.58	
		Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	300mg/Nm ³	159.59	13.59	_
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm ³	5.85	0.50	

No.	Company name	Discharge vent	Name of main pollutant and characteristic pollutant	Executive standard	Emission standard	Actual emission	Total emission rate (kg/h)	Discharge flow
3	Gu'an Enfi Environmental Protection Energy Co., Ltd. (固安恩菲環保能源 有限公司)	Exhaust vent # 1 from Gu'an Enfi Waste Incineration Power	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	30.56	11.09	Atmosphere
		Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	300mg/Nm ³	50.21	14.52	te Discharge flow (h) Discharge flow (h) Atmosphere Atmosphere Atmosphere 48
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm ³	3.21	0.83	
		Exhaust vent # 2 from Gu'an Enfi Waste Incineration Power	SO ₂	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	100mg/Nm ³	40.31	3.40	
		Plant	NOx	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	300mg/Nm ³	46.17	4.07	
			Smoke and dust	Standard for pollution control on the municipal solid waste incineration (GB18485–2014)	30mg/Nm³	2.54	0.11	
	Enfi Urban Solid Waste (Xiaogan) Co., Ltd.(思菲城市固廢(孝感)有限公司)	Exhaust vent of Xiaogan Enfi	SO ₂	Standard for pollution control on the hazardous waste incineration(GB18484-2020)	100mg/Nm ³	6.87	0.4664	Atmosphere
			NOx	Standard for pollution control on the hazardous waste incineration(GB18484–2020)	300mg/Nm ³	164.65	2.4048	
			Smoke and dust	Standard for pollution control on the hazardous waste incineration(GB18484–2020)	30mg/Nm³	9.44	0.2717	
	China City New Energy Development Dafeng Co., Ltd. (都市環保新能源開發大豐有限公司)	China City 1# exhaust gas	SO ₂	Discharge Standard of Pollutants for Thermal Power Plant (GB13223-2011)	100mg/m ³	9.125	0.0489	Atmosphere
			NOx		100mg/m ³	72.375	0.388	A

I. Information about pollution discharge (Continued)

3 Enterprises under special supervision of wastewater treatment plants (3 enterprises)

No.	Company name	Discharge vent	Name of main pollutant and characteristic pollutant	Executive standard	Emission standard	Actual emission	Total emission rate (kg/h)	Discharge flow	
1	China Silicon Corporation LtdThe First Subsidiary (洛陽中硅高科技 有限公司一分公司)	Main vent of wastewater	pH	Integrated Wastewater Discharge Standard (GB8978-1996) (Level Three)	6~9	7.70	1	Sewage treatment Plant of New District, Luoyang City	
			SS	Integrated Wastewater Discharge Standard (GB8978-1996) (Level Three)	400mg/L	79.50	3.56	/ Sewage treatment Plant of New District, Luoyang City	
			COD	Integrated Wastewater Discharge Standard (GB8978–1996) (Level Three)	500mg/L	47.40	2.24		
			Ammoniacal nitrogen	Integrated Wastewater Discharge Standard (GB8978–1996) (Level Three)	l	0.77	0.04		
			Cl ⁻	Discharge Standard of Chlorides for Salt and Alkali Industry DB41/276-2011	350mg/L	150.50	7.23		
			F ⁻	Integrated Wastewater Discharge Standard (GB8978–1996) (Level Three)	20mg/L	2.27	0.11		
		Chimney of Exhaust	HCI	Integrated Emission Standards of Air Pollutants (Level Two)	100mg/Nm ³	6.10	1	Atmosphere	
		Washing Tower			0.915kg/h	0.03	0.18	•	
		Chimney of Acid Fume	HF	Integrated Emission Standards of Air Pollutants (Level Two)	9mg/Nm ³	0.30	1	-	
		Purification			0.38kg/h	0.00	0.01		
		Tower	Tower	NOx	Integrated Emission Standards of Air Pollutants (Level Two)	240mg/Nm ³	15.30	1	
					2.85kg/h	0.28	0.55		

No.	Company name	Discharge vent	Name of main pollutant and characteristic pollutant	Executive standard	Emission standard	Actual emission	Total emission rate (kg/h)	Discharge flow
2	Gu'an Enfi Environmental Protection Energy Co., Ltd. (固安恩菲環保能源有限公司)	Main vent of wastewater	COD	Table 4 of Integrated Wastewater Discharge Standard (GB8978–1996) (Level Three) and requirements for influent water quality of Gu'an Lvyuan Urban Sewage Treatment Co., Ltd.	500mg/L	133.13	3.26	Gu'an Lvyuan Urban Sewage Treatment Co., Ltd.(固安綠源 城區污水處理有限公 司)
			Ammoniacal nitrogen	45mg/L	1.00	0.03		
			PH	6~9	8.12	1		
3	ENFI URBAN SOLID WASTE (Xiaogan) Co., Ltd. (恩菲城市固廢(孝感)有限公司)	Main vent of wastewater	COD	Integrated Wastewater Discharge Standard (GB8978-1996) (Level Three) and Water Collection Standard of Sewage Treatment Plant of Dengjiahe, Xiaogan City	400mg/L	30.86	0.09	Sewage treatment plant of Dengjiahe, Xiaogan City
			Ammoniacal nitrogen	Integrated Wastewater Discharge Standard (GB8978-1996) (Level Three) and Water Collection Standard of Sewage Treatment Plant of Dengjiahe, Xiaogan City	40mg/L	1.39	0.0046	

II. Construction and operation of pollution prevention facilities

In the first half of 2022, the pollution prevention and control facilities of all relevant enterprises under the Company were in normal and stable operation with perfect production operation management, guaranteeing the meeting of applicable emission standards. All sewage treatment companies attached high importance to energy conservation and consumption reduction so that the operation of pollution prevention facilities was normal. By continuously strengthening the management and control of sewage treatment facilities, operation and other aspects, the standards of stable water discharge quality were guaranteed.

- The wastewater treatment facility of Silicon High Technology is equipped with a three-waste treatment station, an integrated system for domestic sewage; the exhaust gas treatment facility is equipped with exhaust washing tower, acid fume purification tower and dust collecting bag. With respect to the solid waste treatment facility, general solid waste storage yard, sludge yard for wastewater treatment, hydrogenated residues yard and hazardous waste temporary storage yard are provided. During the Reporting Period, all pollution prevention and control facilities operated normally and stably, and the production and operation management was perfect, which could meet the emission standards.
- All incineration power plants kept increasing control over percolate, fly ash, flue gas purification system, etc., in order to guarantee wastewater treatment and smoke and dust emission is compliant with requirements.
- 3 During the Reporting Period, Beijing ENFI Environmental Protection Co., Ltd. kept increasing management and control over wastewater treatment facility, operation, etc., in order to guarantee all effluent meets the standards. The standard increase and medication projects (Grade 1A) of Lanzhou Yan'erwan Sewage Plant, and Zhuozhou Zhongshe Water Treatment Songlindian Plant are all in progress.
- ④ The 2 units of China City New Energy Development Dafeng Co., Ltd. are equipped with "SNCR (urea injection at high temperature section of furnace, selective non-catalytic reduction denitrification system) (SNCR(爐內高溫段注射尿素、非催化還原脱硝系統))", "furnace desulfurization system (injection of dry lime powder into high temperature combustion zone in the furnace) (爐內脱硫系統(向爐內高溫燃燒區注入乾石灰粉))" and "two-level dust removal system comprising of cyclone dust remover + dust collection bag (旋風除塵+布袋除塵的兩級除塵系統)", respectively.
- Wastewater treatment process used in 19 wastewater treatment plants operated by MCC Ecological Environmental Protection Group Co., Ltd. mainly adopted primary treatment (physical and chemical treatment process) + secondary treatment (biochemical treatment process) + tertiary treatment (advanced treatment process), in which the plants mainly executed the Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (Level 1 Standard A) (GB18918–2002) for effluent quality.
- ® Baoxie Wastewater Treatment Plant of Wuhan Urban Environmental Water Co., Ltd. adopted hydrolytic acidification + modified A/A/O + coagulation and filtration process with enhanced biological denitrification and phosphorus removal function. Effluent disinfection adopted disinfection by sodium hypochlorite.
- Zuoling Wastewater Treatment Plant of Wuhan Urban Environmental Water Co., Ltd. adopted modified MSBR + coagulation and filtration process with enhanced biological denitrification and phosphorus removal function. Effluent disinfection adopted disinfection by sodium hypochlorite.

III. Environmental impact assessment of construction projects and other permits granted by environmental protection administrative departments

The environmental impact assessment and administrative approval status of relevant sewage treatment plants and solid waste treatment plants operated by subsidiaries of the Company are as follows:

Phase II Project of Ganzhou Enfi Environmental Protection Energy Co., Ltd. was approved by the Administrative Approval Bureau of Ganzhou City (贛州市行政審批局) (Gan Shi Xing Shen Zheng (1) [2019] No. 110) on 3 September 2019, and environmental protection acceptance monitoring was carried out in September 2020. On 16 December 2020, the environmental protection inspection for completion was conducted by the expert inspection team. It was publicized on the national information system of acceptance of environmental protection for completion of construction projects from 9 February to 12 March 2021, and filed with the district and municipal ecological environment departments in the month of publicity.

Gu'an Enfi Project has obtained the EIA approval from Langfang Ecological Environment Bureau (Lang Huan Han [2020] No. 37) on 2 April 2020, and the requirements in the EIA approval during the project construction have been strictly implemented. We have organized our own experts to complete the environmental protection facilities and accepted them independently on 31 December 2021.

Xiaogan Enfi Project has obtained the EIA approval (Xiao Huan Han [2019] No. 101) on 11 July 2019; the independent completion and acceptance of environmental protection has been completed on 20 October 2021, and the environmental protection requirements in the EIA and acceptance approval documents have been fully implemented.

The standard enhancement and modification projects of Lanzhou Yan'erwan Sewage Plant of Enfi Environmental Protection have obtained the EIA approval (Lan Huan Fu [2018] No. 18). The standard enhancement and modification projects of Zhuozhou Zhongshe Environmental Protection West Plant have obtained the EIA approval (Zhuo Huan Biao [2020] No. 22) and have passed the acceptance of environmental protection for completion of construction works. The standard enhancement and modification projects of Zhuozhou Zhongshe Environmental Protection East Plant have obtained the EIA approval (Zhuo Huan Biao [2020] No. 21) and have passed the acceptance of environmental protection for completion of construction works. The standard enhancement and modification projects of Zhuozhou Zhongshe Environmental Protection Development Zone Plant have obtained the EIA approval (Zhuo Huan Biao [2020] No. 23) and have passed the acceptance of environmental protection for completion of construction works. The standard enhancement and modification projects of Zhuozhou Zhongshe Water Treatment Songlindian Plant have obtained the EIA approval (Zhuo Huan Shu [2019] No. 09).

Macheng Wastewater Treatment Plant project has obtained the approval of the environmental impact assessment and pollutant discharge permits (Huang Huan Han [2017] No. 230), and the environmental protection requirements in the EIA and acceptance approval documents have been fully implemented.

Zhuxi County Dongcheng New District District Wastewater Treatment Plant Construction Project has received the EIA approval (Shi Huan Han [2019] No. 481), the environmental protection in the EIA approval document has been fully implemented. The stage acceptance of environmental protection for the completion of Phase I of the project has been completed.

IV. Contingency plans for environmental emergencies

The contingency plan for environmental emergencies set out by a subsidiary of China Silicon Corporation Ltd.- The First Subsidiary (洛陽中硅高科技有限公司-分公司) was filed with Luoyang Ecological Environment Bureau Luolong District on 23 November 2020, with reference number: 410311–2020–04-H.

The contingency plan for environmental emergencies set out by Xiangyang Enfi Environmental Protection Energy Co., Ltd. (襄陽恩菲環保能源有限公司) was filed with Xiangyang Ecological Environment Bureau Xiangcheng Branch on 9 September 2021, with reference number: 420602–2021–005M.

The contingency plan for environmental emergencies set out by Ganzhou Enfi Environmental Protection Energy Co., Ltd. (贛州恩菲環保能源有限公司) was filed with Ganzhou Ecological Environment Bureau Gan County on 18 June 2020, with reference number: 360721–2020–075–2.

The contingency plan for environmental emergencies set out by Gu'an Enfi Environmental Protection Energy Co., Ltd. (固安恩菲環保能源有限公司) was filed with Langfang Ecological Environment Bureau Gu'an County Branch on 30 December 2021, with reference number: 131022–2021–044-M.

The contingency plan for environmental emergencies set out by China City New Energy Development Dafeng Co., Ltd. (都市環保新能源開發大豐有限公司) was filed with Yancheng Environmental Protection Bureau Dafeng District on 3 November 2020, with reference number: 320982–2020–114-L.

All sewage treatment companies have worked out contingency plans for environmental emergencies and filed them with the local Ecological Environment Bureau.

V. Environmental self-monitoring plans

China Silicon Corporation Ltd. (洛陽中硅高科技有限公司), Xiangyang Enfi Environmental Protection Energy Co., Ltd. (襄陽恩菲環保能源有限公司), Ganzhou Enfi Environmental Protection Energy Co., Ltd. (襄陽恩菲環保能源有限公司), Gu'an Enfi Environmental Protection Energy Co., Ltd. (固安恩菲環保能源有限公司), Enfi Urban Solid Waste (Xiaogan) Co., Ltd. (恩菲城市固廢孝感有限公司), China City New Energy Development Dafeng Co., Ltd. (都市環保新能源開發大豐有限公司) and each of the sewage treatment companies has worked out environmental self-monitoring plans to ensure that monitoring data is transmitted and monitored in real time by local environmental protection authorities via the Internet.

VI. Administrative punishment for environmental problems during the Reporting Period

During the Reporting Period, none of the Company's affiliated enterprises with significant waste disposal were subject to administrative punishment due to environmental problems.

VII.	Other information about environmental protection that should be made publication							
	Applicable Not applicable							

- (II) Information on environmental protection of companies not under the List of Enterprises with Significant Waste Disposal
 - I. Administrative punishment due to environmental problems

During the Reporting Period, the subsidiaries of the Company were subject to 8 administrative penalties for environmental problems such as noise and dust, with fines of RMB 114,300 in total. The rectifications of such issues have been completed.

- II. Disclosure of other environmental information with reference to the enterprises with significant waste disposal
 - (1) Information about pollution discharge
 - CISDI Equipment Co., Ltd. (中冶賽迪裝備有限公司): The main pollutants are exhaust gas and waste water, and the main air pollutants include volatile organic compounds, particulate matter, nitrogen oxides and sulfur dioxide. The emission concentrations of such air pollutants meet the emission standard. The main water pollutants include ammonia nitrogen, suspended solids and chemical oxygen demand. The discharge concentrations of such water pollutants meet the discharge standard after waste water is treated in the biochemical tank and then discharged to the sewage treatment plant in the park.
 - 2) WISDRI (Wuhan) Heavy Machinery Co., Ltd (中冶南方(武漢)重工製造有限公司): The main pollutant is exhaust gas, and the main air pollutant is volatile organic compounds. The emission concentration meets the emission standards after being treated by pollution prevention and control facilities.
 - 3) Zhengzhou Baoye Steel Structure Co., Ltd. (鄭州寶冶鋼結構有限公司): The main pollutants are exhaust gas, waste water and general industrial solid waste, and the main air pollutants include volatile organic compounds, particulate matter, nitrogen oxides and sulfur dioxide, the emission concentrations of which all meet the emission standards. The main water pollutants include ammonia nitrogen, suspended solids and chemical oxygen demand, the discharge concentration of which meets the discharge standards. The major kinds of general industrial solid waste are scrap steel, scrap copper, wire reel, iron powder, iron scraps and oxidizing slag, which are collected, stored and disposed of in compliance with regulations.
 - Engineering project: The main pollutants include dust, waste water, noise, solid waste, etc..

(2) Construction and operation of pollution prevention and control facilities

Each production enterprise of the Company has built various pollution control facilities for waste water, exhaust gas, solid waste and noise in accordance with the environmental impact assessment report and approval requirements, and each project is equipped with mist cannon trucks, spraying cars, car washing stations, garbage stations and other facilities. In addition, bare soil is covered with dense mesh and noise reduction measures are taken for high-noise operations. The specific contents are as follows:

1) CISDI Equipment Co., Ltd. (中冶賽迪裝備有限公司)

Exhaust gas treatment facilities: organic gases adsorption filtration system and bag type dust collector system are effectively operated, and the treated exhaust gas is discharged in compliance with standards.

Waste water treatment facilities: after being treated by biochemical tank, the waste water is discharged into the sewage treatment plant of the park, the discharge concentrations of which all meet the discharge standard.

2) WISDRI (Wuhan) Heavy Machinery Co., Ltd (中冶南方(武漢)重工製造有限公司)

Exhaust gas treatment facilities: we use ground absorption exhaust gas collection, cyclone tower, dry filter, UV photolysis/photocatalysis, activated carbon adsorption process to purify paint fume and then discharge in compliance with standard.

Noise pollution prevention and control measures: we select low-noise or self-contained muffler equipment, high-noise equipment with vibration reduction, sound insulation in buildings and other measures to reduce noise pollution.

Solid waste treatment facilities: special hazardous waste warehouses are built, hazardous wastes are sold to units with corresponding hazardous waste business license qualifications for recovery, and five-duplicate procedures for hazardous waste transfer have been completed in accordance with the Measures for the Administration of Hazardous Waste Transfer Manifests (《危險廢物轉移聯單管理辦法》).

3) Zhengzhou Baoye Steel Structure Co., Ltd. (鄭州寶冶鋼結構有限公司)

Exhaust gas pollution control measures: three sets of smoke and dust purification and treatment devices (filter cartridge dust collector) + three 20m-high exhaust pipes are equipped for treating smoke and dust as a result of cutting; three sets of central smoke and dust purification and treatment systems + three 20m-high exhaust pipes are equipped for treating smoke and dust as a result of welding; (each welding station is provided with suction hood); two sets of spraying-drying integrated spraying rooms and two sets of paint mist filtration systems (including glass fiber filter felt and two-stage paint mist filtration devices) + two sets of activated carbon adsorption devices + one set of desorption catalytic combustion devices + one 20m-high exhaust pipe are equipped for treating organic gases such as paint mist, xylene and non-methane hydrocarbons; and three 20m-high exhaust pipes are equipped for treating exhaust gas as a result of natural gas combustion in the drying burner, smoke and dust, SO_2 and NOx.

Noise pollution control measures: select wind turbines with high efficiency, low noise, low speed and high quality, and adopt shock absorption foundation, flexible joint, and sound insulation in buildings to reduce noise pollution.

Solid waste treatment facilities: special hazardous waste warehouses are built, hazardous wastes are sold to units with corresponding hazardous waste business license qualifications for recovery, and five-duplicate procedures for hazardous waste transfer have been completed in accordance with the Measures for the Administration of Hazardous Waste Transfer Manifests (《危險廢物轉移聯單管理辦法》).

4) Engineering projects

Flying dust prevention and control measures: strictly implement the "six 100%" measures of flying dust prevention and control, and adopt dust reduction measures such as water-spraying on tower cranes, high-rise buildings, walls and mist cannon trucks, as well as dust prevention measures such as covering bare soil, greening and solidification based on the construction characteristics of the projects. Besides, sealing measures for transportation of high-floor garbage and muck are adopted, and vehicles shall be washed and cleaned before entering and leaving the site. Such measures are in line with the limit requirements of comprehensive emission standards of air pollutants.

Waste water prevention and control measures: drainage facilities are set up on the construction site, and waste water is treated by pretreatment facilities such as tertiary sedimentation tanks. After the water in monitoring wells passes quality tests, part of the waste water is reused for greening irrigation, water spraying and dust reduction, etc.

Noise prevention measures: reasonably arrange the plan to keep high-noise facilities and equipment away from surrounding noise-sensitive buildings, set up continuous closed enclosures to isolate noise, set up closed protective cover in woodworking sheds, select low-vibration and low-noise construction machineries, and regularly monitor noise volume at the factory boundary to keep in line with the environmental noise emission standards for the construction sites.

Solid waste prevention and control measures: construction waste classification collection facilities are set up on the construction site; wastes of steel, wood and concrete are rationally reused in combination with the site, and the remaining wastes are recycled for resources recycling. In addition, we enter into a solid waste removal contract with qualified units to dispose of discharged solid wastes in compliance with the rules.

	III.	Reasons for non-disclosure of other environmental information
		Applicable ✓ Not applicable
(III)		osed information on subsequent progress or changes of environmental protection during the rting Period
	A	Applicable Not applicable

(IV) Relevant information conducive to protecting ecology, preventing pollution and fulfilling environmental responsibilities

All enterprises with Significant Waste Disposal of the Company have timely submitted environment monitoring data to the Environmental Statistics Reporting System for Enterprises under Special Supervision (《國家重點監控企業的環境統計直報系統》) or published it on relevant online platforms.

On 19 May 2022, the Party branch of Ganzhou ENFI Environmental Energy Co.,Ltd. and the Party branch of Ganzian County Ecological Environment Bureau jointly organized the Party day activity called "Open Day of Environmental Protection Facilities", with 150 teachers and students from the School of Geography and Environmental Engineering, Gannan Normal University coming to the Ganzhou ENFI factory to visit and experience the whole process of waste-to-energy and waste-to-treasure on site.

On 2 June 2022, Urban Environmental Protection Zhuxi County Water Affairs Co., Ltd. and Shiyan Ecological Environment Bureau Zhuxi Branch jointly launched the "World Environment Day" activity, and organized a total of more than 50 people from the county People's Congress, CPPCC members, public security organs, procuratorial organs and people's courts to visit the facilities and processes of wastewater treatment.

In the first half of 2022, Beijing Enfi Environmental Protection Co., Ltd. (北京恩菲環保股份有限公司) has obtained 10 patents in relation to water environmental protection: a biological pond floating sludge removal device, sulfur preparations and method for removing nitrate nitrogen from water, a fixed bed biofilm mixing and stirring system, a curtain damper device for deodorization of sealed plate-and-frame machine, a device for continuous dosing of solids, a scum collecting device for radial sedimentation basin, a multistage AO and MBR membranes coupling reaction system for wastewater treatment, a rotating mechanism for inclined screw conveyor, a slag scraping device for radial sedimentation basin, and an anaerobic wastewater treatment pipeline system.

(V) Measures adopted to reduce carbon emission during the Reporting Period and its results

The Company continues to optimise the energy structure and continuously improves the energy efficiency. We strengthen the assessment of energy consumption in the construction industry, strictly control the intensity of energy consumption, gradually reduce the proportion of fossil fuel energy consumption, strengthen the control of electricity consumption, and vigorously implement solar energy and other clean energy, and the application of air energy heat pump technology, inverter technology and other technologies to reduce consumption, and promote low-carbon energy to replace high-carbon energy, and renewable energy to replace fossil energy.

The Company promotes resource conservation and recycling by turning waste into wealth and implementing green construction. We actively promote green construction, adopt organizational management methods such as general contracting and whole-process engineering consultation, strengthen integrated collaborative management of design and construction, and save resource consumption through double optimization measures; actively promote the factory-based processing of materials to realise precise blanking and fine management, thus reducing the loss rate of building materials, and make full use of surplus materials such as concrete, steel bars and formwork to implement recycling; fully consider the combination of temporary and permanent construction facilities to realise the combination of "permanent facilities" and "temporary facilities" to reduce construction waste.

The Company actively builds an energy saving and environmental protection industry platform, develops comprehensive energy saving and environmental protection services, and enhances the capacity of the environmental protection industry in all aspects. Focusing on sub-sectors including water environment comprehensive treatment, waste incineration, hazardous waste treatment, soil remediation, ecological and environment governance in mining areas, and photovoltaic power generation, the Company cultivates a number of specialized service enterprises integrating technology consultation of energy saving and environmental protection, systematic design, equipment manufacturing, engineering construction, operation management, etc.. The Company has built its energy saving and environmental protection brand.

The Company implements the overall strategic deployment of "Carbon Peak and Carbon Neutrality", pays attention to technological innovation and sustainable development, conducts various researches around the energy saving and consumption reduction goals of sewage plants, and studies new processes with low energy consumption and low carbon source consumption. Among them, MCC Dingyuan Water Co., Ltd. (定遠縣中冶水務有限公司), in the case of ensuring stable discharge standards, adjusts the aeration rate, pump frequency and other methods in a timely manner according to the needs of the inlet and outlet water quality and operating parameters to reduce power consumption, saving about 200kWh of power per day, and conducts data analysis, strengthens process control and adjustment, adjusts the dosage of drugs in a timely manner, reduces the consumption of drugs and strengthens the inspection and spot check of equipment to ensure the normal operation of equipment. Shouguang North Water Corporation MCC actively adopts photovoltaic power generation technology to effectively save energy, achieving a photovoltaic power generation capacity of approximately 295,000kWh in the first half of 2022. Liangxiang Sewage Treatment Plant utilizes a pond mounted photovoltaic system and a sewage source heat pump, resulting in an annual cumulative carbon reduction of approximately 1,242 tonnes.

CISDI Group Corp. Ltd., a subsidiary of the Company, developed and applied the integrated ore blending technology, and opened up the technology chain of ore blending-sintering-ironmaking process for the first time, boosting the high-efficiency and low-carbon production of blast furnaces. At present, the integrated ore blending technology has been continuously applied, and this technology has steadily provided more than 700,000 tonnes of fine blended powder for Wenfeng Iron and Steel. During its use, the sintering and blast furnace production indicators of Wenfeng Iron and Steel have been significantly improved, with the thickness of the sintering machine layer exceeding 1,000mm, the coke ratio of the blast furnace being reduced by 20–30kg, and the carbon emission intensity being reduced by approximately 60–90kg. CO_2/t , effectively supporting cost and carbon reduction, quality improvement and efficiency improvement in the production before iron making.

II. THE SPECIFIC WORK TO CONSOLIDATE AND EXPAND THE ACHIEVEMENTS IN POVERTY ALLEVIATION AND TO PROMOTE RURAL REVITALIZATION

In the first half of 2022, the Company thoroughly studied and implemented General Secretary Xi Jinping's guiding principles related to rural revitalization and paired assistance policies, consolidated and expanded the achievements in poverty alleviation and promoted rural revitalization, continued to provide assistance via consumption and industrial production, actively connected with cadres on temporary posts in the assistance counties to practically solve practical difficulties encountered by the assistance counties, purchased agricultural and sideline products from the paired assistance counties as holiday condolences for employees to solve the problem of marketing local agricultural and sideline products, so as to drive local economic development, increase residents' income, foster rural revitalization, and bravely assume corporate social responsibility.

DISBURSEMENT OF AID FUNDS 1.

During the Reporting Period, the Company fully allocated the non-reimbursable assistance funds for the year of 2022 paired assistance and partner assistance of RMB 7.98 million, including allocating RMB 3,900,000 to conduct 2 industrial revitalization projects and 2 ecological revitalization projects in Dejiang County; RMB 2,100,000 to Qilian County to conduct an industrial revitalization project and an ecological revitalization project; and RMB 1,980,000 to Panzhihua Technician College to implement the "Mine Heart" vocational education program for students from the school's paired assistance counties.

CONSUMER ASSISTANCE 2.

The Company extensively mobilized its subsidiaries and labor unions to actively participate in consumer assistance. In the first half of 2022, the total amount of direct purchases of agricultural products in the paired assistance counties was RMB 5,832,060; the total amount of assistance in selling agricultural products in the paired assistance counties was RMB 154,300; and the total amount of direct purchases in the original 832 national-level poverty-stricken counties outside the paired assistance counties was RMB 1,427,110.

3. INNOVATION IN ASSISTANCE WORK

Chongqing CCIDA Data Technology Co., Ltd., a subsidiary of the Company, focused on the ecological brand of agricultural products in the paired assistance areas, strengthened the integrated development of agriculture and tourism, and explored the paired assistance in poverty-stricken areas through systematic solutions such as overall planning of rural revitalization, industrial introduction and implementation, and contract agriculture drive, so as to continue to consolidate the achievements of poverty alleviation. In the first half of 2022, the Company organised a special team to go deep into the cooperatives, planting and breeding, and production and processing enterprises in 6 paired assistance counties including Yanhe, Dejiang and Zhenxiong, and go deep into the fields to find out the situation and determine the direction, especially focusing on industrial landing and follow-up sales channels, developing more than hundreds of special agricultural products in 6 paired assistance counties including Dejiang and Zhenxiong, helping more than 700 enterprises and cooperatives in poverty-stricken counties, and providing a broad channel for agricultural products to go out of villages and into cities.

THE FIGHT AGAINST THE OUTBREAK OF COVID-19 AND RESUMPTION Ш. OF WORK AND PRODUCTION

Since 2022, the Company has insisted on the general strategy of "preventing case entry from abroad and recurrence at home" and the general policy of "dynamic zero" in the face of the situation of repeated outbreaks, multiple transmission chains and hidden transmission channels, combined normal prevention and control measures with emergency response, and scientifically, accurately and strictly implemented the prevention and control measures of the pandemic. During the Reporting Period, the epidemic prevention and control command organizations of more than 2,000 institutions and 4,000 project departments of the Company operated efficiently, various prevention and control measures were implemented in place, and the epidemic prevention and control situation was generally stable. As for the prevention and control of epidemic in overseas projects, as of the end of June, the Company's 236 overseas projects and institutions, with a total of 7,802 Chinese personnel, had achieved zero positive cases, ensuring site stability and achieving the goal of "staying at the place and making people's mind

The Company actively assessed the impact of the epidemic, and guided each subsidiary to come up with countermeasures in advance according to the general idea of "early planning, early deployment and early implementation" and to do a good job in resuming work and production on the premise to ensure safe production. Due to adequate preparation and effective measures, the Company's major economic indicators rose rapidly in the first half of the year against the trend and hit a historical high. The Company achieved improvements in operating quality and economic benefits, realising the "double half" target of achieving the targets by half during half time, laying a solid foundation for the high-quality completion of the annual tasks.

Since April 2022, the situation of the local epidemic prevention and control in the country has been extremely severe. The Company has acted on the orders and shouldered the mission of central enterprises at critical moments. During the Reporting Period, 11 subsidiaries completed a total of 78 pandemic prevention engineering projects with contribution of 45,000 labor force; among them, a total of 1,052,000 m² of isolation spots, diversion spots, isolation hotels and shelter hospitals and 129,000 beds were constructed in Shanghai; and finished the construction of Shanghai Lingang Shelter Hospital in only 192 hours, overcoming all difficulties to support a shelter for 10,000 people.

I. PERFORMANCE OF UNDERTAKINGS

(I) Undertakings made by relevant parties such as de facto controllers, Shareholders, related parties and acquirers of the Company and the Company during the Reporting Period or subsisting during the Reporting Period.

Background of undertaking	Type of undertaking	Undertaking party	Details of undertaking	Date and duration of undertaking	Whether there is a time limit for performance	Whether it is strictly performed in a timely manner	If not performed timely, specify the reasons in details	If not performed timely, specify further plans
Undertakings in relation to the restructuring of major assets	Solution to and prevention of horizontal competition	China Minmetals	In respect of businesses carried out by China Minmetals and other controlled companies which overlap with those of MCC, China Minmetals will, according to its actual situations and the characteristics and development trend of the industry in which it operates, actively adopts different methods such as entrusted management, asset restructuring, equity swap and business adjustment to minimize the business overlap between the two parties.	17 February 2016	No	Yes	-	-
			Upon the completion of the acquisition, China Minmetals and other controlled companies will not, in whatever form, directly or indirectly, engage in new businesses competing with MCC, and will not establish controlling subsidiaries which engage in the same or similar businesses that will constitute substantial horizontal competition with MCC. China Minmetals will supervise its controlled companies and adopt certain measures when necessary.					
			3. Subject to the above principles 1 and 2 and upon the completion of the acquisition, if the products or services that will be operated by the unlisted subsidiaries controlled by or other unlisted related enterprises of China Minmetals are likely to compete with the main products or services of MCC, China Minmetals will agree that MCC shall be entitled to preferentially acquire the assets in relation to these products or services or 100% equity of China Minmetals in the subsidiaries. MCC shall be entitled to determine the time to request China Minmetals to sell the abovementioned competing businesses at its discretion.					
			China Minmetals will abstain from voting at the Board meeting or general meeting at which MCC reviews whether its new businesses constitute horizontal competition with China Minmetals and whether to exercise the above option right and pre-emptive rights.					
			 China Minmetals undertook that it will strictly comply with the relevant regulations of the CSRC and the SSE, and the Articles of Association and other rules and regulations of MCC, and equally exercise the Shareholder's rights and perform the Shareholder's 					

obligations. It also undertook not to take advantage of its privileged positions as the substantial Shareholder nor impair the legal interests of MCC or other Shareholders. The commitments continue to be valid, cannot be altered and are irrevocable during the period in which China Minmetals has control over MCC or there is relatively material impact. If there is any breach of the above commitments,

China Minmetals shall assume all losses to MCC.

Background of undertaking	Type of undertaking	Undertaking party	Details of undertaking	Date and duration of undertaking	Whether there is a time limit for performance	Whether it is strictly performed in a timely manner	If not performed timely, specify the reasons in details	I If not performed timely, specify further plans
Undertakings in relation to the initial public offering	Solution to and prevention of horizontal competition	CMGC	CMGC, the Controlling Shareholder of MCC, undertook to avoid being engaged in or taking part in any business which may compete horizontally with the principal business of MCC.	5 December 2008	No	yes	-	-
Undertakings in relation to the corporate bonds	Others	MCC	During the term of Corporate Bonds (First Tranche) for 2017 under the Public Issuance by Metallurgical Corporation of China Ltd.* ("2017 Corporate Bonds"), if the Company does not expect to pay the principal and interest for this tranche of bonds on time or fails to pay the principal and interest on time on the maturity date of this tranche of bonds, at least the following measures will be taken: (1) no distribution of profits to the ordinary Shareholders; (2) no reduction in registered capital.	25 October 2017-25 October 2022	yes	yes	-	-
			During the term of Corporate Bonds (First Tranche) for 2018 under the Public Issuance by Metallurgical Corporation of China Ltd.* ("2018 Corporate Bonds"), if the Company does not expect to pay the principal and interest for this tranche of bonds on time or fails to pay the principal and interest on time on the maturity date of this tranche of bonds, at least the following measures will be taken: (1)no distribution of profits to the ordinary Shareholders; (2)no reduction in registered capital.		yes	yes	-	-
			The funds raised from 2017 Corporate Bonds and 2018 Corporate Bonds are used only for production and operating activities of enterprises that comply with national laws, regulations and policies. Such raised funds will be used strictly in accordance with the agreed purpose mentioned in the prospectus. Such funds will not be used by others and will not be used as non-production expenditures and real estate business. A practical and effective monitoring mechanism and isolation mechanism for raised funds will be established.	The issuance dates to the Maturity Date of 2017 Corporate Bonds and 2018 Corporate	yes	yes	-	-

Background of undertaking	Type of undertaking	Undertaking party	Details of undertaking	Date and duration of undertaking	Whether there is a time limit for performance	Whether it is strictly performed in a timely manner	If not performed timely, specify the reasons in details	
Undertakings in relation to non-financial corporate debt financing instruments	Others	MCC	The funds raised from the 2020 First Tranche and the Second Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.* are used only for production and operating activities of enterprises that comply with national laws, regulations and policies, and shall not be used for land, real estate, equity, securities, futures and other areas prohibited by national regulations. Funds raised for the current period will be used to meet the liquidity requirements that comply with national laws, regulations and policies, and shall not be used for long-term investment. During the term of above medium-term notes, if the uses of funds are changed, the relevant information will be disclosed in a timely manner.	The issuance dates to redemption dates of the 2020 First Tranche and the Second Tranche of Mediumterm Notes of Metallurgical Corporation of China Ltd.*	yes	yes	-	
			The funds raised from the 2021 First Tranche, the Second Tranche, the Third Tranche and the Fourth Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.* are used only for production and operating activities of enterprises that comply with national laws, regulations and policies, and shall not be used for land, real estate, equity, securities, futures and other areas prohibited by national regulations. Funds raised for the current period will be used to meet the liquidity requirements that comply with national laws, regulations and policies, and shall not be used for long-term investment. During the term of above medium-term notes, if the uses of funds are changed, the relevant information will be disclosed in a timely manner.	The issuance dates to redemption dates of the 2021 First Tranche, the Second Tranche, the Third Tranche and the Forth Tranche of Mediumterm Notes of Metallurgical Corporation of China Ltd.*	yes	yes		_

II. MISAPPROPRIATION OF FUNDS BY THE CONTROLLING SHAREHOLDERS OR OTHER RELATED PARTIES FOR NON-OPERATING PURPOSES DURING THE REPORTING PERIOD

Applicable / Not applicable
BREACH OF GUARANTEES

Applicable Not applicable

III.

IV.	AUDITING OF INTERIM REPORT
	Applicable / Not applicable
	The Company's 2021 annual general meeting held on 30 June 2022 approved the appointment of Ernst & Young Hua Ming LLP (special general partnership) as the Company's 2022 annual financial report auditor, interim financial report review audit institution and the Company's 2022 internal control audit accounting firm. The Company's 2022 interim financial statement has been reviewed by Ernst & Young Hua Ming LLP (special general partnership), but has not been audited.
V.	CHANGES AND RESOLUTIONS OF MATTERS IN RELATION TO NONSTANDARD AUDIT OPINION FOR THE ANNUAL REPORT OF LAST YEAR
	Applicable Not applicable
VI.	EVENTS IN RELATION TO BANKRUPTCY AND REORGANISATION
	Applicable / Not applicable
VII.	MATERIAL LITIGATION AND ARBITRATION
	The Company had material litigation and arbitration during the Reporting Period The Company had no material litigation and arbitration during the Reporting Period
VIII.	SUSPECTED VIOLATION OF LAWS AND REGULATIONS, THE PENALTIES AND RECTIFICATION OF THE LISTED COMPANY AND ITS DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, CONTROLLING SHAREHOLDER AND DE FACTO CONTROLLER Applicable Not applicable
IX.	INTEGRITY OF THE COMPANY AND ITS CONTROLLING SHAREHOLDER AND DE FACTO CONTROLLER DURING THE REPORTING PERIOD AND DE FACTO CONTROLLER
	During the Reporting Period, the Company and its Controlling Shareholder, CMGC, did not have any court ruling in effect that was yet to be executed or any overdue liability with a relatively significant outstanding amount and was

not otherwise involved in any other similar circumstances.

Query Indexes

X. MATERIAL RELATED PARTY TRANSACTIONS

- (I) Related party transactions in relation to daily operation
 - 1. Events disclosed in interim announcements without further development or change in subsequent implementation

At the 37th meeting of the third session of the Board of Directors convened on 29 March 2022, the Resolution on Adjusting Annual Caps for Daily Related Party Transactions/Continuing Connected Transactions in 2022 and 2023,the Resolution on MCC's Application for Signing a Financial Service Agreement with Minmetals Group Finance Co., Ltd., the Resolution on MCC's Risk Assessment Report on Minmetals Group Finance Co. Ltd., the Resolution on Risk Disposal Plan for the Development of Financial Business by MCC and Minmetals Group Finance Co., Ltd. were considered and approved. It is agreed that the Company will adjust the caps of certain types of the Group's daily related party transactions with China Minmetals and its subsidiaries other than

Overview of the Matter

the Company in 2022-2023.

For details, please refer to the relevant announcement published by the Company on 29 March 2022.

2 .	Events disclosed in interim announcements and with further development or change i	in
	subsequent implementation	

Applicable Not applicable

3. Events not disclosed in interim announcements

Unit: RMB'000

Party to connected transaction	Connected relationship	Type of connected Content of connected transaction transaction	Pricing principle of connected transaction	Annual caps for 2022	Price of connected transaction	Amount of connected transaction	Percentage to similar transactions (%)	Payment method for connected transaction	Market price	Reason for significant difference between transaction price and reference market price
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Sales of Purchase and sales of commodities materials- income	of Agreed price	8,104,530	<u> </u>	1,271,415	13.09%	-	-	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Purchase of Purchase and sales of commodities materials-expense	0 1	24,340,290	=	5,052,459	5.44%	-	=	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Provision of Engineering construct services income	tion – Agreed price	18,850,000	-	901,820	0.35%	-	-	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Acceptance Engineering construct of services expense	tion – Agreed price	5,935,000	-	142,016	0.12%	-	=	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Provision of Metallurgy and mana- services services –income	gement Agreed price	625,000	-	11,512	0.15%	-	-	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Acceptance Metallurgy and mana of services services -expenses		47,580	-	9,297	2.05%	-	-	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Interest Industry and financial expenses services -financing credit services		1,600,000	-	4,411	0.49%	-	-	-
China Minmetals and its subsidiaries (Except MCC)	Indirect controlling shareholder	Other outflowProperty leasing -exp	penses Lease contracts	110,830	-	43,856	7.12%	-	-	-
MCC Ruimu Amperex Technology Limited	Subsidiary of shareholder	Borrowings Financial services-da to related maximum balance parties provision of loan ar discounting service	of nd bill	800,000	-	200,000	-	-	-	-
MCC Ruimu Amperex Technology Limited	Subsidiary of shareholder	Borrowings Financial services-date to related maximum balance parties provision of financi leasing services	aily Agreed price of	500,000	-	87,333	-	-	-	-
MCC Ruimu Amperex Technology Limited	Subsidiary of shareholder		terests Agreed price	88,000	-	2,462	0.38%	-		-
Total				61,001,230	1	7,726,581	1	1	1	1
Details of return of large amount of sales Description of connected transaction					N/A N/A					

II)	Rela	ted party transaction in relation to acquisition of assets or acquisition or disposal of equity
	1.	Events disclosed in interim announcements without further development or change in subsequent implementation
		Applicable / Not applicable
	2.	Events disclosed in interim announcements with further development or change in subsequent implementation
		Applicable Not applicable
	3.	Events not disclosed in interim announcements
		Applicable Not applicable
	4.	Business results during the Reporting Period shall be disclosed as agreed involving the results
		Applicable / Not applicable
III)	Mate	rial related party transactions in relation to joint investment in external parties
	1.	Events disclosed in interim announcements without further development or change in subsequent implementation
		Applicable / Not applicable
	2.	Events disclosed in interim announcements with further development or change in subsequent implementation
		Applicable Not applicable
	3.	Events not disclosed in interim announcements
		Applicable Mot applicable
IV)	Rela	ted creditors' rights and debt transactions
	1.	Events disclosed in interim announcements without further development or change in subsequent implementation
		Applicable / Not applicable
	2.	Events disclosed in interim announcements with further development or change in subsequent implementation
		Applicable Not applicable
	3.	Events not disclosed in interim announcements
		Applicable / Not applicable

(V) Financial business between the Company and its related financial companies and financial business between the Company's holding financial company and its related parties

1. Deposits

During the Reporting Period, the deposits of MCC Ruimu Amperex Technology Limited ("MCC Ruimu Amperex", a subsidiary of CMGC, the controlling shareholder) in MCC Finance Corporation Ltd. (referred to as "Finance Company", a subsidiary of the Company) are as follows:

Unit: RMB

Related party	Connection relationship	Maximum limit of daily deposit	Interest rate range of deposits	Balance at the beginning of the period	Amount for	r the period Total withdrawal	Balance at the end of the period
					Total deposits for the period	amount for the period	
MCC Ruimu Amperex	Fellow subsidiary	I	0.42%-1.26%	295,666,965.69	300,228,588.92	595,895,554.61	0
Total	I	1	0.42%-1.26%	295,666,965.69	300,228,588.92	595,895,554.61	0

2. Loan business

During the Reporting Period, the loan business of Finance Company (a subsidiary of the Company) to MCC Ruimu Amperex (a related party of the Company) is as follows:

Unit: RMB

Related party	Connection relationship	Loan facility	Interest rate range of loans	Balance at the beginning of the period	Amount for	the period	Balance at the end of the period
					Total loans for the period	Total repayment for the period	
MCC Ruimu Amperex	Fellow subsidiary	300,000,000.00	3.85%	200,000,000.00	0	200,000,000.00	0
Total	1	I	1	200,000,000.00	0	200,000,000.00	0

3. Credit granting or other financial business

During the Reporting Period, the credit granted by Finance Company (a subsidiary of the Company) to MCC Ruimu Amperex (a related party of the Company) is as follows:

Unit: RMB

Related party	Relationship	Business type	Total	Actual amount	
MCC Ruimu Amperex	Fellow subsidiary	Credit granting	400,000,000.00	0	

4. Other explanations

According to the relevant provisions published by the China Banking and Insurance Regulatory Commission on "one financial company only for an enterprise group", the Company will dissolve and liquidate its MCC Finance Co., Ltd. upon the approval of the Board. Minmetals Group Finance Co., Ltd. (hereinafter referred to as "Minmetals Finance Company"), a subsidiary of China Minmetals, is a non-banking financial institution approved by the China Bank and Insurance Regulatory Commission to provide financial services to its members. It may provide related financial services to the Company, which is conducive to optimizing financial management, improving the efficiency of capital use and reducing financing costs. The Company carries out related business with Minmetals Finance Company, and will add financial services-related transactions with Minmetals Finance Company. As considered and approved by the Company's 2021 Annual General Meeting and the 37th meeting of the third session of the Board, the Company had signed the Financial Services Agreement with Minmetals Finance Company, and set the annual cap of related party transactions between the Company and its subsidiaries and Minmetals Finance Company from 2022 to 2024, such as daily deposit balance, maximum daily balance of comprehensive facilities, financial service fees, etc. For details, please refer to the relevant announcements of the Company disclosed on 29 March 2022, 25 May 2022 and 30 June 2022. As at the end of the Reporting Period, the Company had not entered into the aforesaid financial services related-party transactions with Minmetals Finance Company.

(VI)	Other material related party transactions
	Applicable / Not applicable

Applicable

XI. MATERIAL CONTRACTS AND THE PERFORMANCE THEREOF

1. TRUSTEESHIP, CONTRACTING AND LEASING

✓ Not Applicable

2. MAJOR GUARANTEES PERFORMED AND OUTSTANDING DURING THE REPORTING PERIOD

Unit: RMB

Guarantor	Relationship between the guarantor and the listed company	Guaranteed party	Guaranteed	Date of guarantee (Signing date of		Expiration date of	Type of	principal debt	Security (if any)	whether execution of guarantee has been completed	Is the guarantee		Counter guarantee	Whether guarant is provi to relate parties	ee ded
		Zhuhai Hengqin Headquarters													
		Building													
MCC Real Estate	Wholly-owned	Development	000 100 051 17	0010 0 1	0010 0 1	0004.0.4	Joint liability	N. I	N	N	N		N	N	M
Group Co., Ltd	subsidiary	Co., Ltd. Zhuhai Hengqin Headquarters	636,466,654.17	2019-9-4	2019-9-4	2024-9-4	guarantee	Normal	No	No	No	0	No	No	No
		Building													
China MCC 20		Development					Joint liability								
Group Co., Ltd	Holding subsidiary	Co., Ltd.	410,623,647.85	2019-9-4	2019-9-4	2024-9-4	guarantee	Normal	No	No	No	0	No	No	No
Total balance of guar	antees incurred during i rantees as at the end of antees provided to its s rantees provided to its s	the Reporting Period	(A) (excluding guar	antees to su	ubsidiaries)	ovided by th	e Company to	its subsidiar	ries					-3,	153,000,000.00 047,090,302.02 226,143,943.70 192,330,611.21
T	. (4.5)		Total g	uarantees	provided by	the Compa	ny (including	juarantees to	o its subsidia	aries)					
Total amount of guar	antees (A+B) antees as a percentage	in the net seeste of th	ha Company /9/ I											1/,	239,420,913.23
Including:	antees as a percentage	III IIIG IIGI doogio UI II	ile Guilipally (10)												13.01/0
	s provided to Sharehold	ders, the de facto con	trollers and their rela	ated parties	(C)										0
	ectly or indirectly provid													5,	880,790,038.21
	total amount exceeding		s (E)												0
	antees of the three abov													5,	880,790,038.21
Explanation on the position Explanation on guara	otential joint repaying lia	adility arising from out	istanding guarantee	3											No See below
LAPIANALION ON GUARA	IIIIEES														oee Dei

Explanation on guarantees: Zhuhai Hengqin Headquarters Building Development Co., Ltd. (珠海橫琴總部 大廈發展有限公司) is 31% owned by MCC Real Estate, a subsidiary of the Company, 20% owned by China MCC 20 Group Co., Ltd., another subsidiary of the Company, 30% owned by Zhuhai Da Hengqin Real Estate Co., Ltd. (珠海大橫琴置業有限公司), and 19% owned by Hong Kong Jimei Property Development Co., Ltd. (香港集美地產發展有限公司). In July 2016, Zhuhai Da Henggin Real Estate Co., Ltd. agreed to act in concert with MCC Real Estate on voting at the Board meeting, and issued a Letter of Acting in Concert. The control of Zhuhai Hengqin Headquarters Building Development Co., Ltd. acquired by MCC Real Estate was included in the scope of consolidation in August 2016. On 5 September 2019, MCC Real Estate and China MCC 20 Group Co., Ltd. provided guarantees in the amount of up to RMB 930 million and RMB 600 million respectively, on a pro-rata basis, to Zhuhai Hengqin Headquarters Building Development Co., Ltd. (for details, please refer to the announcement of the Company dated 30 August 2019 in relation to the provision of guarantees for its subsidiaries). In March 2020, Zhuhai Da Hengqin Real Estate Co., Ltd. cancelled the Letter of Acting in Concert with MCC Real Estate, and Zhuhai Hengqin Headquarters Building Development Co., Ltd. ceased to be included in the scope of MCC Real Estate. The guarantee provided by MCC Real Estate and China MCC 20 Group Co., Ltd. to Zhuhai Hengqin Headquarters Building Development Co., Ltd. then became a guarantee provided for an external company (excluding the guarantee provided for the subsidiaries).

3. OTHER MATERIAL CONTRACTS

Please refer to the section IV "Report of Board of Directors, Management Discussion and Analysis" for details of material contracts signed by the Company during the Reporting Period.

I. **CHANGES IN SHARE CAPITAL (I)** Statement of changes in Shares 1. STATEMENT OF CHANGES IN SHARES During the Reporting Period, there were no changes in the total number of Shares and share capital structure of the Company. **EXPLANATION ON THE CHANGES IN SHARES** Applicable ✓ Not Applicable IMPACTS ON FINANCIAL INDICATORS INCLUDING EARNINGS PER SHARE. NET ASSETS PER 3. SHARE. ETC. DUE TO CHANGES IN SHARES DURING THE PERIOD FROM THE END OF THE REPORTING PERIOD TO THE ISSUANCE OF INTERIM REPORT (IF ANY) ✓ Not Applicable Applicable 4. OTHER INFORMATION THE DISCLOSURE OF WHICH IS DEEMED NECESSARY BY THE

COMPANY OR IS REQUIRED BY SECURITIES REGULATORY AUTHORITIES

✓ Not Applicable

II. PARTICULARS OF SHAREHOLDERS

Changes in shares subject to selling restrictions

✓ Not Applicable

Applicable

(I) Total number of Shareholders:

Applicable

(II)

Total number of ordinary Shareholders as at the end of the Reporting Period (*Person*)

Total number of Shareholders of preferred shares whose voting rights have been restored as at the end of the Reporting Period (*Person*)

0



(II) Table of shareholding of the top 10 Shareholders and top 10 Shareholders with tradable shares (or Shareholders not subject to selling restrictions) as at the end of the Reporting Period (1)

Unit: share

Shareholding of the top 10 Shareholders

	Change	Number of Shares		Number of Shares subject	Pledged, cha	rged or frozen	
Name of Shareholder (full name)	during the Reporting Period	held at the end of the period	Percentage (%)	to selling restrictions	Status of Shares	Amount	Nature of Shareholder
China Metallurgical Group Corporation (中國冶金科工集 團有限公司)		10,190,955,300	49.18	0	Nil	0	State-owned legal person
HKSCC Nominees Limited (香港中央結算(代理人)有限公司) ⁽²⁾	-228,600	2,841,638,951	13.71	0	Nil	0	Others
China National Petroleum Corporation (中國石油天然氣 集團有限公司)		1,227,760,000	5.92	0	Nil	0	State-owned legal person
China Securities Finance Corporation Limited (中國證券 金融股份有限公司)		589,038,427	2.84	0	Nil	0	State-owned legal person
Hong Kong Securities Clearing Company Limited (香港 中央結算有限公司)		389,115,295	1.88	0	Nil	0	Others
Bank of Communications Co., Ltd GF China Securities Infrastructure Engineering Trading Open Index Securities Investment Fund (交通銀行股份有限公司一廣發 中證基建工程交易型開放式指 數證券投資基金)		127,942,900	0.62	0	Nil	0	Others
Bosera Funds - Agricultural Bank - Bosera China Securities and Financial Assets Management Program (博時基金-農業銀行-博時中		63,516,600	0.31	0	Nil	0	Others
證金融資產管理計劃) E-Fund - Agricultural Bank - E-Fund China Securities and Financial Assets Management Programme (易方達基金一農		63,516,600	0.31	0	Nil	0	Others
業銀行-易方達中證金融資產 管理計劃) Da Cheng Fund – Agricultural Bank – Da Cheng China	0	63,516,600	0.31	0	Nil	0	Others
Securities and Financial Assets Management Programme (大成基金-農業 銀行-大成中證金融資產管理							

	Change	Number of Shares		Number of Shares subject	Pledged, cha	arged or frozen	
Name of Shareholder (full name)	during the Reporting Period	held at the end of the period	Percentage	to selling restrictions	Status of Shares	Amount	Nature of Shareholder
	0	00.540.000	0.04	0	N.T.	0	Other
Harvest Fund - Agricultural Bank - Harvest China Securities and Financial Assets Management Programme (嘉實基金-農業 銀行-嘉實中證金融資產管理 計劃)		63,516,600	0.31	0	Nil	0	Others
GF Fund - Agricultural Bank - GF China Securities and Financial Assets Management Programme (廣發基金-農業 銀行-廣發中證金融資產管理 計劃)		63,516,600	0.31	0	Nil	0	Others
Zhong Ou Fund - Agricultural Bank - Zhong Ou China Securities and Financial Assets Management Programme (中歐基金-農業 銀行-中歐中證金融資產管理		63,516,600	0.31	0	Nil	0	Others
計劃) China AMC Fund - Agricultural Bank - China AMC China Securities and Financial Assets Management Programme (華夏基金-農業 銀行-華夏中證金融資產管理 計劃)		63,516,600	0.31	0	Nil	0	Others
Yinhua Fund - Agricultural Bank - Yinhua China Securities and Financial Assets Management Programme (銀華基金-農業 銀行-銀華中證金融資產管理 計劃)		63,516,600	0.31	0	Nil	0	Others
China Southern Fund - Agricultural Bank - China Southern China Securities and Financial Assets Management Programme (南 方基金 - 農業銀行 - 南方中證 金融資產管理計劃)		63,516,600	0.31	0	Nil	0	Others
Togramme (工銀瑞信基金一 Base of East of Eas		63,516,600	0.31	0	Nil	0	Others

Shareholding of the top 10 Shareholders not subject to selling restrictions

	Number of tradable Shares held not subject	Types and number of Shares		
Name of Shareholder	to selling restrictions	Types of Shares	Number of Shares	
China Metallurgical Group Corporation (中國冶金科工集團有限公司)	10,190,955,300	RMB- denominated	10,190,955,300	
HKSCC Nominees Limited (香港中央結算代理人有限公司) (2)	2,841,638,951	ordinary shares Overseas-listed foreign shares	2,841,638,951	
China National Petroleum Corporation (中國石油天然氣集團有限公司)	1,227,760,000	RMB- denominated ordinary shares	1,227,760,000	
China Securities Finance Corporation Limited (中國證券金融股份有限公司)	589,038,427	RMB- denominated ordinary shares	589,038,427	
Hong Kong Securities Clearing Company Limited (香港中央結算有限公司)	389,115,295	RMB- denominated ordinary shares	389,115,295	
Bank of Communications Co., Ltd. – GF China Securities Infrastructure Engineering Trading Open Index Securities Investment Fund (交通銀行股份有限公司一廣發中證基建工程交易型開放式指數證券投資基金)	127,942,900	RMB- denominated ordinary shares	127,942,900	
Bosera Funds – Agricultural Bank– Bosera China Securities and Financial Assets Management Program (博時基金一農業銀行-博時中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
E-Fund – Agricultural Bank – E-Fund China Securities and Financial Assets Management Programme (易方達基金一農業銀行-易方達中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
Da Cheng Fund – Agricultural Bank – Da Cheng China Securities and Financial Assets Management Programme (大成基金 – 農業銀行 – 大成中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
Harvest Fund – Agricultural Bank – Harvest China Securities and Financial Assets Management Programme (嘉實基金一農業銀行—嘉實中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
GF Fund - Agricultural Bank - GF China Securities and Financial Assets Management Programme (廣發基金 - 農業銀行一廣發中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
Zhong Ou Fund – Agricultural Bank – Zhong Ou China Securities and Financial Assets Management Programme (中歐基金一農業銀行一中歐中證金融資產管理計	63,516,600	RMB- denominated ordinary shares	63,516,600	
China AMC Fund – Agricultural Bank – China AMC China Securities and Financial Assets Management Programme (華夏基金 – 農業銀行 – 華夏中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
Yinhua Fund – Agricultural Bank – Yinhua China Securities and Financial Assets Management Programme (銀華基金 – 農業銀行 – 銀華中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
China Southern Fund – Agricultural Bank – China Southern China Securities and Financial Assets Management Programme (南方基金-農業銀行-南方中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	
IDEN ICBC Credit Suisse Fund – Agricultural Bank – ICBC Credit Suisse China Securities and Financial Assets Management Programme (工銀瑞信基金-農業銀行-工銀瑞信中證金融資產管理計劃)	63,516,600	RMB- denominated ordinary shares	63,516,600	

	Number of tradable Shares held not subject	Types and number of Shares Types of Number o			
Name of Shareholder	•				
Explanations on repurchase accounts of the top ten Shareholders	Not applicable				
Explanations on the voting rights of the aforesaid Shareholders (as the trustor and trustee), and waiver of their voting rights	Not applicable				
Explanations on the connections or parties acting in concert among the aforesaid Shareholders	The Company is not aware of the existence of any connections or parties acting in concert among the aforesaid Shareholders				
Explanations on the shareholders of preferred shares whose voting rights have been restored and the number of Shares held	Not applicable				
Note (1): Figures in the table were extracted from the Cor	npany's register of Sh	areholders as at 3	30 June 2022.		
Note (2): The H Shares held by HKSCC Nominees Limited	d are those held on be	half of their multip	ole equity owners.		
Number of Shares held by the top 10 Shareholders s selling restrictions	ubject to selling re	estrictions and	information on the		
Applicable Not Applicable					
Strategic investors or general legal persons became placing of the new Shares	one of the top 10	Shareholders	as a result of the		
Applicable V Not Applicable					

(III)

III. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

 Particulars of changes in the shareholdings of current and resigned Directors, Supervisors and senior management during the Reporting Period

Unit: share

Name	Position	Number of Shares held at the beginning of the period	Number of Shares held at the end of the period	Changes in Shares during the Reporting Period	Reason for the changes
Current					
Chen Jianguang (1)	Chairman and Executive Director	0	0	0	_
Zhang Mengxing	Executive Director and President	60,032	60,032	0	-
Zhou Jichang	Independent Non-executive Director	0	0	0	_
Lang Jia (2)	Non-executive Director	0	0	0	_
Liu Li (3)	Independent Non-executive Director	0	0	0	_
Ng, Kar Ling Johnny	Independent Non-executive Director	0	0	0	-
Yan Aizhong	Employee Representative Director	0	0	0	-
Yin Sisong	Chairman of the Supervisory Committee	28,100	28,100	0	_
Zhang Yandi	Supervisor	0	0	0	_
Chu Zhiqi	Employee Representative Supervisor	0	0	0	-
Zou Hongying	Vice President and Chief Accountant	40,000	40,000	0	_
Qu Yang ⁽⁴⁾	Vice President	70,000	70,000	0	-
Zeng Jianzhong	Vice President	0	0	0	_
Liu Fuming	Vice President	0	0	0	-
Bai Xiaohu	Vice President	0	0	0	_
Zhu Guangxia	Vice President	0	0	0	-
Zeng Gang	Secretary to the Board	0	0	0	-
Resigned					
Guo Wenging (5)	Chairman and Executive Director (resigned)	130,000	130,000	0	-
Yu Hailong (6)	Independent Non-executive Director (resigned)	0	0	0	_

- Note (1): On 26 January 2022, Mr. Chen Jianguang was elected as an Executive Director of the third session of the Board of the Company at the 2022 first extraordinary general meeting of the Company. Mr. Chen Jianguang was elected as the Chairman of the third session of the Board of the Company at the thirty-fifth meeting of the third session of the Board of the Company.
- Note (2): On 26 January 2022, Mr. Lang Jia was elected as a Non-executive Director of the third session of the Board of the Company at the 2022 first extraordinary general meeting of the Company.
- Note (3): On 26 January 2022, Mr. Liu Li was elected as an Independent Non-executive Director of the third session of the Board of the Company at the 2022 first extraordinary general meeting of the Company.
- Note (4): The shares of the Company held by Mr. Qu Yang are H Shares.

Note (5): On 26 January 2022, the Board of the Company received a written resignation report from Mr. Guo Wenqing who resigned as an Executive Director, the Chairman of the Board and relevant positions in the special committees of the Board due to work commitments.

Note (6): Mr. Yu Hailong had served as an Independent Non-executive Director of the Company from 13 November 2014 until the expiration of his term of office on 12 November 2020 for six years. As the resignation of Mr. Yu would result in the number of Independent Directors of the Company falling below the statutory minimum requirement, pursuant to the relevant requirements of the Guiding Opinions on the Establishment of Independent Director System in Listed Companies (《關於在上市公司建立獨立董事制度的指導意見》) and Working Guidelines of Record Keeping and Training of Independent Directors of Listed Companies promulgated by the Shanghai Stock Exchange (《上海證券交易所上市公司獨立董事備案及培訓工作指引》) issued by the CSRC, Mr. Yu would continue to perform his duties as an Independent Director and relevant duties in accordance with the laws and regulations and the Articles of Association. On 26 January 2022, a new Independent Director was elected at the 2022 first extraordinary general meeting of the Company, and Mr. Yu retired from the position of Independent Director and relevant positions of the Board (please refer to the relevant announcement published by the Company on 26 January 2022 for details).

(II)	Share incentives Period	granted to Directors,	Supervisors a	nd senior	management	during the	Reporting
	Applicable	✓ Not Applicable					

- (III) Securities interests owned by Directors, Supervisors and senior management
 - 1. Directors', Supervisors' and chief executive's interests and short positions in the Shares, underlying Shares and debentures of the Company and its associated corporations

As at 30 June 2022, as far as the Company is aware, interests or short positions of the Directors, Supervisors and the chief executive of the Company or their associates 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 were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or otherwise notified to the Company and the Hong Kong Stock Exchange by the Directors and Supervisors pursuant to the Model Code or the rights granted for the purchase of shares or debentures of the Company or any of its associated corporations are as follows:

Unit: share

Name	Position	Class of Shares	Long/ short position	Capacity	Number of Shares	Percentage of the relevant class of Shares in issue (%)	Percentage of the total number of Shares in issue (%)
Director							
Zhang Mengxing	Executive Director and President	A Shares	Long position	Beneficial owner	60,032	0	0
Supervisor							
Yin Sisong	Chairman of the Supervisory Committee	A Shares	Long position	Beneficial owner	28,100	0	0

Save as disclosed above, as at 30 June 2022, as far as the Company is aware, interests or short positions of the Directors, Supervisors and the chief executive of the Company or their associates 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 were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or otherwise notified to the Company and the Hong Kong Stock Exchange by the Directors and Supervisors pursuant to the Model Code.

2. Other senior management's interests and short positions in the Shares, underlying Shares and debentures of the Company and its associated corporations

As at 30 June 2022, as far as the Company is aware, interests of other senior management of the Company in the Shares of the Company are as follows:

Unit: share

Name	Position	Class of Shares	Long/short position	Capacity	Number of Shares	Percentage of the relevant class of Shares in issue (%)	Percentage of the total number of Shares in issue (%)
Zou Hongying	Vice President and Chief	A Shares	Long position	Beneficial owner	40,000	0	0
Qu Yang	Accountant Vice President	H Shares	Long position	Beneficial owner	70,000	0	0

3. Interests and Short Positions of Substantial Shareholders and Other Persons in the Shares and Underlying Shares of the Company

As at 30 June 2022, the Company was informed that the following persons had interests or short positions in the Shares or underlying Shares of the Company as recorded in the register required to be kept under Section 336 of the SFO:

Holders of A Shares

Unit: share

Name of substantial Shareholder	Capacity	Number of A Shares	Nature of interest	Approximate percentage of the total issued A Shares	Approximate percentage of the total issued Shares
China Minmetals Corporation China Metallurgical Group	Interest of a controlled corporation	10,190,955,300	Long position	57.08	49.18
Corporation China National Petroleum	Beneficial owner	10,190,955,300	Long position	57.08	49.18
Corporation	Beneficial owner	1,227,760,000	Long position	6.88	5.92

Holders of H Shares

Unit: share

Name of substantial Shareholder	Capacity	Number of H Shares	Nature of interest	Approximate percentage of the total issued H Shares (%)	Approximate percentage of the total issued Shares
Citigroup Inc.	Interest of a controlled corporation	142,470,812	Long position	4.96	0.69

Save as disclosed above, as far as the Directors, Supervisors and chief executives of the Company are aware, as at 30 June 2022, in accordance with the register required to be kept under Section 336 of the SFO, no other person or corporation has an interest or short position in the Company's share capital that would require disclosure to the Company under Divisions 2 and 3 of Part XV of the SFO.

IV. CHANGES IN CONTROLLING SHAREHOLDERS OR DE FACTO CONTROLLERS

Applicable • Not Applicable

V. EMPLOYEES AND REMUNERATION POLICY

(I) Employees

Number of existing staff of parent company	287
Number of existing staff of principal subsidiaries	97,177
Total number of existing staff	97,464
Number of resigned or retired staff to whom the parent company and	
principal subsidiaries are liable	122,007

Composition of Professionals

Categories of Professional Composition	Number of Professionals		
Engineering contracting	87,775		
Property development and others	2,930		
Equipment manufacture	5,751		
Resources development	1,008		
Total	97,464		

Level of Education

Number		
(person)		
13,309		
52,785		
21,166		
10,204		
97,464		

(II) Remuneration policies

The Company implements a remuneration system on the basis of market-orientation and performance appraisal. In accordance with applicable regulations, the Company established the basic pension contribution plan, basic medical insurance, unemployment insurance, maternity insurance, workers' injury compensation insurance and housing fund for employees. In accordance with applicable laws and regulations, the amount of contribution to the aforesaid social securities and housing fund are strictly based on state, provincial and municipal requirements. As approved by higher authorities, the Company also set up its enterprise annuity for employees according to applicable regulations.

Corporate debentures

(I)

CORPORATE DEBENTURES, CORPORATE BONDS AND NON-FINANCIAL L. **CORPORATE DEBT FINANCING INSTRUMENTS**

	[Ap	oplicable [✓ Not	applicab	ole						
(II	I) (Corpo	rate bonds	3								
	1	1.	Basic Info	ormatio	n on Cor	porate Bo	nds					Unit: RMB
Name of bonds	Short name	Bond code	Issue date	Value date	Expiry date	Number of outstanding bonds	Interest rate	Method to pay principal and interests	Stock exchange	Investor suitability arrangements (if any)		Is there any risk of termination of listing and trading
2017 Corporate Bonds (First Tranche) unde the Public Issuance		1 144361	24 October 2017 to 25 October 2017	25 October 2017 7	25 October 2022	570,000,000	4.99	This tranche of bonds shall bear interest on a yearly basis at a single rate rather than compound rate and interest shall be paid each year. Upon maturity, the principal shall be repaid on a one off basis and the interest for the last tranche shall also be paid at the same time	Shanghai Stock Exchange	-	Bidding transaction	No
2018 Corporate Bonds (First Tranche) unde the Public Issuance		2 143635	7 May 2018 to 8 May 2018	8 May 2018	8 May 2023	220,000,000	4.98	This tranche of bonds shall bear interest on a yearly basis at a single rate rather than compound rate and interest shall be paid each year. Upon maturity, the principal shall be repaid on a one off basis and the interest for the last tranche shall also be paid at the same time	Shanghai Stock Exchange	-	Bidding transaction	No
			The Comp	nany's re	esponse i	measures t	o the r	risk of termination of i	listing and	d trading	of the bo	onds
			Applic	cable	v	Not Applica	able					
			Overdue k	oonds								
			Applic	cable	v	Not Applica	able					
			Explanation	ons on o	verdue a	lebts						
			Applic	cable	/	Not Applica	able					

Whether

2. Trigger and Implementation of Option Clauses of Issuer or Investor and Investor Protection Clauses

As of the date of approval of the interim report, there were no option clauses for issuer or investor in the corporate bonds issued by the Company; no investor protection clauses were triggered by the corporate bonds issued by the Company.

3. Adjustment of Credit Rating Results

Applicable Not applicable

4. Implementation, Change and Impact of Guarantee, Debt Repayment Plan and Other Debt Repayment Guarantee Measures During the Reporting Period

Status	Implementation	Whether there is a change	Situation after the change	Reasons for the change	the change has been approved by the decision- making authority	Effect of the change on the interests of bond investors
As of the date of approval of the interim report, no credit enhancement mechanism has been set in the corporate bonds issued by the Company, and the debt repayment plan and other debt repayment guarantee measures have not changed	relevant undertakings		-	-	No	-

5. Other Information on Corporate Bonds

2017 Corporate Bonds (First Tranche) under the Public Issuance and 2018 Corporate Bonds (First Tranche) under the Public Issuance are all targeted at qualified investors through public issuance.

(III) Non-financial corporate debt financing instruments in interbank bond market

Basic Information of Non-Financial Corporate Debt Financing Instruments

Unit: RMB

Name of bonds	Short	Bond code	Issue date	Value date	Expiry date	Outstanding bonds	Interest Rate (%)	Method to pay principal and interests	Stock exchange	Investor suitability arrangements (if any)	Trading mechanism	Is there any risk of termination of listing and trading
2020 First Tranche of Medium- term Notes of Metallurgical Corporation of China Ltd.*	20 MCC MTN001	102001274	22 June 2020 to 23 June 2020	24 June 2020	Exercise date of options redeemed by the issuer, with the first exercise date of 24 June 2023		3.90	Interests payable per annum, and principal and interest payable upon maturity	National Interbank Bond Market	-	Bidding transaction	No
2020 Second Tranche of Medium- term Notes of Metallurgical Corporation of China Ltd.*	20 MCC MTN002	102001293	24 June 2020, 28 June 2020 to 29 June 2020		Exercise date of options redeemed by the issuer, with the first exercise date or 29 June 2023		3.89	Interests payable per annum, and principal and interest payable upon maturity	National Interbank Bond Market	-	Bidding transaction	No
2021 First Tranche of Medium- term Notes of Metallurgical Corporation of China Ltd.*	21 MCC MTN001	102101395	26 July 2021 to 27 July 2021	28 July 2021	Exercise date of options redeemed by the issuer, with the first exercise date on 28 July 2024	2,000,000,000	3.55	Interests payable per annum, and principal and interest payable upon maturity	National Interbank Bond Market	-	Bidding transaction	No
2021 Second Tranche of Medium- term Notes of Metallurgical Corporation of China Ltd.*	21MCC MTN002	102101593	17 August 2021 to 18 August 2021	-	Exercise date of options redeemed by the issuer, with the first exercise date or 19 August 2024		3.47	Interests payable per annum, and principal and interest payable upon maturity	National Interbank Bond Market	-	Bidding transaction	No
2021 Third Tranche of Medium- term Notes of Metallurgical Corporation of China Ltd.*	21MCC MTN003	102101685	24 August 2021 to 25 August 2021	•	Exercise date of options redeemed by the issuer, with the first exercise date of 26 August 2024	•	3.50	Interests payable per annum, and principal and interest payable upon maturity	National Interbank Bond Market	-	Bidding transaction	No
2021 Fourth Tranch of Medium- term Notes of Metallurgical Corporation of China Ltd.*	e21MCC MTN004	102103353	28 December 2021 to 29 December 2021	30 December 2021	Exercise date of options redeemed by the issuer, with the first exercise date of 30 December 2024		3.30	Interests payable per annum, and principal and interest payable upon maturity	National Interbank Bond Market	-	Bidding transaction	No

Repayment Guarantee Status As at the date of approval of	Implementation	Whether there is a change	Situation after the change	Reasons for the change	Whether the change has been approved by the decision- making authority	Effect of change on the interests of bond investors
Repayment Guarantee	measures During the H	eporting	Period		Whathau	
Implementation, Cha	nge and Impact of Gu			payment	Plan and (Other L
Applicable v	✓ Not Applicable					
Adjustment Of Credit	Rating Results					
payment option have i	val of the interim report, not been created on the ued by the Company had	e mediun	n-term not	es issued	by the Co	mpany;
Trigger And Implement Clauses	ntation of Option Claus	es of Is	suer or In	vestor an	d Investor	Protec
Applicable	Not Applicable					
Explanations on overdu	e debts					
Applicable	Not Applicable					
Overdue bonds						
	1 Not Applicable					
Applicable	Not Applicable					

5. Other Explanations on Non-Financial Corporate Debt Financing Instruments

2020 First Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.*, 2020 Second Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.*, 2021 First Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.*, 2021 Second Tranche of Mediumterm Notes of Metallurgical Corporation of China Ltd.*, 2021 Third Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.* and 2021 Fourth Tranche of Medium-term Notes of Metallurgical Corporation of China Ltd.* are all targeted at institutional investors in national interbank bond market through public issuance.

The Company's loss within t exceeded 10% of the net assets			nts during the Reporting Period
Applicable Not Ap	plicable		
Major accounting data and fina	incial indicators		
	As at the		Increase/decrease
	end of the	As at the	at the end of the Reporting
	Reporting	end of the	Period as compared to the
Major Indicators	Period	previous year	end of the previous year (%)
Current Ratio	1.14	1.15	Decreased by 0.01 percentage point
Quick Ratio	0.69	0.72	Decreased by 0.03 percentage point
Asset-liability Ratio (%)	74.46	72.14	Increased by 2.32 percentage points
		Corresponding	Increase/decrease at the Reporting
	Reporting Period	period of the	Period as compared to the corresponding
	(January – June)	previous year	period of the previous year (%)
EBITDA/Interest Protection Multiples	5.89	4.78	Increased by 1.11 percentage points
Loan Repayment Ratio (%)	100	100	_
Interest Payment Ratio (%)	100	100	=

Asset-liability ratio = Total liabilities/total assets × 100%

П. **CONVERTIBLE CORPORATE BONDS**

Applicable ✓ Not Applicable

For the six months ended 30 June 2022

I. REPORT ON REVIEW OF INTERIM FINANCIAL STATEMENTS

Ernst & Young Hua Ming [2022] Zhuan Zi No. 60923904_A01

TO THE BOARD OF DIRECTORS OF METALLURGICAL CORPORATION OF CHINA LTD.:

We have reviewed the accompanying interim financial statements of Metallurgical Corporation of China Ltd. (the "Company"), which comprised the consolidated and Company's balance sheets as at 30 June 2022, the consolidated and Company's income statements, the consolidated and Company's statements of changes in shareholders' equity and the consolidated and Company's cash flow statements for the six months then ended, and notes to the financial statements (hereinafter collectively referred to as the "Interim Financial Statements"). The preparation of the Interim Financial Statements is the responsibility of the Company's management. Our responsibility is to deliver a report on review of these Interim Financial Statements based on our review.

We conducted our review in accordance with China Certified Public Accountant Review Standard No. 2101 - Review of Financial Statements. This Standard requires us to plan and perform the review to obtain limited assurance about whether the Interim Financial Statements are free from material misstatements. A review is limited primarily to procedures as enquiry of entity's personnel and analytical review procedures applied to the financial information and thus provides less assurance than an audit. We have not performed an audit, and therefore we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the Interim Financial Statements of Metallurgical Corporation of China Ltd. are not prepared in accordance with the requirements of Accounting Standards for Business Enterprises , and cannot present fairly, in all material respects, the consolidated and Company financial positions as at 30 June 2022 and the consolidated and Company's operating performance and cash flows for the six months then ended.

Chinese Certified Public Accountant:
Zhang Ningning

Ernst & Young Hua Ming LLP Beijing, China

Chinese Certified Public Accountant:
Zhao Ning

30 August 2022

This auditor's report of the financial statements and the accompanying financial statements are English translations of the auditor's report and the financial statements prepared under accounting principles and practices generally accepted in the People's Republic of China. These financial statements are not intended to present the balance sheet and results of operations and cash flows in accordance with accounting principles and practices generally accepted in other countries and jurisdictions. In case the English version does not conform to the Chinese version, the Chinese version prevails.

For the six months ended 30 June 2022

II. **FINANCIAL STATEMENTS**

CONSOLIDATED BALANCE SHEET 30 June 2022

All amounts in RMB'000

Items	Notes	30 June 2022	31 December 2021
Current Assets:			
Cash and bank balances	VII 1	63,153,944	41,824,464
Financial assets held for trading	VII 2	139,942	1,107
Derivative financial assets	VII 3	57,594	114,790
Bills receivable	VII 4	2,447,556	3,425,229
Accounts receivable	VII 5	94,556,643	83,881,695
Receivables at FVTOCI	VII 6	13,813,791	11,857,791
Prepayments	VII 7	41,662,507	46,111,033
Other receivables	VII 8	61,708,542	67,766,635
Inventories	VII 9	70,158,705	61,847,522
Contract assets	VII 10	117,841,333	91,185,630
Non-current assets due within one year	VII 11	2,669,572	2,241,185
Other current assets	VII 12	7,321,382	2,058,563
Total Current Assets		475,531,511	412,315,644
Non-current Assets:			
Long-term receivables	VII 13	32,009,489	30,386,163
Long-term equity investments	VII 16	29,853,017	30,328,766
Investments in other equity instruments	VII 15	881,681	786,855
Other non-current financial assets	VII 16	4,719,881	4,711,041
Investment properties	VII 17	7,698,630	7,327,797
Fixed assets	VII 17	24,855,863	25,117,809
Construction in progress	VII 19	3,484,534	4,379,190
Right-of-use assets	VII 19	727,858	591,878
Intangible assets	VII 20	22,333,888	20,878,147
Goodwill	VII 21	55,896	55,896
	==		· · · · · · · · · · · · · · · · · · ·
Long-term prepayments	VII 23	305,374	293,791
Deferred tax assets	VII 24	6,434,116	6,056,805
Other non-current assets	VII 25	1,397,600	240,365
Total Non-current Assets		134,757,827	131,154,503
TOTAL ASSETS		610,289,338	543,470,147

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) II.

CONSOLIDATED BALANCE SHEET (CONTINUED) 30 June 2022

All amounts in RMB'000

Items	Notes	30 June 2022	31 December 2021
Current Liabilities:			
Short-term borrowings	VII 26	46,429,353	21,395,848
Derivative financial liabilities	VII 27	78,105	4,413
Bills payable	VII 28	39,873,937	37,616,532
Accounts payable	VII 29	190,266,025	155,265,041
Receipts in advance	VII 30	157,682	135,118
Contract liabilities	VII 31	72,603,641	87,092,166
Employee benefits payable	VII 32	2,343,091	2,055,773
Taxes payable	VII 33	4,610,397	5,097,306
Other payables	VII 34	33,015,741	27,582,380
Non-current liabilities due within one year	VII 35	12,017,213	13,218,552
Other current liabilities	VII 36	14,812,183	9,426,537
Total Current Liabilities		416,207,368	358,889,666
Non-current Liabilities:			
Long-term borrowings	VII 37	29,179,206	25,332,533
Bonds payable	VII 38	1,300,000	220,000
Lease liabilities	VII 39	485,493	369,145
Long-term payables	VII 40	1,010,609	1,050,081
Long-term employee benefits payable	VII 41	3,906,073	3,887,979
Provisions	VII 42	809,797	811,797
Deferred income	VII 43	1,428,548	1,465,004
Deferred tax liabilities	VII 24	91,040	56,183
Total Non-current Liabilities		38,210,766	33,192,722
TOTAL LIABILITIES		454,418,134	392,082,388

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

CONSOLIDATED BALANCE SHEET (CONTINUED) 30 June 2022

All amounts in RMB'000

Notes	30 June 2022	31 December 2021
VII 44	20,723,619	20,723,619
VII 45	23,700,000	23,700,000
	23,700,000	23,700,000
VII 46	22,614,654	22,612,919
VII 47	167,718	(201,624)
VII 48	47,772	12,550
VII 49	2,692,992	2,692,992
VII 50	41,223,800	37,954,521
	111,170,555	107,494,977
	44,700,649	43,892,782
	155,871,204	151,387,759
TY	610.289.338	543,470,147
	VII 44 VII 45 VII 46 VII 47 VII 48 VII 49	VII 44 VII 45 23,700,000 23,700,000 VII 46 VII 47 VII 48 VII 49 VII 50 2,692,992 VII 50 111,170,555 44,700,649

This financial statement is signed by the following person:

Chairman:

General Accountant:

Financial Controller:

Chen Jianguang

Zou Hongying

Fan Wanzhu

The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

THE COMPANY'S BALANCE SHEET 30 June 2022

All amounts in RMB'000

Items	Notes	30 June 2022	31 December 2021
Current Assets:			
Cash and bank balances		8,699,727	5,017,042
Derivative financial assets		49,346	114,325
Accounts receivable	XVI 1	297,240	173,325
Prepayments		251,101	717,175
Other receivables	XVI 2	68,144,664	60,379,167
Inventories		978	1,107
Contract assets		1,133,882	1,482,927
Non-current assets due within one year		2,037	2,037
Other current assets		<u> </u>	1,481
Total Current Assets	_	78,578,975	67,888,586
Non-current Assets:			
Long-term receivables	XVI 3	263,551	632,590
Long-term equity investments	XVI 4	97,749,754	97,647,601
Investments in other equity instrument		560	553
Fixed assets		14,482	11,947
Right-of-use assets		50,891	691
Intangible assets		3,057	3,758
Total Non-current Assets		98,082,295	98,297,140
TOTAL ASSETS		176,661,270	166,185,726

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) II.

THE COMPANY'S BALANCE SHEET (CONTINUED) 30 June 2022

All amounts in RMB'000

Items	Notes	30 June 2022	31 December 2021
Current Liabilities:			
Short-term borrowings	XVI 5	18,445,728	16,032,447
Derivative financial liabilities		64,172	-
Accounts payable		1,555,984	1,734,094
Contract liabilities		762,587	973,037
Employee benefits payable		_	16,219
Taxes payable		38,962	54,690
Other payables	XVI 6	42,807,076	32,902,591
Non-current liabilities due within one year	XVI 7	1,078,057	2,830,724
Total Current Liabilities		64,752,566	54,543,802
Non-current Liabilities:			
Long-term borrowings	XVI 8	2,000,000	-
Bonds payable		_	220,000
Lease liabilities		29,901	138
Long-term payables		20,456,960	20,456,990
Long-term employee benefits payable		62,437	62,011
Deferred income		3,598	3,598
Total Non-current Liabilities		22,552,896	20,742,737
TOTAL LIABILITIES		87,305,462	75,286,539

For the six months ended 30 June 2022

II. FINANCIAL STATEMENTS (CONTINUED)

THE COMPANY'S BALANCE SHEET (CONTINUED) 30 June 2022

All amounts in RMB'000

ltems Notes	30 June 2022	31 December 2021
Shareholders' Equity:		
Share capital	20,723,619	20,723,619
Other equity instruments	23,700,000	23,700,000
Including: Perpetual bonds	23,700,000	23,700,000
Capital reserve	37,925,332	37,925,332
Other comprehensive income	(7,761)	(1,554)
Special reserve	12,550	12,550
Surplus reserve	2,692,992	2,692,992
Retained earnings	4,309,076	5,846,248
TOTAL SHAREHOLDERS' EQUITY	89,355,808	90,899,187
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	176,661,270	166,185,726

This financial statement is signed by the following person:

Chairman:

General Accountant:

Financial Controller: Fan Wanzhu

Chen Jianguang

Zou Hongying

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The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

CONSOLIDATED INCOME STATEMENT For the six months period ended 30 June 2022

All amounts in RMB'000

Items	3	Notes	Amount for the current period	Amount for the prior period
I.	Total operating revenue		289,201,742	251,003,187
	Including: Operating revenue	VII 51	289,201,742	251,003,187
	Less: Operating costs	VII 51	262,190,220	226,557,020
	Taxes and levies	VII 52	910,603	1,127,474
	Selling expenses	VII 53	1,227,620	1,156,084
	Administrative expenses	VII 54	4,939,714	5,041,482
	Research and development expenses	VII 55	7,638,329	6,008,195
	Financial expenses	VII 56	109,355	1,060,279
	Including: Interest expenses		905,550	1,457,533
	Interest income		1,109,460	954,082
	Add: Other income	VII 57	184,731	157,918
	Investment losses	VII 58	(813,722)	(690,195)
	Including: (Losses)/gains from investments in associates and joint		, ,	,
	ventures Losses from derecognition of financial assets at amortized		(91,968)	123,138
	cost		(526 047)	(520,009)
	(Losses)/gains from changes in fair values	VII 59	(536,947) (130,695)	(529,008) 51,479
	Credit impairment losses	VII 59 VII 60	(1,603,202)	(1,028,111)
	Impairment losses	VII 60	(1,315,925)	(1,082,271)
	Gains on disposal of assets	VII 62	103,781	427,710
	· ·		,	
II.	Operating profit		8,610,869	7,889,183
	Add: Non-operating income	VII 63	116,214	170,451
	Less: Non-operating expenses	VII 64	78,652	28,802
III.	Total profit		8,648,431	8,030,832
	Less: Income tax expenses	VII 66	1,293,702	1,439,925
			-,,,,	.,,.
IV.	Net profit		7,354,729	6,590,907
	(I) Net profit classified by operating continuity			
	Net profit from continuing operations (II) Net profit classified by ownership		7,354,729	6,590,907
	Net profit attributable to shareholders of the			
	Company		5,871,055	4,937,420
	Profit or loss attributable to non-controlling		4 400 074	1 050 407
	interests		1,483,674	1,653,487

For the six months ended 30 June 2022

II. FINANCIAL STATEMENTS (CONTINUED)

CONSOLIDATED INCOME STATEMENT (CONTINUED) For the six months period ended 30 June 2022

All amounts in RMB'000

Items	:	Notes	Amount for the current period	Amount for the prior period
٧.	Other comprehensive income, net of income			
	tax	VII 47	413,117	8,578
	Other comprehensive income attributable to shareholders of the Company, net of income			
	tax		369,667	81,130
	Items that will not be reclassified to profit or loss		(70,183)	(49,801)
	 Re-measurement of defined benefit obligations Other comprehensive income that can 		(75,610)	(138,930)
	not be reclassified to profit or loss under the equity method 3. Changes in fair values of investments		(26)	-
	in other equity instruments		5,453	89,129
	(II) Items that may be reclassified to profit or loss1. Other comprehensive income that can		439,850	130,931
	be reclassified to profit or loss under the equity method 2. Changes of fair value of receivables at		(26,339)	(18,166)
	FVTOCI 3. Exchange differences on translating financial statements in foreign		5,340	(42,637)
	currencies Other comprehensive income attributable to		460,849	191,734
	non-controlling interests, net of income tax		43,450	(72,552)
VI.	Total comprehensive income Total comprehensive income attributable to		7,767,846	6,599,485
	shareholders of the Company Total comprehensive income attributable to non-		6,240,722	5,018,550
	controlling interests		1,527,124	1,580,935
VII.	Earnings per share	VII 67		
	(I) Basic earnings per share (RMB/share)		0.24	0.21
	(II) Diluted earnings per share (RMB/share)		0.24	0.21

This financial statement is signed by the following person:

Chairman: General Accountant:
Chen Jianguang Zou Hongying

The accompanying notes form an integral part of these financial statements.

Financial Controller:
Fan Wanzhu

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

THE COMPANY'S INCOME STATEMENT For the six months period ended 30 June 2022

All amounts in RMB'000

Items	Notes	Amount for the current period	Amount for the prior period
I. Onesation research	VVII O	000 007	0.007.004
I. Operating revenue	XVI 9 XVI 9	860,297	2,267,304
Less: Operating costs Taxes and levies	XVI 9	810,512	2,234,761
		855	534
Administrative expenses		84,436	78,828
Financial expenses		242,366	4,223
Including: Interest expenses		1,197,843	940,824
Interest income		1,203,052	918,061
Add: Other income		1,886	580
Investment income	XVI 10	1,554,877	2,170,884
Including: Gains from investments in			
associates and joint ventures		11,874	6,775
(Losses)/gains from changes in fair values		(129,151)	45,327
Credit impairment (losses)/reversal	XVI 11	(84,202)	29,252
Reversal of impairment losses of assets		3,137	
II. Operating profit		1,068,675	2,195,001
Add: Non-operating income		90	2
Less: Non-operating expenses		16	60
III. Total profit		1,068,749	2,194,943
Less: Income tax expenses		3,820	
IV. Net profit		1,064,929	2,194,943
Net profit from continuing operations		1,064,929	2,194,943
V. Other comprehensive income, net of income tax		(6,207)	(3,769)
(I) Items that will not be reclassified to profit or loss	3	(1,931)	(3,657)
 Re-measurement of defined benefit obligations 		(1,938)	(3,737)
2. Changes in fair values of investments in			
other equity instruments		7	80
(II) Items that may be reclassified to profit or loss		(4,276)	(112)
Other comprehensive income that can be reclassified to profit or loss under the			
equity method		(4,276)	(112)
VI. Total comprehensive income		1,058,722	2,191,174

This financial statement is signed by the following person:

Chairman:

General Accountant:

Financial Controller:

Chen Jianguang

Zou Hongying

Fan Wanzhu

The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

CONSOLIDATED CASH FLOW STATEMENT For the six months period ended 30 June 2022

All amounts in RMB'000

Items	Notes	Amount for the current period	Amount for the prior period
I. Cash Flows from Operating Activities			
Cash receipts from the sale of goods and the			
rendering of services		235,101,049	234,193,038
Receipts of tax refunds		784,538	257,960
Other cash receipts relating to operating activities	VII 68(1)	2,433,370	3,070,948
Sub-total of cash inflows from operating activities		238,318,957	237,521,946
Cash payments for goods purchased and services			
received		209,893,935	212,999,599
Cash payments to and on behalf of employees		14,405,025	13,272,739
Payments of various types of taxes		5,765,743	6,897,838
Other cash payments relating to operating activities	VII 68(2)	8,086,546	12,917,219
Sub-total of cash outflows from operating activities		238,151,249	246,087,395
Net Cash Flows from Operating Activities	VII 69(1)	167,708	(8,565,449)
II. Cash Flows from Investing Activities			
Cash receipts from disposals and recovery of			
investments		122,220	1,634,206
Cash receipts from investment income		75,666	169,705
Net cash receipts from disposal of fixed assets,		·	
intangible assets and other long-term assets		296,046	361,501
Other cash receipts relating to investing activities	VII 68(3)	2,791,887	
Sub-total of cash inflows from investing activities		3,285,819	2,165,412
, and the second		, ,	- A
Cash payments to acquire or construct fixed assets,			
intangible assets and other long-term assets		1,327,518	1,552,182
Cash payments to acquire investments		2,773,150	2,036,506
Other cash payments relating to investing activities	VII 68(4)	780,032	5,616,687
Sub-total of cash outflows from investing activities		4,880,700	9,205,375
Net Cook Flour from Investing Astinitis		(4 504 604)	(7,000,000)
Net Cash Flows from Investing Activities		(1,594,881)	(7,039,963)

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

CONSOLIDATED CASH FLOW STATEMENT (CONTINUED) For the six months period ended 30 June 2022

All amounts in RMB'000

Items	Notes	Amount for the current period	Amount for the prior period	
III.Cash Flows from Financing Activities:				
Cash receipts from capital contributions Including: Cash receipts from capital contributions by		35,552	3,339,300	
non-controlling interests of subsidiaries Cash receipts from issue of perpetual		35,552	119,586	
bonds		-	3,219,714	
Cash receipts from borrowings		69,146,052	63,020,211	
Other cash receipts relating to financing activities	VII 68(5)	178,000	440,137	
Sub-total of cash inflows from financing activities		69,359,604	66,799,648	
Cash repayments of borrowings		41,726,934	45,506,351	
Cash payments for distribution of dividends or profits		41,720,934	45,500,551	
or settlement of interest expenses Including: Payments for distribution of dividends or		3,085,923	3,746,510	
profits to non-controlling interests of				
subsidiaries		829,001	844,161	
Other cash payments relating to financing activities	VII 68(6)	2,313,324	3,421,341	
Sub-total of cash outflows from financing activities		47,126,181	52,674,202	
Net Cash Flows from Financing Activities		22,233,423	14,125,446	
IV Effect of Fernian Evolungo Boto Changes on				
IV. Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents		267,296	162,608	
V. Net Increase/(Decrease) in Cash and				
Cash Equivalents		21,073,546	(1,317,358)	
Add: Opening balance of cash and cash equivalents		31,216,824	42,165,302	
VI. Closing Balance of Cash and Cash Equivalents	VII 69(1)	52,290,370	40,847,944	

This financial statement is signed by the following person:

Chairman:

General Accountant:

Financial Controller:

Chen Jianguang

Zou Hongying

Fan Wanzhu

The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

THE COMPANY'S CASH FLOW STATEMENT For the six months period ended 30 June 2022

All amounts in RMB'000

Items	Notes	Amount for the current period	Amount for the prior period
I. Cash Flows from Operating Activities			
Cash receipts from the sale of goods and the			
rendering of services		846,820	821,859
Receipts of tax refunds		1,886	
Other cash receipts relating to operating activities		533,294	274,997
Sub-total of cash inflows from operating activities		1,382,000	1,096,856
Cash payments for goods purchased and services			
received		521,067	797,365
Cash payments to and on behalf of employees		70,742	62,676
Payments of various types of taxes		11,878	5,131
Other cash payments relating to operating activities		298,288	603,159
Sub-total of cash outflows from operating activities		901,975	1,468,331
Net Cash Flows from Operating Activities	XVI 12(1)	480,025	(371,475)
II. Cash Flows from Investing Activities			
Cash receipts from investment income		1,230,375	2,115,508
Other cash receipts relating to investing activities		4,298,965	259,795
Sub-total of cash inflows from investing activities		5,529,340	2,375,303
Cash payments to acquire or construct fixed assets,			
intangible assets and other long-term assets		3,903	497
Cash payments to acquire investments		100,000	2,188,324
Other cash payments relating to investing activities		9,390,290	11,925,400
Sub-total of cash outflows from investing activities		9,494,193	14,114,221
Net Cash Flows from Investing Activities		(3,964,853)	(11,738,918)

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) II.

THE COMPANY'S CASH FLOW STATEMENT (CONTINUED) For the six months period ended 30 June 2022

All amounts in RMB'000

Items Notes	Amount for the current period	Amount for the prior period
III. Cash Flows from Financing Activities		
Cash receipts from borrowings	27,696,779	40,667,464
Other cash receipts relating to financing activities	140,124,443	3,485,191
Sub-total of cash inflows from financing activities	167,821,222	44,152,655
Cash repayments of borrowings Cash payments for distribution of dividends or profits	25,465,806	32,568,732
or settlement of interest expenses	909,222	1,092,996
Other cash payments relating to financing activities	134,296,357	5,713,000
Sub-total of cash outflows from financing activities	160,671,385	39,374,728
Net Cash Flows from Financing Activities	7,149,837	4,777,927
IV. Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents	17,262	20,269
V. Net Increase/(Decrease) in Cash and Cash		
Equivalents Add: Opening balance of cash and cash equivalents	3,682,271 5,006,514	(7,312,197) 9,606,574
VI. Closing Balance of Cash and Cash Equivalents XVI 12(1)	8,688,785	2,294,377

This financial statement is signed by the following person:

Chairman: Chen Jianguang General Accountant: Zou Hongying

Financial Controller:

Fan Wanzhu

The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

All amounts in RMB'000

				For the six mon	ths period ended	30 June 2022			
			Attributable	to shareholders of t	he Company				
ltems	Share capital	Other equity instruments (Perpetual bonds)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained profits	Non- controlling interests	Total shareholders' equity
I Closing balance of the preceding p	eriod 20,723,619	23,700,000	22,612,919	(201,624)	12,550	2,692,992	37,954,521	43,892,782	151,387,759
Add: Changes in accounting policies			,,	-	-	_	-	-	-
Corrections of prior period error	s -		_	_	_		_	_	_
Others	-	-	-	-	-	-	-	-	-
II Opening balance of the current per	od 20,723,619	23,700,000	22,612,919	(201,624)	12,550	2,692,992	37,954,521	43,892,782	151,387,759
III Changes for the period	_	_	1,735	369,342	35,222	_	3,269,279	807,867	4,483,445
(I) Total comprehensive income	_	_	_	369,667	· -	_	5,871,055	1,527,124	7,767,846
(II) Shareholders' contributions ar	d reduction in capital -	_	1,735		_	_		35,552	37,287
Capital contribution from		_	_	-	_	-	_	34,222	34,222
2. Capital contribution and r	eduction of other equity								
instruments' holders	-	-	-	-	-	-	-	-	
3. Others	-	-	1,735	-	-	-	-	1,330	3,06
(III) Profit distribution	-	-	-	-	-	-	(2,602,101)	(755,262)	(3,357,36
 Transfer to surplus reserv 	-	-	-	-	-	-	-	-	
Distributions to sharehold	ers -	-	-	-	-	-	(1,616,442)	(577,813)	(2,194,25
Distributions of perpetual		-	-	-	-	-	(985,659)	(177,449)	(1,163,10
(IV) Transfers within shareholders'	equity -	-	-	(325)	-	-	325	-	
 Capitalization of capital re 		-	-	-	-	-	-	-	
Capitalization of surplus r		-	-	-	-	-	-	-	
Loss offset by surplus res		-	-	-	-	-	-	-	
4. Changes in amount of a d									
carried forward to retai		-	_	-	-	-	-	_	
Other comprehensive incomprehensive incom				(005)					
retained earnings (Note	VII 15) -	-	-	(325)	-	-	325	_	
6. Others	-	-	_	-	-	-	-	-	05.07
(V) Special reserve	in the ourrent period	_	-	-	35,222	7		453	35,67
Transfer to special reserv Amount utilized in the cur		_	_		3,858,759 (3,823,537)	_	-	338,474 (338,021)	4,197,23
(VI) Others	ent period -	-	-	-	(3,023,331)	-		(330,021)	(4,161,55
Closing balance of the current peri	od 20,723,619	23,700,000	22,614,654	167,718	47,772	2,692,992	41,223,800	44,700,649	155,871,204

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) П.

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (CONTINUED)

All amounts in RMB'000

	_				For the six mor	ths period ended	30 June 2021			
				Attributable	to shareholders of t	he Company				
tems		Share capital	Other equity instruments (Perpetual bonds)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained profits	Non- controlling interests	Total shareholders' equity
		oupital	201100)	1000110		1000110	1000110	promo	111010010	oquity
	closing balance of the preceding period dd: Changes in accounting policies Corrections of prior period errors	20,723,619 -	20,500,000	22,461,602	(284,396) - -	12,550 - -	2,016,768	32,461,495 - -	42,463,669 - -	140,355,307 - -
	Others	-	-	-	-	-	-	-	-	_
I C	pening balance of the current period	20,723,619	20,500,000	22,461,602	(284,396)	12,550	2,016,768	32,461,495	42,463,669	140,355,307
II C	changes for the period	_		35,530	82,237	_	_	3,193,141	684,223	3,995,131
(1		=	=	-	81,130	_	=	4,937,420	1,580,935	6,599,485
	Shareholders' contributions and reduction in capital Capital contribution and reduction from	-	-	35,530	-	-	-	=	(88,854)	(53,324
	shareholders, net 2. Capital contribution and reduction of other	=	=	=	=	=	=	=	(73,786)	(73,786
	equity instruments' holders, net	-	-	-	=	-	-	-	(9,722)	(9,722
	3. Others	=	=	35,530	=	-	=	=	(5,346)	30,184
(II) Profit distribution	-	_	_	-	-	_	(1,743,172)	(807,858)	(2,551,030
	Transfer to surplus reserve	=	=	=	=	=	=	=	=	
	2. Distributions to shareholders	=	=	-	=	=	=	(1,554,272)	(599,296)	(2,153,568
	3. Distributions of perpetual bond interest	=	=	-	=	=	=	(188,900)	(208,562)	(397,462
(1	V) Transfers within shareholders' equity	=	=	-	1,107	=	=	(1,107)	=	
	Capitalization of capital reserve	-	-	-	-	-	_	-	-	
	2. Capitalization of surplus reserve	-	-	-	-	-	-	-	-	
	3. Loss offset by surplus reserve	-	-	-	-	-	-	-	-	-
	4. Changes in amount of a defined benefit plan									
	carried forward to retained earnings 5. Other comprehensive income carried forward	-	-	-	-	-	-	-	-	-
	to retained earnings	=	=	-	1,107	=	=	(1,107)	=	
	6. Others	-	-	-	-		-	-	-	
()	V) Special reserve	-	-	-	=	-	-	-	-	
	Transfer to special reserve in the current period	-	-	-	-	3,457,237	-	-	299,534	3,756,77
	2. Amount utilized in the current period	-	-	-	-	(3,457,237)	-	-	(299,534)	(3,756,77
()	VI) Others	-	-	=	-	-	-	=	-	-
V C	losing balance of the current period	20,723,619	20,500,000	22,497,132	(202,159)	12,550	2,016,768	35,654,636	43,147,892	144,350,438

This financial statement is signed by the following person:

Chairman: Chen Jianguang General Accountant: Zou Hongying

Financial Controller: Fan Wanzhu

The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) II.

THE COMPANY'S STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

All amounts in RMB'000

	For the six months period ended 30 June 2022									
iems	Share capital	Other equity instruments (Perpetual bonds)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained profits	Total shareholders' equity		
Closing balance of the preceding										
period	20,723,619	23,700,000	37,925,332	(1,554)	12,550	2,692,992	5,846,248	90,899,187		
Add: Changes in accounting policies	_	_	-	_	_		_	· · · · -		
Corrections of prior period errors	-	-	-	-	-	_	_	-		
Others	_		-	-	-	-	_			
Opening balance of the current period	20,723,619	23,700,000	37,925,332	(1,554)	12,550	2,692,992	5,846,248	90,899,187		
I Changes for the period	_	_	_	(6,207)	_	_	(1,537,172)	(1,543,379		
(I) Total comprehensive income	_	_	_	(6,207)	_	_	1,064,929	1,058,722		
(II) Shareholders' contributions and				(0,201)			1,001,020	1,000,122		
reduction in capital	_	_	_	_	_	_	_	_		
Capital contributed by										
shareholders	_	_	_	_	_	_	_	_		
2. Capital contribution and										
reduction of other equity										
instruments' holders	_	_	-	-	-	_	-			
3. Others	-	-	-	-	-	-	-			
(III) Profit distribution	-	-	-	-	-	-	(2,602,101)	(2,602,101		
Transfer to surplus reserve	-	-	-	-	-	-	-			
Distributions to shareholders	-	-	-	-	-	-	(1,616,442)	(1,616,442		
3. Distributions of perpetual bond										
interest	-	-	-	-	-	-	(985,659)	(985,659		
(IV) Transfers within shareholders'										
equity	-	-	_	-	-	-	-	-		
Capitalization of capital reserve	-	-	_	-	-	-	-			
Capitalization of surplus reserve	_	-	_	-	-	_	_			
Loss offset by surplus reserve Changes in arrount of a defined.	_	-	_	-	-	_	_	•		
Changes in amount of a defined benefit plan carried forward										
to retained earnings										
5. Other comprehensive income	_	_	_	_	_	_	_	•		
carried forward to retained										
earnings	_	_	_	_	_	_	_			
6. Others	_	_	_	_	_	_	_			
(V) Special reserve	_	_	_	_	_	_	_			
Transfer to special reserve in										
the current period	_	_	_	_	_	_	_			
Amount utilized in the current										
period	_	_	_	_	_	_	_			
(VI) Others	-	_	-	-	-	-	-			
/ Closing balance of the current period	20,723,619	23,700,000	37,925,332	(7,761)	12,550	2,692,992	4,309,076	89,355,808		

For the six months ended 30 June 2022

FINANCIAL STATEMENTS (CONTINUED) II.

THE COMPANY'S STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (CONTINUED)

All amounts in RMB'000

		For the six months period ended 30 June 2021							
Items		Share capital	Other equity instruments (Perpetual bonds)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained profits	Total shareholders' equity
	osing balance of the preceding				(222)				
	period	20,723,619	20,500,000	37,925,332	(355)	12,550	2,016,768	2,090,245	83,268,159
AC	dd: Changes in accounting policies Corrections of prior period errors	-	-	-	=	-	-	-	-
	Others		-						
II Op	pening balance of the current period	20,723,619	20,500,000	37,925,332	(355)	12,550	2,016,768	2,090,245	83,268,159
III Ch	nanges for the period	-	=	=	(3,769)	-	=	451,771	448,002
(I) (II)		-	-	=	(3,769)	=	-	2,194,943	2,191,174
,	reduction in capital 1. Capital contributed by	-	-	-	-	-	-	-	-
	shareholders	=	-	-	-	-	-	=-	-
	2. Capital contribution and								
	reduction of other equity								
	instruments' holders 3. Others	-	-	-	=	-	-	-	-
(111	Others Profit distribution	_	_	_	_	_	_	(1,743,172)	(1,743,172)
(111	Transfer to surplus reserve	=	_	_	_	_	_	(1,140,112)	(1,140,112)
	2. Distributions to shareholders	-	-	-	-	-	-	(1,554,272)	(1,554,272)
	3. Distributions of perpetual bond								
(1)	interest	=	=	=	-	=	=	(188,900)	(188,900)
(IV	Transfers within shareholders' equity								
	Capitalization of capital reserve		_	_	_	_	_	_	_
	Capitalization of surplus reserve	_	-	-	_	_	_	_	_
	3. Loss offset by surplus reserve	=	-	-	-	-	-	-	-
	4. Changes in amount of a defined								
	benefit plan carried forward								
	to retained earnings 5. Other comprehensive income	=	-	-	=	-	-	-	-
	carried forward to retained								
	earnings	_	_	_	_	_	_	_	_
	6. Others	=	_	-	=	-	_	_	_
(V)		=	=	-	=	-	-	-	-
	1. Transfer to special reserve in								
	the current period	-	-	-	-	-	-	-	-
	Amount utilized in the current								
(\/I	period I) Others	400	_	_	=	_	_	_	_
	-								_
IV CI	osing balance of the current period	20,723,619	20,500,000	37,925,332	(4,124)	12,550	2,016,768	2,542,016	83,716,161

This financial statement is signed by the following person:

Chairman: Chen Jianguang General Accountant: Zou Hongying

Financial Controller: Fan Wanzhu

The accompanying notes form an integral part of these financial statements.

For the six months ended 30 June 2022

III. BASIC CORPORATE INFORMATION

1. Basic information of the Company

Metallurgical Corporation of China Ltd. (the "Company") was established as a joint stock limited liability company by China Metallurgical Group Corporation ("CMGC") and China Baowu Steel Group Corporation ("CBSGC", formerly named as Baosteel Group Corporation) as promoters on 1 December 2008 and was registered in Beijing in the People's Republic of China (the "PRC"), upon the approval by the State-owned Assets Supervision and Administration Commission of the State Council of the PRC (the "SASAC") of Guozi Reform [2008] 528 Approval for CMGC's Group Restructuring and Dual Listing in Domestic and Overseas Markets, issued on 10 June, 2008, CMGC is the parent company of the Company and the SASAC is the ultimate controlling party of the Company. Upon establishment of the Company, the registered capital of the Company was RMB 13 billion, representing 13 billion ordinary shares of RMB 1.0 each. On 14 September 2009, the Company issued 3,500 million A shares of the Company to domestic investors and these A shares of the Company were listed on the Shanghai Stock Exchange on 21 September 2009, and 2,610 million H shares of the Company were issued on 16 September 2009 and listed on the Main Board of The Stock Exchange of Hong Kong Ltd. (the "Hong Kong Stock Exchange") on 24 September 2009. During the course of the issue of A shares and H shares of the Company, CMGC and CBSGC transferred a total amount of 350 million shares of the Company to National Council for State Security Fund ("NSSF") of the PRC and converted 261 million domestic shares into H shares and transferred to NSSF, among which 261 million H shares were offered for sale upon issuance of H shares of the Company. Upon completion of the public offering of A shares and H shares above, the total registered capital of the Company increased to RMB 19.11 billion.

Pursuant to the special mandate granted by the shareholders at the 2016 First Extraordinary General Meeting, the 2016 First A Shareholders' Class Meeting and the 2016 First H Shareholders' Class Meeting, having received the *Approval in relation to the Non-public Issuance of Shares by Metallurgical Corporation of China Ltd.* (Zheng Jian Xu Ke [2016] No. 1794) from the China Securities Regulatory Commission (the "CSRC"), the Company performed the non-public issuance of 1,613,619,000 A Shares of the Company (the "Non-Public Issuance") to certain specific investors on 26 December 2016. Upon completion of the Non-Public Issuance, the share capital of the Company increases to RMB 20,723,619,000, and CMGC remains the controlling shareholder of the Company.

On 8 December 2015, the Strategic Restructuring between CMGC and China Minmetals Corporation ("CMC") started upon the approval of the SASAC, whereby CMGC would be merged into CMC. In May 2019, CMGC completed the industrial and commercial registration of its shareholding alteration with its capital contributor changing from SASAC to CMC. The status of CMGC as controlling shareholder and the SASAC as the ultimate controlling shareholder of the Company does not change after the Strategic Restructuring.

In October 2018, CMGC purchased the structure adjusting funds for central enterprises at a consideration of 3% of shares it held in the Company. The proportion of shareholding and voting upon the Company decreased from 59.18% to 56.18% subsequent to the completion of purchase and CMGC is still the controlling shareholder of the Company.

In September and November 2019, CMGC purchased the central enterprise innovation driven ETF fund with 224,685,000 shares of the Company. After the purchase, the shareholding ratio and voting right ratio of CMGC in the Company decreased from 56.18% to 55.10%, and CMGC remains as the controlling shareholder of the Company.

In May 2020, CMGC transferred its 1,227,760 thousand A shares of the Company (accounting for 5.92% of the Company's total share capital) to China National Petroleum Corporation("CNPC") for free. After the completion of the free transfer, China Metallurgical Company's shareholding and voting rights in the Company were reduced from 55.10% to 49.18%, and CMGC remains as the controlling shareholder of the Company.

For the six months ended 30 June 2022

III. BASIC CORPORATE INFORMATION (CONTINUED)

1. Basic information of the Company (Continued)

The Company and its subsidiaries (the "Group") are principally engaged in the following activities: engineering contracting, property development, equipment manufacture, and resource development.

The Group provide services and products as follows: provision of engineering, construction and other related contracting services for metallurgical and non-metallurgical projects ("engineering contracting"); development and sale of residential and commercial properties, affordable housing and primary land development ("property development"); development and production of metallurgical equipment, steel structures and other metal products ("equipment manufacture"); and development, mining and processing of mineral resources and the production of nonferrous metal and polysilicon ("resource development").

During the Reporting Period, the Group did not have material changes in its principal business activities.

The Company's and consolidated financial statements had been approved by the board of directors of the Company on 30 August 2022.

2. Scope of consolidated financial statements

Details of the scope of consolidated financial statements are set out in Note IX "Interest in other entities", whereas the changes of the scope of consolidation are set out in Note VIII "Changes of the scope of consolidation".

IV. BASIS OF PREPARATION

1. Basis of preparation

The Group has adopted the Accounting Standards for Business Enterprises issued by the Ministry of Finance (the "MoF") and the implementation guidance, interpretations and other relevant provisions issued or revised subsequently by the MoF (collectively referred to as "CASBE"). In addition, the Group has disclosed relevant financial information in these financial statements in accordance with the *Information Disclosure and Presentation Rules for Companies Offering Securities to the Public No. 15 – General Provisions on Financial Reporting (revised by CSRC in 2014)*.

According to Acceptance of Mainland Accounting and Auditing Standards and Mainland Audit Firms for Mainland Incorporated Companies Listed in Hong Kong and other Hong Kong Listing Rules Amendments issued by the Hong Kong Stock Exchange in December 2010, and the relevant provisions issued by the MoF and the CSRC, and approved by the stockholders in the general meeting of the Company, from fiscal year 2014, the Company no longer provides the financial statements prepared in accordance with the CASBE and the International Financial Reporting Standards (the "IFRS") separately to stockholders of A shares and H shares. Instead, the Company provides the financial statements prepared in accordance with the CASBE to all stockholders, taking into consideration the relevant disclosure standards of Hong Kong Companies Ordinance and Hong Kong Listing Rules into consideration.

For the six months ended 30 June 2022

IV. BASIS OF PREPARATION (CONTINUED)

2. Accrual basis and measurement principle

The Group has adopted the accrual basis of accounting. Except for certain financial instruments set out in Note XI 1 which are measured at fair value, the Group adopts the historical cost as the principle of measurement in the financial statements. Where assets are impaired, provisions for asset impairment are made in accordance with relevant requirements.

In the historical cost measurement, assets obtained shall be measured at the amount of cash or cash equivalents or fair value of the purchase amount paid. Liabilities shall be measured at the actual amount of cash or assets received or the contracted amount, given the current obligations assumed, or measured at the prospective amount of cash or cash equivalents paid to discharge the liabilities according to business activities.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing market participants in an arm's length transaction at the measurement date. Fair value measured and disclosed in the financial statements are determined on this basis whether it is observable or estimated by valuation techniques.

The following table provides an analysis, grouped into Levels 1 to 3 based on the degree to which the fair value input is observable and 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.

3. Going concern

The Group has performed an assessment of the going concern for the following 12 months from 30 June 2022 and does not identify any significant doubtful matter or event on the going concern. As such, these financial statements have been prepared on a going concern basis.

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

1. Statement of compliance

These financial statements are in compliance with the CASBE to truly and completely reflect consolidated and the Company's financial position as at 30 June 2022 and consolidated and the Company's operating results and cash flows for the year then ended.

2. Accounting period

The Group has adopted the calendar year as its accounting year, i.e. from 1 January to 31 December. The preparation period of these financial statements is from January 1 to June 30 of 2022.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

3. Business cycle

Business cycle refers to the period that starts from the purchase of assets for production and ends with the realization of cash or cash equivalents. The business cycle of infrastructure and property development business of the Group is normally over one year because the duration of construction and infrastructure warranty is relatively long. The business cycles of other businesses are in 12 months in general.

4. Reporting currency

The Company and its domestic subsidiaries choose Renminbi ("RMB") as their functional currency. The functional currency of the overseas subsidiaries of the Company is selected based on the primary economic environment where they operate. The Company adopts RMB to present its financial statements.

5. Business combinations

(1) Business combinations involving enterprises under common control

A business combination involving enterprises under common control is a business combination in which all of the combining enterprises are ultimately controlled by the same party or parties both before and after the combination, and that control is not transitory. Assets and liabilities obtained shall be measured at their respective carrying amounts as recorded by the combining entities at the date of the combination. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination is adjusted to the share premium in capital reserve. If the share premium is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings. Costs that are directly attributable to the combination are charged to profit or loss in the period in which they are incurred. Direct issue costs incurred in respect of equity instruments or liabilities issued pursuant to the business combination should be charged to the respective equity instruments or liabilities upon initial recognition of the underlying equity instruments or liabilities.

(2) Business combinations not involving enterprises under common control

A business combination not involving enterprises under common control is a business combination in which all of the combining enterprises are not ultimately controlled by the same party or parties before and after the combination.

The costs of business combination are the fair value of the assets paid, liabilities happened or bore and equity instruments issued by the acquirer for the purpose of achieving the control rights of the acquiree. If the business combination is achieved in stages, the cost of business combination is the sum of total consideration paid at the acquisition date and the re-measured fair value of acquirer's previously held equity interests in the acquirer at the acquisition date. The acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date. Any gains or losses arising from such re-measurement are recognized in profit or loss. Other comprehensive income associated with equity interest in the acquiree already held by the acquirer before the acquisition date is reclassified to investment income at the date on which acquisition is made.

For the six months ended 30 June 2022

٧. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

Business combinations (Continued)

(2) Business combinations not involving enterprises under common control (Continued)

The intermediary costs such as audit fees, legal service fees, assessment consulting costs and other related management costs that are directly attributable to the combination by the acquirer are charged to profit or loss in the period in which they are incurred. Direct issue costs incurred in respect of equity instruments or liabilities issued pursuant to the business combination should be charged to the respect equity instruments or liabilities upon initial recognition of the underlying equity instruments or liabilities.

The acquiree's identifiable assets, liabilities and contingent liabilities acquired by the acquirer in a business combination, that meet the recognition criteria shall be measured at fair value at the acquisition date. Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is treated as an asset and recognized as goodwill, which is measured at cost on initial recognition. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer firstly reassesses the measurement of the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities and measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer recognizes the remaining difference immediately in profit or loss for the current year.

The goodwill arisen because of the business combination should be separately disclosed in the consolidated financial statements and measured by the amount of costs deducted by the accumulative provision for impairment.

6. Basis for preparation of consolidated financial statements

The scope of consolidation in consolidated financial statements is determined on the basis of control, and covers the financial statements of the Company and all its subsidiaries. Subsidiaries refer to entities controlled by the Company, including separable components of enterprises and investees, as well as structured entities controlled by the Company. Control is achieved when the Company has power over the investee; is exposed, or has rights, to variable returns from its involvement with the investee; and has the ability to use its power to affect its returns.

For a subsidiary disposed of by the Group, the operating results and cash flows before the date of disposal (the date when control is lost) are included in consolidated income statement and consolidated statement of cash flows, as appropriate.

For a subsidiary acquired through a business combination not involving enterprises under common control, the operating results and cash flows from the acquisition date (the date when control is obtained) are included in consolidated income statement and consolidated statement of cash flows

A subsidiary acquired through a business combination involving enterprises under common control will be fully consolidated into consolidated financial statements from the date on which the subsidiary was ultimately under common control by the same party or parties.

The significant accounting policies and accounting years adopted by the subsidiaries are determined based on the uniform accounting policies and accounting years set out by the Company. For those subsidiaries acquired through business combinations not involving enterprises under common control, the identifiable assets and liabilities recorded in the financial statements of the acquired subsidiaries should be adjusted based on the fair value determined at the acquisition date.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

6. Basis for preparation of consolidated financial statements (Continued)

All significant intra-group balances, transactions and unrealized profits are eliminated on consolidation. The portion of subsidiaries' equity that is not attributable to the Company is treated as non-controlling interests and presented as "non-controlling interests" in the shareholders' equity in consolidated balance sheet. The portion of net profits or losses of subsidiaries for the period attributable to non-controlling interests is presented as "non-controlling interests" in consolidated income statement below the "net profit" line item.

When the amount of loss for the period attributable to the non-controlling shareholders of a subsidiary exceeds the non-controlling shareholders' portion of the opening balance of owners' equity of the subsidiary, the excess amount is still allocated against non-controlling interests.

Acquisition of non-controlling interests or disposal of equity interest in a subsidiary that does not result in the loss of control over the subsidiary is accounted for as equity transactions. The carrying amounts of shareholders' interests and non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. The difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is adjusted to capital reserve under owners' equity. If the capital reserve is not sufficient to absorb the difference, the excess is adjusted against retained earnings.

When the Group loses control over a subsidiary due to disposal of certain equity interest or other reasons, any retained interest is re-measured at its fair value at the date when control is lost. The difference between (i) the aggregate of the consideration received on disposal and the fair value of any retained interest and (ii) the share of the former subsidiary's net assets cumulatively calculated from the acquisition date according to the original proportion of ownership interest is recognized as investment income in the period in which control is lost. Other comprehensive income associated with investment in the former subsidiary is reclassified to investment income in the period in which control is lost.

7. Classification of joint arrangement and accounting methods for joint management

Joint arrangement involves two or more parties with joint control. Joint control is the contractually agreed sharing of control over an economic activity, and exists only when the strategic financial and operating decisions relating to the activity require the unanimous consent of the parties sharing control (the ventures).

The Group classifies the joint arrangements according to the rights enjoyed and obligations borne in the joint arrangements. There are only two types of joint arrangements – joint operations and joint ventures.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint ventures are accounted for using the equity method.

A joint operation is a joint arrangement whereby the joint operators have rights to the assets, and obligations for the liabilities, relating to the arrangement. When the Group undertakes its activities under joint operations, the Group as a joint operator recognized in relation to its interest in a joint operation: its assets, including its share of any assets held jointly; its liabilities, including its share of any liabilities incurred jointly; its revenue from the sale of its share of the output arising from the joint operation; its share of the revenue from the sale of the output by the joint operation; and its expenses, including its share of any expenses incurred jointly. The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the provision applicable to the particular assets, liabilities, revenue and expenses.

For the six months ended 30 June 2022

٧. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

Cash and cash equivalents

Cash comprises cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents are the Group's short-term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

9. Translation of transactions and financial statements denominated in foreign currencies

(1) Transactions denominated in foreign currencies

On initial recognition, foreign currency transactions are translated into RMB using the spot exchange rate prevailing at the date of transaction.

At the balance sheet date, foreign currency monetary items are translated into RMB using the spot exchange rates at the balance sheet date. Exchange differences arising from the differences between the spot exchange rates prevailing at the balance sheet date and those on initial recognition or at the previous balance sheet date are recognized in profit or loss for the period, except that exchange differences related to a specific-purpose borrowing denominated in foreign currency that qualify for capitalization are capitalized as part of the cost of the qualifying asset during the capitalization period.

When preparing financial statements involving foreign operations, if there is any foreign currency monetary items which in substance form part of the net investment in the foreign operations, exchange differences arising from the changes of foreign currency should be recorded as other comprehensive income, and will be reclassified to profit or loss upon disposal of the foreign operations.

Foreign currency non-monetary items measured at historical cost are translated to the amounts in functional currency at the spot exchange rates on the dates of the transactions and the amounts in functional currency remain unchanged. Foreign currency non-monetary items measured at fair value are re-translated at the spot exchange rate on the date the fair value is determined. Difference between the re-translated functional currency amount and the original functional currency amount is treated as changes in fair value (including changes of exchange rate) and is recognized in profit and loss or as other comprehensive income.

(2) Translation of financial statements denominated in foreign currency

For the purpose of preparing consolidated financial statements, financial statements of a foreign operation are translated from the foreign currency into RMB using the following method: assets and liabilities on the balance sheet are translated at the spot exchange rate prevailing at the balance sheet date; shareholders' equity items except for retained earnings are translated at the spot exchange rates at the dates on which such items arose; all items in the income statement as well as items reflecting the distribution of profits are translated at the spot exchange rates on the dates of the transactions; the opening balance of retained earnings is the translated closing balance of the previous year's retained earnings; and the closing balance of retained earnings is calculated and presented on the basis of each translated income statement and profit distribution item. The difference between the translated assets and the aggregate of liabilities and shareholders' equity items is recorded as other comprehensive income.

Cash flows arising from a transaction in foreign currency and the cash flows of a foreign subsidiary are translated at the spot exchange rate on the date of the cash flows. The effect of exchange rate changes on cash and cash equivalents is regarded as a reconciling item and presented separately in the cash flow statement as "effect of foreign exchange rate changes on cash and cash equivalents".

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

9. Translation of transactions and financial statements denominated in foreign currencies (Continued)

(2) Translation of financial statements denominated in foreign currency (Continued)

The opening balances and the comparative figures of prior year are presented at the translated amounts in the prior year's financial statements.

On disposal of the Group's entire equity interest in a foreign operation, or upon a loss of control over a foreign operation due to disposal of certain equity interest in it or other reasons, the Group transfers the accumulated exchange fluctuation reserve, which is attributable to the owners' equity of the Company and presented under other comprehensive income to profit or loss in the period in which the disposal occurs.

In case of a disposal or other reason that does not result in the Group losing control over a foreign operation, the proportionate share of accumulated exchange fluctuation reserve is re-attributed to non-controlling interests and is not recognized in profit and loss. For partial disposals of equity interest in foreign operations which are associates or joint ventures, the proportionate share of the accumulated exchange fluctuation reserve is reclassified to profit or loss.

10. Financial instruments

Financial assets and financial liabilities are recognized when the Group becomes a party to the contractual provisions of the instrument. Financial assets and financial liabilities are initially measured at fair value. For financial assets and financial liabilities at fair value through profit or loss, transaction costs are immediately recognized in profit or loss. For other financial assets and financial liabilities, transaction costs are included in their initial recognized amounts. When the Group recognizes the accounts receivable excluding significant financing component or does not consider the financing component in the contract within one year in accordance with the *Accounting Standards of Business Enterprise No. 14 – Revenue* (hereinafter referred to as "New Standards for Revenue", the standards for revenue before modification are to be referred to as "Former Standards for Revenue"), the accounts receivable on initial recognition is measured at transaction price defined in New Standards for Revenue.

The amortized cost of a financial asset or a financial liability is an accumulatively amortized amount arising from the initially recognized amount of the financial asset or the financial liability deducting repaid principals plus or less amortization of the differences between the initially recognized amount on initial recognition and the amount on maturity date using the effective interest method, and then deducting accumulated provisions for losses (only applicable to financial assets).

The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant accounting period.

The effective interest rate is the rate that exactly discounts estimated future cash flows through the expected life of the financial asset or financial liability or, where appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates future cash flows considering all contractual terms of the financial asset or financial liability without considering expected credit losses.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(1) Classification and measurement of financial assets

On initial recognition, the Group's financial assets are classified into the following categories: financial assets measured at amortized cost, financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss.

(a) Financial assets measured at amortized cost

If the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding and the financial asset is held within a business model whose objective is achieved by collecting contractual cash flows, the Group shall classify the financial asset into the financial asset measured at amortized cost. The Group's financial assets measured at amortized cost include cash and bank balances, bills and accounts receivable, other receivables, non-current assets due within one year and long-term receivables.

Financial assets measured at amortized cost are subsequently measured at amortized cost using the effective interest rate method. Gain or loss arising from impairment or derecognition is recognized in profit or loss.

For financial assets measured at amortized cost, the Group recognizes interest income using effective interest rate method. The Group calculates and recognizes interest income through book value of financial assets multiplying effective interest rate, except for the following circumstances:

- (i) For purchased or originated credit-impaired financial assets with credit impairment, the Group calculates and recognizes its interest income based on amortized cost of the financial asset and the effective interest rate through credit adjustment since initial recognition.
- (ii) For purchased or originated financial assets without credit impairment incurred while with credit impairment incurred in subsequent periods, the Group calculates and recognizes its interest income based on amortized cost of the financial asset and the effective interest rate in subsequent periods. If the credit risk of the financial asset is reduced during subsequent periods and credit impairment does not exist, the Group shall calculate and recognize interest income through book value of financial assets multiplying effective interest rate.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(1) Classification and measurement of financial assets (Continued)

(b) Financial assets at fair value through other comprehensive income ("FVTOCI")

If the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets, the Group shall classify the financial asset into the financial assets at FVTOCI.

Impairment losses or gains related to financial assets, interest income measured using effective interest rate method and exchange gains or losses are recognized into profit or loss for the current period. Except for the above circumstances, changes in fair value of the financial assets are included in other comprehensive income. When the financial asset is derecognized, the cumulative gains or losses previously recognized in other comprehensive income shall be removed from other comprehensive income and recognized in profit or loss.

The Group's financial assets at FVTOCI are presented in the line item "financing with receivables" in the balance sheet.

(c) Financial assets at fair value through profit or loss ("FVTPL")

Financial assets at FVTPL include financial assets at FVTPL and those designated as at FVTPL.

Financial assets that do not meet the criteria for being measured at amortized cost or FVTOCI are categorized into financial assets measured at FVTPL.

On initial recognition, the Group may irrevocably designate a financial asset as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

Other than financial assets included in a portion of hedging relations, the Group subsequently measured these financial assets at fair value, and gains or losses arising from changes in fair value and dividends and interest income related to these financial assets shall be recognized into profit or loss for the period.

The Group's financial assets measured at FVTPL include monetary funds, tradable equity instrument investments, investments in unlisted funds and trust products and derivatives classified as financial assets, which are presented under the items "tradable financial assets", "other non-current financial assets" and "derivative financial assets" in the balance sheet. The Group has no financial assets designated as at FVTPL.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(1) Classification and measurement of financial assets (Continued)

(d) Designated as financial assets at fair value through other comprehensive income ("FVTOCI")

On initial recognition, the Group may irrevocably designate a non-tradable equity instrument investments as financial asset measured at FVTOCI.

The financial assets designated as financial assets measured at FVTOCI are set out under the item "investments in other equity instrument". Changes in fair value of non-tradable equity investments should be recognized in other comprehensive income, and when the financial assets are derecognized, the accumulative gains or losses previously recognized in other comprehensive income shall be transferred out from other comprehensive income and recognized in retained earnings. During the period that the Group holds these non-tradable equity instruments, the Group has established the right of collecting dividends, whose economic benefit is probably flow into the Group, and the amount of the dividends can be reliably measured, then the Group recognize dividend income in profit or loss.

(2) Impairment of financial instruments

The Group shall recognize an impairment loss for expected credit losses on financial assets measured at amortized cost, financial assets at FVTOCI, contract assets and financial guarantee contracts.

The Group makes expected credit loss allowance during the whole life of the contract assets and accounts receivable arising from transactions applying New Standards for Revenue. Such contract assets and accounts receivable do not have significant financing component or do not need to consider the financing component as the contracts associated are within one year.

For other financial instruments, the Group assesses changes in credit risks of the relevant financial instruments since initial recognition at each balance sheet date. If the credit loss of the financial instruments has been significantly increased since initial recognition, the Group will make a loss allowance at an amount of expected credit loss during the whole life; if not, the Group will make a loss allowance for the financial instruments at an amount in the future 12-month expected credit losses. The increased or reversed amount of credit is recognized in profit or loss as impairment loss or gain. The Group has made a loss allowance against amount of expected credit losses during the whole life in the prior accounting period. However, at the balance sheet date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group will measure the loss allowance for that financial instrument at an amount in the future 12-month expected credit losses. Reversed amount of loss allowance arising from such circumstances shall be included in profit or loss as impairment gains.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(2) Impairment of financial instruments (Continued)

(a) Significant increase of credit risk

The Group will make use of reasonable and supportable forward-looking information that is available to determine whether credit risk has increased significantly since initial recognition through comparing the risk of a default occurring on the financial instruments as at the reporting date with the risk of a default occurring on the financial instruments as at the date of initial recognition. For financial guarantee contracts, when applying the provision of impairment of financial instruments, the Group shall take the date when it becomes the party making an irrevocable undertaking as the initial confirmation date.

The Group will take the following factors into consideration when assessing whether credit risk has increased significantly:

- Significant changes in internal price indicators of credit risk as a result of a change in credit risk;
- Adverse changes in business, financial or economic conditions that are expected to cause a significant change in the debtor's ability to meet its debt obligations;
- An actual or expected significant change in the operating results of the debtor;
- Significant adverse change in the regulatory, economic, or technological environment of the debtor;
- Significant changes in the value of the collateral supporting the obligation or in the
 quality of third-party guarantees or credit enhancements, which are expected to
 reduce the debtor's economic incentive to make scheduled contractual payments or
 to otherwise have an effect on the probability of a default occurring;
- Significant changes in circumstances expected to reduce the debtor's economic incentive to make scheduled contractual payments;
- Expected changes in the loan documentation including an expected breach of contract that may lead to covenant waivers or amendments, interest payment holidays, interest rate step-ups, requiring additional collateral or guarantees, or other changes to the contractual framework of the financial instruments;
- Significant changes in the expected performance and behavior of the debtor;
- Past due period of contract payment exceeding 30 days (inclusive).

At balance sheet date, if the Group considers that the financial instruments has only lower credit risk, the Group will assume that the credit risk of the financial instruments has not been significantly increased since initial recognition. If the risk of default on financial instruments is low, and the borrower's ability to meet its contractual cash flow obligations in the short term is strong, even if the economic situation and operating environment are adversely changed over a long period of time, it may not necessarily reduce the borrower's ability to fulfill its contractual cash flow obligations, and the financial instrument is considered to have a lower credit risk.

For the six months ended 30 June 2022

٧. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

Financial instruments (Continued) 10.

(2) Impairment of financial instruments (Continued)

(b) Credit-impaired financial assets

When the Group expected occurrence of one or more events which may cause adverse impact on future cash flows of a financial asset, the financial asset will become a creditimpaired financial assets. Objective evidence that a financial asset is impaired includes the following observable events:

- Significant financial difficulty of the issuer or debtor;
- A breach of contract by the debtor, such as a default or delinquency in interest or principal payments;
- The creditor, for economic or legal reasons relating to the debtor's financial difficulty, granting a concession to the debtor;
- It becoming probable that the debtor will enter bankruptcy or other financial reorganizations;
- The disappearance of an active market for that financial asset because of financial difficulties of the issuer or the debtor;
- Purchase or originate a financial asset with a large scale of discount, which reflects the facts of credit loss incurred.

(c) Determination of expected credit loss

The Group determines expected credit losses of relevant financial instruments using the following methods:

- For a financial asset, a credit loss is the present value of the difference between the contractual cash flows that are due to the Group under the contract and the cash flows that the Group expects to receive;
- For a financial guarantee contract, the credit loss is the present value of the differences between estimated amount paid by the Group for the credit losses incurred by the contract holder and the amount the Group expects to receive from the contract holder, the debtor or any other party;
- For a financial asset with credit-impaired at the balance sheet date, the credit loss is the difference between the asset's gross carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate

The factors reflected in methods of measurement of expected credit losses include an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes; time value of money; reasonable and supportable information about past events, current conditions and forecasts on future economic status at balance sheet date without unnecessary additional costs or efforts.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(2) Impairment of financial instruments (Continued)

(d) Write-down of financial assets

When the Group will no longer reasonably expect that the contractual cash flows of financial assets can be collected in aggregate or in part, the Group will directly write down the carrying amount of the financial asset, which constitutes derecognition of relevant financial assets.

(3) Transfer of financial assets

The Group will derecognize a financial asset if one of the following conditions is satisfied: (i) the contractual rights to the cash flows from the financial asset expire; (ii) the financial asset has been transferred and substantially all the risks and rewards of ownership of the financial asset are transferred to the transferee; or (iii) the financial asset has been transferred, and the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, but the Group has not retained control of the financial asset.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership of a financial asset, and it retains control of the financial asset, the Group will recognize the financial asset to the extent of its continuing involvement in the transferred financial asset and recognize an associated liability.

If a transfer of a financial asset in its entirety satisfies the derecognition criteria, for financial asset categorized into those measured at amortized cost, the difference between the carrying amount of the financial asset transferred and the sum of the consideration received from the transfer is recognized in profit or loss; for the non-tradable equity instruments designated as financial assets at FVTOCI, the cumulative gain or loss that has been recognized in other comprehensive income should be transferred out from other comprehensive income but be recognized in retained earnings.

If a transfer of a financial asset partially satisfies the derecognition criteria, the carrying amount of the transferred financial asset is allocated between the part that is derecognized and the part that is continuously involved, based on the respective fair values of those parts on transfer date. The difference between (1) the sum of the consideration received for the part derecognized and any cumulative gain or loss allocated to the part derecognized which has been previously recognized in other comprehensive income; and (2) the carrying amount allocated to the part derecognized on derecognition date; is recognized in profit or loss or retained earnings.

For a transfer of a financial asset in its entirety that does not satisfy the derecognition criteria, the Group will continuously recognize the transferred financial asset in its entirety. Considerations received due to transfer of assets should be recognized as a liability upon receipts.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(4) Classification and measurement of financial liabilities

Financial instruments issued by the Group are classified into financial liabilities or equity instruments based on the substance of the business and contractual arrangements other than its legal form, together with the definition of financial liability and equity instruments on initial recognition.

On initial recognition, financial liabilities are classified into financial liabilities at fair value through profit or loss and other financial liabilities.

(a) Financial liabilities at fair value through profit or loss

Financial liabilities at FVTPL consist of financial liabilities held for trading (including derivatives classified as financial liabilities) and those designated as at FVTPL.

Financial liabilities meet one of the following conditions, indicating that the Group's purpose of undertaking the financial liabilities is for trading:

- The purpose of undertaking relevant financial liabilities is mainly for the recent repurchase;
- The relevant financial liabilities are part of the centrally managed identifiable financial instrument portfolio at initial recognition, and there is objective evidence that shortterm profits will occur in the near future;
- Related financial liabilities are derivatives, except for derivatives that meet the definition of a financial guarantee contract and that are designated as effective hedging instruments.

Financial liabilities held for trading are subsequently measured at fair value. Any gains or losses arising from changes in the fair value and any dividend or interest expenses paid on the financial liabilities are recognized in profit or loss.

The Group's financial liabilities measured at FVTPL are derivatives classified as financial liabilities which are presented as" derivative financial liabilities" in the balance sheet.

(b) Other financial liabilities

Other financial liabilities, except for financial liabilities arising from transfer of financial assets which does not satisfy derecognition criteria or continuous involvement of transferred financial assets and financial guarantee contracts liability, are subsequently measured at amortized cost, with gain or loss arising from derecognition or amortization recognized in profit or loss. The Group's financial liabilities measured at amortized cost include bills payable, accounts payable, other payables, long-term payables, loans and bonds payable etc.

For the six months ended 30 June 2022

٧. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

Financial instruments (Continued) 10.

(4) Classification and measurement of financial liabilities (Continued)

(b) Other financial liabilities (Continued)

If the Group and its counterparty modify or renegotiate the contract and do not lead to derecognition of a financial liability subsequently measured at amortized cost but result in changes in contractual cash flows, the Group will recalculate the carrying amount of the financial liability, with relevant gain or loss recognized in profit or loss. The Group will determine carrying amount of the financial liability based on the present value of renegotiated or modified contractual cash flows discounted at the financial liability's original effective interest rate. For all costs or expenses arising from modification or renegotiation of the contract, the Group will adjust the modified carrying amount of the financial liability and amortized during the remaining term of the modified financial liability.

If the term of the financial liability measured at amortized cost is under one year (inclusive), the financial liability is presented as current liability; if the financial liability is with the term over one year but will fall due within one year (inclusive) since the balance sheet date, it is present as non-current liability due within one year; others are presented as non-current liability.

(c) Financial quarantee contracts

A financial guarantee contract is a contract by which the issuer is required to compensate a specific amount to the contract holder suffering losses in the case where the specific debtor fails to settle the debt in accordance with the initial or revised terms of debt instrument when the debt falls due. After initial recognition, the Group measure financial guarantee contracts at the higher of: (i) amount of loss allowance; and (ii) the amount initially recognized less cumulative amortization recognized in accordance with related terms of Standards for Revenue.

(5) Derecognition of financial liabilities

The Group derecognizes a financial liability (or part of it) only when the underlying present obligation (or part of it) is discharged. An agreement between the Group (an existing debtor) and an existing lender to replace the original financial liability with a new financial liability with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability.

When the Group derecognizes a financial liability or a part of it, it recognizes the difference between the carrying amount of the financial liability (or part of the financial liability) derecognized and the consideration paid (including any non-cash assets transferred or new financial liabilities assumed) in profit or loss.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

10. Financial instruments (Continued)

(6) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. The issuance (including refinance), repurchase, selling or cancellation of these instruments are treated as change in equity. Change of fair value of equity instruments is not recognized by the Group. The related transaction costs are deducted from equity.

The Group recognizes the distribution to holders of the equity instruments as distribution of profits, and dividends paid do not affect the total amount of shareholders' equity.

(7) Derivatives

Derivatives of the Group include forward foreign exchange settlement contracts and currency swap contracts. Derivatives are initially measured at fair value at the date when the derivative contracts are entered into and are subsequently re-measured at fair value. Changes are recognized in current profit or loss.

(8) Offsetting financial assets and financial liabilities

Where the Group has a legal right that is currently enforceable to set off the recognized financial assets and financial liabilities, and intends either to settle on a net basis, or to realize the financial asset and settle the financial liability simultaneously, a financial asset and a financial liability shall be offset and the net amount is presented in the balance sheet. Except for the above circumstances, financial assets and financial liabilities shall be presented separately in the balance sheet and shall not be offset.

11. Inventories

(1) Categories of inventories and initial measurement

The Group's inventories are initially measured at cost. Inventories mainly include raw materials, material procurement, outsourced processing materials, work in progress, finished goods, materials in transit, costs to fulfil a contract, properties under development, completed properties held for sale etc.

(2) Valuation method of inventories upon delivery

The actual cost of inventories upon delivery is calculated using the first-in-first-out or weighted average method. Cost of finished goods and work in progress comprise all costs of materials, direct labor costs and other manufacturing overheads allocated on a normal production capacity and systematic basis.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

Inventories (Continued) 11.

Basis for determining net realizable value of inventories and provision methods for decline in (3) value of inventories

At the balance sheet date, inventories are measured at the lower of cost and net realizable value. If the net realizable value is below the cost of inventories, a provision for decline in value of inventories is made. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion, the estimated costs necessary to make the sale and relevant taxes. Net realizable value is determined based on clear evidence obtained, taking into consideration the purposes of holding inventories and effect of post balance sheet events.

After the provision for decline in value of inventories is made, if the circumstances that previously caused inventories to be written down below cost no longer exist so that the net realizable value of inventories is higher than their carrying amount, the original provision for decline in value is reversed and the reversal is included in profit or loss for the period.

The perpetual inventory system is maintained for stock system. (4)

(5) Amortization method for low cost and short-lived consumable items and packaging materials

Materials in transit include packaging materials and low cost and short-lived consumable items. Packaging materials and low cost and short-lived consumable items are using either one-off amortization method or multiple-stage amortization method.

(6) Properties under development and completed properties held for sale

Costs of properties under development and completed properties held for sale mainly consist of acquisition cost of land use rights, expenditures of land development, infrastructure costs, construction costs, capitalized borrowing costs and other relevant costs. The expenditure of development land is included in the development cost. The construction expenditures of public facilities (the facilities approved by the relevant government departments such as roads) form part of property development costs and are allocated to respective individual properties projects. Development costs are capitalised as developed products after completion of construction.

Long-term equity investments 12.

Long-term equity investments include equity investments in subsidiaries, associates and joint ventures.

Subsidiaries are the companies that are controlled by the Company. Associates are the companies over which the Group has significant influence. Joint ventures are joint arrangements over which the Group has joint control along with other investors and has rights to the net assets of the joint arrangement.

The Company accounts for the investment in subsidiaries at historical cost in the Company's financial statements. Investments in joint ventures and associates are accounted for under equity method.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

12. Long-term equity investments (Continued)

(1) Determination of investment cost

For a long-term equity investment acquired through a business combination involving enterprises under common control, the investment cost of the long-term equity investment is the share of the carrying amount of the shareholders' equity of the acquiree attributable to the ultimate controlling party at the date of combination. For a long-term equity investment acquired through business combination not involving enterprises under common control, the investment cost of the long-term equity investment is the cost of acquisition. For a business combination not involving enterprises under common control achieved in stages that involves multiple exchange transactions, the initial investment cost is carried at the aggregate of the carrying amount of the acquirer's previously held equity interest in the acquiree and the new investment cost incurred on the acquisition date.

Regarding the long-term equity investment acquired otherwise than through a business combination, if the long-term equity investment is acquired by cash, the historical cost is determined based on the amount of cash paid and payable; if the long-term equity investment is acquired through the issuance of equity instruments, the historical cost is determined based on the fair value of the equity instruments issued.

(2) Subsequent measurement and recognition of profit or loss

If the long-term equity investment is accounted for at cost, it should be measured at historical cost. Dividend declared by the investee should be accounted for as investment income.

Under the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, no adjustment is made to the initial investment cost. Where the initial investment cost is less than the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, the difference is recognized in profit or loss for the period, and the cost of the long-term equity investment is adjusted accordingly.

Under the equity method, the Group recognizes its share of the net profit or loss and other comprehensive income of the investee for the period as investment income or loss and other comprehensive income for the period. The Group recognizes its share of the investee's net profit or loss based on the fair value of the investee's individual separately identifiable assets at the acquisition date after making appropriate adjustments to be in compliance with the Group's accounting policies and accounting period. The Group's share of net losses of the investee is recognised to the extent that the carrying amount of the investment together with any long-term interests that in substance form part of its net investment in the investee is reduced to zero, except that the Group has the obligations to assume further losses. If the Group has incurred obligations to assume additional losses of the investee, a provision is recognized according to the expected obligation, and recorded as an investment loss for the period. For the changes in equity in addition to the net profit or loss, other comprehensive income and profits distribution, the carrying value of long-term equity investment is adjusted when the investee declares dividend distribution and included in shareholders' equity. The Group recognizes its share of the dividends of the investee by reducing the carrying value of the investment. Unrealized profits or losses resulting from the Group's transactions with its associates and joint ventures are recognized as investment income or loss to the extent that those attributable to the Group's equity interest are eliminated if the trading assets do not form a business. Unrealized losses are resulted from the Group's transactions with its associates and joint ventures, and the assets impairment losses are not eliminated.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

12. Long-term equity investments (Continued)

(3) Basis for determining control, joint control and significant influence over investee

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

Joint control is the contractually agreed sharing of control over an economic activity, and exists only when the strategic financial and operating policy decisions relating to the activity require the unanimous consent of the parties sharing control.

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.

When determining whether an investing enterprise is able to exercise control or significant influence over an investee, the effect of potential voting rights of the investee (for example, warrants and convertible debts) held by the investing enterprises or other parties that are currently exercisable or convertible shall be considered.

(4) Impairment loss of long-term equity investments

If the recoverable amounts of the investments to subsidiaries, joint ventures and associates are less than their carrying amounts, an impairment loss should be recognized to reduce the carrying amounts to the recoverable amounts (*Note V18*).

(5) The disposal of long-term equity investment

On disposal of a long-term equity investment, the difference between the proceeds actually received and receivable and the carrying amount is recognized in profit or loss for the period.

If the Group loses its control over the investee because of the disposal of partial equity investment and the remaining equity investment still have joint control or significant influence on the investee, then equity method should be adopted to record long-term equity investment when preparing the financial statements as if the equity investment is accounted for under equity method from the date the Group acquired this investment. If the remaining equity investment does not have joint control or significant influence on the investee, the equity investment should be recorded according to the recognition and measurement of financial assets and the difference between the carrying amount and fair value of the equity investment on the date of losing control shall be included in profit or loss for the current year. The other comprehensive income recognized before the Group had control over the investee under equity method or the financial assets measurement, should be treated on a basis that the investee disposes these assets and liabilities directly at the date the Group loses control over the investee. The other changes in shareholders' equity of the investee's net assets, except the net profit or loss, other comprehensive income and profit distribution, will be included in profit or loss for the current year of losing its control over the investee. When the Group continues to use the equity method, the amounts previously recognised in other comprehensive income are accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities and reclassified to profit or loss on a pro-rata basis. Equity previously recognised resulting from the investee's equity changes other than profit or loss, other comprehensive income and profit distribution is reclassified to profit or loss on a pro-rata basis.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

13. Investment properties

Investment properties include properties held to earn rentals or for capital appreciation or properties in construction which will be used to earn rentals or for capital appreciation in the future. An investment property is measured initially at cost. Subsequent expenditures incurred for such investment property are included in the cost of the investment property if it is probable that economic benefits associated with an investment property will flow to the Group and the subsequent expenditures can be measured reliably. Other subsequent expenditures are recognized in profit or loss in the period in which they are incurred.

The Group uses the cost model for subsequent measurement of investment property, and adopts a depreciation or amortization policy for the investment property according to estimated useful lives and net salvage value for buildings or land use rights. The estimated useful lives, estimated residual values and annual depreciation rates of investment properties by category are as follows:

	Estimated useful lives (years)	Estimated residual values	Annual depreciation (amortization) rate
Buildings and structures	15–40	3–5	2.38–6.47
Land use rights	40–70	–	1.43–2.50

When the purpose of the investment properties is changed to self-use, the investment properties are transferred to fixed assets or intangible assets from the date the purpose is changed. When the purpose of the self-use buildings or land use rights are changed to held for earning rentals or capital appreciation, the buildings are transferred from fixed assets or intangible assets to investment properties from the date the purpose is changed. The carrying amounts of the buildings remain unchanged before and after the purpose change.

The estimated useful lives, estimated residual values and depreciation (amortization) rate of investment properties are reviewed and adjusted as appropriate at each year-end.

When an investment property is sold or retired from its use and the expected not to be able to recover economic benefits from disposal, the investment property should be de-recognized. When an investment property is sold, transferred, retired or damaged, the Group recognizes the amount of any proceeds on disposal net of the carrying amount and related taxes in profit or loss for the period.

If the recoverable amounts of the investment properties are less than the carrying amounts, the carrying amounts will be reduced to the recoverable amounts (*Note V18*).

For the six months ended 30 June 2022

٧. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

14. **Fixed assets**

Recognition criteria for fixed assets (1)

Fixed assets include buildings and structures, machinery and equipment, transportation vehicles, office equipment and others.

Fixed assets are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and have useful lives of more than one accounting year. A fixed asset is recognized only when it is probable that economic benefits associated with the asset will flow to the Group and the cost of the asset can be reliably measured. Purchased or constructed fixed assets are initially measured at cost when acquired. During the course of transformation of the Company into a limited liability company, the initial costs of fixed assets injected by the State-owned shareholder were measured based on the valuation amounts approved by the State-owned assets management authority.

Subsequent expenditures incurred for the fixed asset are included in the cost of the fixed asset if it is probable that economic benefits associated with the asset will flow to the Group and the subsequent expenditures can be measured reliably. When old-fixed asset items are replaced by other new fixed asset items, the old-fixed asset items should be de-recognized. Other subsequent expenditures are recognized in profit or loss in the period in which they are incurred.

(2) Depreciation of each category of fixed assets

Fixed asset is depreciated based on the cost of fixed asset recognized less expected net residual value over its useful life using the straight-line method. For the impaired fixed asset, depreciation is calculated based on the carrying amount of the fixed asset after impairment over the estimated remaining useful life of the asset. The estimated useful lives, estimated residual values and annual depreciation rate of fixed assets are reviewed at each year end date to assess if any change is needed. The estimated useful life, estimated net residual value and annual depreciation rate of each category of fixed assets are as follows:

Category	Depreciation	Useful life (year)	Residual value (%)	depreciation rate
Buildings and structures Temporary buildings and	the straight-line method	15–40	3–5	2.38–6.47
structures	the straight-line method	3–5	3–5	19.00-32.33
Machinery and equipment	the straight-line method	3–14	3–5	6.79-32.33
Transportation vehicles	the straight-line method	5–12	3–5	7.92-19.40
Office equipment and others	the straight-line method	5–12	3–5	7.92–19.40

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

14. Fixed assets (Continued)

(3) Derecognition and impairment

If a fixed asset is disposed of or no future economic benefits are expected to be generated from its use or disposal, the fixed asset is derecognized. When a fixed asset is sold, transferred, retired or damaged, the amount of any proceeds on disposal of the asset net of the carrying amount and related taxes is recognized in profit or loss for the period.

If the recoverable amounts of the fixed assets are less than the carrying amounts, the carrying amounts will be reduced to the recoverable amounts (*Note V18*).

15. Construction in progress

Construction in progress is measured at its actual costs. The actual costs include various construction, installation costs, borrowing costs capitalized and other expenditures incurred until such time as the relevant assets are completed and ready for its intended use. When the asset concerned is ready for its intended use, the cost of the asset is transferred to fixed assets and depreciated starting from the following month.

If the recoverable amounts of the construction in progress are less than the carrying amounts, the carrying amounts will be reduced to the recoverable amounts (*Note V18*).

16. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying asset are capitalized when expenditures for such asset and borrowing costs are incurred and activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced. Capitalization of borrowing costs ceases when the qualifying asset being acquired, constructed or produced becomes ready for its intended use or sale. Borrowing costs incurred subsequently should be charged to profit or loss. Capitalization of borrowing costs is suspended during periods in which the acquisition, construction or production of a qualifying asset is suspended abnormally and when the suspension is for a continuous period of more than 3 months. Capitalization is suspended until the acquisition, construction or production of the asset is resumed.

Where funds are borrowed under a specific-purpose borrowing, the amount of interest to be capitalized is the actual interest expenses incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used on the asset or any investment income on the temporary investment of those funds.

Where funds are borrowed under general-purpose borrowings, the Group determines the amount of interest to be capitalized on such borrowings by applying a capitalization rate to the weighted average of the excess of cumulative expenditures on the asset over the amounts of specific-purpose borrowings. The capitalization rate is the weighted average of the interest rates applicable to the general-purpose borrowings.

During the capitalization period, exchange differences on foreign currency specific-purpose borrowing are fully capitalized whereas exchange differences on foreign currency general-purpose borrowing are charged to profit or loss.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

17. Intangible assets

(1) Valuation methods, service life and impairment

The Group's intangible assets include land use rights, concession assets, mining rights, software, patent and proprietary technology and others. Intangible assets are measured initially at cost. During the course of transformation of the Company into a limited liability company, the initial costs of intangible assets injected by the State-owned shareholder were measured based on the valuation amount approved by the State-owned assets management authority.

(a) Land use rights

Land use rights of the Group are amortized on the straight-line basis according to the useful lives of 40 to 70 years approved in the obtained land use rights certificates.

(b) Mining rights

Amortization is calculated based on the units of production method based only on proved mining reserves.

(c) The right to use of the franchise

The Group engages in certain service concession arrangements in which the Group carries out construction work for the granting authority and receives in exchange a right to operate the assets concerned in accordance with the pre-established conditions set by the granting authority. The assets under the concession arrangements may be classified as intangible assets or receivables from the granting authority.

The Group recognizes revenue and a financial asset to the extent that it has an unconditional contractual right to receive specified or determinable amount of cash or another financial assets from the granting authority, or to receive the shortfall from the granting authority, if any, between amounts received from users of the public service and specified or determinable amounts.

According to the contract, the Group has the right to charge fees from the service recipients during a certain operating period after the related infrastructure construction is completed. If the charge amount is undetermined, this right does not constitute any right of collecting cash unconditionally. The Group recognizes revenue and intangible assets simultaneously.

The Group classifies the non-current assets linked to the long-term investment in these concession arrangements as "concession assets" within intangible assets on the balance sheet if the intangible asset model is adopted. Once the underlying infrastructure of the concession arrangements has been completed, the concession assets will be amortized over the term of the concession on the straight-line basis under the intangible asset model.

If the financial asset model is applied, the Group recognizes contract assets resulted from the concession arrangement in its balance sheet. During the operation of PPP project, the Group, entitled to collect certain cash flows (or other financial assets), should recognise revenue and receivables simultaneously when the social capital party has the right to collect such consideration (a right is only determined by the passage of time). Financial assets are measured in accordance with Accounting Standards for Business Enterprises No.22 – Recognition and Measurement of Financial Instruments.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

17. Intangible assets (Continued)

(1) Valuation methods, service life and impairment (Continued)

(d) Software

Software is amortized on the straight-line basis over its estimated useful life of 3 to 5 years.

(e) Patent and proprietary technologies

Patent and proprietary technologies are amortized on the straight-line basis over 5 to 20 years.

(f) Review of the useful life and amortization method periodically

For an intangible asset with a finite useful life, the Group reviews the useful life and amortization method at the end of the year, and makes adjustments when necessary.

(g) If the recoverable amounts of the intangible assets are less than the carrying amounts, the carrying amounts will be reduced to the recoverable amounts (Note V18).

(2) Research and development expenditure

Internal research and development project expenditures were classified into research expenditures and development expenditures depending on its nature and the greater uncertainty whether the research activities becoming to intangible assets.

Expenditure during the research phase is recognized as an expense in the period in which it is incurred. Expenditure during the development phase that meets all of the following conditions at the same time is recognized as an intangible asset:

- It is technically feasible to complete the intangible asset so that it will be available for use or sale;
- The Group has the intention to complete the intangible asset and use or sell it;
- The Group can demonstrate the ways in which the intangible asset will generate economic benefits;
- The availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset;
- The expenditure attributable to the intangible asset during its development phase can be reliably measured.

Expenditures that do not meet all of the above conditions at the same time are recognized in profit or loss when incurred. Expenditures that have previously been recognized in the profit or loss would not be recognized as an asset in subsequent years. Those expenditures capitalized during the development stage are recognized as development costs incurred and will be transferred to intangible assets when the underlying project is ready for an intended use.

For the six months ended 30 June 2022

٧. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

18. Impairment of non-current assets other than financial assets

The Company assesses at each balance sheet date whether there is any indication that the fixed assets, construction in progress, right of use assets, intangible assets with finite useful lives, investment properties measured at historical cost, investments in subsidiaries, joint ventures and associates may be impaired. If there is any indication that such assets may be impaired, recoverable amounts are estimated for such assets. The recoverable amount of an asset is the higher of its fair value less costs to sell and the present value of the future cash flow estimated to be derived from the asset. The Group estimates the recoverable amount on an individual basis. If it is not possible to estimate the recoverable amount of the individual asset, the Group determines the recoverable amount of the asset group to which the asset belongs. Identification of an asset group is based on whether major cash inflows generated by the asset group are largely independent of the cash inflows from other assets or asset groups.

Goodwill arising from a business combination is tested for impairment at least at each year end, irrespective of whether there is any indication that the asset may be impaired. For the purpose of impairment testing, the carrying amount of goodwill acquired in a business combination is allocated from the acquisition date on a reasonable basis to each of the related asset groups; if it is impossible to allocate to the related asset groups, it is allocated to each of the related set of asset groups. Each of the related asset groups or set of asset groups is an asset group or set of asset group that is able to benefit from the synergies of the business combination and shall not be larger than a reportable segment determined by the Group. If the carrying amount of the asset group or set of asset groups is higher than its recoverable amount, the amount of the impairment loss is firstly used to reduce the carrying amount of the goodwill allocated to the asset group or set of asset groups, and then used to reduce the carrying amount of other assets (other than the goodwill) within the asset group or set of asset groups, on a pro-rata basis of the carrying amount of each asset

Once the impairment loss of such assets is recognized, it is not be reversed in any subsequent period.

19. Long-term prepayments

Long-term prepayments include improvement expenses on leased fixed assets and other expenses incurred that should be amortized over the current and subsequent periods (amortization period of more than one year). Long-term prepayments are amortized on a straight-line basis over the expected periods in which benefits are derived, presented as the net amount of actual expenditure less accumulated amortization.

20. **Employee benefits**

Short-term employee benefits (1)

Short-term employee benefits include salaries, bonus, subsidies, staff benefits, social security charges (including medical insurance, work-related injury insurance and maternity insurance, etc.), housing funds, labor union expenditures and personal education.

During the accounting period in which the employees provide services, the Group's actual shortterm remuneration is recognized as liabilities and included in the profits or losses of the current year or recognized as respective assets costs. At the time of actual occurrence, The Group's employee benefits are recorded into the profits and losses of the current year or the cost of relevant assets according to the actual amount. The non-monetary employee benefits are measured at fair value.

Regarding the health insurance, industrial injury insurance, maternity insurance and other social insurances, housing fund and labor union expenditure and personnel education that the Group paid for employees, the Group should recognize corresponding employee benefit payables and include these expenses in the profits or losses of the current year or recognized as respective assets costs.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

20. Employee benefits (Continued)

(2) Post-employment benefits

Post-employment benefits are classified into defined contribution plans and defined benefit plans.

All the employees of the Group enjoy and participate in the endowment insurance plans set by local government, which are called defined contribution plans. The Group takes certain proportion (no more than the upper limit) out of employees' wages as endowment insurance, and pays to local labor and social security institutes. Corresponding expenses shall be included in the profits or losses of the period in which employees provide services or assets associated costs.

The Group provides supplementary pension benefits to certain retired employees, which is considered as defined benefit plans. The defined benefit plans obligation is calculated semiannually by independent actuaries using the projected unit credit method. The Group's defined benefit plans include the following components: (i) Service cost include current year service cost, past-service cost and settlement gain or loss. Current year service cost means the increase of the value of defined benefit plans resulting from the current year service offered by employees. Past-service cost means the increase or decrease of the value of defined benefit plans resulting from the revision of the defined benefit plans related to the prior year service offered by employees. (ii) Interest costs of defined benefit plans payable. (iii) Changes related to the revaluation of defined benefit plans liabilities.

Unless other accounting standards require or permit to charge the employee benefits into assets cost, the Group charges (i) and (ii) mentioned above into profits or losses of the current year, and recognize (iii) mentioned above as other comprehensive income without charging into profits or losses in later accounting periods.

Part of subsidiaries of the Group provide medical benefits to the retired employees. The costs of benefits are determined using the same accounting policies with defined benefit plans.

(3) Termination benefits

Liabilities arising from termination benefits and staff early retirement plan are recognized after the specific termination clauses are agreed or passed to the employee. The Group should recognize the employee benefits liabilities related to the compensation of the employment termination and charge to profit or loss at the earlier of (i)The Group cannot withdraw from the compensation plan of the employment termination by itself. (ii)The Group recognizes the costs or expenses of the reorganization involving the compensation of termination. When the Group offers some compensation plans to encourage the employees to accept the termination of the labor relationship voluntarily, the termination benefits are recognized based on the expected number of employees who are willing to take the compensation plans. The specific terms of the termination and early retirement plans varies according to the occupation, seniority and location etc.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

20. Employee benefits (Continued)

(3) Termination benefits (Continued)

The Group provides early retirement benefits to employees who are willing to retire voluntarily. Early retirement benefits refer to wages and social security fees the Group pays to employees who retired earlier voluntarily with the approval of the management. Early retirement benefits are recognized in the period in which the Group has entered into an agreement with the employee specifying the terms of redundancy, or after the individual employee has been advised of the specific terms. The accounting treatments of early retirement benefits are referring to termination benefits. From the date on which the termination benefit requirements are fulfilled, the Group recognizes monthly paid salaries and social benefits for these early retirees during the period from the date of early retirement to the normal retirement date as employee benefits payable and charges in profit or loss of the current year.

21. Provisions

Provisions are recognized when the Group has a present obligation related to a contingency, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the settlement date, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money. Where the effect of the time value of money is material, the amount of the provision is determined by discounting the related future cash outflows. The increase in the provision due to passage of time is recognized as interest expense.

If all or part of the provision settlements is reimbursed by third parties, when the realization of income is virtually certain, then the related asset should be recognized. However, the amount of related asset recognized should not exceed the respective provision amount.

At the balance sheet date, the carrying amount of provision should be re-assessed to reflect the best estimation then.

22. Other equity instruments

Perpetual bonds or other financial instruments issued by the Group are equity instruments if, and only if both conditions below are met:

- The instrument includes no contractual obligation: (i) to deliver cash or another financial asset to another entity; or (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the issuer;
- If the instrument will be or may be settled in the issuer's own equity instruments, and it is a nonderivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

22. Other equity instruments (Continued)

The interest expenses or dividends of perpetual bonds or other financial instruments classified as equity instruments are treated as profit distribution of the Group. The repurchase or cancellation of these instruments is treated as a change in equity. The related transaction costs are deducted from equity.

23. Revenue

The Group's revenue is mainly from the following business types:

- Engineering contracting
- Real estate development
- Equipment manufacturing
- Resources development

The Group shall recognize revenue when the Group satisfies a performance obligation in the contract, that is when the customer obtains control over relevant goods or services. Control over the relevant goods refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from the goods or services.

Where the contract entered into by the Group and the customer satisfies all of the following conditions at the same time, the Group will recognize revenue when the customer obtains control over the relevant goods or services:

- The parties to the contract have approved the contract and are committed to perform their respective obligations;
- The contract can identify each party's rights and obligations regarding goods or services to be transferred;
- The contract can identify the payment terms for the goods or services to be transferred;
- The contract has commercial substance (i.e. the risk, timing or amount of the Group's future cash flows is expected to change as a result of the contract); and
- It is probable that the Group will recover the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer.

If a contract meets the above criteria at contract inception, the Group shall not reassess those criteria unless there is an indication of a significant change in facts and circumstances. If a contract does not meet the above criteria at contract inception, the Group shall continue to assess the contract and make accounting treatment when the above criteria are met. When a contract does not meet the above criteria, the Group shall recognize the consideration received as revenue only when the Group has no remaining obligations to transfer goods or services to the customers and the consideration received from the customer is non-refundable; otherwise, the Group shall recognize the consideration received from the customer as a liability.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

23. Revenue (Continued)

Engineering construction contracts

The engineering construction contracts between the Group and the clients usually involve performing obligations for building construction and infrastructure construction. Since the clients have control over the assets in construction in the course of the Group's performance, the Group shall treat them as performance obligations to be satisfied during a period of time and recognize revenue according to progress of performance within such period, unless the progress of performance cannot be reasonably determined. The Group determines the progress of performance of the services provided based on the costs incurred under the input method. When the progress of performance cannot be reasonably determined, the costs incurred are expected to be compensated, the Group recognizes revenue based on the amount of costs incurred till the progress of performance can be reasonably determined.

Contracts for sale of goods

Contracts for sale of goods between the Group and the clients usually contain only the obligation to transfer goods. The Group generally recognizes revenue at the time of control transfer on the basis of comprehensively considering the following factors: acquisition of the current right to receive payments for the goods, transfer of the main risks and rewards in the ownership of the goods, transfer of legal ownership of the goods, transfer of physical assets of the goods, and acceptance of the goods by the clients.

The Group recognizes the income from sale of real estate when a building is completed and accepted, the Group has signed a sales contract with the buyer, obtained the buyer's proof of payment and delivered the building for use. If the buyer receives a written notice of delivery and refuses to accept it without justifiable reasons, The Group recognizes the income from sale of real estate after the end of the delivery time limit determined in the written notice of delivery.

The specific policies of the Group's contracts with clients mainly include:

(1) Determining the transaction price

The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties and amounts expected to be refunded to a customer. The Group shall consider the terms of the contract and its customary business practices to determine the transaction price. When determining the transaction price, the Group may consider effects of factors such as the variable consideration, a significant financing component, consideration payable to a customer and non-cash considerations.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

23. Revenue (Continued)

(1) Determining the transaction price (Continued)

(a) Variable consideration

In case of the existence of variable consideration (performance bonuses and penalties etc.) in the contract, the Group shall determine the best estimate of variable consideration based on the expected value or the most probably occurred amount. The transaction price including variable consideration shall not exceed the amount of the cumulative recognized revenue which is the most probably to be significantly reversed when elimination of relevant uncertainty. At each balance sheet date, the Group re-estimate the amount of variable consideration which should be included in transaction price.

(b) A significant financing component

In case of the existence of a significant financing component in the contract, the Group shall determine the transaction price on the assumption that the customer has paid the amount payable by cash when obtaining the control over the goods or services. Differences between transaction price and contract consideration are amortized using effective interest method during the contract life. At contract inception, if the period between when the Group transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less, the Group would not consider the significant component in the contract.

(c) Consideration payable to a customer

In case of the existence of consideration payable to a customer in the contract, the Group shall account for consideration payable to a customer as a reduction of the transaction price and, therefore, of revenue unless the payment to the customer is in exchange for a distinct good or service. The Group shall recognize the reduction of revenue at the later of recognizing relevant revenue and paying (or promising to pay) the consideration.

(d) Non-cash consideration

In case of non-cash consideration paid by the customer, the Group shall determine transaction price at fair value of non-cash consideration. If the fair value of the non-cash consideration is not be estimated reasonably, the Group shall measure the consideration indirectly by reference to the stand-alone selling price of the goods or services promised to the customer.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

23. Revenue (Continued)

(2) Identification of stand-alone performance obligations in the contract

At contract inception, the Group assesses the contract and identify stand-alone performance obligations. Performance obligations refer to commitment of the Group to transfer a distinct good or service to the customer.

In the following circumstances, the Group takes the commitments to transfer of a good or services to the customer as stand-alone performance obligations: (i) commitment to transfer of a distinct good or services (or a group of goods or services); (ii) commitment to transfer of a series of distinct goods or services with the same substances and the same transfer model.

If the goods or services committed by the Group to the customer meets the following two conditions at the same time, those can be taken as distinct goods or services: (i) the customer is able to benefit from the stand-alone good or services or from the good or services together with other available source, namely that the good or services its own can be distinct; (ii) the commitment to transfer the good or services is separated from other commitments in the contract, namely, the commitment to transfer of the good or services is distinct in the contract.

When determining whether the commitment to transfer the good or services can be distinct, the Group uses judgement and comprehensively considers all facts and circumstances. The following circumstances generally reflect that the commitment to transfer the good or services is not separated from other commitments in the contract: (i) the Group provides a significant service of integrating the goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output for which the customer has contracted; (ii) the goods or services significantly modifies or customizes other goods or services promised in the contract; and (iii) the goods or services are highly interrelated with other goods or services promised in the contract.

(3) Transaction price allocated to each stand-alone performance obligation

If there are two or more of performance obligations included in the contract, at the contract inception, the Group allocates the transaction price to each single performance obligation based on the proportion of stand-alone selling price of goods or services promised in each stand-alone performance obligation. However, if there is conclusive evidence indicating that the contract discount or variable consideration is only relative with one or more (not the whole) performance obligations in the contract, the Group will allocate the contract discount or variable consideration to relative one or more performance obligation. Stand-alone selling price refers to the price of single sales of goods or services. If the stand-alone selling price cannot be observed directly, the Group estimates the stand-alone selling price through comprehensive consideration of all reasonably acquired relative information and maximum use of observable inputs.

(4) Revenue recognition at satisfying each stand-alone performance obligation

At contract inception, the Group identifies each stand-alone performance obligation included in the contract, determines whether the performance obligation satisfied during a period of time or at a point in time, and recognizes revenue when satisfying each stand-alone performance obligation.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

23. Revenue (Continued)

(4) Revenue recognition at satisfying each stand-alone performance obligation (Continued)

(a) Performance obligation satisfied during a period of time

It is a performance obligation satisfied during a period of time if one of the following conditions is met: (i) the customer obtains and consumes economic benefits at the same time of the Group's performance; (ii) the customer is able to control goods or services in progress during the Group's performance; and (iii) goods or services generated during the Group's performance have irreplaceable utilization, and the Group is entitled to collect amounts of cumulative performance parts which have been done up to now.

For performance obligations satisfied during a period of time, the Group will recognize revenue according to progress of performance within such period except for circumstances that the progress of performance cannot be reasonably determined. The Group determines progress of performance using input method, to determine the progress of performance based on the proportion of the accumulative actual cost accounting for the expected total cost. When the progress of performance cannot be reasonably determined, and the costs incurred are expected to be compensated, the Group recognizes revenue based on the amount of costs incurred till the progress of performance can be reasonably determined.

(b) Performance obligation satisfied at a point in time

For performance obligation satisfied not during a period of time but at a point in time, the Group will recognize revenue at the point in time when the customer obtains control over relative goods or services.

When judging whether the customer has obtained control over the goods or services, the Group will consider the following indications.

- The Group has a present right of receivables for the good or services, namely, a customer is presently obliged to pay for the good or services;
- The Group has transferred the legal title of the good to the customer, namely, the customer has physically possessed the good;
- The Group has transferred the significant risks and rewards of ownership of the good to the customer, namely, the customer has obtained the significant risks and rewards of ownership of the good;
- The customer has accepted the good or services;
- Other indications reflecting that the customer has obtained the control over the good or services.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

23. Revenue (Continued)

(5) Accounting treatment of specific transaction

(a) Sales attached with quality warranty terms

For sales attached with quality warranty terms, if such quality warranty provides an individual service other than that the Group have made commitments that the sold goods or services meet the established criteria, such quality warranty constitutes a single performance obligation, otherwise, the Group will make accounting treatment for quality warranty liability in accordance with the Accounting Standard for Business Enterprises No. 13 – Contingencies.

(b) A principal and an agent

To determine whether the Group is a principal or an agent, the Group identifies the specified goods or services to be provided to the customer, and assesses whether it controls those goods or services before they are transferred to the customer. If the Group can control those goods or services before they are transferred to the customer, the Group is a principal, recognizing revenue at the total consideration received or receivable; otherwise, the Group is an agent, recognizing revenue at the amount of commissions or service charges expected to be entitled to collection, and such amount shall be determined based on net amount of total consideration received or receivable less amounts payable to other related parties, or on established amounts or proportions of commissions.

(6) Contract costs

(a) Costs of obtaining a contract

The incremental costs of obtaining a contract (i.e. it would not have incurred if the contract had not been obtained) which are expected to be collected shall be recognize as an asset. If the amortization period of the asset is less than one year, it will be included in profit or loss when incurred. Other expenditures incurred to obtain the contract are included in profit or loss when incurred, except for expenditures clearly borne by the customer.

(b) Costs to fulfil a contract

If the costs incurred in fulfilling a contract are not within the scope of other accounting standards for business enterprises other than the new revenue standards and satisfy the following conditions at the same time, the costs will be recognized as an asset: (i) the costs relate directly to a contract or to an anticipated contract; (ii) the costs enhance resources of the Group that will be used in satisfying performance obligations in the future; and (iii) the costs are expected to be recovered.

(c) Amortization of the related assets of contract costs

An asset associated with contract costs shall be amortized on the same basis as the revenue recognition of goods or services associated with the asset.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

23. Revenue (Continued)

(6) Contract costs (Continued)

(d) Impairment of the related assets of contract costs

The Group shall make impairment allowance and recognize an impairment loss in profit or loss to the extent that the carrying amount of an asset associated with contract costs recognized the remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates, less the costs expected to be incurred to transfer the relative goods or services.

The Group shall recognize in profit or loss a reversal of an impairment loss previously recognized when the impairment conditions have changed. The reversed carrying amount of the asset at the reversal date shall not exceed the amount that would have been determined if no impairment loss had been recognized previously.

(7) Contract asset and contract liability

Contract asset refers to the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer when that right is conditioned on something other than the passage of time. Please refer to Note V 10 (2) for accounting policies on impairment of a contract asset. The Group's right of unconditional (i.e. solely depending on the passage of time) collection of consideration from the customer shall be separately set out as receivables.

Contract liability refers to the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or the amount is due) from the customer.

The Group shall recognize revenue when the Group satisfies a performance obligation in a contract, namely when the client obtains control over relevant goods or services. Control over relevant goods or services refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from the goods or services.

24. Government grants

Government grants are transferred of monetary assets and non-monetary assets from the government to the Group at no consideration. A government grant is recognized only when the Group can comply with the conditions attaching to it and the grant will be received.

If a government grant takes the form of a monetary asset, it is measured at the amount received or receivable. If a government grant takes the form of a non-monetary asset, it is measured at fair value. If the fair value cannot be reliably determined, it is measured at a nominal amount. A government grant measured at a nominal amount is recognized immediately in profit or loss for the period. Government grants received by the Group related to routine activities are recognized in other income or as reductions in the related costs and expenses according to the economic nature of business; whereas government grants received by the Group other than those related to routine activities are recognized in non-operating income.

For the six months ended 30 June 2022

SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES ٧. (CONTINUED)

Government grants (Continued) 24.

Government grants used for creating long-term assets by purchase, construction or other ways are recognized by the Group as the government grants related to assets, mainly including the investment subsidies for the purchase or construction of new equipment and other production infrastructure.

Government grants related to assets of the Group will be recognized as deferred income and amortized to profit or loss for the current period on a reasonable and systematic basis over the useful life of the related

The government grants related to income are those other than the ones related to assets. Government grants of the Group related to income mainly include scientific research subsidies. As they are mainly the compensation for related expenses of the enterprises, such government grants are recognized as the government grants related to income. The Group classifies government grants which are difficult to distinguish as the grants related to income on an entire basis.

If the government grants related to income are compensation for related expenses or losses to be incurred in subsequent periods, they are recognized as deferred income, and will be recognized in profit or loss or used to offset with related costs and expenses for the period when related expenses or losses are recognized. If the government grants related to income are compensation for related expenses or losses already incurred, they are recognized immediately in profit or loss for the current period or used to offset related with costs and expenses.

If the preferential low-interest loans received by the Group is subject to the fact that the government finance authority allocates interest subsidy fund to the bank which thereafter issues loans to the Group at preferential low-interest rates, the Group recognizes such borrowing at an amount actually received and calculates the borrowing costs based on the principal and the preferential low-interest rates. If the preferential low-interest loans received by the Group is the interest subsidy fund to the Group directly from the government finance authority, the Group deducts the interest subsidy from related borrowing costs.

Repayment of government grants should be applied first against any unamortized deferred income in respect of the grants. To the extent that repayment exceeds any such deferred income, or when no deferred income exists, the repayment should be recognized immediately in profit or loss for the current period.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

25. Deferred tax

For temporary differences between the carrying amounts of certain assets or liabilities and their tax base, or between the nil carrying amount of those items that are not recognized as assets or liabilities and their tax base that can be determined according to tax laws, deferred tax assets and liabilities are recognized using the balance sheet liability method.

All taxable temporary differences are recognized as related deferred tax liabilities under normal circumstances. Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized.

For deductible losses and tax credits that can be carried forward, deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized. However, for deductible temporary differences associated with the initial recognition of goodwill and the initial recognition of an asset or liability arising from a transaction (not a business combination) that affects neither the accounting profit nor taxable profits (or deductible losses) at the time of transaction, no deferred tax asset or liability is recognized. At the balance sheet date, deferred tax assets and liabilities are measured at the tax rates, according to tax laws, that are expected to apply in the period in which the asset is realized or the liability is settled.

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

Except for those current income tax and deferred tax charged to comprehensive income or shareholders' equity in respect of those transactions or events which have been directly recognized in other comprehensive income or shareholders' equity, and deferred tax recognized on business combinations, all other current income tax and deferred tax items are charged to profit or loss in the current year.

At the balance sheet date, the carrying amount of deferred tax assets is reviewed and reduced if it is no longer probable that sufficient taxable profits will be available in the future to allow the benefit of deferred tax assets to be utilized. Such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

When the Group has a legal right to settle current tax assets and liabilities on a net basis, and 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 assets and liabilities on a net basis or to realize the assets and liabilities simultaneously and in each future period in which significant amounts of deferred tax assets or liabilities are expected to be reversed, deferred tax assets and deferred tax liabilities are offset and presented on a net basis.

For the six months ended 30 June 2022

SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES ٧. (CONTINUED)

26. Lease

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

The Group assesses whether a contract is or contains a lease at inception or modification date. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

(1) The Group as the lessee

(a) Separation of the lease

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

The Group applies practical expedient not to separate non-lease components from lease component, and instead accounts for the lease component and any associated non-lease components as a single lease component for contracts containing leases for buildings and structures, machinery and equipment, and transportation vehicles.

(b) Right-of-use assets

Except for short-term leases and leases of low value assets, the Group recognizes rightof-use assets at the commencement date of the lease (i.e. the date the underlying asset provided by the lessor is available for use). Right-of-use assets are measured at cost which includes:

- the amount of the initial measurement of the lease liabilities;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

If a re-measurement of the lease liability occurs after the commencement date of the lease, the book value of the right-of-use assets shall be adjusted accordingly.

The Group depreciates the right of use assets in accordance with the relevant depreciation requirements of the Accounting Standards for Business Enterprises No.4 - Fixed Assets. Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straightline basis over the shorter of its estimated useful life and the lease term.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

26. Lease (Continued)

(1) The Group as the lessee (Continued)

(b) Right-of-use assets (Continued)

The Group determines whether the right of use assets are impaired and accounts for the identified impairment loss based on the *Accounting Standards for Business Enterprises No.8 – Impairment of Assets*. If the recoverable amount of the right-of-use asset is estimated to be less than its carrying amount, the carrying amount of the asset will be reduced to its recoverable amount (Note V18).

(c) Refundable rental deposit

The refundable rental deposits paid by the Group are measured at fair value in accordance with the *Accounting Standards for Business Enterprises No.22 – Recognition and Measurement of Financial Instruments.* The differences between the fair value and the nominal value at the time of initial recognition are considered as an additional lease payments and included in the cost of the right-of-use assets.

(d) Lease liabilities

Except for short-term leases and leases of low value assets, at the commencement date of the lease, the Group recognizes and measures the lease liabilities at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

Lease payments refer to the payments made by the Group to the lessor for the lessee's right to use the leased asset over the lease term and include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable;
- variable lease payments that depend on an index or a rate;
- the exercise price of a purchase option reasonably certain to be exercised by the Group;
- payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate;
- amounts expected to be paid under residual value guarantees.

For the six months ended 30 June 2022

SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES ٧. (CONTINUED)

26. Lease (Continued)

The Group as the lessee (Continued) (1)

Lease liabilities (Continued) (d)

Variable lease payments that depend on an index or a rate are initially measured using the index or rate at the commencement date. Variable lease payments that are not included in the measurement of lease liabilities are recognized in profit or loss or the cost of underlying assets in the period in which they occur.

Interest expenses on the lease liabilities in each period during the lease term are recognized by the Group by using the fixed periodic rate of interest.

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

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liabilities are remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in expected payment under a guaranteed residual value or a change in an index or a rate used to determine those payments, in which cases the related lease liabilities are remeasured by discounting the revised lease payments using the initial discount rate.

Lease liabilities are presented as "current liabilities" and "non-current liabilities" based on their liquidity at the balance sheet. The closing balance of non-current lease liabilities due within 1 year from the balance sheet date is reflected under the line item of "non-current liabilities due within 1 year".

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

For short-term leases and leases of low-value items to which the recognition exemption is applied by the Group, right-of-use assets and lease liabilities are not recognized. A shortterm lease refers to a lease that, at the commencement date, has a lease term of 12 months or less and does not contain a purchase option. A lease of low value asset refers to a single lease asset, when new, is of low value. Lease payments on short-term leases and leases of low-value assets are recognized in profit or loss or the cost of underlying assets on a straightline basis over the lease term.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

26. Lease (Continued)

(1) The Group as the lessee (Continued)

(f) Lease modifications

The Group accounts for a lease modification as a separate lease if there is a lease modification and both of the following apply:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

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

(2) The Group as the lessor

(a) Separation of the lease

Where a contract contains both lease and non-lease components, the Group allocates the consideration of the contract in accordance with the provisions of the revenue standards on allocation of transaction price. The basis of the allocation is the respective stand-alone selling price of lease component and non-lease component.

(b) Classification of the lease

The Group classifies the lease into financing lease and operating lease on the start date of the lease. Financial lease refers to a lease that essentially transfers almost all the risks and rewards related to the ownership of leased assets. Its ownership may or may not be transferred eventually. Operational lease refers to the leases other than financial leases.

The Group does not reassess the classification of leases after the start of the lease unless there is a modification in the lease. The Group shall not reassess the classification of leases if the estimated useful life and expected residual value of leased assets change or the lessee defaults.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

26. Lease (Continued)

(2) The Group as the lessor (Continued)

(c) Rental deposit to be refunded

The lease deposits received by the Group that shall be refunded, are measured at fair value at the time of initial recognition in accordance with Accounting Standards for Business Enterprises No.22 – Recognition and Measurement of Financial Instruments. The difference between the fair value and the nominal value at the time of initial recognition shall be considered as the additional lease payments from the lessee.

(d) Operating leases recorded by the Group as lessor

During the periods within the lease term, the Group recognizes the lease receipts from operating lease as rental income. The initial direct costs incurred by the Group to obtain the operating lease are capitalized when they are incurred, and are allocated over the lease term on the same basis of recognition of rental income, and are included in profit or loss by stages.

The variable lease receipts obtained by the Group from operating lease but not included in the lease receivables are included in profit or loss when they incur.

(3) Sale and leaseback transactions (The Group acting as a seller-lessee)

The Group assesses whether the transfer of the asset in the sale and leaseback transaction constitutes a sale in accordance with the Revenue Standards. If the transfer of the asset is not a sale, the Group continues to recognize the transferred assets and should recognize a financial liability equal to the transfer proceeds. Such financial liability is accounted for applying *Accounting Standards for Business Enterprises No.22 – Recognition and Measurement of Financial Instruments.* If the transfer of an asset constitutes a sale, the Group shall measure the right-of-use asset arising from the leaseback at the proportion of the previous carrying amount of the asset that relates to the right of use and recognize only the amount of any gain or loss that relates to the rights transferred to the lessor.

27. Other significant accounting policies and accounting estimates

(1) Distribution of dividends

The cash dividend of the Company is recognized as a liability upon approval in the annual shareholders' meeting.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

27. Other significant accounting policies and accounting estimates (Continued)

(2) Production safety expenses

The Group accrues for production safety expenses pursuant to the Circular on Printing and Issuing the Management Measures on the Enterprise Production Safety Expenses Appropriation and Utilization <Cai Qi [2012] No.16>, issued by the MoF and the State Administration of Work Safety.

Production safety expenses accrued based on the aforesaid regulations shall be recorded in the costs of related products or expenses in profit or loss for the current year, and provided as a fund in the special reserve. When the expenditures are utilized, they should be offset against the special reserve; when the expenditures incurred relate to fixed assets, they shall be recognized as construction in progress. When the assets are ready for their intended use, a same amount should be offset against the special reserve and recorded as accumulated depreciation at the same time. The related fixed asset is not subject to any further depreciation in the subsequent periods.

(3) Segment information

The accounting policies of segment information are listed in Note XV1 (1).

(4) Discontinued operation

Discontinued operation refers to the separately identifiable components that have been disposed of or classified as held for sale and meet one of the following conditions:

- The component represents an independent main business or a major business area;
- This component is a part of a related plan that intends to dispose of an independent main business or a separate main operating area;
- This component is a subsidiary acquired exclusively for resale.

(5) Significant accounting estimates and judgments

As operating activities have inherent uncertainties, the Group need to make judgments, estimates and assumptions upon report items that cannot be accurately calculated in applying the above accounting policies. These judgments, estimates and assumptions are made based on historical experiences of the management of the Group, taking other related factors into consideration. The actual results may be different from the estimates of the Group.

The Group review the above judgments, estimates and assumptions periodically based on going concern. If the changes of accounting estimates only affect the current year, the influence amount is recognized in the current year. If the changes of accounting estimates affect both of the current year and the future period, the influence amount is recognized in the current year and the future period.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

27. Other significant accounting policies and accounting estimates (Continued)

(5) Significant accounting estimates and judgments (Continued)

(a) Important judgments in applying accounting policies

The Group made some important judgments in applying accounting policies, which have significant influences on the amount of financial statements.

(i) Equity instrument

The issued perpetual bond has no maturity date. Since the Group has the right to defer interest payment and the option for redemption of perpetual bond. The Group has no obligation to deliver cash or another financial asset to another entity, or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the issuer, the perpetual bond is classified as an equity instrument, which meets the qualifying to be recorded in Note V22 as equity instrument.

(ii) Business models

The classification of financial assets at initial recognition depends on the Group's business model for managing financial assets. When determining the business model, the Group consider how the performance of the business model and the financial assets held within that business model are evaluated and reported to the entity's key management personnel, the risks affecting the performance of financial assets and the risk management, and the manner in which the relevant management receives remuneration. When assessing whether the objective is to collect contractual cash flows, the Group needs to analyse and judge the reason, timing, frequency and value of the sale before the maturity date of the financial assets.

(iii) Contractual cash flow characteristics

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics, and the judgements on whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, including the assessment of the modification of the time value of money, the judgement on whether there is any significant difference from the benchmark cash flow and whether the fair value of the prepayment features is insignificant for financial assets with prepayment features, etc.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

- 27. Other significant accounting policies and accounting estimates (Continued)
 - (5) Significant accounting estimates and judgments (Continued)
 - (a) Important judgments in applying accounting policies (Continued)
 - (iv) Whether the Group has control over a structured entity

The Group has shares in a number of structured entities investing in infrastructure development. The Group mainly determines whether it actually controls a structured entity in accordance with *Accounting Standard for Business Enterprises No. 33 – Consolidated Financial Statements.* Where the Group has effective control, the Group includes the structured entity in the consolidated financial statements. Where the Group does not actually control the structured entity but exercises joint control with other parties or is only able to exert significant influence on the structured entity, the Group accounts for the structured entity as a joint venture or associated enterprise. Where the Group has neither actual control nor joint control over the structured entity and has no significant influence, the Group accounts for the structured entity in other non-current financial assets.

(v) Whether a contract is, or contains, a lease

The Group signed the lease agreement on equipment for some engineering construction projects. The Group believes that, based on the agreement, there is no identified asset, the supplier has the substantive right to substitute the underlying asset throughout the period of use. Therefore, the agreement does not contain a lease, and the Group treats it as acceptance of a service.

(b) The key assumptions and uncertainties used in accounting estimates

As at balance sheet date, the key assumptions concerning the future, and other key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities in the next 12 months are as below:

(i) Progress of performance of engineering construction contracts

The Group determines to use input method to measure the progress of income of engineering services contracts provided by the Group which require to be fulfilled in a certain period. Specifically, the Group determines progress of performance based on the proportion of accumulatively actual cost in estimated total cost. Because of the nature of the activity undertaken in engineering contracting services, the date at which the contract activity is entered into and the date when the activity is completed usually fall into different accounting periods. In the contract progress, the management of the Group regularly reviews the transaction price and contract modification, contract costs in the budget prepared for each contract, the progress of the contracts performance and the accumulatively actual cost. If there are circumstances that there are changes in the transaction price, the contract costs in the budget or the progress of the contract performance, estimates are revised. These revisions may result in increasing or decreasing in estimated revenues or costs and are reflected in consolidated income statement in the current period.

For the six months ended 30 June 2022

SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES ٧. (CONTINUED)

- Other significant accounting policies and accounting estimates (Continued) 27.
 - Significant accounting estimates and judgments (Continued) (5)
 - (b) The key assumptions and uncertainties used in accounting estimates (Continued)
 - (ii) Impairment of financial instruments and contract assets

The Group uses the expected credit loss model to assess the impairment of financial instruments and contract assets. The Group is required to perform significant judgement and estimation and take into account all reasonable and supportable information, including forward-looking information. When making such judgements and estimates, the Group infers the expected changes in the debtor's credit risk based on historical repayment data combined with economic policies. macroeconomic indicators, industry risks and other factors. The different estimates may impact the impairment assessment, and the provision for impairment may also not be representative of the actual impairment loss in the future.

(iii) Impairment of non-current assets other than financial assets (other than goodwill)

The Group assesses whether there are any indicators of impairment for all noncurrent assets other than financial assets at the balance sheet date. Intangible assets with indefinite useful lives are tested for impairment annually and at other times when such indicator exists. Other non-current assets other than financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. Where the carrying amount of an asset or asset group is higher than its recoverable amount (i.e. the higher of its fair value less costs to sell and the present value of the future cash flows expected to be derived from it), it is indicated that such asset or asset group is impaired. The fair value less costs to sell is determined with reference to the price in sales agreement or observable market price in arm's length transaction, adjusted for incremental costs that would be directly attributable to the disposal of the asset or asset group. When calculating the present value of expected future cash flows from an asset or asset group, the management shall estimate the expected future cash flows from the asset or asset group and choose a suitable discount rate in order to calculate the present value of those cash flows. Further details are given in Note V 18.

(iv) Useful lives of fixed assets, investment properties and intangible assets

The fixed assets, investment properties and intangible assets of the Group are depreciated or amortised over their expected useful lives. The Group periodically reviews the expected useful life of the underlying assets to determine the amount of depreciation and amortization expense to be included in each reporting period. The useful life of an asset is determined by the Group based on its past experience with comparable assets and in the light of anticipated technological changes. If there is a significant change to previous estimates, depreciation and amortization expenses are adjusted for future periods.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

- 27. Other significant accounting policies and accounting estimates (Continued)
 - (5) Significant accounting estimates and judgments (Continued)
 - (b) The key assumptions and uncertainties used in accounting estimates (Continued)
 - (v) Tax

The Company and its subsidiaries are subject to income taxes and other taxes in numerous jurisdictions in domestic provinces and certain overseas countries. The ultimate tax effect of many transactions has uncertainty during normal business activities. The Group shall make significant judgment on current year income tax and land appreciation tax provisions in different areas and districts. Where the final tax outcome of these matters is different from the amounts originally recorded, the differences will impact on the current year income tax provisions in the periods in which the differences arise.

Deferred tax assets relating to certain temporary differences and tax losses are recognized as management considers it is probable that future taxable profit will be available against which the deductible temporary differences or tax losses can be utilized. In cases where the estimated amount differs from original estimation, the difference would influence the recognition of deferred tax assets in the period when the estimation changes. Deferred tax assets relating to certain temporary differences and tax losses should not be recognized if management considers it is not probable to utilize the deductible temporary differences or tax losses to deduct taxable income in future.

(vi) Retirement benefits

The Group establishes liabilities in connection with supplementary benefits paid to certain retired employees. The amounts of employee benefit expenses and liabilities are determined using various assumptions and conditions on discount rates, salary growth rates during retirement, medical expense growth rates, and other factors. Actual results that differ from the assumptions are recognized immediately and therefore affect recognized other comprehensive income in the period in which such differences arise. While management believes that its assumptions are appropriate, differences in actual experience or changes in assumptions may affect the other comprehensive income and balance of liabilities related to the supplementary employee retirement benefit obligations.

For the six months ended 30 June 2022

V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

28. Changes in significant accounting policies and accounting estimates

(1) Changes in significant accounting policies

During the reporting period, there were no significant changes in accounting policies.

(2) Changes in significant accounting estimates

During the reporting period, there were no significant changes in accounting estimates.

VI. TAXATION

1. Major categories of taxes and respective tax rates

The main taxes and tax rates applicable to the Company and the onshore subsidiaries are as follows:

Category of tax	Tax rates	
Value-added tay ("VAT")) VAT payable (VAT is imposed on the taxable sales	3%, 5%, 6%, 9% and 13%
value-added tax (VAT)	amount multiplied by the tax rate (output-VAT) less deductible input-VAT of the current year)	3/6, 3/6, 0/6, 9/6 and 13/6
City maintenance and construction tax ("CCT")	Payment for VAT	1%, 5% and 7%
Education surcharges	Payment for VAT	3%
Enterprise income tax ("EIT")	Taxable income	25%
Land appreciation tax	Appreciation amount on the transfer of real estate	30% to 60%

The Company and the subsidiaries, except some established onshore that enjoy preferential tax policies, are subject to corporate income tax at 25% of their taxable income.

Offshore subsidiaries of the Company (including those established in Hong Kong SAR of China) are subject to the taxes at the tax rates stipulated by tax regulations of respective jurisdictions.

For the six months ended 30 June 2022

VI. TAXATION (CONTINUED)

Tax incentive

The preferential policies on corporate income tax enjoyed by the main entities of the Group are summarized as follows:

	Preferent	ial tax rate	
	Amount for the current period	Amount for the prior period	Preferential policies on corporate income tax
Shanghai Baoye Group Corp. Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
China First Metallurgical Group Co. Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
China Second Metallurgy Group Corp. Ltd.	15%	15%	Preferential policies on corporate income tax
China MCC5 Group Corp. Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
China MCC17 Group Co. Ltd.	15%	15%	Preferential policies on corporate income tax
China MCC19 Group Corp. Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses, additional deduction for payroll expenses of disabled employees
China MCC20 Group Corp. Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses, additional deduction for payroll expenses of disabled employees
China MCC22 Group Corp. Ltd.	15%	15%	Preferential policies on corporate income tax
Central Research Institute of Building and Construction Co., Ltd.	15%	15%	Preferential policies on corporate income tax
Beijing Metallurgical Equipment	15%	15%	Preferential policies on corporate income tax, additional
Research Design Institute Co., Ltd.			deduction for R&D expenses
MCC Capital Engineering & Research Incorporation Limited	15%	15%	Preferential policies on corporate income tax
WISDRI Engineering & Research Incorporation Limited	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
Huatian Engineering & Technology Corporation, MCC	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
ZHONGYE Chang Tian International Engineering Co., Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
Shen Kan Engineering & Technology Corporation, MCC	15%	15%	Preferential policies on corporate income tax
Wuhan Surveying Geotechnical Research Institute Co., Ltd. of MCC	15%	15%	Preferential policies on corporate income tax
MCC TianGong Group Corporation Limited	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses, additional deduction for payroll expenses of disabled employees
MCC Baosteel Technology Services Co., Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses, additional deduction for payroll expenses of disabled employees
MCC Communication Construction Group Co., Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses, additional deduction for payroll expenses of disabled employees
MCC (Shanghai) Steel Structure Technology Co., Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
MCC Urban Investment Holding Co., Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses
MCC-SFRE Heavy Industry Equipment Co., Ltd.	15%	15%	Preferential policies on corporate income tax, additional deduction for R&D expenses

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Cash and bank balances

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Cash	14,486	11,136
Bank deposits	57,580,269	30,905,299
Other cash and bank balances	5,559,189	10,908,029
Total	63,153,944	41,824,464
Including: Total amount of deposits abroad	2,010,411	2,333,195

As at 30 June 2022, restricted cash and bank balances of the Group were RMB 10,863,574,000 (as at 31 December 2021: RMB 10,607,640,000) (Note VII70), which mainly includes bank deposits for issuing acceptance bills, guarantee deposits, frozen funds for lawsuit, funds under supervision for property presale, mortgage guarantees, deposits on wages for rural migrant workers and special funds for projects, etc.

The Group's certain cash and bank balances deposited overseas are subject to the exchange control in relevant countries or regions and cannot be converted to foreign currencies freely or remitted out from these countries or regions. As at 30 June 2022, the proportion of the Group's cash and bank balances denominated in foreign currency deposited in these countries or regions to the balance of cash and bank balances in the Group's consolidated balance sheet was less than 3% (as at 31 December 2021: less than 5%).

The Group obtains interest income on its bank demand deposits at the interest rates for demand deposits. The fixed deposit term for short-term deposits range from 30 days to 3 months, depending on the Group's demands for cash and the interest income is earned at the corresponding interest rates for demand deposits.

2. Financial assets held for trading

Items	30 June 2022	31 December 2021
Financial assets at FVTPL		
Equity instrument investment	139,942	1,107
Including: Investment in listed stocks	1,177	1,107
Investment in unlisted equities	138,765	
Total	139,942	1,107

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

3. **Derivative financial assets**

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Forward foreign exchange settlement and Sales contracts Currency swap contracts	8,248 49,346	114,790
Total	57,594	114,790

Bills receivable 4.

(1) Bills receivable analyzed by category

All amounts in RMB'000

Items	Book value	30 June 2022 Provisions for credit losses	Carrying amount	31 Book value	December 2021 Provisions for credit losses	Carrying amount
Bank acceptance bills Commercial acceptance	444,956	-	444,956	1,085,427	-	1,085,427
bills	2,044,915	42,315	2,002,600	2,736,162	396,360	2,339,802
Total	2,489,871	42,315	2,447,556	3,821,589	396,360	3,425,229

(2) The Group's pledged bills receivable

Items	Pledged amount as at 30 June 2022	Pledged amount as at 31 December 2021
Bank acceptance bills	163,859	278,038
Commercial acceptance bills		30,432
Total	163,859	308,470

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Bills receivable (Continued)

(3) The Group's bills receivable endorsed to other parties or discounted but not yet due at the balance sheet date

All amounts in RMB'000

Items	30 June 2022	30 June 2022	31 December 2021	31 December 2021
	Derecognized	Not derecognized	Derecognized	Not derecognized
Bank acceptance bills	45,062	-	-	999,697
Commercial acceptance bills	-	703,668	-	
Total	45,062	703,668	_	999,697

(4) Changes in provision for credit losses of bills receivable

All amounts in RMB'000

Item	31 December 2021	Reversal for the current period	Transfer out for the current period	30 June 2022
Provision for credit losses of commercial acceptance bills	396,360	(86,574)	(267,471)	42,315

Restricted bills receivable as at 30 June 2022 are set out in Note VII 70. (5)

5. Accounts receivable

Disclosed by aging (1)

The Group's accounts receivables are mainly receivables for engineering contracting business. The credit period of accounts receivable is generally one to three months.

All amounts in RMB'000

Aging	30 June 2022	31 December 2021
Within 1 year	72,400,736	62,442,338
1 to 2 years	15,945,434	13,893,734
2 to 3 years	5,580,429	6,350,925
3 to 4 years	4,601,151	3,921,082
4 to 5 years	2,791,112	3,027,452
Over 5 years	9,501,335	9,219,754
Total book value	110,820,197	98,855,285
Less: provisions for credit losses	16,263,554	14,973,590
Carrying amount	94,556,643	83,881,695

Settlement of trade receivables generated through engineering and construction services is made in accordance with terms specified in the contracts governing the relevant transactions, and the aging of relevant trade receivables is calculated based on the settlement time of the project.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

5. Accounts receivable (Continued)

(2) Disclosed by method of determining provision for credit losses

All amounts in RMB'000

	Book va		30 June 2022 Provision for c	redit losses	Oceania	Book va		December 202 Provision for o		Coming
Category	Amount	Ratio	Amount	Ratio	Carrying amount	Amount	Ratio	Amount	Ratio	Carrying amount
Accounts receivable for which provision for credit losses is individually assessed Accounts receivable for which provision for credit losses is collectively assessed on a portfolio basis	31,064,963 79,755,234	28.03	7,888,840 8,374,714	25.39	23,176,123	28,719,762	29.05	7,145,146 7,828,444	24.88	21,574,616
Total	110,820,197	100.00	16,263,554	1	94,556,643	98,855,285	100.00	14,973,590	1	83,881,695

(a) Accounts receivable for which provision for credit losses is individually assessed at the end of the period

All amounts in RMB'000

Name of entity	Accounts receivable	30 June 2022 Provision for credit losses	Proportion of provision	Reasons
Party 1	1,619,424	-	_	The Group considered the reasonable
Party 2	1,441,365	566,940	39.33	and supported information related to
Party 3	712,030	_	_	other party (including forward-looking
Party 4	613,600	122,919	20.03	information), then evaluated the
Party 5	571,959	571,959	100.00	anticipated credit losses and made
Others	26,106,585	6,627,022	25.38	provision for credit losses.
Total	31,064,963	7,888,840	25.39	1

Note: For the evaluation on Party 1's expected credit losses, please refer to Note VII 10(3).

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Accounts receivable (Continued)

(2) Disclosed by method of determining provision for credit losses (Continued)

Accounts receivable for which provision for credit losses is collectively assessed on a portfolio basis at the end of the period

All amounts in RMB'000

Aging	Estimated gross carrying amount at default	30 June 2022 Expected lifetime credit losses	Proportion of provision (%)
Within 1 year 1 to 2 years 2 to 3 years 3 to 4 years 4 to 5 years Over 5 years	57,807,197 11,553,009 3,663,829 2,285,251 1,701,705 2,744,243	1,660,608 1,173,271 802,139 899,972 1,157,088 2,681,636	2.87 10.16 21.89 39.38 68.00 97.72
Total	79,755,234	8,374,714	10.50

The Group considers the aging factor and groups accounts receivable accordingly. The Group determines the expected credit loss and provision for credit losses based on the historical experience of credit losses.

(3) Provision for credit losses of accounts receivable

All amounts in RMB'000

		Changes for the year					
	31 December					Other	30 June
Item	2021	Provision	Reversal	Transfer-in	Write-off	changes	2022
Provision for credit losses	14.973.590	1.411.329	(388,070)	267.471	(2,003)	1,237	16,263,554
LIONIPION IOI CIECIT 102262	14,973,390	1,411,028	(300,070)	201,411	(2,000)	1,231	10,200,004

The Group's significant amounts of reversal or recovery for this period are as follows:

Accounts receivable (per entity)	Reason for reversal or recovery of provision for original bad debts	Basis for proportion of provision for reversal or recovery	Amount of reversal or recovery	Recovery mode
Party 1	Recovery of project fees	Possibility of recovery	84,000	Bank deposits
Party 2	Recovery of project fees	Possibility of recovery	60,000	Bank deposits

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

5. Accounts receivable (Continued)

(4) The five largest accounts receivable collected by arrears at the end of the period

All amounts in RMB'000

Name of entity	Relationship with the Group	Balance as at 30 June 2022	Provision for bad debts as at 30 June 2022	As a percentage of accounts receivable (%)
Party 1	Third party	2,980,233	178,592	2.69
Party 2	Third party	2,135,409	285,918	1.93
Party 3	Third party	1,619,424	-	1.46
Party 4	Third party	1,441,365	566,940	1.30
Party 5	Third party	712,030	-	0.64
Total	1	8,888,461	1,031,450	8.02

- (5) For the current year, the Group's total carrying amount of derecognized accounts receivable due to the transfer of accounts receivable amortized cost to financial institutions in the form of non-recourse protection factoring and asset securitization was RMB 16,443,138,000. Losses due to derecognition of financial assets was RMB 536,947,000, which was recorded into investment losses. As at 30 June 2022, no assets and liabilities the Group recognized for transfer of accounts receivable and continuing involvement.
- (6) Accounts receivable with title restriction as at 30 June 2022 are set out in Note VII 70.

6. Receivables at FVTOCI

Items	30 June 2022	31 December 2021
Bank acceptance bills Other credit instruments at fair value through other	13,213,094	11,857,791
comprehensive income	600,697	
Total	13,813,791	11,857,791

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Receivables at FVTOCI (Continued)

- (1) The Group recognizes impairment provision for receivables at FVTOCI on the basis of the expected credit loss. For the current period, there was no significant credit risk in financing with receivables upon evaluation. Therefore, the Group didn't make provision for credit impairment loss of the receivables at FVTOCI.
- (2) Endorsed or discounted financing with receivables which were not due as at the balance sheet date are as follows:

All amounts in RMB'000

Items	30 June 2022		31 December 2021	
	Derecognized	Not derecognized	Derecognized	Not derecognized
Bank acceptance bills Other credit instruments at fair value through other comprehensive income	18,915,534 85,257	1,092,604	15,310,163	-
Total	19,000,791	1,092,604	15,310,163	_

Restricted receivable of FVTOCI as at 30 June 2022 are set out in Note VII 70. (3)

7. **Prepayments**

Analysis by aging (1)

All amounts in RMB'000

	30 June 20	22	31 December 2021	
Aging	Amount	Ratio <i>(%)</i>	Amount	Ratio (%)
Within 1 year	33,229,206	79.76	38,785,762	84.12
1 to 2 years	5,290,318	12.70	4,146,628	8.99
2 to 3 years	1,155,680	2.77	1,703,716	3.69
Over 3 years	1,987,303	4.77	1,474,927	3.20
Total	41,662,507	100.00	46,111,033	100.00
Total	11,002,001	100100	10,111,000	100.00

As at 30 June 2022, prepayments aged over one year were RMB 8,433,301,000 (As at 31 December 2021: RMB 7,325,271,000), mainly including prepaid construction payments and payments for goods to sub-contractors.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

7. Prepayments (Continued)

(2) The carrying amounts of the five largest prepayments at the end of the year

All amounts in RMB'000

Name of entity	Relationship with the Group	30 June 2022	As a percentage of total prepayments (%)
Party 1	Third party	1,008,500	2.42
Party 2	Third party	932,550	2.24
Party 3	Third party	614,256	1.47
Party 4	Third party	394,782	0.95
Party 5	Third party	318,019	0.76
Total	1	3,268,107	7.84

8. Other receivables

(1) Other receivables analyzed by category

All amounts in RMB'000

Items	30 June 2022	31 December 2021	
Interest receivables Dividend receivables Other receivables	7,804 37,954 61,662,784	1,038 579,445 67,186,152	
Total	61,708,542	67,766,635	

(2) Interest receivables

Item	30 June 2022	31 December 2021
Interests on term deposits	7,804	1,038
Total	7,804	1,038

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Other receivables (Continued)

(3) Dividend receivables

All amounts in RMB'000

The name of investee	30 June 2022	31 December 2021
Hebei Steel Luan County Sijiaying Iron Ore		
Co., Ltd.	9,024	9,024
MCC Rong Xing Building Materials (Chengdu)		
Co., Ltd.	6,000	6,000
Sichuan Hangye Industrial Co., Ltd.	2,400	_
Sichuan Developing Shuou Construction		
Engineering Co., Ltd.	1,749	1,749
Jidong Cement Luanzhou Co., Ltd.	1,685	_
Zhuhai MCC Jianxin Investment Management		
Partnership (LP)	_	531,697
Chongqing Qianxin International Trading Co., Ltd.	_	11,060
Others	17,096	19,915
Total	37,954	579,445

As at 30 June 2022, dividends receivable aged over one year were RMB 24,144,000 (31 December 2021: RMB 24,144,000).

(4) Aging analysis

Aging	30 June 2022	31 December 2021
Within 1 year	37,865,648	44,830,051
1 to 2 years	8,857,945	9,813,773
2 to 3 years	5,003,861	4,197,192
3 to 4 years	4,861,035	3,810,157
4 to 5 years	1,840,129	3,903,880
Over 5 years	10,974,905	9,392,287
Total book value	69,403,523	75,947,340
Less: provisions for credit losses	7,740,739	8,761,188
Carrying amount	61,662,784	67,186,152

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

8. Other receivables (Continued)

(5) Other receivables categorized by nature

All amounts in RMB'000

Nature of other receivables	Book value on 30 June 2022	Book value on 31 December 2021
Deposits, guarantee funds and advances Loan receivables from related parties Advance to employees Receivables on disposal of investments Others	33,316,639 25,851,601 365,438 2,702,393 7,167,452	31,827,031 34,363,346 284,175 2,702,393 6,770,395
Total	69,403,523	75,947,340

(6) Provision for credit losses of other receivables

	Phase 1	Phase 2 Lifetime	Phase 3 Lifetime	
	Future	expected	expected	
	12-month	credit losses	credit losses	
Items	expected credit losses	(Non-credit- impaired)	(Credit- impaired)	Total
Provision for credit losses at 31				
December 2021	2,618,201	793,510	5,349,477	8,761,188
Transfer of opening balance for the				
current period	(92,629)	_	92,629	-
Provision for the current period	319,404	390,478	165,047	874,929
Reversal for the current period	(236,966)	(23,668)	(85,727)	(346,361)
Write-off for the current period	(228)	_	(312)	(540)
Changes in scope of consolidation	=	(313,505)	(1,239,296)	(1,552,801)
Change of exchange rate	1,503	_	2,821	4,324
Provision for credit losses at 30				
June 2022	2,609,285	846,815	4,284,639	7,740,739

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Other receivables (Continued)

(7) The five largest other receivables at the end of the current period

All amounts in RMB'000

Name of entity	Relationship with the Group	Nature of other receivables	Aging	30 June 2022	Provision for bad debts	As a percentage of total other receivables (%)
Party 1	Third party	Current accounts	Within 1 year	3,980,000	-	5.73
Party 2	Joint venture	Loans to related parties	Within 1 year	3,312,270	-	4.77
Party 3	Joint venture	Loans to related parties	Within 1 year	2,477,902	-	3.57
Party 4	Joint venture	Loans to related parties	Within 1 year	2,439,237	-	3.51
Party 5	Third party	Receivables on disposal of investments	Over 5 years	2,122,943	-	3.06
Total	1	1	1	14,332,352	_	20.64

Other notes:

Restricted other receivables as at 30 June 2022 are set out in Note VII 70.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Inventories

(1) Categories of inventories

	Book value impairment amount Book value impairment a Transterials 3,874,361 19,799 3,854,562 4,867,187 19,609 4,84 Frials procurement 112,073 - 112,073 352,585 - 35 Frials procurement 352,585 4,867,187 19,609 4,84 500000000000000000000000000000000000					
		Provision for	Carrying		Provision for	Carrying
Items	Book value	impairment	amount	Book value	impairment	amount
Raw materials	3,874,361	19,799	3,854,562	4,867,187	19,609	4,847,578
Materials procurement	112,073	-	112,073	352,585	-	352,585
Outsourced processing						
materials	7,986	-	7,986	8,339	105	8,234
Work in progress	2,992,217	501,938	2,490,279	3,056,724	503,637	2,553,087
Finished goods	3,384,573	202,039	3,182,534	3,190,278	199,283	2,990,995
Other materials	649,901	4,447	645,454	635,843	4,469	631,374
Performance costs of						
contracts	162,961	_	162,961	142,430	-	142,430
Properties under						
development (a)	37,668,535	19,763	37,648,772	26,552,312	19,763	26,532,549
Completed properties						
held for sale (b)	22,404,755	350,671	22,054,084	24,141,037	352,347	23,788,690
Total	71,257,362	1,098,657	70,158,705	62,946,735	1,099,213	61,847,522

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Inventories (Continued)

(1) Categories of inventories (Continued)

Details of the properties under development

	Project	Estimated	Estimated total		
Project name	Commencement date	Completion date	investment amount	31 December 2021	30 June 2022
Nanjing Xiaguan Riverside Project					
(Note 1)	2011-01-01	2026-12-31	9,631,279	5,722,280	7,236,469
Guangzhou Wanbao (Note 1)	2018-04-01	2022-12-31	6,206,220	=	4,907,486
MCC Xinglong New City Hongshijun Tiantai Road (Yangqiao Avenue)	2017–12–20	2023-12-31	7,944,072	3,708,978	3,890,076
(Note 1) Shijiazhuang MCC Dexian Mansion	2017-04-30	2023–12–31	8,239,270	-	2,476,047
(Note 1)	2021-08-29	2023-06-30	4,930,980	-	2,451,456
Yanjiao Headquarters Base Project	2019-10-31	2023-08-31	2,794,420	1,611,110	1,756,727
MCC Tongluo Town	2014-11-01	2026-12-31	5,523,340	1,387,733	1,508,729
Qingdao MCC Dexian Mansion	2020-06-24	2024-06-30	4,016,260	2,582,940	1,312,509
Zhongjie Mansion	2012–11–11	2023-06-30	1,605,830	1,243,027	1,255,849
Changchengshili Spring Breeze Town	2018-03-03	2025-12-31	2,500,000	1,077,888	1,190,565
Qin Hai Yun Villa Project	2011-08-08	2025-12-31	4,400,000	1,686,907	969,565
Tangshan MCC Dexian Mansion	2022-03-15	2024-10-25	3,772,290	-	799,283
Shijiazhuang Zhaotuo Park Project MCC Baizhishan International	2019-03-01	2022–12–31	5,441,540	724,294	790,529
Holiday Resort (Project I)	2014-04-01	2024-04-01	4,000,000	701,992	788,268
Qinhuangdao Fanhua Dexian New City Project II	2018-12-31	2025-12-31	2,823,800	702,001	722,008
Shanghai Jinshan District – MCC					
Fengjunyuan Project II	2015-12-31	2022-12-31	800,000	658,632	706,277
Gengyang New City 5 District II Qinhuangdao Yunding Dexian New	2020–11–01	2022–12–31	1,168,200	536,075	652,277
City Project I	2018-12-31	2025-12-31	2,666,337	617,703	640,989
Renhe Xili	2019-03-01	2022-12-31	1,924,180	373,991	439,249
Guanhu Phase I Project Qianhai Headquarter R&D Base Commercial properties of	2018–10–20	2022-08-31	649,190	521,243	383,939
Southern R&D Center	2019–12–12	2023-06-30	3,382,174	267,660	282,111
Qinhuangdao Dexian Huafu 3 District	2021-06-30	2023-00-30	400,005	218,249	259,446
Hunan Xiangtan-Daxueli IV	2016-09-30	2022-12-13	260.000	223,503	244,984
MCC Yaxi	2020-03-01	2023-10-31	518,744	206,317	208,161
Others	/		34,594,328	1,779,789	1,795,536
Total <i>(Note 2)</i>	1	1	120,192,459	26,552,312	37,668,535

- Note 1: The inventories have been increased by RMB 12,683,297,000 as MCC Real Estate Group Co., Ltd., one of the Company's subsidiaries, has acquired, Nanjing MCC Zhenghuai Real Estate Co., Ltd., Tianjin MCC Mingrui Real Estate Co., Ltd., Guangzhou MCC Mingjie Real Estate Co., Ltd. and Shijiazhuang MCC Mingguan Real Estate Development Co., Ltd.
- Note 2: As at 30 June 2022, the total borrowing costs capitalized included in costs of properties development and development products were RMB 8,675,434,000 (as at 31 December 2021: RMB 6,287,047,000), where the capitalized amount of borrowing costs has been increased by an amount of RMB 2,624,323,000 due to changes in scope of consolidation. For the six months ended 30 June 2022, the total borrowing costs capitalized were RMB 729,729,000 (for the six months ending 30 June 2021: RMB 661,493,000). The capitalization rates for determining the capitalized amount of borrowing costs were 2.75% - 7.80% (for the six months ended 30 June 2021: 3.60% -7.80%).

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

9. Inventories (Continued)

(1) Categories of inventories (Continued)

(b) Details of the completed properties held for sale

Project name	Completion date	31 December 2021	Increase in the current period	Decrease in the current period	30 June 2022
Zhongye Yijing Mansion	2021–12–22	5,482,517		3,190,361	2,292,156
Shijiazhuang Zhaotuo Park Project	2021-12-31	2,162,007	_	233,338	1,928,669
Henggin Port Base Project	2020-01-31	1,852,504	_	177	1,852,327
Tianjin Xinbadali District	2020 01 01	1,002,001			1,002,021
Qixianli Project	2019-06-26	1,879,721	=	54,513	1,825,208
Shijiazhuang MCC Dexian Mansion					
Project	2020-10-31	1,617,288	10,671	108,955	1,519,004
Qin Hai Yun Villa Project	2022-06-23	646,311	852,701	119,101	1,379,911
Tiantai Road (Yangqiao Avenue)	2022-03-31	-	1,610,184	503,492	1,106,692
Nanjing Xiaguan Riverside Project	2020-06-24	1,028,708	-	18,200	1,010,508
Qingdao MCC Dexian Mansion	2022-06-15	-	1,658,793	738,655	920,138
Hong Kong Quanwan Qinglongtou					
Yijing Longwan Project	2020-09-30	835,849	19,325	-	855,174
MCC 39th Street Project	2019-09-30	973,389	3,416	233,832	742,973
MCC Xinglong New City Hongshijun	2020-02-08	427,933	104,443	2,168	530,208
Baotou MCC Campus South Road					
Community Project	2020-11-20	561,354	_	44,954	516,400
Plot D-1, Gengyang New City	2021–12–31	447,995	-	109,324	338,671
Beijing Daxing District Jiugong Green					
Belt Parcel A1 Project	2017–10–31	345,038	-	8,250	336,788
MCC.Happy Chen	2022-06-27	77,111	280,941	22,170	335,882
Luanping Anxinjiayuan	2021-06-30	340,010	-	11,837	328,173
Dalian International Business City	2014–12–31	316,997	-	8,995	308,002
Jinxiu Huafu	2021-09-30	326,708	=	77,572	249,136
Hubei Huangshi-MCC Huangshi	0004 40 04	050 500	04.055	405.004	004 507
Park II	2021–12–31	352,563	64,955	195,931	221,587
Brazil Fluctuation Apartment	2018–10–30	598,536	470 474	598,536	0.007.140
Others	1	3,868,498	476,474	537,824	3,807,148
Total	1	24,141,037	5,081,903	6,818,185	22,404,755

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Inventories (Continued)

(2) Provision for decline in value of inventories

All amounts in RMB'000

	31 December	Increase	Decrea	se	Balance at 30 June
Items	2021	Provision	Reversals	Write-offs	2022
Raw materials	19,609	289	_	99	19,799
Outsourced processing materials	105	-	-	105	_
Work in progress	503,637	-	140	1,559	501,938
Finished goods	199,283	3,416	-	660	202,039
Other materials	4,469	-	16	6	4,447
Properties under development	19,763	_	_	-	19,763
Completed properties held for sale	352,347	-	=	1,676	350,671
Total	1,099,213	3,705	156	4,105	1,098,657

(3) Inventories with title restriction as at 30 June 2022 are set out in Note VII 70.

10. **Contract assets**

(1) Presentation of contract assets

		30 June 2022		3	1 December 2021	
		Provision for	Carrying		Provision for	Carrying
Items	Book value	impairment	amount	Book value	impairment	amount
Contract assets interrelated						
with engineering contracting						
services	119,114,003	5,279,635	113,834,368	91,584,943	4,226,123	87,358,820
Contract assets interrelated with						
quality guarantee deposits	4,332,949	325,984	4,006,965	4,110,334	283,524	3,826,810
Total	123,446,952	5,605,619	117,841,333	95,695,277	4,509,647	91,185,630

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

10. Contract assets (Continued)

(1) Presentation of contract assets (Continued)

The engineering contracting services provided by the Group normally constitute the single performance obligation, which is required to be fulfilled in a certain period. The Group shall determine the implementation progress according to the proportion of actual cost in estimated total cost. Engineering contracting services require regular settlement with the client, and the related contract consideration vests the Group the right to charge the consideration, which will be reclassified to accounts receivables, to the client unconditionally after the completion of settlement. Under normal circumstances, there are some timing differences between the implementation progress and the settlement progress in engineering contracting. As at 30 June 2022, implementation progress of part of contracts exceeded the settlement progress, thus formed related contract assets, which shall be transferred into receivables after the completion of settlement.

For the engineering quality deposit arising from the settlement of engineering contracting services provided by the Group, the Group has the right to receive the consideration unconditionally from the customer upon the expiration of the guarantee period with no significant quality issues occurred therein. Such deposit constituted contract assets and was transferred into accounts receivable under the condition mentioned above.

(2) Provision for impairment of contract assets

Items	Provision for impairment which is individually assessed	Provision for impairment by portfolios	Total
Provision impairment at			
31 December 2021	2,051,117	2,458,530	4,509,647
Provision for the current period	152,353	976,688	1,129,041
Reversal for the current period	-	(33,074)	(33,074)
Other changes	_	5	5
Provision impairment at 30 June 2022	2,203,470	3,402,149	5,605,619
Book value of contract assets at			T. A.
30 June 2022	2,736,985	120,709,967	123,446,952

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

10. Contract assets (Continued)

West Australia SINO Iron Mining Project (3)

In 2012, MCC Mining (Western Australia) Pty Ltd. ("Western Australia"), a wholly-owned subsidiary of the Group, was forced to postpone the SINO Iron Project, including six production lines in total, due to reasons such as extreme weather condition in Australia and other unpredictable reasons. The owner of the project is CITIC Limited. The Group negotiated with China CITIC Group Ltd. ("CITIC Group", the parent company of CITIC Limited) for the project delay and the total contract price after cost overruns. CITIC Group and Western Australia signed the Third Supplementary EPC Agreement of SINO Iron Project in Western Australia on 30 December 2011 agreeing that the construction costs to complete the second main process line including trial run should be within USD 4.357 billion. The ultimate construction costs for the aforesaid project should be determined by an audit performed by a third-party auditor. Based on the consensus with CITIC Group above and the estimated total construction costs of the project, the Group recognized an impairment loss on contract costs of USD 481 million (equivalent to approximately RMB 3.035 billion) for the year ended 31 December 2012.

As of 31 December 2013, the first and the second production lines of the project were completed and put into operation. Western Australia and Sino Iron Pty Ltd. (a wholly-owned subsidiary of CITIC Limited) signed the Fourth Supplementary Agreement of SINO Iron Project in Western Australia dated 24 December 2013 for the handing over of the first and the second production lines of the project to CITIC Group at the end of 2013. As such, the construction, installation and trial running work set out in the EPC contract for the project entered into by Western Australia was completed. For the third to sixth production lines of the project, Western Australia and Northern Engineering & Technology Corporation, a subsidiary of the Company, has entered into the Project Management Service Agreement and Engineering Design and Equipment Procurement Management Technology Service Agreement, respectively, with CITIC Group for the provision of follow-up technology management services to CITIC Group. In addition, both the Group and CITIC Group have agreed to engage an independent third party to perform an audit of the total construction costs incurred for the project, the reasonableness of the construction costs incurred, the reasons for the project delay and the responsibility for the delay. Based on the final result of the audit, the Group and CITIC Group will make final settlement of the project.

The Group assessed the accounts receivable (Note V 5(2)(a)) and the contract assets based on expected credit losses. In the opinion of the Group, although the final contract amount shall be confirmed after the auditing of the third party, the consensus between the Group and CITIC Group for the previously agreed construction costs of USD 4.357 billion mentioned in the paragraph above remained unchanged. The Group reasonably expected that the consensus should not have any significant change and recognized no additional contract losses as at 30 June 2022.

On 30 June 2022, the accounts receivable for the above items amounted to RMB 1,619,424,000, and the contract assets of the project mentioned above amounted to RMB 3,590,668,000. After the completion of the audit mentioned above, the Group will actively follow up with CITIC Group for negotiation and discussion in reaching the final agreed project construction costs and make relevant accounting treatments accordingly.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

11. Non-current assets due within one year

All amounts in RMB'000

Item	30 June 2022	31 December 2021		
Long-term receivables due within 1 year (Note VII 13)	2,669,572	2,241,185		
Total	2,669,572	2,241,185		

12. Other current assets

All amounts in RMB'000

Items	30 June 2022	31 December 2021		
Input VAT to be deducted Prepayments of tax	5,528,674 1,792,708	1,169,008 889,555		
Total	7,321,382	2,058,563		

13. Long-term receivables

(1) Long-term receivables

All amounts in RMB'000

Items	30 June 2022	31 December 2021		
Long-term receivables on project	35,565,237	33,284,178		
Loans to related parties	234,576	319,333		
Receivables on disposal of equity investments	333,485	333,485		
Others	885,237	891,877		
		A.		
Total carrying amount	37,018,535	34,828,873		
Less: Provisions for credit losses of long-term				
receivables	2,339,474	2,201,525		
Total book value	34,679,061	32,627,348		
Including: Long-term receivables due	, , ,			
within 1 year, net	2,669,572	2,241,185		
Long-term receivables due				
over 1 year, net	32,009,489	30,386,163		
Including: Long-term receivables due within 1 year, net Long-term receivables due	2,669,572	2,241,1		

At 30 June 2022, long-term receivables are presented on a net basis with the discount rates ranging from 4.35% to 4.90% (as at 31 December 2021: 4.35% to 4.90%).

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

13. Long-term receivables (Continued)

(2) Provision for credit losses of long-term receivables

As at 30 June 2022, changes in provision for credit losses based on the 12-month expected credit losses and expected lifetime credit losses on long-term receivables are as follows:

All amounts in RMB'000

	Phase 1	Phase 2 Lifetime	Phase 3 Lifetime	
Items	Future 12-month expected credit losses	expected credit losses (Non- credit-impaired)	expected credit losses (Credit- impaired)	Total
Provisions for credit losses at				
31 December 2021	409,330	337,251	1,454,944	2,201,525
Transfer of opening balance for				
the current period	39,532	(197,040)	157,508	=
Provision for the period	32,159	65,478	70,846	168,483
Reversal for the period	(3,316)	(17,313)	(9,905)	(30,534)
Provisions for credit losses at				
30 June 2022	477,705	188,376	1,673,393	2,339,474

(3) Long-term receivables with title restriction as at 30 June 2022 are set out in Note VII 70.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

14. Long-term equity investments

	0 .	Movements for the current period							0 !		
lame of investee	Carrying amount at 31 December 2021	Increase in investments	Decrease in investments	Share of profits/ (losses)	Other comprehensive income	Other equity movements	Declaration of cash dividends or profits	Changes in scope of consolidation	Others	Carrying amount at 30 June 2022	Provision for impairment at 30 June 2022
ame of investee	2021	investments	investments	(losses)	income	movements	or profits	consolidation	Others	2022	30 June 2022
Joint ventures											
Guizhou Ziwang Highway Construction											
Co., Ltd.	1,516,947	-	-	19,050	_	-	_	_	-	1,535,997	
Guizhou Sanli Highway Construction											
Co., Ltd.	1,455,666	-	-	13,186	-	-	-	-	-	1,468,852	
Guizhou Sanshi Highway Construction	000 500			(40 500)						700.007	
Co., Ltd.	803,560	-	-	(12,593)	-	-	_	-	-	790,967	
Zhuhai Hengqin Headquarters Building Development Co., Ltd.	518,128	_		5			_	_	_	518,133	
Chongqing-Hunan Double-track Highway	010,120			J						310,100	
Co., Ltd.	_	107,285	_	_	_	_	_	_	199,600	306,885	
Zhongshan MCC Cuicheng Street		.,							,	,	
Integrated Pipe Network Co., Ltd.	-	-	-	10	-	-	-	-	302,400	302,410	
Yinchuan Huaiyuan Road Integrated Pipe											
Network Construction and Management	040 405			(4.470)						044 000	
Co., Ltd. Others	243,405 2,119,174	12,250	(18,172)	(1,473) (25,606)	_	(21)	_	(37)	130,470	241,932 2,218,058	219,72
Olliela	2,110,174	12,230	(10,172)	(23,000)		(21)		(31)	130,470	2,210,030	215,72
ub-total	6,656,880	119,535	(18,172)	(7,421)	-	(21)	-	(37)	632,470	7,383,234	219,72
Accesiates											
. Associates Zhuhai MCC Jianxin Investment											
Management Partnership (LP)											
(Note VIII 1)	2,809,543	_	_	(157,761)	_	_	(29,281)	(2,622,501)	_	_	
Beijing City Vice-Center Investment Fund				, , ,			,	,,,,,			
Partnership (Limited Partnership)	853,411	-	-	3,697	-	-	-	-	-	857,108	
Yunnan Mangliang Expressway Investment											
and Development Co., Ltd.	641,576	217,000	-	-	-	-	-	-	-	858,576	
Chongqing Yunkai Expressway Co., Ltd. Tangshan Stainless steel Co., Ltd.	495,000 659,784	150,000	-	4 (85,598)	_	748	_	-	_	645,004 574,934	
Lanzhou Lianhuo Highway Qingzhong	033,104			(00,000)		140		_		374,334	
Section Construction and development											
Co., Ltd.	394,240	154,600	-	-	_	_	_	_	-	548,840	
Hebei Steel Luan County Sijiaying Iron											
Ore Co., Ltd.	491,295	-	-	51,313	-	11	-	-	-	542,619	
Shigang Jingcheng Equipment Development	500 405										
and Manufacturing Co., Ltd. Xiamen International Trade Exhibition	532,125	-	-	829	-	-	_	-	-	532,954	
Center Co., Ltd.	198,781	286,720		(288)			_	_	_	485,213	
Hangzhou Fuchunwan Baofu Construction	100,101	200,120		(200)						700,210	
& Management Co., Ltd.	16,001	258,555	_	_	_	_	_	_	_	274,556	
Others	16,580,130	1,428,592	(100,551)	103,257	(34,719)	888	(24,984)	(170,164)	(632,470)	17,149,979	155,58
ub-total -	23,671,886	2,495,467	(100,551)	(84,547)	(34,719)	1,647	(54,265)	(2,792,665)	(632,470)	22,469,783	155,58

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

15. Investments in other equity instruments

(1) Investments in other equity instruments

All amounts in RMB'000

Items	Carrying amount at 30 June 2022	Carrying amount at 31 December 2021	Cash dividends recognized for the current period
Investments in non-trading equity instruments Including: Stock investments of listed companies Equity investments of unlisted	306,717	301,457	-
companies	574,964	485,398	775
Total	881,681	786,855	775

Since these investments are non-tradable equity instruments and the Group is not expected to sell them in the foreseeable future, the Group designates these investments as financial assets at fair value through OCI. The method for determining the fair values of investments in other equity instruments can be found in Note

For the current period, the Group derecognized investments in other equity instruments, and transferred the accumulated gains from such investments previously included in other comprehensive income amounting to RMB 325,000 to retained earnings. At the end of 30 June 2022, loss from changes in fair value of other equity instruments held by the Group that are other comprehensive income was RMB 85,502,000 (Note VII 47).

Other non-current financial assets 16.

All amounts in RMB'000

Items	Carrying amount at 30 June 2022	Carrying amount at 31 December 2021
Financial assets at FVTPL Including: Investment in unquoted fund products and trust products Others	4,641,142 78,739	4,632,778 78,263
Total	4,719,881	4,711,041

Several subsidiaries of the Company were involved in structured entity arrangements. They invested in joint ventures and associates indirectly by purchasing funds and trusts. Relevant investments are measured at fair value through profit or loss. For further information, please refer to Note IX 4.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

17. Investment properties

(1) Investment properties measured at cost

All amounts in RMB'000

Ite	ems	Buildings and structures	Land use rights	Total
ı.	Total original book value			
	1. 31 December 2021	8,038,053	616,798	8,654,851
	2. Increase	624,699	25,330	650,029
	(1) Transferred from fixed assets	448	-	448
	(2) Transferred from inventories	599,292	-	599,292
	(3) Transferred from intangible			
	assets	_	25,330	25,330
	(4) Changes of exchange rates	14,349	-	14,349
	(5) Others	10,610	_	10,610
	3. Decrease	176,543	-	176,543
	(1) Disposal	7,366	_	7,366
	(2) Transferred to inventories	6,710	_	6,710
	(3) Others	162,467	-	162,467
	4. 30 June 2022	8,486,209	642,128	9,128,337
II.	Accumulated depreciation and			
	amortization	1 147 007	150.040	1 000 040
	1. 31 December 2021	1,147,697	156,246	1,303,943
	2. Increase	90,198	15,103	105,301
	(1) Provision	87,702	6,589	94,291
	(2) Transferred from fixed assets(3) Transferred from intangible	268	_	268
	assets	_	8,514	8,514
	(4) Changes of exchange rates	2,228	_	2,228
	3. Decrease	2,907	_	2,907
	(1) Disposal	1,497	_	1,497
	(2) Transferred to inventories	1,410	_	1,410
	4. 30 June 2022	1,234,988	171,349	1,406,337
III.	Provision for impairment			
	1. 31 December 2021	23,111	-	23,111
	2. Increase	276	=	276
	3. Decrease	17	-	17
	4. 30 June 2022	23,370	-	23,370
I۷	. Total carrying amount			
	1. 30 June 2022	7,227,851	470,779	7,698,630
	2. 31 December 2021	6,867,245	460,552	7,327,797

Investment properties of which certificates of title have not been obtained: (2)

All amounts in RMB'000

Item	Carrying amount	Reasons for title certificates outstanding
Buildings and structures	1,226,009	In the process

Investment properties with title restriction as at 30 June 2022 are set out in Note VII 70.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

18. **Fixed assets**

(1) Changes in fixed assets

		Buildings and structures	Machinery and equipment	Transportation vehicles	equipment and others	Total
 To 	stal historical cost:					
1. 10	31 December 2021	25,525,876	21,007,292	2,224,186	4,290,332	53,047,686
2.	Increase	557,076	990,966	167,898	193,642	1,909,582
۷.	(1) Purchase	80,168	249,462	117,468	83,163	530,261
	(2) Transferred from construction in	00,100	243,402	117,400	00,100	330,201
	progress	231,964	310,183	27,486	3,195	572,828
	(3) Transferred from right of use assets	231,904	70,733	21,400	3, 193	70,733
		_	70,733	-	_	10,133
	(4) Changes of the scope of				010	010
	consolidation	- 044.054	- 005 007	- 04 5 4 7	910	910
	(5) Changes of exchange rates	244,054	325,227	21,547	100,783	691,611
	(6) Others	890	35,361	1,397	5,591	43,239
3.	Decrease	338,783	282,492	94,939	342,509	1,058,723
	(1) Disposal or write-off	102,231	240,142	67,707	288,164	698,244
	(2) Transferred to investment properties	448	=	=	=	448
	(3) Changes of exchange rates	1,389	26,146	12,117	2,468	42,120
	(4) Others	234,715	16,204	15,115	51,877	317,911
4.	30 June 2022	25,744,169	21,715,766	2,297,145	4,141,465	53,898,545
	cumulated depreciation					
1.		8,264,226	13,951,883	1,458,390	2,067,809	25,742,308
2.	Increase	534,163	885,965	88,421	164,996	1,673,545
	(1) Provision	444,047	593,306	74,557	135,693	1,247,603
	(2) Transferred from right of use assets	-	43,261	-	-	43,261
	(3) Changes of exchange rates	74,509	234,100	13,504	25,304	347,417
	(4) Others	15,607	15,298	360	3,999	35,264
3.	Decrease	67,486	247,673	68,473	254,125	637,757
	(1) Disposal or write-off	59,259	220,341	61,249	218,458	559,307
	(2) Transferred to investment properties	268	-	-	-	268
	(3) Changes of exchange rates	714	5,793	1,376	536	8,419
	(4) Others	7,245	21,539	5,848	35,131	69,763
4.	30 June 2022	8,730,903	14,590,175	1,478,338	1,978,680	26,778,096
III. Pro	ovision for impairment					
1.	31 December 2021	991,366	1,062,123	26,551	107,529	2,187,569
2.	Increase	42,022	31,968	659	5,477	80,126
	(1) Provision	30,307	14,655	-	-	44,962
	(2) Changes of exchange rates	11,715	17,313	659	5,477	35,164
3.	Decrease	564	2,302	215	28	3,109
	(1) Disposal or write-off	_	2,094	215	28	2,337
	(2) Others	564	208	_	_	772
4.	()	1,032,824	1,091,789	26,995	112,978	2,264,586
IV. To	tal carrying amount					
1.	, 0	15,980,442	6,033,802	791,812	2,049,807	24,855,863
2.	31 December 2021	16,270,284	5,993,286	739,245	2,114,994	25,117,809

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

18. Fixed assets (Continued)

(2) Temporary idle fixed assets

All amounts in RMB'000

Items	Historical cost	Accumulated depreciation	Provision for impairment	Carrying amount	Notes
Buildings and structures	80,561	9,543	60,839	10,179	Idle or seasonal suspension
Machinery and equipment	600,474	277,374	307,224	15,876	Idle or seasonal suspension
Office equipment and others	25,858	17,811	1,680	6,367	Idle or seasonal suspension

(3) Fixed assets under operating leases

All amounts in RMB'000

Item	Carrying amount
Machinery equipment and others	44,138

(4) Fixed assets of which certificates of title have not been obtained

Fixed assets of which certificates of title have not been obtained as at 30 June 2022 are as follows:

All amounts in RMB'000

Items	Carrying amount	certificates outstanding
Buildings and structures	241,293	In the process

(5) Fixed assets with title restriction as at 30 June 2022 are set out in Note VII 70.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

19. **Construction in progress**

(1) Construction in progress analysed by category

All amounts in RMB'000

Category	30 June 2022	31 December 2021
Construction in progress Materials for construction	3,426,604 57,930	4,318,897 60,293
Total	3,484,534	4,379,190

(2) Construction in progress

(a) Construction in progress

		30 June 2022 Provision for	Comming	3	1 December 2021 Provision for	Correina
Items	Book value	impairment	Carrying amount	Book value	impairment	Carrying amount
Infrastructure Project of MCC JCL Anak						
Mining Co., Ltd.	1,142,611	-	1,142,611	1,071,482	-	1,071,482
Courtyard Development and Reform Project						
of Central Research Institute of Building						
and Construction Co., Ltd.	458,274	-	458,274	441,016	=	441,016
MCC Guangdong Shenzhen Qianhai						
Technology Building Project	433,507	-	433,507	350,101	=	350,101
MCC 17 Technology Centre Building						
Project	245,893	_	245,893	154,409	_	154,409
Sichuan Chengdu MCC CISDI R&D and						
Design Centre	235,802	_	235,802	235,789	_	235,789
Electronic information material						
transformation and upgrading project of						
Luoyang City, Henan Province	211,733	_	211,733	6,430	=	6,430
High Performance Carbon Brick Production						
Line	120,336	_	120,336	120,180	=	120,180
Pakistan Mining Project	621,825	603,202	18,623	623,296	603,202	20,094
Others	571,986	12,161	559,825	1,931,447	12,051	1,919,396
	,					
Total	4,041,967	615,363	3,426,604	4,934,150	615,253	4,318,897

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

19. Construction in progress (Continued)

(2) Construction in progress (Continued)

(b) Movements of the significant items of construction in progress in the current period

Items	Budgeted amount	31 December 2021	Increase	Transfer to fixed assets/ Intangible assets	Other changes	30 June 2022	Cost incurred as a percentage of budgeted amount (%)	Construction progress (%)	Accumulated capitalized borrowing costs	Including: Capitalized borrowing costs for the current period	Latest rate of borrowing costs capitalized for the current period (%)	Sources of fund
Infrastructure Project of MCC JCL Anak Mining Co., Ltd.	23,847,800	1,071,482	71,129	-	-	1,142,611	4.79	4.79	-	-	-	Self-raised funds
Courtyard Development and Reform Project of Central	1,000,000	441,016	17,258	=	=	458,274	90.03	90.03	15,476	=	=	Self-raised funds and loans from financial
Research Institute of Building and Construction Co., Ltd.												institutions
MCC Guangdong Shenzhen Qianhai Technology Building Project	3,382,174	350,101	83,406	-	-	433,507	50.00	50.00	174,800	22,542	4.31	Self-raised funds and loans from financial institutions
MCC 17 Technology Centre Building Project	250,000	154,409	91,484	-	-	245,893	98.36	98.36	-	-	-	Self-raised funds
Sichuan Chengdu MCC CISDI R&D and Design Centre	766,550	235,789	13	-	-	235,802	30.76	30.76	-	-	-	Self-raised funds
Electronic information material transformation and upgrading project of Luoyang City, Henan Province	1,083,383	6,430	205,303	-	=	211,733	19.54	19.54	2,187	2,187	4.35	Self-raised funds and loans from financial institutions
High Performance Carbon Brick Production Line	180,000	120,180	156	=	-	120,336	66.85	66.85	=	-	=	Self-raised funds
Pakistan Mining Project	654,962	623,296	339	1,810	-	621,825	96.30	96.30	1,145	-	-	Self-raised funds and loans from financial institutions
Others	4,868,458	1,931,447	416,075	574,967	1,200,569	571,986	1	1	1,682	2,536	1	1
Total	36,033,327	4,934,150	885,163	576,777	1,200,569	4,041,967	1		195,290	27,265	1	1

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Construction in progress (Continued) 19.

Materials for construction (3)

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Materials Equipment Tools and instruments prepared for production Others	13,973 43,309 625 23	14,195 45,482 594 22
Total	57,930	60,293

20. Right-of-use assets

All amounts in RMB'000

Ite	ms		Buildings and structures	Transportation vehicles	Machinery and equipment	Others	Total
I.	Tot	tal historical cost:					
	1.	31 December 2021	855,412	43,506	368,158	26,092	1,293,168
	2.	Increase	280,583	-	1	10,427	291,011
		(1) New leases	276,472	-	-	10,314	286,786
		(2) Changes of the scope of					
		consolidation	3,221	=	=	=	3,221
		(3) Changes of exchange rates	890	-	1	113	1,004
	3.	Decrease	110,067	286	70,964	1,086	182,403
		(1) Disposal	99,550	286	231	1,086	101,153
		(2) Transferred to fixed assets	-	-	70,733	_	70,733
		(3) Others	10,517	=	=	=	10,517
	4.	30 June 2022	1,025,928	43,220	297,195	35,433	1,401,776
II.	Ac	cumulated depreciation					
	1.	31 December 2021	373,631	41,726	272,831	13,102	701,290
	2.	Increase	97,469	614	9,105	3,732	110,920
		(1) Amortization	97,221	614	9,105	3,639	110,579
		(2) Changes of exchange rates	248	-	-	93	341
	3.	Decrease	94,618	286	43,261	127	138,292
		(1) Disposal	82,601	286	_	127	83,014
		(2) Transferred to fixed assets	-	-	43,261	-	43,261
		(3) Others	12,017	-	-	-	12,017
	4.	30 June 2022	376,482	42,054	238,675	16,707	673,918
III.	Pro	ovision for impairment					
	1.	31 December 2021	-	_	_	_	_
	4.	30 June 2022	-	=	-	-	=
IV.	Ca	rrying amount					
	1.	30 June 2022	649,446	1,166	58,520	18,726	727,858
	2.	31 December 2021	481,781	1,780	95,327	12,990	591,878

For the current period, the Group's short-term leasing fee and assets with low value leasing fee, which are simplified and charged to current profits and losses, totaled RMB 96,795,000.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

21. Intangible assets

Intangible assets (1)

All amounts in RMB'000

Iter	ns		Land use rights	Mining rights	Franchise	Software	Patent and proprietary technology	Trademark right	Total
I.	Tot	tal historical cost							
"	1.	31 December 2021	7,975,340	3,778,214	15,182,539	899,078	225,701	270	28,061,142
	2.	Increase	77,627	67,837	1,763,411	63,645	9,535		1,982,055
		(1) Purchase	75,228	_	1,514,281	39,284	9,012	_	1,637,805
		(2) Transferred from construction in							
		progress	-	-	-	3,949	_	_	3,949
		(3) Changes of the scope of							
		consolidation	-	-	249,130	130	-	-	249,260
		(4) Change of exchange rate	2,399	66,600	-	376	523	-	69,898
		(5) Others	-	1,237	-	19,906	-	-	21,143
	3.	Decrease	102,085	3,857	2,072	12,436	26	-	120,476
		Disposal or write-off	71,299	-	2,072	10,129	3	-	83,503
		(2) Transferred to investment							
		properties	25,330	-	-	-	-	-	25,330
		(3) Change of exchange rate	744	3,857	-	-	2	-	4,603
		(4) Others	4,712	-	-	2,307	21	-	7,040
	4.	30 June 2022	7,950,882	3,842,194	16,943,878	950,287	235,210	270	29,922,721
II.	Acc	cumulated amortization							
	1.	31 December 2021	1,799,704	66,338	2,217,298	588,394	88,556	270	4,760,560
	2.	Increase	83,551	868	288,515	62,101	13,765	-	448,800
		(1) Amortization	83,551	362	288,515	42,052	13,427	-	427,907
		(2) Change of exchange rate	-	506	-	374	338	-	1,218
		(3) Others	-	-	-	19,675	-	-	19,675
	3.	Decrease	29,359	3,283	1,426	6,392	3	-	40,463
		Disposal or write-off	20,690	-	1,426	6,358	3	-	28,477
		(2) Transferred to investment							90
		properties	8,514	-	-	-	-	-	8,514
		(3) Change of exchange rate	155	-	-	-	-	-	155
		(4) Others	-	3,283	-	34	-	-	3,317
	4.	30 June 2022	1,853,896	63,923	2,504,387	644,103	102,318	270	5,168,897
III.	Pro	ovision for impairment							
	1.	31 December 2021	20,233	2,397,444	-1	250	4,508	-	2,422,435
	2.	Increase	1,358	-	-//-		-	-	1,358
	3.	Decrease	-	3,857	20/20/20/20/20	13/2/2012		-	3,857
	4.	30 June 2022	21,591	2,393,587	-	250	4,508	-	2,419,936
IV.	Cai	rrying amount							
	1.	30 June 2022	6,075,395	1,384,684	14,439,491	305,934	128,384	=	22,333,888
	2.	31 December 2021	6,155,403	1,314,432	12,965,241	310,434	132,637	-	20,878,147

As at 30 June 2022, the internally developed intangible assets as a percentage of total intangible assets of the Group were 0.50% (as at 31 December 2021: 0.48%).

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

21. Intangible assets (Continued)

(1) Intangible assets (Continued)

As at 30 June 2022, the accumulated impairment provision for the Cape Lambert Iron Project intangible assets amounted to RMB 2,373,089,000, including the provision for the decrease of exchange fluctuation of Australian dollars of RMB 177,888,000. The related intangible assets belong to the resource development segment.

Intangible assets with title restriction as at 30 June 2022 are set out in Note VII 70.

22. Goodwill

(1) Change of original historical amount

Name of investee	31 December 2021	Decrea Disposal	se Others	30 June 2022
		•		
MCC Finance Corporation Ltd.	105,032	_	_	105,032
Chengde Tiangong Architectural				
Design Co., Ltd.	33,460	_	_	33,460
MCC Minera Sierra Grande S.A.	16,772	_	1,011	15,761
China Metallurgical Construction				
Engineering Group Chongqing				
Heyuan Concrete Co., Ltd.	18,533	_	_	18,533
Qingdao JinZe HuaDi Real Estate				
Development Co., Ltd.	9,779	_	_	9,779
Beijing HaiKe Real Estate Development				
Co., Ltd.	6,477	_	_	6,477
Beijing Tianrun Construction				
Co., Ltd.	5,142	_	_	5,142
Shanghai WuGang Equipment				
Engineering Co., Ltd.	1,114	_	_	1,114
Sub-total	196,309	_	1,011	195,298
_				
Less: Provision for impairment	140,413	_	1,011	139,402
Total	55,896	_	_	55,896

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

22. Goodwill (Continued)

(2) Provision for impairment of goodwill

All amounts in RMB'000

Name of investee	31 December 2021	Decreas Disposal	se Others	30 June 2022
MCC Finance Corporation Ltd.	105,032	_	_	105,032
MCC Minera Sierra Grande S.A.	16,772	_	1,011	15,761
Qingdao JinZe HuaDi Real Estate				
Development Co., Ltd.	9,779	_	_	9,779
Beijing HaiKe Real Estate Development				
Co., Ltd.	6,477	_	_	6,477
China Metallurgical Construction				
Engineering Group Chongqing				
Heyuan Concrete Co., Ltd.	2,353	-	_	2,353
_				
Total	140,413	-	1,011	139,402

When the Group performs impairment assessment on goodwill arising from business combination, the Group allocates the book value of goodwill to the asset group or portfolio that is expected to benefit from the synergistic effect of enterprise merger and evaluates the recoverable amount of the asset group or portfolio that contains the apportioned goodwill.

The recoverable value of the asset groups is calculated based on the present value of future cash flows which is approved by the management. The pre-tax discount rate of Chengde Tiangong Construction and Design Co., Ltd. is 15.00% (As at 31 December 2021: 15.00%). Cash flow projections during the forecast period for the asset groups are based on the expected growth rates and gross margins during the forecast period. Forecast growth rate is determined based on the expected growth rate of the industry. Forecast gross margin is determined based on past performance of the market and management's expectations. The recoverable value of the asset groups of the other subsidiaries is calculated based on the present value of future cash flows but is not significant to the Group.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

23. Long-term prepayments

All amounts in RMB'000

Items	31 December 2021	Increase	Amortization	Other decreases	30 June 2022
Improvements of leasehold	55,064	42,724	7,308	834	89,646
Insurance expenditures	8,639	-	1,023	(12)	7,628
Repair expenditures	27,229	10,536	3,019	8,297	26,449
Others	202,859	10,430	31,645	(7)	181,651
Total	293,791	63,690	42,995	9,112	305,374

Deferred tax assets/deferred tax liabilities 24.

(1) Deferred tax assets without taking into consideration the offsetting of balances within the same tax jurisdiction

Items	30 June 2022 Deductible temporary differences/ tax losses tax assets		31 December 2021 Deductible temporary differences/ tax losses tax assets	
Impairment provision Unrealized profit on inter-company transactions Defined benefit plans Deductible tax losses Accrued expenses Employee benefits payable Changes in the fair values Others	29,488,997 2,545,181 929,532 732,201 626,547 406,368 271,498 1,227,763	5,092,719 584,056 216,053 118,898 121,287 65,140 48,442 228,940	26,042,528 2,457,094 939,337 995,248 641,562 390,759 263,185 1,347,243	4,678,860 582,642 218,036 159,178 134,288 62,475 45,791 245,946
Total	36,228,087	6,475,535	33,076,956	6,127,216

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

24. Deferred tax assets/Deferred tax liabilities (Continued)

(2) Deferred tax liabilities without taking into consideration the offsetting of balances within the same tax jurisdiction

All amounts in RMB'000

	30 June Taxable	2022	31 December 2021 Taxable	
Items	temporary differences	Deferred tax liabilities	temporary differences	Deferred tax liabilities
Fair value adjustments upon business combination not under common control	5,302	1,856	6,690	2,342
Changes in the fair value of investments of other equity instruments	149,816	24,438	142,099	24,236
Others	445,715	106,165	416,877	100,016
Total	600,833	132,459	565,666	126,594

(3) Deferred tax assets and deferred tax liabilities presented on a net basis after offsetting

All amounts in RMB'000

Items	30 June 2022 The offset amount of Deferred tax deferred tax assets and assets and liabilities liabilities after offset		31 Decem The offset amount of deferred tax assets and liabilities	Deferred tax assets and liabilities after offset
Deferred tax assets	41,419	6,434,116	70,411	6,056,805
Deferred tax liabilities	41,419	91,040	70,411	,56,183

(4) Details of the Group's unrecognized deferred tax assets

Items	30 June 2022	31 December 2021
Deductible temporary differences Deductible tax losses	13,356,296 7,705,426	11,896,406 7,472,290
Total	21,061,722	19,368,696

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Deferred tax assets/Deferred tax liabilities (Continued) 24.

(5) Deductible tax losses that are not recognized as deferred tax assets will expire in the following years

All amounts in RMB'000

Year	30 June 2022	31 December 2021
2022	654,976	1,226,432
2023	1,068,447	1,720,834
2024	1,623,063	1,623,539
2025	990,622	1,023,446
2026	1,544,813	1,878,039
2027	1,823,505	=
Total	7,705,426	7,472,290

25. Other non-current assets

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Contract assets for PPP project Pending treatment of foreclosed assets Deposits for acquisition of assets Others	1,122,482 178,609 24,099 72,410	- 152,401 15,554 72,410
Total	1,397,600	240,365

Short-term borrowings 26.

(1) Categories of short-term borrowings

Items	30 June 2022	31 December 2021
Mortgaged loans (a)	583,084	661,616
Guaranteed loans (b)	872,482	1,141,250
Credit loans	44,973,787	19,592,982
Total	46,429,353	21,395,848

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

26. Short-term borrowings (Continued)

(1) Categories of short-term borrowings (Continued)

(a) Mortgaged Loans

As at 30 June 2022, the mortgaged loans of RMB 583,084,000 (as at 31 December 2021: RMB 661,616,000) were secured by the mortgage of the Group's inventories, intangible assets and fixed assets in an aggregate carrying amount of RMB 942,789,000 (as at 31 December 2021: RMB 812,325,000).

(b) Guaranteed Loans

As at 30 June 2022, the guaranteed loans of RMB 872,482,000 (as at 31 December 2021: RMB 1,141,250,000) were guaranteed by CMGC.

(2) For the current period, the weighted average interest rate of short-term borrowings was 3.29% per annum (for the period ended 30 June 2021: 3.36% per annum).

27. Derivative financial liabilities

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Forward exchange contracts Currency swap contracts	13,933 64,172	4,413 -
Total	78,105	4,413

28. Bills payable

Category	30 June 2022	31 December 2021
Bank acceptance bills	37,808,110	34,781,032
Commercial acceptance bills	2,065,827	2,835,500
Total	39,873,937	37,616,532

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

29. Accounts payable

(1) Presentation of accounts payable

All amounts in RMB'000

Items	30 June 2022	31 December 2021	
Project fees	119,485,914	95,991,899	
Purchases	51,588,786	43,764,628	
Labor fees	14,510,830	11,633,071	
Retention money	1,339,491	1,395,095	
Design fees	325,498	354,893	
Others	3,015,506	2,125,455	
Total	190,266,025	155,265,041	

(2) Aging analysis of accounts payable

All amounts in RMB'000

Aging	30 June 2022	31 December 2021	
Within 1 year	147,878,975	116,689,113	
1 to 2 years	24,885,934	20,849,638	
2 to 3 years	6,995,131	7,486,816	
Over 3 years	10,505,985	10,239,474	
Total	190,266,025	155,265,041	

On 30 June 2022, accounts payable of RMB 42,387,050,000 (31 December 2021: RMB 38,575,928,000) aged over one year were mainly due to project and materials payable, as both parties remained business transactions and the amount has not been settled.

30. Receipts in advance

Item	30 June 2022	31 December 2021
Lease receipts in advance	157,682	135,118
Total	157,682	135,118

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

31. Contract liabilities

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Contract liabilities relating to engineering contracting service contracts Contract liabilities relating to pre-sales deposits Contract liabilities relating to sales contracts Contract liabilities relating to contracts of other customers	62,370,031 5,642,091 2,594,320 1,997,199	73,477,762 9,067,067 2,602,022 1,945,315
Total	72,603,641	87,092,166

The contract liabilities of the Group mainly derives from engineering contracting service contracts, property sales contracts and sales contracts.

As presented in Note VII 10, the engineering contracting services provided by the Group require regular settlements with the customers. Under normal circumstances, there are some time differences among the implementation and settlement progress of the engineering contracting service contracts or the progress of receipt. As at 30 June 2022, the implementation progress of some engineering contracting service contracts lagged behind the settlement progress or receipt progress, which means the Group has acquired the contract consideration or the right to gain contract consideration unconditionally, thus forming the contract liabilities relating to engineering contracting services. For the six months period ended 30 June 2022, the Group recognized RMB 45,395,996,000 in RMB 73,477,762,000 of contract liabilities related to the engineering contracting service on 31 December 2021 as the engineering contracting income for the current period based on the performance of engineering contracting service contracts signed with clients, and the remaining amounts will be recognized when the Group performs its obligations for its clients in subsequent years.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

31. **Contract liabilities (Continued)**

Contract liabilities analyzed by category (Continued)

Property sales contracts and the sales contracts of the Group are normally satisfied at a point in time. The Group will recognize revenue at the time of acquiring the control of the related goods. As at 30 June 2022, the implementation time of performance obligation of the Group in property sales contracts and the sales contracts were later than the payment time of the customers, thus forming the related contract liabilities of property sales contracts and the sales contracts.

Other notes:

Contract liabilities formed by receipt of property sales amount in advance

Items	30 June 2022	31 December 2021	Pre-sale percentage	Estimated completion date
Shanghai Jinshan District – MCC				
Fengjunyuan	933,147	893,242	64.00%	2022-12-31
MCC Port Mansion	892,708	889,512	/	Completed
Jinxiu Tianxi	454,088	236,500	57.00%	2022-09-30
Guangzhou Wanbao Project	379,145	_	64.51%	2022-12-31
Gengyang New City Project	291,583	292,210	17.10%	2022-12-31
Wuhan, Hubei - MCC 39th Street	290,875	306,268	/	Completed
Wuhan, Hubei - MCC Huangshi				
Park	147,240	326,256	/	Completed
Fenghuang New City Yuhuadao South				
Project	136,094	239,995	73.00%	2022-12-31
MCC Dexian Mansion	53,012	738,019	50.00%	Completed
Zhongye Yijing Mansion	43,727	2,971,783	/	Completed
Others	2,020,472	2,173,282		
		. ,		
Total	5,642,091	9,067,067		

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Employee benefits payable

(1) Employee benefits payable

All amounts in RMB'000

Items	31 December 2021	Increase	Decrease	30 June 2022
I. Short-term employee	1 700 405	10.707.000	10 500 040	1.044.100
benefits II. Post-employment benefits – defined contribution plan	1,700,485 259.040	1,625,604	10,523,940	1,944,168 291,884
III. Termination benefits IV. Other benefits	6,121 90,127	15,616 1,717,566	17,975 1,704,416	3,762 103,277
Total	2,055,773	14,126,409	13,839,091	2,343,091

Short-term employee benefits (2)

Iter	ms	31 December 2021	Increase	Decrease	30 June 2022
l.	Salaries, bonuses, allowances and				
	subsidies	528,233	8,491,381	8,293,245	726,369
11.	Staff welfare	14,262	475,408	475,648	14,022
III.	Social insurance premiums	28,161	753,359	747,344	34,176
	Including: Medical insurance	26,277	684,273	678,862	31,688
	Work-related injury				
	insurance	1,701	50,420	49,978	2,143
	Maternity insurance	183	18,666	18,504	345
IV.	Housing provident funds	89,943	825,290	811,649	103,584
٧.	Labor union expenditures and				
	employees' education expenses	1,039,886	222,185	196,054	1,066,017
Tot	al	1,700,485	10,767,623	10,523,940	1,944,168

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

32. **Employee benefits payable (Continued)**

(3) **Defined contribution plan**

All amounts in RMB'000

Items	31 December 2021	Increase	Decrease	30 June 2022
 Basic retirement insurance Unemployment insurance Supplementary pension 	89,154 5,992 163,894	1,117,496 38,676 469,432	1,108,802 38,570 445,388	97,848 6,098 187,938
Total	259,040	1,625,604	1,592,760	291,884

Other notes:

The Group participated in the social insurance premiums plans set up by the government according to the regulations. According to the plan, the Group makes deposits into the plans according to the regulations. Other than the deposits mentioned above, the Group does not need to make any further payments. The corresponding expenses shall be charged to the profit or loss in the period as and when incurred.

For the current period, the Group made deposits amounting to RMB 1,625,604,000 (for the period ended 30 June 2021: RMB 1,441,075,000) to the defined contribution plan. As at 30 June 2022, there was a payable amount of RMB 291,884,000 (as at 31 December 2021: RMB 259,040,000).

33. Taxes payable

Items	30 June 2022	31 December 2021
Value added tax	718,877	933,986
Enterprise income tax	1,544,884	1,560,647
Individual income tax	99,064	499,874
City maintenance and construction tax	59,115	75,510
Education surcharges	39,056	51,574
Land appreciation tax	1,800,118	1,654,274
Others	349,283	321,441
Total	4,610,397	5,097,306

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

34. Other payables

(1) Other payables disclosed by nature

All amounts in RMB'000

Categories	30 June 2022	31 December 2021
Interest payable Dividends payable Other payables	14,902 2,609,816 30,391,023	8,609 495,521 27,078,250
Total	33,015,741	27,582,380

(2) Interest payable

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Interests payable on long-term borrowings Interests payable on short-term borrowings Others	8,056 2,091 4,755	4,192 - 4,417
Total	14,902	8,609

(3) Dividends payable

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Dividend declared on perpetual bonds classified as equity instrument Other dividends	664,267 1,945,549	165,567 329,954
Total	2,609,816	495,521

Dividends aged over one year but not settled yet amounted to RMB 202,726,000. relevant subsidiaries are discussing with the relevant shareholders for the payments schedule.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

34. Other payables (Continued)

(4) Other payables

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Security deposits Current accounts Guarantee deposits Others	12,786,763 11,157,139 1,247,106 5,200,015	11,147,526 9,565,704 1,466,045 4,898,975
Total	30,391,023	27,078,250

On 30 June 2022, other payables aged over one year of RMB 12,028,581,000 (31 December 2021: RMB 11,885,998,000) were mainly guarantees and deposits payable collected by the Group. Since both parties remained business transactions, the amount has not been settled.

Non-current liabilities due within one year 35.

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Long-term borrowings due within one year (<i>Note VII 37</i>) Bonds payable due within one year (<i>Note VII 38</i>) Lease liabilities due within one year (<i>Note VII 39</i>) Long-term payables due within one year (<i>Note VII 40</i>) Employee benefits payable due within one year (<i>Note VII 41</i>)	10,528,256 830,865 209,209 175,541 273,342	12,049,664 582,334 158,826 96,562 331,166
Total	12,017,213	13,218,552

36. Other current liabilities

Items	30 June 2022	31 December 2021
Amounts to be transferred to output VAT	14,812,183	9,426,537
Total	14,812,183	9,426,537

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

37. Long-term borrowings

(1) Long-term borrowings analyzed by category

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Pledged loans (a)	8,149,605	5,941,592
Mortgaged loans (b)	6,203,107	3,774,553
Guaranteed loans (c)	2,829,768	2,924,794
Credit loans	22,524,982	24,741,258
Total	39,707,462	37,382,197
Less: Long-term borrowings due within one year (Note VII 35)	10,528,256	12,049,664
Including: Pledged loans	1,737,985	519,869
Mortgaged loans	501,051	953,426
Guaranteed loans	2,816,065	1,677,585
Credit loans	5,473,155	8,898,784
Long-term borrowings due over one year	29,179,206	25,332,533

- (a) As at 30 June 2022, long-term borrowings of RMB 8,149,605,000 (as at 31 December 2021: RMB 5,941,592,000) were secured by the pledge of the Group's accounts receivable in amount of RMB 7,028,727,000 (as at 31 December 2021: RMB 3,274,988,000).
- (b) As at 30 June 2022, long-term borrowings of RMB 6,203,107,000 (as at 31 December 2021: RMB 3,774,553,000) were secured by the mortgage of the Group's intangible assets, fixed assets, investment properties, inventories and other assets in amount of RMB 8,292,174,000 (as at 31 December 2021: RMB 6,236,150,000).
- (c) As at 30 June 2022, long-term borrowings of RMB 2,829,768,000 were guaranteed by CMGC and the third party (as at 31 December 2021: RMB 2,924,794,000).

All amounts in RMB'000

Maturity Date of long-term borrowings due over one year	30 June 2022	31 December 2021
		- X
1 to 2 years	8,965,952	9,485,108
2 to 5 years	13,259,864	8,139,159
Over 5 years	6,953,390	7,708,266
Total	29,179,206	25,332,533

For the current period, the weighted average interest rate of long-term borrowings was 4.41% per annum (for the period ended 30 June 2021: 4.65% per annum).

As at 30 June 2022, the Group did not have any significant overdue long-term borrowings.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

38. Bonds payable

(1) Bonds payable

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Corporate debentures	2,130,865	802,334
Less: Bonds payable due within one year (Note VII 35) Bonds payable due over one year	830,865 1,300,000	582,334 220,000

For the six months ended 30 June 2022, the movements of bonds payable as follows: (2)

Name of bonds	Face value	Issue date	Term	Issue amount	31 December 2021	Issued in the current period	Interest accrued based on face value	Repaid in the current period	30 June 2022
Corporate debentures publicly									
issued by the Company in		2017-10-24 to							
2017 (first tranche) (a)	570,000	2017-10-25	5 years	570,000	575,220	-	14,066	-	589,286
Corporate debentures publicly									
issued by the Company in		2018-05-07 to							
2018 (first tranche) (b)	220,000	2018-05-08	5 years	220,000	227,114	=	5,418	10,957	221,575
2022 first tranche of target debt									
financing instruments of									
MCC Real Estate Group		2022-03-23 to							
Co., Ltd. (c)	1,300,000	2022-03-24	3 years	1,300,000	-	1,300,000	20,004	-	1,320,004
Total	2,090,000	1	1	2,090,000	802,334	1,300,000	39,488	10,957	2,130,865

- The Company issued corporate debentures publicly from 24 October 2017 to 25 October 2017, at an equal (a) price with the face value of RMB 570,000,000, a term of five years from issuance. The debentures bear interest at a fixed rate of 4.99% per annum. Interest will be paid every year and principal will be paid upon maturity date.
- The Company issued corporate debentures on a public issuance basis from 7 May 2018 to 8 May 2018 at (b) an equal price with the face value of RMB 220,000,000 with a term of five years from issuance and interest bearing at a fixed rate of 4.98%. Interest will be paid every year and principal will be paid upon maturity
- MCC Real Estate Group Co., Ltd., one of the Company's subsidiaries, issued corporate debentures on a public issuance basis from 23 March 2022 to 24 March 2022 at an equal price with the face value of RMB 1,300,000,000 with a term of three years from issuance and interest bearing at a fixed rate of 4.79%. Interest will be paid every year and principal will be paid upon maturity date.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

39. Lease liabilities

Lease liabilities disclosed by nature (1)

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Lease of buildings and structures Other leases	616,467 78,235	441,398 86,573
Total	694,702	527,971
Less: Lease liabilities due within one year (Note VII 35) Lease liabilities due over one year	209,209 485,493	158,826 369,145

Analysis of the maturity profile of lease liabilities (2)

All amounts in RMB'000

Maturity Date of lease liabilities	30 June 2022	31 December 2021
1st year after the balance sheet date 2nd year after the balance sheet date 3rd year after the balance sheet date	228,280 167,615 118,784	181,423 129,909 75,285
Subsequent years	271,103	221,050
Total minimum lease payments Less: Unrecognized financing cost	785,782 91,080	607,667 79,696
Total lease liabilities	694,702	527,971

40. Long-term payables

(1) Presentation of long-term payables

Categories		30 June 2022	31 December 2021
Long-term payables Special payables	2.81%	960,366 50,243	1,010,194 39,887
Total		1,010,609	1,050,081

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

40. Long-term payables (Continued)

(2) Long-term payables

Long-term payables disclosed by nature (a)

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Housing maintenance fee payables	41,844	41,844
Amounts due to funds	376,858	376,858
Others	717,205	688,054
Total	1,135,907	1,106,756
Less: Long-term payables due within one year (Note VII 35) Long-term payables due over one year	175,541 960,366	96,562 1,010,194

Analysis of the maturity profile of long-term payables due over one year (b)

Maturity Date	30 June 2022	31 December 2021
1 to 2 years	488,300	560,634
2 to 5 years	86,827	38,804
Over 5 years	385,239	410,756
Total	960,366	1,010,194

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

40. Long-term payables (Continued)

(3) Special payables

All amounts in RMB'000

Items	31 December 2021	Increase	Decrease	30 June 2022
Special payables for water/ power/gas supply and				
property (Note)	34,146	_	1,438	32,708
Others	5,741	21,963	10,169	17,535
Total	39,887	21,963	11,607	50,243

Note:

The Group has commenced the transfer of water/power/gas supply and property with the received special payables for water/power/gas supply and property aggregated to the special payables for settlement, in accordance with the Notice of Rewarding the Guidance on the Separation and Transfer of Water/Power/Gas Supply and Property in Residential Quarters for Employees of the State-owned Enterprises by State-owned Assets Supervision and Administration Commission of the State Council, the MoF from the General Office of the State Council (Guo Ban Fa [2016] No.45), and the Management of Central Government Grants on the Separation and Transfer of Water/Power/Gas Supply and Property to Employees and Their Relatives of Central Enterprises (Cai Zi [2016] No.38) and other related management documents.

41. Long-term employee benefits payable

(1) Long-term employee benefits payable

Items	30 June 2022	31 December 2021
Post-employment benefits -Net liabilities arising from		
defined benefit plans	4,179,415	4,219,145
Less: Long-term employee benefits payable due		
within one year (Note VII 35)	273,342	331,166
Long-term employee benefits payable due		
over one year	3,906,073	3,887,979

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

41. Long-term employee benefits payable (Continued)

(2) Movements in the defined benefit plans

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
I. Opening balance	4,219,145	4,444,692
II. Defined benefit costs recognized in profit or loss	67,390	93,514
 Past service cost 	8,779	26,763
2. Net interest expense	58,611	66,751
III. Defined benefit costs recognized in other		
comprehensive income	82,891	153,529
Actuarial losses	82,891	153,529
IV. Other movements	(190,011)	(195,412)
1. Benefits paid	(190,011)	(195,412)
V. Closing balance	4,179,415	4,496,323

The RMB2,599,857,000 of the balance of defined benefit plan is a supplementary retirement benefit for employees who retired before 31 December 2007 and RMB1,579,558,000 is a supplementary retirement benefit for employees who retire before 31 December 2023. The retirement benefits received depend on the position, seniority, salary of the staff when the staff retires. The Group's supplementary retirement benefits obligation at the balance sheet date is calculated by an external independent actuary "Towers Watson Consulting (Shanghai) Co., Ltd." using projected unit credit actuarial cost method.

Defined benefits plan exposes the Group to various risks, mainly including the risk of change of interest rate of treasury bonds, inflation rate risk, and risk of the increase in life expectancy. The decrease of the interest rate of treasury bonds will increase the defined benefit plan obligations. The Group is of the view that the interest rate of treasury bonds will not have significant fluctuations in the future. The changes of inflation rate will have impact on the significant assumptions of the living costs of the underlying staff and dependents, and the growth rate of the staff medical expense reimbursements. The Group believes these risks are not significant. The increase of the life expectancy will increase the defined benefit plan obligations.

The principal assumptions used for the purposes of the actuarial valuations as below:

Items	30 June 2022	31 December 2021
Discount rate	2.75%	3.00%
Mortality rate	CLA CL5/CL6 up 3	CLA CL5/CL6 up 3
Annual growth rate of living cost for retirement staff and		
survivors	4.50%	4.50%
Annual growth rate of various employee medical expense		
reimbursement	8.00%	8.00%

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

42. Provisions

Items	31 December 2021	Increase	Decrease	30 June 2022
Pending litigations (a)	229,442	20,000	1,569	247,873
Product quality warranties (b)	16,020	1,689	2,681	15,028
Restoration, rehabilitation and environmental provision (c)	182,873	9,596	82	192,387
Onerous contract to be performed (d)	173,717	26,945	34,005	166,657
The separation and hand-over cost of "Special payables for water/power/gas supply and property" (e)	131,465	-	7,409	124,056
Others	78,280	=	14,484	63,796
Total	811,797	58,230	60,230	809,797
TOTAL	011,797	36,230	00,230	609,797

- (a) Because of the verdict of losing a lawsuit, the Group needed to bear the present obligations of the pending litigations, and that an outflow of resources would be required to settle these obligations and the amount had been reliably estimated.
- (b) According to the sales contract, the Group needed to bear the present obligations of the product quality warranties, and an outflow of resources would be required to settle this obligation and the amount had been reliably estimated.
- (c) According to the resource development contract, the Group needed to bear the present obligations of the restoration of the environment, and that an outflow of resources would be required to settle this obligation and the amount had been reliably estimated.
- (d) According to the onerous contract to be performed, the Group needed to bear the present obligations arising from the Group's payment for expected contract loss, and an outflow of economic benefits would be required to settle this obligation and the amount could be reliably estimated.
- (e) In accordance with the requirement of Guo Ban Fa [2016] No.45, Cai Zi [2016] No.38, and other related management documents, the Group shall bear the current obligation formed during the separation and hand-over of "Special payables for water/power/gas supply and property". An outflow of resources would be required to settle this obligation and the amount had been reliably estimated.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Deferred Income 43.

All amounts in RMB'000

Items	31 December 2021	Increase	Decrease	30 June 2022
Government grants Others	1,395,739 69,265	59,010 4,762	90,495 9,733	1,364,254 64,294
Total	1,465,004	63,772	100,228	1,428,548

The government grants related to assets mainly include the investment subsidies for the purchase of new equipment and other production infrastructure; the government grants related to profits mainly include research subsidies.

44. **Share Capital**

Items	30 June 2022	31 December 2021
Unrestricted shares RMB ordinary shares Foreign shares listed overseas	17,852,619 2,871,000	17,852,619 2,871,000
Total shares	20,723,619	20,723,619

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

45. Other equity instruments

Name of outstanding financial instruments	30 June 2022		31 Decen	31 December 2021		
	Number (ten thousand)	Carrying amount	Number (ten thousand)	Carrying amount		
Renewable Financing Instruments of Generali						
China Asset Management in 2019	1	3,000,000	1	3,000,000		
Renewable Financing Instruments of Kunlun Trust in 2019	1	8,000,000	/	8,000,000		
2019 Second Tranche of Renewable Financing Instrument of ICBC	1	500,000	/	500,000		
Public Offering of Renewable Corporate Bonds						
in 2020 (First Tranche)	2,000	2,000,000	2,000	2,000,000		
Public Offering of Renewable Corporate Bonds						
in 2020 (Second Tranche)	1,000	1,000,000	1,000	1,000,000		
Renewable Financing Instruments of Bairui Trust in 2020	1	1,500,000		1,500,000		
Renewable Financing Instruments of Zhongyuan Wealth Growth		, ,				
No.1152 Tranche in 2021	1	500,000	1	500,000		
No.778 Renewable Financing Instruments of		,		,		
Barry Hengyi in 2021	1	500,000	1	500,000		
No.778 (02) Renewable Financing Instruments of Barry Hengyi in		,		,		
2021	1	200,000	1	200,000		
2021 MCC MTN001	2,000	2,000,000	2,000	2,000,000		
2021 MCC MTN002	2,000	2,000,000	2,000	2,000,000		
2021 MCC MTN003	2,000	2,000,000	2,000	2,000,000		
2021 MCC MTN004	500	500,000	500	500,000		
Total	1	23,700,000	1	23,700,000		

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Other equity instruments (Continued)

All amounts in RMB'000

Name of financial instruments	Issue date	Dividend rate or interest rate	Issue amount	Maturity date or renewal	Condition for share conversion	Conversion
Renewable Financing Instruments of						
Generali China Asset Management	2019-06-28,					
in 2019	2019-07-09	5.30%	3,000,000	Not yet due	None	No
Renewable Financing Instruments of						
Kunlun Trust in 2019	2019-09-05	5.20%	8,000,000	Not yet due	None	No
2019 Second Tranche of Renewable						
Financing Instrument of ICBC	2019–12–30	5.20%	500,000	Not yet due	None	No
Public Offering of Renewable						
Corporate Bonds in 2020 (First	2020-06-22 to	0.000/				
Tranche)	2020-06-23	3.90%	2,000,000	Not yet due	None	No
Public Offering of Renewable	2020-06-24,					
Corporate Bonds in 2020 (Second	2020-06-28 to	0.000/	4 000 000	NI-to-at-do-	Mana	NI.
Tranche)	2020-06-29	3.89%	1,000,000	Not yet due	None	No
Renewable Financing Instruments of	0000 40 47	4.000/	4 500 000	NI-to-at-do-	Mana	NI.
Bairui Trust in 2020	2020-12-17	4.99%	1,500,000	Not yet due	None	No
Renewable Financing Instruments of						
Zhongyuan Wealth Growth No.1152 Tranche in 2021	2021-12-29	4.050/	F00 000	Nietwet dwe	Nana	NI-
	2021-12-29	4.95%	500,000	Not yet due	None	No
No.778 Renewable Financing	0001 10 17	4.90%	F00 000	Nint	None	No
Instruments of Barry Hengyi in 2021 No.778 (02) Renewable Financing	2021-12-17	4.90%	500,000	Not yet due	None	INO
Instruments of Barry Hengyi in 2021	2021 12 20	4.90%	200.000	Not yet due	None	No
instruments of barry flerigyr in 2021	2021-12-30 2021-07-26 to	4.90 /0	200,000	Not yet due	None	INO
2021 MCC MTN001	2021-07-20 10	3.55%	2.000.000	Not yet due	None	No
2021 MICC WITHOUT	2021-08-17 to	0.0076	2,000,000	Not yet due	110116	110
2021 MCC MTN002	2021-08-18	3.47%	2,000,000	Not yet due	None	No
2021 WOO WITHOO2	2021-08-24 to	0.47 /0	2,000,000	Not yet duc	110110	110
2021 MCC MTN003	2021-08-25	3.50%	2,000,000	Not yet due	None	No
202100 111111000	2021-12-28 to	0.0070	2,000,000	y or ado	140110	. 10
2021 MCC MTN004	2021-12-29	3.30%	500,000	Not yet due	None	No
		0.0070	223,200			
Total	1	1	23,700,000	1	1	1
TUlai	1	/	23,700,000	1	1	1

As it is at the discretion of the Company to decide whether to redeem the above-mentioned medium-term notes or defer payments on the above-mentioned corporate bonds and renewable financing instruments, the above-mentioned renewable financing instruments' perpetuity remains in effect. Unless otherwise dictated by a compulsory interest payment occurrence that is independently decided and consequently controlled by the Company, the Company can choose, at its own discretion, to defer the current interest payment and previous deferred interests and related yields to next interest payment date without any limitation on the number of deferred interest payments, and the repayment order of such renewable financing instruments at the settlement is inferior to that of ordinary bonds and other debts issued by the Company. The Company believes that such renewable financing instruments do not meet the definition of financial liabilities and are accounted for as other equity instruments subsequent to deduction of related transaction costs from the total issue amount.

China Second Metallurgical Group Corporation Limited, one of the Company's subsidiaries, issued perpetual bonds in 2020. The amounts received after deducting relative transaction costs are recognized in other equity instruments and presented under the item of minority interests in the consolidated financial statements. At 30 June 2022, the closing balance of this minority interest are RMB 800,000,000.

MCC Holding (Hong Kong) Corporation Limited, one of the Company's subsidiaries, issued overseas perpetual bonds in 2020 and 2021. The amounts received after deducting relative transaction costs are recognized in other equity instruments and presented under the item of minority interests in the consolidated financial statements. At 30 June 2022, the closing balance of this minority interest are RMB 10,138,871,000.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

46. Capital reserve

All amounts in RMB'000

Items	31 December 2021	Increase	Decrease	30 June 2022
Share premium Other capital reserve	22,467,142 145,777	- 1,735	-	22,467,142 147,512
Total	22,612,919	1,735	-	22,614,654

47. Other comprehensive income

Accumulated balance of other comprehensive income attributable to the parent company in the consolidated balance sheet:

For the six months period ended 30 June 2022

		Attributable to owners of the Company, net of	Retained earnings transferred from other comprehensive	
Items	1 January 2022	income tax	income	30 June 2022
Other comprehensive income				
that will not be reclassified				
to profit or loss				
Changes in re-				
measurement of				
defined benefit				
obligations	11,692	(75,610)	_	(63,918)
Other comprehensive				
income that cannot be				
transferred to profit				
or loss under equity				
method	55	(26)	_	29
Fair value changes in				
investments in other				
equity instruments	(90,630)	5,453	(325)	(85,502)
Sub-total	(78,883)	(70,183)	(325)	(149,391)
Other comprehensive income				
that may be reclassified to				
profit or loss				
Other comprehensive				
income that may be				
transferred to profit				
or loss under equity				
method	53,571	(26,339)	_	27,232

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

47. Other comprehensive income (Continued)

Items	1 January 2022	Attributable to owners of the Company, net of income tax	Retained earnings transferred from other comprehensive income	30 June 2022
Changes in fair value of receivables at FVTOCI Exchange differences on translating foreign	(120,296)	5,340	-	(114,956)
operations	(56,016)	460,849	_	404,833
Sub-total	(122,741)	439,850		317,109
Total	(201,624)	369,667	(325)	167,718

Other comprehensive income incurred:

For the six months period ended 30 June 2022

Items	Other comprehensive income before tax for the period	Less: Income tax expenses	Attributable to owners of the Company, net of income tax	Attributable to non-controlling interests, net of income tax
Other comprehensive income				
that will not be reclassified				
to profit or loss				
Changes in re-				
measurement of				
defined benefit	(00.004)	(4.400)	(==)	(=)
obligations	(82,891)	(1,480)	(75,610)	(5,801)
Other comprehensive income that cannot be				
transferred to profit				
or loss under equity				
method	(26)	_	(26)	_
Fair value changes in	(==)		(==)	
investments in other				
equity instruments	1,444	460	5,453	(4,469)
Other comprehensive income				
that may be reclassified to				
profit or loss				

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

47. Other comprehensive income (Continued)

Items	Other comprehensive income before tax for the period	Less: Income tax expenses	Attributable to owners of the Company, net of income tax	Attributable to non-controlling interests, net of income tax
Other comprehensive income that may be transferred to profit or loss under equity				
method	(34,693)	_	(26,339)	(8,354)
Changes in fair value of receivables at FVTOCI Exchange differences on translating foreign	6,603	1,037	5,340	226
operations	522,697	_	460,849	61,848
Total	413,134	17	369,667	43,450

48. Special reserve

All amounts in RMB'000

Item	31 December 2021	Increase	Decrease	30 June 2022
Production safety fee	12,550	3,858,759	3,823,537	47,772
Total	12,550	3,858,759	3,823,537	47,772

49. Surplus reserve

All amounts in RMB'000

Item	31 December 2021	Increase	Decrease	30 June 2022
Statutory surplus reserve	2,692,992	_	_	2,692,992
Total	2,692,992	_	_	2,692,992

In accordance with the Company Law of the PRC and the Company's Articles of Association, the Company appropriated 10% of the net profit to the statutory surplus reserve. When the accumulated amount of statutory surplus reserve reaches 50% of the Company's registered capital, further appropriation will not be mandatory. Upon the approval of the board, the statutory surplus reserve can be used to offset previous years' losses or increase the share capital.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

50. Retained earnings

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Retained earnings at the beginning of the period Add: Net profit attributable to shareholders of the parent	37,954,521	32,461,495
company Other comprehensive income carried forward to	5,871,055	4,937,420
retained earnings Less: Appropriation to surplus reserve	325	(1,107)
Distribution of dividends on ordinary shares (a) Distribution of interest on perpetual bonds	1,616,442	1,554,272
classified as equity instrument (b)	985,659	188,900
Retained earnings at the end of the period	41,223,800	35,654,636

As at 30 June 2022, retained earnings of the Group included statutory surplus reserve of subsidiaries of the parent company amounting to RMB 16,312,563,000 (as at 31 December 2021: RMB 16,312,563,000).

- (a) In accordance with the resolution at the 2021 annual general meeting of shareholders on 30 June 2022, a final cash dividend of RMB 0.78 (inclusive of tax) for every ten shares was approved after the appropriation to statutory surplus reserve, which amounted to RMB 1,616,442,000, This dividend has been paid as of 29 August 2022.
- (b) For the current period, the Company distributed interest on perpetual bonds amounting to RMB 985,659,000 (for the period ended 30 June 2021: RMB 188,900,000). On 30 June 2022, retained earnings included no interest belonging to the perpetual bond holders (as at 31 December 2021: Nil).

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Operating revenue and operating costs

(1) Operating revenue and operating costs

All amounts in RMB'000

	Amount for the current period		Amount for the prior period		
Items	Operating revenue	Operating costs	Operating revenue	Operating costs	
Principal business Other business	288,719,325 482,417	261,914,974 275,246	250,347,973 655,214	226,149,668 407,352	
Total	289,201,742	262,190,220	251,003,187	226,557,020	

All amounts in RMB'000

Items	Amount for the current period Operating revenue	Amount for the prior period Operating revenue
Revenue from contracts with customers Leasing income	288,882,117 319,625	250,659,565 343,622
Total	289,201,742	251,003,187

The segment information of operating revenue (2)

Reporting segment	Engineering contracting	Property development	Equipment manufacture	Resource development	Other	Total
Troporting segment	oontraoting	ucrotophicht	manaraotaro	ucreiopinent	VIIICI	Total
Major product type						Gr.
Engineering construction	257,821,095	1,406,969	3,630,546	=	=	262,858,610
Design and consulting services	3,724,537	-	55,272	-	444,223	4,224,032
Product sales	1,915,045	7,063,650	2,026,093	3,577,075	211,764	14,793,627
Others	4,818,085	431,786	944,032	4,610	807,335	7,005,848
Total	268,278,762	8,902,405	6,655,943	3,581,685	1,463,322	288,882,117
=						
Time of revenue recognition						
Principal business income	268,051,034	8,843,037	6,636,329	3,577,075	1,454,562	288,562,037
Including: Recognition of revenue						
at a point in time	6,455,911	7,212,982	2,912,156	3,577,075	987,123	21,145,247
Recognition of revenue						
within a certain						
period of time	261,595,123	1,630,055	3,724,173	- 1	467,439	267,416,790
Other business income	227,728	59,368	19,614	4,610	8,760	320,080
THE RESERVE TO THE RE			Wa I had		11111	11 -1
Total	268,278,762	8,902,405	6,655,943	3,581,685	1,463,322	288,882,117

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

51. Operating revenue and operating costs (Continued)

(2) The segment information of operating revenue (Continued)

The engineering contracting services provided by the Group generally constitutes a single performance obligation as a whole and is performed over time. As at 30 June 2022, some of the Group's engineering contracting service contracts were still in the process of performance, the transaction price allocated to the outstanding (or partially unperformed) performance obligations are related to the performance progress of each service contract, and will be recognized as revenue in the future performance period of each contract based on the performance progress.

(3) Operating revenue from the five largest customers of the Group

The total amount of operating revenue from the five largest customers of the Group is RMB 11,300,452,000 (for the period ended 30 June 2021: RMB 11,043,193,000), accounting for 3.90% of the total operating revenue of the Group (for the period ended 30 June 2021: 4.40%). The details are set out below:

Customers	Operating revenue	As a percentage of total operating revenue of the Group (%)
Party 1	3,175,996	1.10
Party 2	2,668,883	0.92
Party 3	1,942,797	0.67
Party 4	1,795,763	0.62
Party 5	1,717,013	0.59
Total	11,300,452	3.90

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

52. Taxes and levies

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Stamp duty	172,536	139,277
City construction and maintenance tax	163,122	155,862
Land appreciation tax	130,163	471,767
Education surcharges	125,341	73,460
Property tax	122,066	114,941
Land use tax	49,238	55,402
Others	148,137	116,765
Total	910,603	1,127,474

53. Selling expenses

Items	Amount for the current period	Amount for the prior period
Employee benefits	587,237	522,233
Advertising and sales service expenses	268,994	236,525
Travelling expenses	84,214	101,497
Office expenses	80,653	95,268
Packing charges	23,127	4,072
Transportation expenses	13,107	47,640
Depreciation of fixed assets	9,654	8,344
Others	160,634	140,505
Total	1,227,620	1,156,084

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

54. Administrative expenses

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Employee benefits	3,417,640	3,380,034
Depreciation of fixed assets	255,066	260,291
Office expenses	185,277	202,664
Professional service fees	169,356	182,115
Travelling expenses	133,142	161,172
Amortization of intangible assets	92,988	89,635
Lease rentals	82,765	53,836
Repairs and maintenance expenses	35,741	66,595
Others	567,739	645,140
Total	4,939,714	5,041,482

55. Research and development expenditure

Items	Amount for the current period	Amount for the prior period
Research and development material expenditure Employee benefits Depreciation of fixed assets Amortization of intangible assets Others	5,186,375 2,120,046 52,410 10,554 268,944	3,891,720 1,792,291 42,576 9,570 272,038
Total	7,638,329	6,008,195

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

56. Financial expenses

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Interest expenses Less: Capitalized interests Less: Interest income	1,947,849 1,042,299 1,109,460	2,360,156 902,623 954,082
Exchange (gains)/losses Bank charges Interest expenses of lease liabilities Others	(198,329) 400,984 15,370 95,240	70,781 372,248 10,995 102,804
Total	109,355	1,060,279

57. Other income

Items	Amount for the current period	Amount for the prior period
Tax returns Research subsidies Others	60,824 17,285 106,622	34,894 15,871 107,153
Total	184,731	157,918

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

58. Investment losses

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
(Losses)/Gains from long-term equity investments under equity method	(91,968)	123,138
Investment income on disposal of long-term equity investments	20,546	5,261
Investment income on disposal of financial assets held-for-trading	_	6,807
Investment income from disposal of other non-current financial assets	_	4,455
Investment loss from disposal of receivables at FVTOCI (Note)	(222,466)	(267,141)
Investment income from holding investments in other equity instruments	775	6,890
Investment income from holding other non-current financial assets	16,599	31,729
Losses from derecognition of financial assets at amortized		/
cost (Note) Others	(536,947) (261)	(529,008) (72,326)
	(201)	(12,020)
Total	(813,722)	(690,195)

For the current period, the Group's investment losses due to the transfer of receivables at FVTOCI to financial institutions in the form of discounted financing, and the transfer of accounts receivable measured by amortized cost to financial institutions in the form of non-recourse protection factoring and asset securitization were RMB 222,466,000 and RMB 536,947,000 (for the period ended 30 June 2021: RMB 267,141,000 and RMB 529,008,000).

59. (Losses)/gains from changes in fair values

Items	Amount for the current period	Amount for the prior period
(Losses)/Gains arising on changes in fair value of financial		
assets held for trading	(283)	6,937
(Losses)/Gains arising on changes in fair value of derivative		
financial assets	(57,196)	45,579
Losses arising on changes in fair value of derivative financial		
liabilities	(73,692)	(1,036)
Gains/(Losses) arising on changes in fair value of other non-	•	
current financial assets	476	(1)
Total	(130,695)	51,479

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

60. Credit impairment losses

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Impairment losses reversed/(recognised) of bills receivable (Note VII 4(4)) Credit losses on accounts receivable (Note VII 5(3)) Credit losses on other receivables (Note VII 8(6)) Credit losses on long-term receivables (Note VII 13(2))	86,574 (1,023,259) (528,568) (137,949)	(1,590) (408,160) (557,277) (61,084)
Total	(1,603,202)	(1,028,111)

Impairment losses of assets 61.

Items	Amount for the current period	Amount for the prior period
Impairment of contract assets (Note VII 10(2)) Impairment of long-term equity investments Impairment of fixed assets (Note VII 18(1)) Impairment of inventories (Note VII 9(2))	(1,095,967) (171,447) (44,962) (3,549)	(822,696) - - (259,575)
Total	(1,315,925)	(1,082,271)

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

62. Gains on disposal of assets

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Gains on disposal of fixed assets Gains on disposal of intangible assets Gains on disposal of other long-term assets	14,626 32,666 56,489	144,992 282,718 —
Total	103,781	427,710

63. Non-operating income

Items	Amount for the current period	Amount for the prior period	Recognized in non-recurring profit or loss for the current period
Income from penalty Government grants irrelevant to routine activities	37,864 20,046	7,185 83.384	37,864 20,046
Unpayable balances Others	20,040 27,153 31,151	35,190 44,692	27,153 31,151
Total	116,214	170,451	116,214

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

64. Non-operating expenses

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period	Recognized in non-recurring profit or loss for the current period
Companyation and default neumants	26.227	10.000	06.027
Compensation and default payments	26,237	18,023	26,237
Expected losses on pending lawsuits	19,154	(2,531)	19,154
Losses on damage or retirement of non-			
current assets	12,356	2,630	12,356
Fines and surcharges for overdue			
payments	12,333	11,144	12,333
Donation outlays	4,392	269	4,392
Others	4,180	(733)	4,180
Total	78,652	28,802	78,652

65. Expenses categorized by nature

The supplementary information on the Group's operating costs, selling expenses, administrative expenses as well as research and development expenses by nature is summarized as follows:

Items	Amount for the current period	Amount for the prior period
Subcontracting costs	125,612,709	108,181,749
Consumed raw materials	94,031,997	77,784,875
Labor costs	19,275,776	16,306,173
Employee benefits	14,126,409	13,428,264
Carry-forward of cost of property development products	6,218,893	9,495,882
Other construction costs	4,222,040	3,955,930
Depreciation and amortization expenses	1,923,375	1,784,895
Other product sales costs	237,909	369,710
Others	10,346,775	7,455,303
Total	275,995,883	238,762,781

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

66. Income tax expenses

(1) Income tax expenses

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Current year tax expenses Deferred tax expenses	1,634,872 (341,170)	1,676,382 (236,457)
Total	1,293,702	1,439,925

(2) Reconciliation of income tax expenses to the accounting profit

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Total profit	8,648,431	8,030,832
Income tax expenses calculated at the tax rate of 25%	2,162,108	2,007,708
Effect of difference between applicable tax rate and		
statutory tax rate	(970,023)	(781,514)
Income not subject to tax	(40,146)	(254,654)
Expenses not deductible for tax purposes	82,036	88,616
Utilization of tax losses and other temporary differences		
for which no deferred income tax assets were		
recognized previously	(381,486)	(301,493)
Tax losses and other temporary differences for which no		
deferred income tax assets were recognized	872,973	976,265
Others	(431,760)	(295,003)
Income tax expense	1,293,702	1,439,925

Most of the companies now comprising the Group are subject to PRC enterprise income tax, which have been provided based on the statutory income tax rate of 25% on the assessable income during the current period as determined in accordance with the relevant PRC income tax rules and regulations except for certain subsidiaries which were exempted from tax or taxed at preferential rate.

Taxation of overseas subsidiaries within the Group has been calculated on the estimated assessable profit of these subsidiaries for the current period at the rates of taxation prevailing in the countries or jurisdictions in which these companies operate.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

67. Earnings per share

(1) When calculating earnings per share, net profit for the current period attributable to ordinary shareholders

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Net profit for the current period attributable to shareholders of the Company Including: Net profit from continuing operations	5,871,055 5,871,055	4,937,420 4,937,420
Less: The effect of other equity instruments interest Net profit for the current period attributable to ordinary shareholders	985,659 4,885,396	505,436 4,431,984

(2) For the purpose of calculating basic earnings per share, the denominator is the weighted average number of outstanding ordinary shares

All amounts in thousand shares

Items	Amount for the current period	Amount for the prior period
Number of ordinary shares outstanding at the beginning of the period	20,723,619	20,723,619
Add: Weighted average number of ordinary shares issued during the period	-	
Less: Weighted average number of ordinary shares repurchased during the period Number of ordinary shares outstanding at the end of	-	-
the period	20,723,619	20,723,619

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

67. Earnings per share (Continued)

(3) Earnings per share

RMB/share

Items	Amount for the current period	Amount for the prior period
Calculated based on net profit attributable to		
ordinary shareholders: Basic earnings per share	0.24	0.21
Diluted earnings per share	0.24	0.21
Calculated based on net profit from continuing	0.24	0.21
operations attributable to ordinary shareholders:		
Basic earnings per share	0.24	0.21
Diluted earnings per share	0.24	0.21
Calculated based on net profit from discontinued		
operations attributable to ordinary shareholders:		
Basic earnings per share	N/A	N/A
Diluted earnings per share	N/A	N/A

Notes to items in the cash flow statements 68.

(1) Other cash receipts relating to operating activities

Items	Amount for the current period	Amount for the prior period
Receipts of deposits and guarantee funds Interest income	1,420,298 354,738	1,965,194 300,833
Government grants Others	196,208 462,126	275,887 529,034
Total	2,433,370	3,070,948

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

68. Notes to items in the cash flow statements (Continued)

(2) Other cash payments relating to operating activities

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Research and development expenses	5,455,259	4,678,399
Payments of deposits and guarantee funds	800,478	4,529,565
Office expenses	265,929	297,933
Travelling expenses	217,355	262,669
Payments for retirement benefits	149,350	195,433
Repair and maintenance expenses	95,515	69,496
Advance to employees	68,799	95,351
Advertising and sales service expenses	63,614	58,124
Utilities expenses	31,734	41,122
Advances and others	938,513	2,689,127
Total	8,086,546	12,917,219

(3) Other cash receipts relating to investing activities

All amounts in RMB'000

Item	Amount for the current period	Amount for the prior period
Repayments and interest income from loans Net cash receipts from acquisition of subsidiaries	2,781,085	-
(Note VIII 1)	10,802	_
Total	2,791,887	-

(4) Other cash payments relating to investing activities

Item	Amount for the current period	Amount for the prior period
Providing loans to related parties and others	780,032	5,616,687
Total	780,032	5,616,687

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Notes to items in the cash flow statements (Continued)

(5) Other cash receipts relating to financing activities

All amounts in RMB'000

Item	Amount for the current period	Amount for the prior period
Loans to related parties Decrease in restricted deposits	178,000 –	- 440,137
Total	178,000	440,137

(6) Other cash payments relating to financing activities

Items	Amount for the current period	Amount for the prior period
Transactions with non-controlling interests Capital transactions with shareholders Cash outflows related to leasing Redemption of perpetual medium-term notes	2,080,000 120,000 113,324	4,438 - 186,853 3,230,050
Total	2,313,324	3,421,341

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

69. Supplementary information to the cash flow statements

(1) Supplementary information to the cash flow statements

Sup	plementary information	Amount for the current period	Amount for the prior period
1.	Reconciliation of net profit to cash flows		
	from operating activities		
	Net profit	7,354,729	6,590,907
	Add: Provision for impairment losses of assets		
	and credit losses	2,919,127	2,110,382
	Depreciation of fixed assets and right-		
	of-use assets, and amortization of		
	investment properties	1,452,473	1,440,287
	Amortization of intangible assets	427,907	291,564
	Amortization of long-term prepayments	42,995	53,044
	Gains on disposal of fixed assets,		
	intangible assets and other long-term	///\	(407 740)
	assets	(103,781)	(427,710)
	Losses/(gains) on write-off of fixed assets	3,775	(694)
	Losses/(gains) from changes in fair value	130,695	(51,479)
	Financial expenses Investment losses	934,698	815,279
	Increase in deferred tax assets	53,914	161,187 (235,856)
	Increase/(decrease) in deferred tax	(345,024)	(233,630)
	liabilities	3,854	(601)
	Decrease/(increase) in inventories	3,776,639	(2,271,239)
	Increase in contract assets	(27,505,750)	(22,217,681)
	Decrease in contract liabilities	(15,422,077)	(8,531,573)
	(Increase)/decrease in receivables from	(13,422,077)	(0,001,010)
	operating activities	(12,715,711)	51,300,495
	Increase/(decrease) in payables from	(12,710,711)	01,000,400
	operating activities	39,159,245	(37,591,761)
	Net cash flows from operating activities	167,708	(8,565,449)
	That again nows from operating detivities	101,700	(0,000,440)
2.	Net changes in cash and cash equivalents		
	Closing balance of cash	52,290,370	40,847,944
	Less: Opening balance of cash	31,216,824	42,165,302
	Net increase/(decrease) in cash and cash	• -, •,•	.2,.00,002
	equivalents	21,073,546	(1,317,358)
	1.000		, , , , ,

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Supplementary information to the cash flow statements (Continued)

(2) The composition of cash and cash equivalents

All amounts in RMB'000

Iten	ns	Amount for the current period	Amount for the prior period
I.	Cash Including: Cash on hand Bank deposits without restriction Other cash and bank balances without restriction	52,290,370 14,486 52,275,884	31,216,824 11,136 30,905,299 300,389
II.	Closing balance of cash and cash equivalents	52,290,370	31,216,824

70. Assets with title or right-of-use restrictions

Items	30 June 2022	June 2022 Reasons	
Cash and bank balances	10,863,574	Frozen/Regulated	
Bills receivable	163,859	Pledge for bill pool business	
Bills receivable	703,668	Endorsed or discounted	
Accounts receivable	734,222	Pledge for borrowings	
Other receivables	805,549	Pledge for borrowings	
Long-term receivables	1,745,351	Pledge for borrowings	
Receivables at FVTOCI	2,393,673	Pledge for bill pool business	
Receivables at FVTOCI	1,092,604	Endorsed or discounted	
Inventories	5,366,736	Mortgage for borrowings	
Investment properties	964,789	Mortgage for borrowings	
Fixed assets	290,360	Mortgage for borrowings Frozen	
Intangible assets	2,360,787	Mortgage for borrowings Frozen	
Total	27,485,172	1	

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

71. Foreign currencies denominated items

(1) Foreign currencies denominated items

Items	Foreign currency at 30 June 2022	Exchange rate	RMB at 30 June 2022
Cash and bank balances			8,014,836
Including: USD	955,490	6.7114	6,412,676
IDR	830,817,592	0.000454	377,191
AUD	49,000	4.6145	226,111
EUR	18,004	7.0084	126,179
HKD	87,192	0.8552	74,567
Others	1	/	798,112
Accounts receivable			757,895
Including: USD	53,998	6.7114	362,402
HKD	91,206	0.8552	77,999
Others	1	/	317,494
Other receivables			2,491,696
Including: USD	200,370	6.7114	1,344,763
AUD	129,275	4.6145	596,539
HKD	250,410	0.8552	214,151
Others	1	/	336,243
Short-term borrowings			5,915,544
Including: USD	770,460	6.7114	5,170,865
Others	1	/	744,679
Accounts payable			688,682
Including: USD	35,228	6.7114	236,429
HKD	57,736	0.8552	49,376
JPY	280,255	0.049136	13,771
Others	1	/	389,106
Other payables			7,134,048
Including: USD	705,769	6.7114	4,736,698
HKD	237,779	0.8552	203,349
AUD	39,096	4.6145	180,408
Others	/	1	2,013,593
Long-term borrowings			2,802,323
Including: USD	230,000	6.7114	1,543,622
SGD	261,304	4.8170	1,258,701

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Foreign currencies denominated items (Continued) 71.

(2) Notes for the foreign business entities

Full name of the major foreign operations	Place of business	Reporting currency	The basis of select functional currency
MCC Minera Sierra Grande S.A MCC Mining (Western Australia) Pty Ltd.	Argentina Australia	Argentine Peso USD	The functional currency of the overseas subsidiary is based on the primary economic environment
MCC Australia Holding Pty Ltd.	Australia	Australian dollar	where it operates.
MCC Tongsin Resources Ltd.	Pakistan	USD	
MCC Holding (Hong Kong) Corporation Limited	Hong Kong, China	USD	
MCC Ramu NiCo Ltd.	Papua New Guinea	USD	

The functional currencies of the Group's major foreign operations have not changed during the reporting period.

For the six months ended 30 June 2022

VII. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

72. **Government grants**

(1) Basic information of government grants

All amounts in RMB'000

Government grants	Category	Amount received for the current period	Presenting items	Amount recognized in profit or loss
Dalian High-Tech Industrial Zone index-based subsidies under science and technology support fund program	Related to income	45,621	Operating cost	45,621
Tax returns for comprehensive resource utilization projects	Related to income	12,930	Other income	12,930
Operation grants from Department of Resource Allocation and Management of the Ministry of Science and Technology	Related to income	10,877	Administrative expenses	71
Fiscal supporting funds from Luodian Town People's Government	Related to income	10,000	Other income	10,000
Operating grants before transformation allocated by the Ministry of Science and Technology	Related to income	6,550	Non-operating income	6,550
Enterprise development funds from Beijing Miyun District	Related to income	6,382	Other income	6,382
Tax incentives from Mentougou Service Center of Zhongguancun Science Park	Related to income	6,190	Other income	6,190
Enterprise support incentives from Shuangqiaozi Subdistrict Office, Chenghua District People's government of Chengdu	Related to income	5,957	Other income	5,957
Tax returns from Haibin Street	Related to income	4,920	Other income	4,920
Grants for the development and use of key super-intelligent electric art furnace teel-making technologies, etc.	Related to income	4,151	Other income	4,151
Others	Related to assets/ Related to income	106,897	Deferred income/ Operating cost/ Administrative expenses/ Other income/ Non-operating income/ Research and development expenses	143,696
Total	1	220,475	1	246,468

(2) During the reporting period, the Group has no returned government grants.

For the six months ended 30 June 2022

VIII. CHANGES OF THE SCOPE OF CONSOLIDATION

1. Business combinations not involving enterprises under common control

During the reporting period, the information on the Group's business combinations not involving enterprises under common control is as follows:

All amounts in RMB'000

Combining entity	Name of acquiree	Acquisition date	Ownership at the end of period (%)	
MCC Real Estate Group Co., Ltd.	Zhuhai MCC Jianxin Investment Management Partnership (LP)	2022-03-31	50.99	
MCC Real Estate Group Co., Ltd.	Guangzhou MCC Mingjie Real Estate Co., Ltd.	2022-03-31	100.00	
MCC Real Estate Group Co., Ltd.	Tianjin MCC Mingrui Real Estate Co., Ltd.	2022-03-31	100.00	
Nanjing Linjiang Old City Reconstruction and Investment Co., Ltd.	Nanjing MCC Zhenghuai Real Estate Co., Ltd.	2022-03-31	100.00	
MCC Real Estate Group Co., Ltd.	Shijiazhuang MCC Mingguan Real Estate Development Co., Ltd.	2022-03-31	100.00	
MCC Capital Engineering & Research Incorporati Limited	onHebei Jinghuan Expressway Co., Ltd.	2022-04-01	99.00	
MCC South China Construction and Engineering Co., Ltd.	MCC South China (Shenzhen) Construction & Technology Innovation Co., Ltd.	2022-04-29	70.00	

For the current period, the Group acquired the substantial control over entities listed above through cash, or through amending the partnership agreement. These entities were included in consolidation scope since the acquisition date.

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VIII. CHANGES OF THE SCOPE OF CONSOLIDATION (CONTINUED)

1. Business combinations not involving enterprises under common control (Continued)

The fair value and carrying amount of the identifiable assets and liabilities of companies listed above as at the dates of acquisition were as follows:

	Fair value	Carrying amount
	on the	on the
Items	acquisition date	acquisition date
Cash and bank balances	37,680	37,680
Prepayments	269,809	269,809
Other receivables	6,865,683	6,865,683
Inventories	12,683,297	12,683,297
Other current assets	315,034	315,034
Fixed assets	910	895
Right-of-use assets	3,221	3,221
Intangible assets	249,260	249,260
Accounts payable	(258,871)	(258,871)
Contract liabilities	(956,115)	(956,115)
Employee benefits payable	(196)	(196)
Taxes payable	(27,482)	(27,482)
Other payables	(14,925,503)	(14,925,503)
Long-term borrowings	(876,687)	(876,687)
Lease liabilities	(2,951)	(2,951)
Deferred tax liabilities	(2,106)	(2,106)
Fair value of net identifiable assets on the		
acquisition date	3,374,983	3,374,968
Less: Non-controlling interests	63	
Add: Goodwill from purchases	(3,131)	Note 1
Consideration of acquisition	3,371,789	Note 2

For the six months ended 30 June 2022

VIII. CHANGES OF THE SCOPE OF CONSOLIDATION (CONTINUED)

Business combinations not involving enterprises under common control (Continued)

- Note 1: The negative goodwill arising from business combinations not involving enterprises under common control has been recognized in non-operating income.
- Note 2: Such amount includes the cash of RMB 39,900,000 paid by the Company for business combinations, fair values of Zhuhai MCC Jianxin, Guangzhou MCC Mingjie Real Estate Co., Ltd., Tianjin MCC Mingrui Real Estate Co., Ltd., Nanjing MCC Zhenghuai Real Estate Co., Ltd. and Shijiazhuang MCC Mingguan Real Estate Development Co., Ltd. owned by MCC Real Estate before the acquisition date in the amount of RMB 3,201,594,000, as well as fair value of Hebei Jinghuan Expressway Co., Ltd. owned by MCC Capital Engineering & Research Incorporation Limited in the amount of RMB 130,295,000.

The operating results and cash flows of the above companies from the acquisition date till the end of period are listed as follows:

All amounts in RMB'000

acquisition date till 30 June 2022
531,901 87,517 23,085

Net cash received for acquisition of subsidiaries:

All amounts in RMB'000

	For the six months
	period ended
Items	30 June 2020
Consideration for acquisition of subsidiaries	3,710,278
Cash and cash equivalents paid for acquisition of subsidiaries	26,878
Less: Cash and cash equivalents held by the acquiree	37,680
Net cash received for acquisition of subsidiaries	10,802

2. Change of consolidation scope for other reasons

For this reporting period, the Group did not invest and establish any important subsidiaries other than MCC Great Wall Investment Co., Ltd.

For the six months ended 30 June 2022

INTERESTS IN OTHER ENTITIES IX.

Interests in subsidiaries

(1) The constitution of the Group

Details of subsidiaries of the Group:

	Place of	Place of establishment/		Registered	Proportion of o		Method of obtaining interests in
Name of subsidiary	business	incorporation	Business scope	capital	Direct	Indirect	the subsidiary
Central Research Institute of Building and Construction Co., Ltd.	China	Beijing	EPC	2,905,110	100.00	-	Invested by shareholders
Beijing Metallurgical Equipment Research Design Institute Co., Ltd.	China	Beijing	EPC	761,816	100.00	-	Invested by shareholders
China ENFI Engineering Co., Ltd.	China	Beijing	EPC	2,346,730	100.00	-	Invested by shareholders
MCC Capital Engineering & Research Incorporation Limited	China	Beijing	EPC	3,283,104	88.89	_	Invested by shareholders
CISDI Group Co., Ltd.	China	Chongqing	EPC	2,300,000	100.00	-	Invested by shareholders
WISDRI Engineering & Research Incorporation Limited	China	Wuhan	EPC	3,350,000	83.08	-	Invested by shareholders
Huatian Engineering & Technology Corporation, MCC	China	Ma'anshan	EPC	823,259	85.10	-	Invested by shareholders
ACRE Coking & Refractory Engineering Consulting Corporation, MCC	China	Anshan	EPC	1,296,600	87.81	-	Invested by shareholders
Zhong Ye Chang Tian International Engineering Co., Ltd.	China	Changsha	EPC	677,301	92.61	-	Invested by shareholders
Northern Engineering & Technology Corporation, MCC	China	Anshan	EPC	528,511	91.26	-	Invested by shareholders
Shen Kan Engineering & Technology Corporation, MCC	China	Shenyang	Investigation, design	346,264	100.00	-	Invested by shareholders
Wuhan Surveying Geotechnical Research Institute Co., Ltd. of MCC	China	Wuhan	Investigation, design	500,000	100.00	-	Invested by shareholders
China First Metallurgical Group Co., Ltd.	China	Wuhan	Engineering contracting	2,019,027	98.26	_	Invested by shareholders
China Second Metallurgical Group Co., Ltd.	China	Baotou	Engineering contracting	1,500,000	100.00		Invested by shareholders
China MCC 3 Group Co., Ltd.	China	Anshan	Engineering contracting	1,500,000	100.00	-	Invested by shareholders
China MCC 5 Group Co., Ltd.	China	Chengdu	Engineering contracting	5,004,178	98.58	_	Invested by shareholders
MCC TianGong Group Corporation Limited	China	Tianjin	Engineering contracting	2,050,000	98.53	-	Invested by shareholders
China MCC 17 Group Co., Ltd.	China	Ma'anshan	Engineering contracting	2,050,000	72.39	-	Invested by shareholders
China Metallurgical Construction Engineering Group Co., Ltd.	China	Chongqing	Engineering contracting	2,100,000	100.00	-	Invested by shareholders
China MCC 19 Group Co., Ltd.	China	Panzhihua	Engineering contracting	3,010,000	100.00	-	Invested by shareholders
China MCC 20 Group Co., Ltd.	China	Shanghai	Engineering contracting	2,050,000	73.14	Al Toronto	Invested by shareholders
China 22MCC Group Co., Ltd.	China	Tangshan	Engineering contracting	2,780,000	100.00		Invested by shareholders

For the six months ended 30 June 2022

IX. INTERESTS IN OTHER ENTITIES (CONTINUED)

Interests in subsidiaries (Continued) 1.

(1) The constitution of the Group (Continued)

Details of subsidiaries of the Group (Continued):

Name of subsidiary	Place of	Place of establishment/		Degistered	Proportion of ownership interest (%)		Method of obtaining
	business	incorporation	Business scope	Registered capital	Direct	Indirect	interests in the subsidiary
Shanghai Baoye Group Co., Ltd.	China	Shanghai	Engineering contracting	5,285,230	97.93	0.80	Invested by shareholders
China Huaye Group Co., Ltd.	China	Beijing	Engineering contracting	1,434,900	100.00	_	Invested by shareholders
MCC Baosteel Technology Services Co., Ltd.	China	Shanghai	Repair work	1,200,000	59.65	20.69	Invested by shareholders
MCC Communication Construction Group Co., Ltd.	China	Beijing	Infrastructure contractor	9,312,258	100.00	-	Invested by shareholders
MCC Rail Transit Co., Ltd.	China	Langfang	Engineering contracting	1,000,000	100.00	-	Established through investments
MCC Road&Bridge Construction Co., Ltd.	China	Inner Mongolia	Engineering contracting	2,000,000	100.00	-	Established through investments
MCC Zhongyuan Construction Investment Co., Ltd.	China	Zhengzhou	Engineering contracting	500,000	100.00	-	Established through investments
MCC Integrated Pipe Network Technology & Development Co., Ltd.	China	Baoding	Project contracting, Integrated pipe network technology development	200,000	100.00	-	Established through investments
MCC South China Construction Investment Co., Ltd.	China	Shenzhen	Engineering contracting	500,000	51.00	=	Established through investments
MCC (Hainan) Investment Development Co., Ltd.	China	Hainan	Engineering consulting, Investment management, etc.	100,000	60.00	39.30	Established through investments
MCC Urban Investment Holding Co., Ltd.	China	Guangdong	Engineering consulting, Investment management, etc.	1,000,000	60.00	-	Established through investments
MCC (Yunnan) Engineering Investment and Construction Co., Ltd.	China	Yunnan	Engineering contracting	250,000	60.00	-	Established through investments
MCC Fujian Investment and Construction Co., Ltd.	China	Fujian	Engineering contracting	1,000,000	60.00	-	Established through investments
MCC (Shanghai) Steel Structure Technology Co., Ltd.	China	Shanghai	Engineering contracting	1,000,000	42.56	54.79	Investments Investments shareholders
MCC Ecological Environmental Protection Group Co., Ltd.	China	Beijing	Water resource management	3,000,000	4.48	81.29	Established through
MCC Great Wall Investment Co., Ltd.	China	Beijing	Investment management	15,000,000	100.00	(3 -	investments Established through investments

For the six months ended 30 June 2022

INTERESTS IN OTHER ENTITIES (CONTINUED) IX.

Interests in subsidiaries (Continued)

(1) The constitution of the Group (Continued)

Details of subsidiaries of the Group (Continued):

	Place of	Place of establishment/		Registered		Proportion of ownership interest (%)	
Name of subsidiary	business	incorporation	Business scope	capital	Direct	Indirect	interests in the subsidiary
MCC Real Estate Group Co., Ltd. (Note 1)	China	Beijing	Property development	5,000,000	100.00	-	Invested by shareholders
MCC Tongsin Resources Ltd.	Pakistan	British Virgin Islands	Resource development	2,830,103	100.00	=	Invested by shareholders
MCC Australia Holding Pty Ltd.	Australia	Australia	Resource development	49,016	100.00	-	Invested by shareholders
MCC-JJJ Mining Development Company Limited	China	Beijing	Resource development	3,095,700	67.02	=	Invested by shareholders
Ramu NiCo Management (MCC) Ltd.	Papua New Guinea	Papua New Guinea	Nickel cobalt ore mining and smelting	3	100.00	=	Invested by shareholders
MCC Finance Corporation Ltd. (Note 2)	China	Beijing	Finance	1,800,000	86.13	12.48	Invested by shareholders
MCC Financial Leasing Co., Ltd.	China	Zhuhai	Finance lease	1,000,000	51.00	49.00	Established through investments
MCC International Incorporation Ltd.	China	Beijing	Engineering contracting	100,000	100.00	=	Invested by shareholders
MCC Overseas Ltd.	China	Beijing	Engineering contracting	429,126	100.00	-	Invested by shareholders
MCC Vietnam Engineering Technology Co., Ltd.	Vietnam	Vietnam	Engineering contracting	-	100.00	-	Established through investments
China MCC International Economic and Trade Co., Ltd.	China	Shanghai	Trading	120,000	54.58	40.89	Invested by shareholders
MCC Holding (Hong Kong) Corporation Limited	China	Hong Kong, China	Others	6,485	100.00	-	Established through investments
MCC-SFRE Heavy Industry Equipment Co., Ltd.	China	Xi'an	Metallurgy equipment manufacture	1,286,000	71.47	-	Invested by shareholders
MCC Mining (Western Australia) Pty Ltd.	Australia	Australia	Resource development	124,382	100.00	-	Invested by shareholders
China 13th Metallurgical Construction Corporation	China	Taiyuan	Engineering contracting	111,663	100.00	-	Invested by shareholders
Tianjin United Huitong Investment Partnership (Limited Partnership)	China	Tianjin	Investment with own funds	5,000,200	20.00	-	Established through investments
Tianjin United Huixin Investment Partnership (Limited Partnership)	China	Tianjin	Investment with own funds	7,500,200	20.00	_	Established through
Tianjin Hongxin Investment Partnership (Limited Partnership)	China	Tianjin	Investment with own funds	7,500,200	20.00	-	investments Established through investments

Note 1: At 30 June 2022, except for the Company and MCC Real Estate Group Co., Ltd., other subsidiaries have not issued any bond. None of the subsidiaries of the Company have issued share capital.

Note 2: On 24 December 2021, the resolution of the resolution of the dissolution and liquidation of MCC Finance Corporation Ltd was passed in the No.33 meeting of the third Board of Directors. After the dissolution in the second half of 2022, the number of subsidiaries included in the consolidated financial statements will reduce by one.

For the six months ended 30 June 2022

IX. INTERESTS IN OTHER ENTITIES (CONTINUED)

1. Interests in subsidiaries (Continued)

Details of subsidiaries of the Group (Continued):

- (a) The grounds for controlling the investees of which the Group is holding half or less than half of the equity interest, and the grounds for not controlling the investees of which the Group is holding more than half of the equity interest
 - (i) The grounds for controlling the investees of which the Group is holding half or less than half of the equity interest

The Group has several investees in which it holds half or less than half of equities, and these investees are incorporated in the scope of consolidation of the Group. Mainly based on shareholder agreements, the rules of procedures for the articles of association of investees or agreements of shareholding entrustment and other arrangements, the Group has the control over these investees.

(ii) The grounds for not controlling the investees in which the Group holds more than half of the equity interest

The Group has several investees in which it holds more than half of equities. As there is a consistent action arrangement between the Group and another shareholder, and the other shareholder has one vote with the right to veto or can determine independently the investees' related activities, the Group has no control over the investees, but it has the joint control or can exercise significant influence over the investees, which are therefore accounted for and managed as joint ventures or associates.

For the six months ended 30 June 2022

INTERESTS IN OTHER ENTITIES (CONTINUED) IX.

- Interests in subsidiaries (Continued)
 - (2) Material non-controlling interests

Company name	Proportion of equity interest held by non-controlling interests	Comprehensive income attributable to non-controlling interests in the current period	Declaration of cash dividends to non-controlling interests in the current period	Non-controlling interests at the end of the period
WICDDI Engineering & Decearch				
WISDRI Engineering & Research Incorporation Limited	16.92	174,550		2,273,290
'		*	115.050	, ,
China MCC 20 Group Co., Ltd.	26.86	32,256	115,059	1,367,071
China MCC 17 Group Co., Ltd.	27.61	190,221	_	1,821,135
MCC Baosteel Technology				
Services Co., Ltd.	19.66	77,136	7,449	949,072
Huatian Engineering &				
Technology Corporation, MCC	14.90	12,881	-	628,066
MCC Capital Engineering &				
Research Incorporation				
Limited	11.11	44,871	_	571,255

For the six months ended 30 June 2022

IX. INTERESTS IN OTHER ENTITIES (CONTINUED)

Interests in subsidiaries (Continued)

The following tables provide significant financial information of significant non-wholly owned subsidiaries. All amounts are before elimination:

All amounts in RMB'000

			30 Jur	ne 2022					31 Decer	mber 2021		
		Non-current		Current	Non-current	Total	Current	Non-current		Current	Non-current	Total
Name of subsidiary	Current assets	assets	Total assets	liabilities	liabilities	liabilities	assets	assets	Total assets	liabilities	liabilities	liabilities
WISDRI Engineering &												
Research Incorporation												
Limited	23,379,754	4,654,581	28,034,335	18,765,779	265,167	19,030,946	22,798,675	4,561,157	27,359,832	18,858,562	282,351	19,140,913
China MCC 20 Group Co.,												
Ltd.	30,911,879	3,729,341	34,641,220	29,094,197	498,934	29,593,131	27,167,913	3,595,518	30,763,431	24,919,230	486,824	25,406,054
China MCC 17 Group Co.,												
Ltd.	25,197,043	4,102,314	29,299,357	21,226,335	1,489,005	22,715,340	20,115,624	3,882,694	23,998,318	17,128,548	974,664	18,103,212
MCC Baosteel Technology												
Services Co., Ltd.	6,290,883	1,107,414	7,398,297	2,578,512	112,518	2,691,030	6,114,306	1,048,479	7,162,785	2,737,624	101,718	2,839,342
Huatian Engineering &												
Technology Corporation,												
MCC	6,673,288	5,018,453	11,691,741	6,877,485	2,302,486	9,179,971	6,264,996	4,946,277	11,211,273	5,979,100	2,796,325	8,775,425
MCC Capital Engineering &												
Research Incorporation												
Limited	19,161,343	2,984,105	22,145,448	16,596,368	614,349	17,210,717	19,138,058	3,107,779	22,245,837	17,424,076	249,619	17,673,695

	Amount for the current period			Amount for the prior period				
Name of subsidiary	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities	Operating revenue	Net profit	Total comprehensive income	Cash flows from operating activities
WISDRI Engineering & Research Incorporation Limited China MCC 20 Group Co., Ltd. China MCC 17 Group Co., Ltd. MCC Baosteel Technology Services Co., Ltd. Huatian Engineering & Technology Corporation, MCC MCC Capital Engineering & Research Incorporation Limited	14,605,523 23,330,547 25,169,498 4,073,977 2,812,843 10,809,504	808,924 138,322 689,901 391,212 76,642 364,476	784,470 121,251 688,909 390,128 75,922 362,526	1,722,120 (1,240,401) 1,317,239 (242,809) 163,025 564,615	10,075,089 21,994,082 21,017,812 3,874,157 2,768,849 8,476,644	451,999 286,107 534,659 483,533 121,023 275,767	422,585 273,806 528,788 475,214 120,625 265,728	149,607 480,921 (96,725) (164,441) (366,224) 347,066

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IX. INTERESTS IN OTHER ENTITIES (CONTINUED)

2. Interests in joint ventures and associates

(1) Details of the Group's material joint ventures and associates

All amounts in RMB'000

	.				Proportion of owners interest held by the Gro		
Name of joint ventures and associates	Principal place of operation	e Place of establishment	Principal activities	Registered capital	Direct Ind	irect	Accounting method
Guizhou Sanli Highway Construction Co., Ltd.	China	Qiannan Buyei and Miao Autonomous Prefecture	Highway investment and development	2,832,800	59.95	-	Equity method
Guizhou Ziwang Highway Construction Co., Ltd.	China	Anshun	Highway investment and development	3,190,000	59.96	-	Equity method
Guizhou Sanshi Highway Construction Co., Ltd.	China	Qiandongnan Miao and Dong Autonomous Prefecture	Highway investment and development	1,584,375	59.90	-	Equity method
Chongqing Yuxiang Double Track Expressway Co., Ltd.	China	Chongqing	Highway investment and development	500,000	4.99	-	Equity method
Zhuhai Hengqin Headquarters Building Development Co., Ltd.	China	Zhuhai	Property investment and development	1,000,000	51.00	-	Equity method
Yinchuan Huaiyuan Road Integrated Pipe Network Construction and Management Co., Ltd.	China	Yinchuan	Construction and operation of comprehensive pipe network	348,229	70.00	=	Equity method
Zhongshan MCC Cuicheng Street Integrated Pipe Network Co., Ltd.	China	Zhongshan	Construction and operation of comprehensive pipe network	300,000	60.00	-	Equity method
Beijing City Vice-Center Investment Fund Partnership (Limited Partnership)	China	Beijing	Investment management	14,410,000	13.88	-	Equity method
Shigang Jingcheng Equipment Development and Manufacturing Co., Ltd.	China	Yingkou	Special steel production and equipment manufacturing	3,166,297	48.96	-	Equity method
Yunnan Mangliang Expressway Investment and Development Co., Ltd.	China	Mangshi	Highway investment and development	100,000	40.00	-	Equity method
Chongqing Yunkai Expressway Co., Ltd.	China	Chongqing	Highway investment and development	100,000	30.00	-	Equity method
anzhou Lianhuo Highway Qingzhong Section Construction and development Co., Ltd.	China	Lanzhou	Highway investment and development	500,000	17.00	-	Equity method
Fangshan Stainless steel Co., Ltd.	China	Tangshan	Smelting and pressing of ferrous metals	2,080,000	23.89	-	Equity method
Hebei Steel Luan County Sijiaying Iron Ore Co., Ltd.	China	Tangshan	Processing of ferrous metal ores	553,710	14.45	-	Equity method
Kiamen International Trade Exhibition Center Co., Ltd.	China	Xiamen	Conference and exhibition services	3,120,000	26.00	-	Equity method
Hangzhou Fuchunwan Baofu Construction & Management Co., Ltd.	China	Hangzhou	Construction project construction	200,000	30.00	-	Equity method

The Group has no significant interest in any single joint venture or associate above.

For the six months ended 30 June 2022

IX. INTERESTS IN OTHER ENTITIES (CONTINUED)

2. Interests in joint ventures and associates (Continued)

(1) Details of the Group's material joint ventures and associates (Continued)

- (a) The grounds for holding less than 20% of the voting rights in the investees while the Group has common control or significant influence over these investees, and the grounds for holding 20% or more of the voting rights in the investees over which the Group does not have significant influence
 - (i) The grounds for holding less than 20% of the voting rights in the investees while the Group has common control or significant influence over these investees

The Group has several investees in which it holds less than 20% of equities but has the joint control or significant influence over the investees. As the Group has assigned directors into the board of directors of the investees, the Group has the joint control or can exercise significant influence over the investees, which are therefore accounted for and managed as joint ventures or associates.

(ii) The grounds for holding 20% or more of the voting rights in the investees over which the Group does not have significant influence

The Group has several investees in which it holds more than 20% of equities but has no joint control or significant influence over the investees. As the Group has neither assigned directors into the board of directors of the investees, nor involved in or influenced the financial and operating decisions or normal operating activities of the investees in any other forms, so they are not accounted for and managed as joint ventures or associates.

(2) Summarized financial information of material joint ventures and associates

All amounts in RMB'000

Items	30 June 2022/ Amount recognized in the current period	31 December 2021/ Amount recognized in the prior period
Joint ventures Total carrying amount	7,383,234	6,656,880
The Group's share of the following items - Net losses - Total comprehensive losses	(7,421) 	(9,946) (9,946)
Associates Total carrying amount The Group's share of the following items	22,469,783	23,671,886
Net (losses)/profitOther comprehensive lossesTotal comprehensive (losses)/income	(84,547) (34,719) (119,266)	133,084 (969) 132,115

(3) In the reporting period, there were no significant restrictions on the realization of long-term equity investments, or on the remittance of cash arising from the investment income in joint ventures and associates.

For the six months ended 30 June 2022

IX. INTERESTS IN OTHER ENTITIES (CONTINUED)

3. Equity in structured entities included in the consolidated financial statements

As at 30 June 2022, the total amount of main structured entities included in the consolidated financial statements of the Group was approximately RMB 36,275,680,000, of which the amount subscribed by the Group was approximately RMB 12,171,120,000. As at 30 June 2022, the amount paid by the Group was approximately RMB 8,380,234,000, and the amount paid by other investors was approximately RMB 20,176,858,000, of which approximately RMB 16,000,000,000 was accounted for in minority interests, approximately RMB 3,800,000,000 was accounted for in other payables and approximately RMB 376,858,000 was accounted for in the long-term payables. The Group has no obligation or intention to provide financial support to these structured entities.

4. Equity in structured entities not included in the consolidated financial statements

As at 30 June 2022, the Group has cumulatively issued asset-backed securities and asset-backed notes of RMB 44,128,100,000, and the subordinated tranches of the related asset-backed securities and asset-backed notes were RMB 1,410,600,000. For the purpose of liquidity, the Company is obligated to make up the difference between the principal and fixed income of senior asset-backed securities and asset-backed notes in the amount of RMB 42,717,500,000 and the distributable funds of the special asset-backed securities plan and asset-backed note trust in each phase. These special plans and trusts are not consolidated as the Group does not hold inferior shares and the probability of future liquidity supplement is assessed to be low.

As at 30 June 2022, the total amount of main structured entities not included in the consolidated financial statements participated by certain subsidiaries of the Group was approximately RMB 47,157,881,000, of which approximately RMB 6,187,145,000 was subscribed by the Group and approximately RMB 40,970,736,000 was subscribed by other investors. Such structured entities were not consolidated as the Group does not have control over them. As at 30 June 2022, the Group's paid-in amount was approximately RMB 4,577,226,000, of which approximately RMB 117,540,000 was accounted for in long-term equity investments and approximately RMB 4,459,686,000 was accounted for in other non-current financial assets. The Group's maximum exposure to these structured entities is the Group's paid-in capital contribution as of the balance sheet date. The Group has no obligation or intention to provide financial support to these structured entities.

For the six months ended 30 June 2022

X. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

1. Financial instruments by category

Carrying amounts of each category of financial instruments at the balance sheet date are as follows:

30 June 2022

(1) Financial assets

	Financial assets at fair value through		Financial asset		
Items	profit or loss Required by the standard	Financial assets at amortised cost	Required by the standard	income Designated	Total
Cash and bank balances	_	63,153,944	_	_	63,153,944
Financial assets held for trading	139,942	-	_	_	139,942
Derivative financial assets	57,594	_	-		57,594
Bills receivable		2,447,556	=	=	2,447,556
Accounts receivable	_	94,556,643	_	_	94,556,643
Receivables at FVTOCI	-	_	13,813,791	_	13,813,791
Other receivables	-	61,708,542	-	-	61,708,542
Non-current assets due within					
one year	=	2,669,572	=	=	2,669,572
Long-term receivables	=	32,009,489	=	=	32,009,489
Investments in other equity instruments	-	-	-	881,681	881,681
Other non-current financial					
assets	4,719,881	-	-	=	4,719,881
Total	4,917,417	256,545,746	13,813,791	881,681	276,158,635

For the six months ended 30 June 2022

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (CONTINUED) X.

- Financial instruments by category (Continued)
 - (2) Financial liabilities

	Financial liabilities at fair value through profit or loss		
	Required by the	Financial liabilities	
Items	standard	at amortised cost	Total
Short-term borrowings	_	46,429,353	46,429,353
Derivative financial liabilities	78,105	_	78,105
Bills payable	-	39,873,937	39,873,937
Accounts payable	-	190,266,025	190,266,025
Other payables	-	33,015,741	33,015,741
Non-current liabilities due within			
one year	-	11,534,662	11,534,662
Long-term borrowings	-	29,179,206	29,179,206
Bonds payable	-	1,300,000	1,300,000
Long-term payables		1,010,609	1,010,609
Total	78,105	352,609,533	352,687,638

For the six months ended 30 June 2022

X. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (CONTINUED)

2. Transfer of financial assets

Details are set out in Note VII 4(3), Note VII 5(5) and Note VII 6.

3. Financial instruments and risk management

The Group's operating activities expose to a variety of financial risks: market risk (mainly including foreign exchange risk and interest rate risk), credit risk and liquidity risk. Management monitors these exposures to ensure appropriate measures are implemented in a timely and effective manner to address the uncertainty of financial market and to reduce the potential negative impact on the operating results of the Group.

(1) Market risk

(a) Foreign exchange risks

The functional currency of a majority of the entities within the Group is RMB and most of the transactions are settled in RMB. However, there are also foreign currencies denominated transactions. The Group's exposure to foreign exchange risk relates principally to United States Dollars ("USD"). To monitor the impact of exchange rate fluctuations, the Group continually assesses and monitors its exposure to foreign exchange risk. Management continuously monitors foreign exchange exposure and will prudently consider hedging significant foreign exchange exposure should the need arises. The Group uses foreign exchange forward contracts and currency swap contracts to offset part of the foreign exchange risk. The management is of the view that the reasonable fluctuation of the exchange rate in the near future will not have a significant impact on the operating results of the Group.

Details of the Group's foreign currencies denominated financial assets and financial liabilities (amount translated into RMB) as at 30 June 2022 are set out in Note VII 71.

As at 30 June 2022, for the variety of foreign currencies of financial assets and financial liabilities, mainly influenced by the exchange rate of RMB against USD, if RMB had strengthened/weakened by 5% against USD with all other variables held constant, the profit after tax of the Group would have been approximately RMB 63,318,000 higher/lower (as at 31 December 2021: RMB 239,769,000 lower/higher).

(b) Interest rate risk

The interest bearing debts at fixed rates expose the Group to fair value interest-rate risk, relating to bank borrowings at fixed rates and bonds payable at fixed rates, etc. The differences between the fair values and the carrying amounts of the above fixed rate financial instruments are set out in Note XI 2.

The interest bearing debts at floating rates expose the Group to cash flow interest-rate risk. The Group chooses the relative proportion of borrowing contracts with floating rates and those with fixed rates according to current market conditions. As at 30 June 2022, short-term borrowings of the Group were RMB 46,429,353,000 (as at 31 December 2021: RMB 21,395,848,000); long-term interest bearing debts at floating rates due within one year were RMB 4,556,802,000 (as at 31 December 2021: RMB 4,164,775,000); long-term interest bearing debts at floating rates due over one year were RMB 17,975,179,000 (as at 31 December 2021: RMB 13,410,306,000); long-term interest bearing debts at fixed rates due within one year were RMB 7,011,528,000 (as at 31 December 2021: RMB 8,626,049,000); and long-term interest bearing debts at fixed rates due over one year were RMB 12,989,520,000 (as at 31 December 2021: RMB 12,511,372,000) (Notes VII 26, 35, 37, 38, 39).

For the six months ended 30 June 2022

X. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (CONTINUED)

3. Financial instruments and risk management (Continued)

(1) Market risk (Continued)

(b) Interest rate risk (Continued)

The treasury department of the headquarters of the Group continually monitors the level of interest rates. Any rise in interest rate would increase the cost of new borrowings and interest installments of existing loans with floating interest arrangements and generate significant negative financial effects on the Group's overall financial performance. The management would make timely strategic adjustments according to latest market conditions; the adjustments of reducing interest rate risk may include the interest rate swap arrangement included in the Group's currency swap contracts during the reporting period.

During the current period, if the respective interest rates on RMB-denominated floating-rate borrowings had been 100 basis points higher/lower with all other variables held constant and no interest capitalization involved, profit after income tax of the Group would have been RMB 240,956,000 lower/higher (for the period ended 30 June 2021: approximately RMB 106,448,000).

During the current period, if the interest rates on USD and other foreign currency-denominated floating-rate borrowings had been 100 basis points higher/lower with all other variables held constant, profit after income tax of the Group would have been RMB 54,844,000 lower/higher (for the period ended 30 June 2021: approximately RMB 35,305,000).

(2) Credit risk

As at 30 June 2022, the Group's maximum exposure to credit risk which could cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from: the carrying amount of bank deposits, bills receivable and accounts receivable, contract assets, other receivables and long-term receivables recognized in the balance sheet of the Group.

To reduce credit risk, the Group has policies in place to ensure that services are rendered and products are sold to customers with appropriate credit history and the Group performs periodic credit evaluations of its customers according to their financial conditions, the likelihood of obtaining guarantee from the third party, credit history and others such as the current market conditions. The Group regularly monitors its customers' credit history, and for customers with bad credit history, the Group shall issue reminder notices, shorten or cancel the credit period to make sure that the Group's overall credit risk is under control.

The credit risk on the bank deposits of the Group is limited because they are deposited with national banks and other large and medium listing banks.

In addition, external guarantees incurred by the Group may also result in financial losses. As at 30 June 2022, the Group's external guarantee refers to Note XIII 2(1) (b).

For the six months ended 30 June 2022

X. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (CONTINUED)

3. Financial instruments and risk management (Continued)

(2) Credit risk (Continued)

In addition to separately determining the credit loss of individual amounts with significant credit impairment incurred, the Group evaluates the expected credit loss of receivables by using an impairment matrix on a portfolio basis. The Group's accounts receivable involve a large number of customers, and the aging information can reflect the solvency of these customers. The group divided accounts receivable into several portfolios based on the credit risk characteristics of different types of customers, calculated the historical actual loss rate of every portfolio in different ages according to the historical data, and then adjusted the expected credit loss rate after considering the current and future economic forecast, such as national GDP growth, consumer price index and other forward-looking information. For contract assets and long-term receivables, the Group reasonably evaluates the expected credit loss after considering the settlement period, the payment period of the contract, the financial position and the economic situation of the debtor and considering the above forward-looking information. For other financial assets, the Group calculates the expected credit loss rate through its default exposure and the rate of expected credit loss over the next 12 months or for the entire duration.

Please refer to Note V 10(2) in respect of the specific methods to assess whether the credit risk has been increased remarkably since initial recognition, the basis to determine whether a credit impairment has happened to the financial assets, the combination methods to divide the financial instruments in a combination as base assessment of anticipated credit risk, and the policies to write down the financial instruments directly.

The Group's risk exposure is distributed among multiple contract parties and multiple customers, so the Group has no significant credit concentration risk. As of 30 June 2022, the five largest accounts receivable and other receivables of the Group's balances owed by the arrears are shown in Note VII 5(4) and Note VII 8(7).

(3) Liquidity risk

Subsidiaries of the Group take responsibility of their own cash flow forecast. On the basis of summarizing cash flow forecasts from subsidiaries, the treasury department at the headquarters continuously monitors both short-term and long-term financing needs on the Group level in order to obtain adequate cash reserve and quoted securities. Meanwhile, the treasury department will constantly monitor any non-compliance of borrowings and obtain sufficient loan facilities from major financial institutions to meet both short-term and long-term financing needs.

For the six months ended 30 June 2022

X. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (CONTINUED)

3. Financial instruments and risk management (Continued)

(3) Liquidity risk (Continued)

Analysis of the maturity profile of financial liabilities and lease liabilities of the Group based on the undiscounted remaining contractual obligations as at 30 June 2022 were as follows:

Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
47,161,628	-	-	-	47,161,628
78,105	_	-	-	78,105
39,873,937	-	_	_	39,873,937
190,266,025	=	=	=	190,266,025
33,015,741	_	_	_	33,015,741
11,820,795	=	=	=	11,820,795
_	10,212,972	14,953,514	7,272,221	32,438,707
-	62,270	1,365,554	=	1,427,824
-	167,615	252,530	137,374	557,519
	489,754	71,210	451,180	1,012,144
322,216,231	10,932,611	16,642,808	7,860,775	357,652,425
	47,161,628 78,105 39,873,937 190,266,025 33,015,741 11,820,795	47,161,628 - 78,105 - 39,873,937 - 190,266,025 - 33,015,741 - 11,820,795 - 10,212,972 - 62,270 - 167,615 - 489,754	47,161,628	47,161,628

For the six months ended 30 June 2022

X. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT (CONTINUED)

4. Capital management

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

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares and other equity instruments, or sell assets to reduce debt.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as the total borrowings (including short-term borrowings, long-term borrowings, bonds payable and lease liabilities) less cash and cash equivalents. Total capital is calculated as "equity" as shown in the consolidated balance sheet, plus net debt. The Group aims to maintain the gearing ratio at a reasonable level.

The gearing ratios of the Group as at 30 June 2022 and 31 December 2021 are as follows:

Items	30 June 2022	31 December 2021
Total borrowings:		
Short-term borrowings (Note VII 26)	46,429,353	21,395,848
Long-term borrowings (inclusive of those due within one year)		
(Note VII 37)	39,707,462	37,382,197
Bonds payable (inclusive of those due within one year)		
(Note VII 38)	2,130,865	802,334
Lease liabilities (inclusive of those due within one year)		
(Note VII 39)	694,702	527,971
Less: Cash and cash equivalents (Note VII 69(2))	52,290,370	31,216,824
Net debt	36,672,012	28,891,526
Shareholders' equity	155,871,204	151,387,759
Total capital	192,543,216	180,279,285
The gearing ratio	19.05%	16.03%

For the six months ended 30 June 2022

FAIR VALUE DISCLOSURES XI.

Fair value of the Group's financial assets and financial liabilities that are measured at fair value at the end of the period

All amounts in RMB'000

	at 30 June 2022		
Level 1 of the fair value hierarchy(a)	Level 2 of the fair value hierarchy(b)	Level 3 of the fair value hierarchy(c) (d)	Total
1,177	_	138,765	139,942
-	57,594	-	57,594
-	13,813,791	-	13,813,791
306,717	-	_	306,717
-	-	574,964	574,964
-	4,641,142		4,641,142
_		78,739	78,739
307.894	18.512.527	792.468	19,612,889
	78,105	_	78,105
_	78,105	_	78,105
	the fair value hierarchy(a)	Level 1 of the fair value hierarchy(a) 1,177	the fair value hierarchy(a) 1,177 - 138,765 - 57,594 13,813,791 306,717 - 574,964 - 4,641,142 - 78,739 307,894 18,512,527 792,468

(a) The basis of market prices determined on level 1 of the fair value hierarchy

Fair values of held-for-trading financial assets and non-tradable equity instruments of listed companies regarded as investments in other equity instruments are based on their closing prices of publicly traded market on the last trading day of the reporting period.

(b) Qualitative and quantitative information of valuation techniques and key inputs on level 2 of the fair value hierarchy

Items	Valuation techniques	Key inputs		
	20/209/209/209/209			
Other non-current financial assets – Investments in unquoted funds and trust products	Discounted cash flow method	Average yield rate of similar products of the same term		
Derivative financial instruments	Discounted cash flow method	The forward rate		
Receivables at FVTOCI	Discounted cash flow method	Discounting rate of bank acceptance for the same period		

For the six months ended 30 June 2022

XI. FAIR VALUE DISCLOSURES (CONTINUED)

- Fair value of the group's financial assets and financial liabilities that are measured at fair value at the end of the period (Continued)
 - (c) Qualitative and quantitative information of valuation techniques and key inputs on level 3 of the fair value hierarchy

Items	Valuation techniques	Key inputs
Financial assets held for trading- Unlisted equity investments, other equity instrument investments – Investments in non-trading equity instruments in unlisted companies, other non-current financial assets – Investments in unquoted fund and trust products and others	Cost method/Market method/ Income method	Future cash flows, discount rate and key financial ratios of comparable listed companies of the same industry

(d) Reconciliation information of the opening balance and the closing balance on level 3 of the fair value hierarchy

All amounts in RMB'000

Items	31 December 2021	Additions for the period	Fair value changes for the current period	Disposal for the period	30 June 2022
Financial assets held for trading – Non listed equity investments Other equity instrument investments	-	138,765	-	-	138,765
 Investments in non-trading equity instruments in unlisted companies Other non-current financial assets – 	485,398	96,000	(5,102)	(1,332)	574,964
Non listed equity investments	78,263	-	476	-	78,739

There was no transfer between any levels of the fair value hierarchy in the reporting period. There was no change in the valuation techniques in the reporting period.

For the six months ended 30 June 2022

FAIR VALUE DISCLOSURES (CONTINUED) XI.

Fair value of financial assets and financial liabilities that are measured at fair value on a non-recurring basis

Bills receivables, accounts receivables, other receivables, long-term receivables, non-current assets due within one year, short-term borrowings, bills payables, accounts payables, other payables, long-term borrowings, bonds payable, long-term payables and non-current liabilities due within one year included in the financial assets/liabilities are measured at fair value on a non-recurring basis.

Except for the items listed in the table below, the Group considers that the fair value of the financial assets and liabilities measured at amortized cost method are approximate to their carrying amounts.

All amounts in RMB'000

Items	Carrying amount as at 30 June 2022	Level 1 of the fair value hierarchy	Fair value as a Level 2 of the fair value hierarchy(a)	Level 3 of the fair value hierarchy	Total
Financial liabilities measured at amortized cost:	19,306,346	-	19,435,015	-	19,435,015
 Long-term borrowings at fixed interest rate Bonds payable at fixed interest 	17,175,481	-	17,269,931	-	17,269,931
rate	2,130,865	_	2,165,084	_	2,165,084

All amounts in RMB'000

	Carrying amount as at	F Level 1 of	Fair value as at 3 Level 2 of	1 December 2021 Level 3 of	
Items	31 December 2021	the fair value hierarchy	the fair value hierarchy(a)	the fair value hierarchy	Total
Financial liabilities measured at amortized cost: 1. Long-term borrowings at fixed	20,609,450	-	20,193,548	-	20,193,548
interest rate 2. Bonds payable at fixed interest	19,807,116	_	19,389,698	_	19,389,698
rate	802,334	-	803,850	-	803,850

(a) Quantitative information determined in accordance with the level 2:

Items	Valuation techniques	Key inputs
	2020202020202020	
Long-term borrowings at fixed interest rate	Discounted cash flow method	Benchmark lending rate with corresponding maturity released by the People's Bank of China
Bonds payable at fixed interest rate	Discounted cash flow method	Benchmark lending rate with corresponding maturity released by the People's Bank of China

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS

Details of the parent company of the Company

All amounts in RMB'000

Name of company	Place of registration	Principal activities	Registered capital	Percentage of ownership interest in the Company (%)	Percentage of voting rights in the Company (%)
China Metallurgical Group Corporation	Beijing	Engineering contracting, property development, equipment manufacture, resource development and others	10,338,556	49.18	49.18

As stated in Note III, CMC together with its other subsidiaries other than the Company are the Group's related party.

Related party transactions between the Company and CMC together with its other subsidiaries other than the Company also constitute connected transactions or continuing connected transactions as defined in Chapter 14A of Listing Rules of the Hong Kong Stock Exchange.

SASAC is the ultimate controlling party of the Group.

2. Subsidiaries of the Company

Details of the subsidiaries of the Company are set out in Note IX 1.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

3. Joint ventures and associates of the Group

Details of the principal joint ventures and associates of the Group are set out in Note IX 2.

Joint ventures and associates entered into transactions with the Group during the period, or during the prior period with remaining closing balances were as follows:

Name of joint ventures and associates	Relationship with the Group
Deiling Tienshore Cours Present Management Co. Ltd.	In internations
Beijing Tiancheng Guyun Property Management Co., Ltd.	Joint venture
Beijing MCC Mingding Real Estate Development Co., Ltd.	Joint venture
Beijing MCC Mingying Real Estate Development Co., Ltd.	Joint venture
Chengdu Chuanye Construction and Development Co., Ltd.	Joint venture
Guangzhou MCC Minghui Real Estate Co., Ltd.	Joint venture
Hangzhou MCC Mingjin Real Estate Development Co., Ltd.	Joint venture
Jingmen Jingye Construction Co., Ltd.	Joint venture
Nanjing MCC Minghan Real Estate Co., Ltd.	Joint venture
Sanya MCC Minglan Development Co., Ltd.	Joint venture
Shijiazhuang MCC Mingguan Real Estate Development Co., Ltd. (Note)	Joint venture
Suzhou Zhongyuanrui Real Estate Development Co., Ltd.	Joint venture
Tangshan Fengrun District Runfeng Municipal Infrastructure Development and Construction Co., Ltd.	Joint venture
Tianjin Mingjin MCC Real Estate Co., Ltd.	Joint venture
Xing Long County MCC Minglu Real Estate Development Co., Ltd.	Joint venture
Xuzhou MCC Chengdong Express Way Co., Ltd.	Joint venture
MCC 1 Xuzhou Construction Engineering Co., Ltd.	Joint venture
MCC Baotou Mingyang Real Estate Development Co., Ltd.	Joint venture
Zhuozhou MCC Mingcheng Real Estate Development Co., Ltd.	Joint venture
Zhuozhou MCC Mingda Real Estate Development Co., Ltd.	Joint venture
Baotou MCC Real Estate Co., Ltd.	Associate
Binhai County Shengxin Project Management Co., Ltd.	Associate
Cangzhou Tianyun Construction and Management Co., Ltd.	Associate
Chengdu Tianfu New Area MCC Xinde Real Estate Co., Ltd.	Associate
Chengdu Yexing Runda New Building Materials Co., Ltd.	Associate
Chongzuo MCC Investment and Development Co., Ltd.	Associate
Dancheng Zhongyi Ecological Environment Management Co., Ltd.	Associate
Dangtu Qingyuan Engineering Construction Co., Ltd.	Associate
Ezhou Xinsheng Construction Engineering Co., Ltd.	Associate
China 22 MCC Corporation Industrial Technology Service Co., Ltd.	Associate
Fuzhou Xincheng Infrastructure Investment Co., Ltd.	Associate
Gansu Jingli Expressway Longnan Management Co., Ltd.	Associate
Guangxi Guoye Transportation Investment Co., Ltd.	Associate
Guizhou MCC Infrastructure Investment Co., Ltd.	Associate
Handan Guorui Construction Engineering Management Co., Ltd.	Associate
Hangzhou Fuyang Shenrong Construction Development Co., Ltd.	Associate
Huaining County Huaiye Construction and Development Co., Ltd.	Associate
Huanggang Lianlu Water Co., Ltd.	Associate
Jintang Yejian Vocational Education Town Construction Engineering	Associate
Management Co., Ltd.	

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

3. Joint Ventures and Associates of the Group (Continued)

Joint ventures and associates entered into transactions with the Group during the period, or during the prior period with remaining closing balances were as follows: (Continued)

Name of joint ventures and associates	Relationship with the Group
Jinyun Hongye Transportation Investment Co., Ltd.	Associate
Lanzhou Olympic Sports Center Construction and Development Co.,	Associate
Ltd. Liuzhou Guoye Road and Bridge Investment and Development Co., Ltd.	Associate
Luxi Huarui Construction Engineering Management Co., Ltd.	Associate
Ma'anshan MCC Hi Tech Construction Co., Ltd.	Associate
Nanchong Zhongjian Shijiu Road Construction and Investment Co., Ltd.	Associate
Qiqihar North MCC Real Estate Co., Ltd.	Associate
Shandong Expressway Jiqing Middle Line Highway Co., Ltd.	Associate
Shanghai Union Automobile Avenue Development and Construction Co., Ltd.	Associate
Shanghai Ruiyuan Urban Construction Development Co., Ltd.	Associate
Shanghai Xunxiang Real Estate Co., Ltd.	Associate
Shanghai Yuepu South Concrete Co., Ltd.	Associate
Shanghai MCC Xiangqi Investment Co., Ltd.	Associate
Si County Siye Construction Investment Co., Ltd.	Associate
Suzhou Suma MCC Construction Development Co., Ltd.	Associate
Suining Kaihong Construction Development Co., Ltd.	Associate
Weihai Zhiye Kangyang Construction Project Management Co., Ltd.	Associate
Weifang Huaqing Real Estate Co., Ltd.	Associate
Wuzhou Guoye Investment and Development Co., Ltd.	Associate
Xichang Anmin City Construction Investment Co., Ltd.	Associate
Yancheng Chengtou Huaying Real Estate Co., Ltd.	Associate
Yibin Dingye Highway Engineering Co., Ltd.	Associate
Yinchuan Mancheng Street Underground Comprehensive Pipe Network Construction and Management Co., Ltd.	Associate
Yuhuan Tianshang Construction and Development Co., Ltd.	Associate
Yushan County Yusheng Construction Engineering Investment Co., Ltd.	Associate
Yunnan Yongmeng Expressway Construction and Development Co., Ltd.	Associate
Zhejiang MCC Investment Management Co., LTD	Associate
Canberra Real Estate Co., Ltd.	Associate
MCC Baoding Development and Construction Co., Ltd.	Associate
MCC Capital (Xiangtan) Heavy Industrial Equipment Co., Ltd.	Associate
Chongqing Guangjiu Construction Project Management Co., Ltd.	Associate
Chongqing Jiangjin Tuanjie Lake Construction and Operation Co.,	Associate
Ltd.	

Note: Shijiazhuang MCC Mingguan Real Estate Development Co., Ltd. has been transformed into a subsidiary of the Company during this period. For more details, please refer to Note VIII.1.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Other related parties of the Group

Other related parties entered into transactions with the Group during the period, or during the prior year with closing balance were as follows, such transactions also constitute connected transactions or continuing connected transactions as defined in Chapter 14A of Listing Rules of the Hong Kong Stock Exchange:

Name of other related parties	Relationship with the Group
MCC Ruimu Amperex Technology Limited	Controlled by MCC group

Subsidiaries of China Minmetals Corporation:

Minmetals Steel Chengdu Co., Ltd.	Under common control of China Minmetals Corporation
Minmetals Steel Shanghai Co., Ltd.	Under common control of China Minmetals Corporation
Minmetals Steel Tianjin Co., Ltd.	Under common control of China Minmetals Corporation
Minmetals Steel Lanzhou Co., Ltd.	Under common control of China Minmetals Corporation
Minmetals Steel (Wuhan) Limited Company	Under common control of China Minmetals Corporation
Minmetals Steel Beijing Co., Ltd.	Under common control of China Minmetals Corporation
The 23rd Metallurgical Construction Group Co.,	Under common control of China Minmetals Corporation
Ltd. of Minmetals	
Minmetals Steel Guangzhou Co., Ltd.	Under common control of China Minmetals Corporation
Minmetals Steel Xi'an Co., Ltd.	Under common control of China Minmetals Corporation
4: 0: 0	Lie de la companya de la contrata de China a Minara de la Companya di an

Under common control of China Minmetals Corporation Under common control of China Minmetals Corporation Under common control of China Minmetals Corporation Huabei Aluminum New Materials Technology Co., Under common control of China Minmetals Corporation

Under common control of China Minmetals Corporation Under common control of China Minmetals Corporation Anshan Minmetals Chentaigou Mining Co., Ltd. Under common control of China Minmetals Corporation China National Foreign Trade Financial & Leasing Under common control of China Minmetals Corporation

Under common control of China Minmetals Corporation Minmetals Nonferrous Metals Trade Co., Ltd. Under common control of China Minmetals Corporation Zhuzhou Smelter Nonferrous Metals Industrial Co., Under common control of China Minmetals Corporation

Minmetals International Engineering Technology Under common control of China Minmetals Corporation

Luobei Yunshan Graphite New Material Co., Ltd. Under common control of China Minmetals Corporation Minmetals Securities Co., Ltd. Under common control of China Minmetals Corporation China Minmetals Corporation Limited Under common control of China Minmetals Corporation Minmetals Nonferrous Metals Co., Ltd. Under common control of China Minmetals Corporation Guangzhou Pincheng Real Estate Development Under common control of China Minmetals Corporation

Co., Ltd. Under common control of China Minmetals Corporation Chengdu Kuangyi Real Estate Co., Ltd. Under common control of China Minmetals Corporation

Minmetals Hanxing Mining (Anhui) Property Under common control of China Minmetals Corporation

> Under common control of China Minmetals Corporation Under common control of China Minmetals Corporation Under common control of China Minmetals Corporation

Beijing Dongxing Metallurgical New Technology

Jianhe Innovation Technology (Hainan) Co., Ltd.

Hunan Huangshaping Lead-Zinc Mine China National Metal Products Co., Ltd.

Development Co., Ltd.

Management Co., Ltd.

Ltd.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Related party transactions

(1) Purchase or sales of goods, provision or receipt of services

(a) Purchase of goods and receipt of services

All amounts in RMB'000

Related parties	Related party transactions	Amount for the current period	Amount for the prior period
Transactions of a company under common control of CMC (Note):		13,373	16,599
China Metallurgical Group Corporation	Receipt of services	13,373	16,599
Transactions of companies under control by Minmetals Corporation (Note):		5,210,930	6,442,114
Minmetals Steel Chengdu Co., Ltd.	Purchase of goods	2,136,059	1,702,140
Minmetals Steel Tianjin Co., Ltd.	Purchase of goods	769,192	533,371
Minmetals Steel Shanghai Co., Ltd.	Purchase of goods	666,297	1,486,688
Minmetals Steel Lanzhou Co., Ltd.	Purchase of goods	368,065	453,421
Minmetals Steel (Wuhan) Limited Company	Purchase of goods	354,353	470,790
Minmetals Steel Beijing Co., Ltd.	Purchase of goods	188,419	301,089
Minmetals Steel Guangzhou Co., Ltd.	Purchase of goods	146,895	189,001
The 23rd Metallurgical Construction Group Co., Ltd. of Minmetals	Purchase of goods and receipt of services	135,075	104,064
Minmetals Steel Xi'an Co., Ltd.	Purchase of goods	125,073	42,711
Minmetals Steel Chongqing Co., Ltd.	Purchase of goods	74,443	178,243
Minmetals Trading Co., Ltd.	Purchase of goods	68,661	192,632
Others	Purchase of goods and receipt of services	178,398	787,964
Transactions with joint ventures and associates:		335,367	355,803
Chengdu Chuanye Construction and Development Co., Ltd.	Purchase of goods	110,071	7,559
Chengdu Yexing Runda New Building Materials Co., Ltd.	Purchase of goods	75,112	39,245
China 22 MCC Corporation Industrial Technology Service Co., Ltd.	Receipt of services	41,118	98,978
Shigang Jingcheng Equipment Development and Manufacturing Co., Ltd.	Purchase of goods	35,895	27,780
MCC Capital (Xiangtan) Heavy Industry Equipment Co., Ltd.	Purchase of goods	27,561	45,546
Shanghai Yuepu South Concrete Co., Ltd.	Purchase of goods	25,424	12,727
Others	Purchase of goods and	20,186	123,968
	receipt of services		

These related party transactions also constitute continuing connected transactions as defined in Note: Chapter 14A of Listing Rules of the Hong Kong Stock Exchange.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

- Related party transactions (Continued)
 - (1) Purchase or sales of goods, provision or receipt of services (Continued)
 - (b) Sales of goods and provision of services

Related parties	Related party transactions	Amount for the current period	Amount for the prior period
Transactions with a company under common control of CMC (Note):		10,577	685,968
MCC Ruimu Amperex Technology Limited	Provision of services	10,577	685,968
Transactions of companies under control by Minmetals Corporation (Note):		2,174,171	685,485
Minmetals Nonferrous Metals Co., Ltd.	Sales of goods	953,015	183,405
Nordic Metals and Minerals Co. Ltd.	Sales of goods	313,197	132,659
Luobei Yunshan Graphite New Material Co., Ltd.	Provision of services	190,508	-
North China Aluminum New Material Technology Co., Ltd.	Provision of services	111,487	-
Guangzhou Pincheng Real Estate Development Co., Ltd.	Provision of services	110,412	-
Minera Las Bambas S.A.	Provision of services	78,723	-
Chengdu Kuangyi Real Estate Co., Ltd.	Provision of services	65,706	42,353
Others	Sales of goods and provision of services	351,123	327,068

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

- **Related Party Transactions (Continued)**
 - (1) Purchase or sales of goods, provision or receipt of services (Continued)
 - (b) Sales of goods and provision of services (Continued)

All amounts in RMB'000

Related parties	Related party transactions	Amount for the current period	Amount for the prior period
Transactions with joint ventures and associates:		29,402,940	22,687,957
MCC Baoding Development and Construction Co., Ltd.	Provision of services	3,211,577	-
Chongqing Yunkai Expressway Co., Ltd.	Provision of services	1,058,533	747,109
Huaining County MCC Construction and Development Co., Ltd.	Provision of services	1,002,626	199,185
Jintang Yejian Vocational Education Town Construction Engineering Management Co., Ltd.	Provision of services	949,447	242,029
Yunnan Mangliang Expressway Investment and Development Co., Ltd.	Provision of services	915,630	1,032,029
Liuzhou Guoye Luqiao Investment and Development Co., LTD	Provision of services	880,752	422,971
Jinyun County Hongye Transportation Investment Co., Ltd.	Provision of services	867,990	-
Yushan County Yusheng Construction Engineering Investment Co., Ltd.	Provision of services	702,061	-
Shandong Expressway Jiqing Middle Line Highway Co., Ltd.	Provision of services	559,757	-
Yibin Dingye Highway Engineering Co., Ltd.	Provision of services	550,363	-
Yunnan Yongmeng Expressway Construction and Development Co., Ltd.	Provision of services	538,882	1,363,544
Ma'anshan MCC High-tech Construction Co., Ltd.	Provision of services	538,695	34,581
Gansu Jingli Expressway Longnan Management Co., Ltd.	Provision of services	507,094	139,476
Ezhou Xinsheng Construction Engineering Co., Ltd.	Provision of services	470,874	281,448
Chongzuo MCC Investment and Development Co., Ltd.	Provision of services	424,756	175,832
Cangzhou Tianyun Construction Management Co., Ltd.	Provision of services	387,084	-
Weihai Zhiye Kangyang Construction Project Management Co., Ltd.	Provision of services	371,976	-
Other	Sales of goods and provision of services	15,464,843	18,049,753

Note: These related party transactions also constitute continuing connected transactions as defined in Chapter 14A of Listing Rules of the Hong Kong Stock Exchange.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Related party transactions (Continued)

(2) Leases

As lessor (a)

All amounts in RMB'000

Name of lessee	Type of leased assets	Leasing income recognized for the current period	Leasing income recognized for the prior period
Tangshan Runda Property Management Co., Ltd.	Buildings, structures	977	_
Anshan Minmetals Chentaigou Mining Co., Ltd. Shanghai MCC Hospital	Buildings, structures Buildings,	377	377
onangna mee meepha.	structures	120	131
Total	1	1,474	508

(b) As lessee

All amounts in RMB'000

Name of lessor	Type of leased assets	Lease liabilities at 30 June 2022	Increase of historical cost of right-of-use assets for the current period	Leasing expense recognized for the current period
China Metallurgical Group Corporation	Buildings, structures	98,299	46,104	34,741
Tangshan Runda Property Management Co., Ltd.	Buildings, structures	-	-	6,950
Beijing Dongxing Metallurgical New Technology Development Co., Ltd.	Buildings, structures	34,653	20,480	1,717
Minmetals Hanxing Mining (Anhui) Property Management Co., Ltd.	Buildings, structures		-	448
Beijing Tiancheng Guyun Property Management Co., Ltd.	Buildings, structures		-	377
Total	1	132,952	66,584	44,233

These related party transactions also constitute continuing connected transactions as defined in Note: Chapter 14A of Listing Rules of the Hong Kong Stock Exchange.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Related party transactions (Continued)

(3) Guarantee

Grant guarantee (a)

All amounts in RMB'000

Guarantor	Guaranteed amount	Inception date	Expiration date of guarantee	Whether the execution of guarantee has been completed at 30 June 2022
Zhuhai Hengqin Headquarters Building Development	410,624	2019–09–04	2024-09-04	No
Co., Ltd. Zhuhai Hengqin Headquarters Building Development Co., Ltd.	636,467	2019-09-04	2024-09-04	No

(b) Guarantees be granted

Guarantor	Guaranteed amount	Inception date of guarantee	Expiration date of guarantee	Whether the execution of guarantee has been completed at 30 June 2022
China Metallurgical Group	1,543,622	2019–11–01	2022–10–31	No
Corporation China Metallurgical Group	1,252,420	2020-05-05	2023-05-05	No
Corporation China Metallurgical Group Corporation	872,482	2021–08–18	2022–08–10	No

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Related party transactions (Continued)

(4) Loans from/to related parties

All amounts in RMB'000

Related party	Amount	Inception date	Expiration date	Notes
Borrowing				
China National Foreign Trade Financial & Leasing Co., Ltd.	123,000	2022-06-28	2030-06-28	General borrowings
China National Metal Products Co., Ltd.	40,000	2022-01-13	2022-06-27	General borrowings
Jianhe Innovation Technology (Hainan) Co., Ltd.	15,000	2022-06-06	2025–06–05	General borrowings
Total	178,000	1	1	1

Related party	Amount	Inception date	Expiration date	Notes
Lending				
Shijiazhuang MCC Mingguan Real Estate Development Co., Ltd.	40,000	2022-02-01	No fixed maturity date	General borrowings
Chengdu Tianfu New District MCC Xinde Real Estate Co., Ltd.	8,000	2022-01-01	No fixed maturity date	0
Zhejiang MCC Investment Management Co., LTD	3,582	2022-01-10	No fixed maturity date	General borrowings
Total	51,582	1	1	1

These related party transactions also constitute continuing connected transactions as defined in Chapter Note: 14A of Listing Rules of the Hong Kong Stock Exchange.

Certain of the loans from/to related parties mentioned above are interest bearing. The interest rates ranged from 2.75% to 9.00%.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

5. Related party transactions (Continued)

Compensation of key management personnel (5)

All amounts in RMB'000

Compensation of key management personnel	Amount for the current period	Amount for the prior period
Total	5,794	4,594

(6) Other related party transactions

All amounts in RMB'000

Related party transactions	Related parties	Amount for the current period	Amount for the prior period
Interest income	Beijing MCC Mingying Real Estate Development Co., LTD	123,798	35,848
Interest income	Guangzhou MCC Minghui Real Estate Co., Ltd.	107,185	55,588
Interest income	Hangzhou MCC Mingjin Real Estate Development Co., Ltd.	101,065	78,520
Interest income	MCC Baotou Mingyang Real Estate Development Co., Ltd.	75,576	53,022
Interest income	Suzhou MCC Zhongyuanrui Real Estate Development Co., Ltd.	60,304	-
Interest income	Nanjing MCC Minghan Real Estate Co., Ltd.	54,371	-
Interest income	Beijing MCC Mingding Real Estate Development Co., LTD	50,047	14,718
Interest income	Zhuozhou MCC Mingda Real Estate Development Co., Ltd.	43,351	4,594
Interest income	Zhuozhou MCC Mingcheng Real Estate Development Co., Ltd.	38,827	20,695
Interest income	Shigang Jingcheng Equipment Development and Manufacturing Co., Ltd.	13,954	13,203
Interest income	Tianjin Mingjin MCC Real Estate Co., Ltd.	11,866	11,194
Interest income Interest income	Canberra Real Estate Co., Ltd. Xing Long County MCC Minglu Real Estate Development Co., Ltd.	11,036 10,870	1,801
Interest income	Others	70,949	270,921
Total		773,199	560,104
Interest expense	China National Foreign Trade Financial & Leasing Co., Ltd.	3,072	7,091
Interest expense Interest expense	China National Metal Products Co., Ltd. Others	2,469 197	- 753
Total		5,738	7,844

Note: These related party transactions also constitute continuing connected transactions as defined in Chapter 14A of Listing Rules of the Hong Kong Stock Exchange.

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Amounts due from/due to related parties

(1) Receivables

		30 Jui	ne 2022 Provisions for	31 Decem	nber 2021 Provisions for
Items	Related parties	Book value	credit losses	Book value	credit losses
Accounts receivable	BERIS Engineering and Research Corporation Jiangsu Heavy Industry Co., Ltd.	571,959	571,959	571,959	571,959
Accounts receivable	Minmetals Nonferrous Metals Co., Ltd.	465,328	_	10,669	=
Accounts receivable	MCC Baoding Development and Construction Co., Ltd.	335,913	4,239	9,343	240
Accounts receivable	Lanzhou Olympic Sports Center Construction and Development Co., Ltd.	296,576	-	-	-
Accounts receivable	Suining Kaihong Construction Development Co., Ltd.	293,932	-	211,797	-
Accounts receivable	Guizhou MCC Infrastructure Investment Co. LTD	293,305	26,271	274,541	25,114
Accounts receivable	Yancheng Chengtou Huaying Real Estate Co., Ltd.	211,100	-	-	=
Accounts receivable	Zhuhai Hengqin Headquarters Building Development Co., Ltd.	197,246	6,031	226,158	6,912
Accounts receivable	Dancheng Zhongyi Ecological Environment Management Co., Ltd.	197,145	-	188,545	-
Accounts receivable	Ezhou Xinsheng Construction Engineering Co., Ltd.	173,481	-	52,661	-
Accounts receivable	MCC 1 Xuzhou Construction Engineering Co., Ltd.	169,486	5,085	85,337	2,560
Accounts receivable	Yuhuan Tianshang Construction and Development Co., Ltd.	159,631	4,294	20,953	549
Accounts receivable	Hangzhou Fuyang Shenrong Construction Development Co., Ltd.	148,951	3,456	17,890	415
Accounts receivable	Baotou MCC Real Estate Co., Ltd.	145,953	134,277	145,953	124,925
Accounts receivable	Nanchong Zhongjian Shijiu Road Construction and Investment Co., Ltd.	144,879	-	143,726	
Accounts receivable	Handan Guorui Construction Engineering Management Co., Ltd.	142,347	-	100,347	1
Accounts receivable	Yinchuan Mancheng Street Underground Comprehensive Pipe Network Construction and Management Co., Ltd.	139,353	-	268,954	-
Accounts receivable	Luxi Huarui Construction Engineering Management Co., Ltd.	138,714	-	65,252	-
Accounts receivable	Jingmen Jingye Construction Co., Ltd.	130,576	-	11,980	-
Accounts receivable	Si County MCC construction Investment Co., Ltd.	116,872	-	-	-
Accounts receivable	Ma'anshan MCC High-tech Construction Co., Ltd.	104,223	-	99,056	
Accounts receivable Accounts receivable	Weifang Huaqing Real Estate Co., Ltd. Others	102,629 3,983,504	- 126,169	- 5,257,024	127,168
Total		8,663,103	881,781	7,762,145	859,842

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Amounts due from/due to related parties (Continued)

(1) Receivables (Continued)

		30 Jur	ne 2022 Provisions for	31 Decen	nber 2021 Provisions for
Items	Related parties	Book value	credit losses	Book value	credit losses
Other receivables	Guangzhou MCC Minghui Real Estate Co.,	3,312,270	-	3,434,806	-
Other receivables	Hangzhou MCC Mingjin Real Estate Development Co., Ltd.	2,477,902	-	2,475,593	2,590
Other receivables	Beijing MCC Mingying Real Estate Development Co., Ltd.	2,439,237	-	2,785,115	-
Other receivables	Shigang Jingcheng Equipment Development and Manufacturing Co., Ltd.	1,917,214	520,653	1,923,443	520,653
Other receivables	MCC Baotou Mingyang Real Estate Development Co., Ltd.	1,817,498	-	1,969,383	-
Other receivables	MCC Baoding Development and Construction Co., Ltd.	1,399,503	2,186	1,320,000	-
Other receivables	Suzhou ZhongyuanRui Real Estate Development Co., Ltd.	1,261,592	-	1,324,682	-
Other receivables Other receivables	Nanjing MCC Minghan Real Estate Co., Ltd. Beijing MCC Mingding Real Estate Development Co., Ltd.	1,196,754 1,153,262	-	1,170,821 1,241,708	-
Other receivables Other receivables	Qiqihar North MCC Real Estate Co., Ltd. Others	1,150,962 9,492,431	- 1,362,548	1,160,255 19,006,245	2,579,510
		-, -, -	7 7	.,,	,,
Total		27,618,625	1,885,387	37,812,051	3,102,753
Prepayments	Minmetals Steel Shanghai Co., Ltd.	193,419	_	_	_
Prepayments	Shanghai Ruiyuan Urban Construction Development Co., Ltd.	180,000	-	=	=
Prepayments	Minmetals Steel Chongqing Co., Ltd.	152,799	_	-	-
Prepayments	MCC Capital (Xiangtan) Heavy Industrial Equipment Co., Ltd.	43,514	-	29,479	-
Prepayments	Minmetals Steel Chengdu Co., Ltd.	18,644	-	12,833	-
Prepayments	Minmetals Steel Lanzhou Co., Ltd.	14,232	-	15,000	-
Prepayments	Minmetals Steel (Wuhan) Limited Company	12,704	-	12,227	-
Prepayments	Jinchi Energy and Material Co., Ltd.	9,452	_	9,452	-
Prepayments	Others	11,102	_	106,568	-
Total		635,866	-	185,559	-

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Amounts due from/due to related parties (Continued)

(1) Receivables (Continued)

All amounts in RMB'000

		30 Jur	ne 2022 Provisions for	31 Decem	nber 2021 Provisions for
Items	Related parties	Book value	credit losses	Book value	credit losses
Long-term receivables	Suining Kaihong Construction Development Co., Ltd.	367,109	-	372,775	-
Long-term receivables	Henan Chengtou Zhonghe Jianfang Construction Co., Ltd.	234,576	-	-	=
Long-term receivables	Guizhou Ziwang Highway Construction Co., Ltd.	65,066	-	62,881	-
Long-term receivables	Xuzhou MCC Chengdong Express Way Co., Ltd.	49,471	-	174,010	-
Long-term receivables	Fuzhou MCC Infrastructure Investment Co., Ltd.	10,353	-	10,354	-
Long-term receivables	MCC Ruimu Amperex Technology Limited	-	-	87,333	866
Total		726,575	-	707,353	866

Payables (2)

Related parties	30 June 2022	31 December 2021
Minmetals Steel Tianjin Co., Ltd.	349,355	47,379
Minmetals Steel Chengdu Co., Ltd.	290,615	91,922
Minmetals Steel Lanzhou Co., Ltd.	259,379	232,218
Minmetals Steel Shanghai Co., Ltd.	159,533	98,172
Minmetals Steel (Wuhan) Limited Company	154,544	115,699
Minmetals Steel Xi'an Co., Ltd.	124,080	49,438
Minmetals Trading Co., Ltd.	108,021	92,843
Minmetals Steel Beijing Co., Ltd.	100,272	54,940
Chengdu Yexing Runda New Building Materials Co.,Ltd.	70,132	26,362
Minmetals Steel Guangzhou Co., Ltd.	64,406	75,722
Shanghai Ruiyuan Urban Construction Development Co., Ltd.	56,787	-
Minmetals Nonferrous Metals Trade Co., Ltd.	42,579	42,579
Others	324,823	354,779
	2,104,526	1,282,053
	Minmetals Steel Tianjin Co., Ltd. Minmetals Steel Chengdu Co., Ltd. Minmetals Steel Lanzhou Co., Ltd. Minmetals Steel Shanghai Co., Ltd. Minmetals Steel (Wuhan) Limited Company Minmetals Steel Xi'an Co., Ltd. Minmetals Trading Co., Ltd. Minmetals Steel Beijing Co., Ltd. Chengdu Yexing Runda New Building Materials Co., Ltd. Minmetals Steel Guangzhou Co., Ltd. Shanghai Ruiyuan Urban Construction Development Co., Ltd. Minmetals Nonferrous Metals Trade Co., Ltd.	Minmetals Steel Tianjin Co., Ltd. Minmetals Steel Chengdu Co., Ltd. Minmetals Steel Lanzhou Co., Ltd. Minmetals Steel Shanghai Co., Ltd. Minmetals Steel (Wuhan) Limited Company Minmetals Steel Xi'an Co., Ltd. Minmetals Trading Co., Ltd. Minmetals Trading Co., Ltd. Minmetals Steel Beijing Co., Ltd. Minmetals Steel Beijing Co., Ltd. Chengdu Yexing Runda New Building Materials Co., Ltd. Minmetals Steel Guangzhou Co., Ltd. Shanghai Ruiyuan Urban Construction Development Co., Ltd. Minmetals Nonferrous Metals Trade Co., Ltd. Others 349,355 290,615 159,533 154,544 159,533 Minmetals Steel Muhan) Limited Company 154,544 108,021 108,021 100,272 Chengdu Yexing Runda New Building Materials 70,132 Co., Ltd. 64,406 Shanghai Ruiyuan Urban Construction Development Co., Ltd. Minmetals Nonferrous Metals Trade Co., Ltd. Others

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Amounts due from/due to related parties (Continued)

(2) Payables (Continued)

Items	Related parties	30 June 2022	31 December 2021
Other payables	Zhuhai Hengqin Headquarters Building Development Co., Ltd.	460,789	636,212
Other payables	China Metallurgical Group Corporation	222,383	195,030
Other payables	Sanya MCC Minglan Development Co., Ltd.	168,811	136,806
Other payables	Zhuzhou Smelter Nonferrous Metals Industrial Co., Ltd.	155,880	148,083
Other payables	Minmetals International Engineering Technology Co., Ltd.	81,657	81,659
Other payables	Lanzhou Lianhuo Qingzhong Section expressway Construction and Development Co., LTD	81,496	-
Other payables	Baotou MCC Real Estate Co., Ltd.	72,663	72,663
Other payables	Hunan Huangshaping Lead-Zinc Mine	68,779	65,339
Other payables	Wuzhou Guoye Investment and Development Co., Ltd.	29,760	29,760
Other payables	Dangtu Qingyuan Engineering Construction Co., Ltd.	28,326	-
Other payables	Shanghai MCC Xiangqi Investment Co., Ltd.	24,483	24,483
Other payables	Suzhou Suma MCC Construction Development Co., Ltd.	24,229	-
Other payables	Shanghai Xunxiang Real Estate Co., Ltd.	24,085	-
Other payables	Shanghai Union Automobile Avenue Development and Construction Co., Ltd.	24,000	24,000
Other payables	Others	143,630	661,039
Total		1,610,971	2,075,074

For the six months ended 30 June 2022

XII. RELATED PARTIES AND TRANSACTIONS (CONTINUED)

Amounts due from/due to related parties (Continued)

(2) Payables (Continued)

Items	Related parties	30 June 2022	31 December 2021
Contract liabilities	Xichang Anmin City Construction Investment Co., Ltd.	343,210	400,199
Contract liabilities	Tangshan Fengrun District Runfeng Municipal Infrastructure Development and Construction Co., Ltd.	248,810	279,163
Contract liabilities	Chongqing Yunkai Expressway Co., Ltd.	238,821	18,275
Contract liabilities	Luobei Yunshan Graphite New Material Co., Ltd.	163,890	208,062
Contract liabilities	Hangzhou MCC Mingjin Real Estate Development Co., Ltd.	133,917	133,917
Contract liabilities	Huanggang Lianlu Water Co., Ltd.	115,872	64,072
Contract liabilities	Binhai County Shengxin Project Management Co., Ltd.	115,635	-
Contract liabilities	Chongqing Guangjiu Construction Project Management Co., Ltd.	100,463	143,003
Contract liabilities	Nordic Metals And Minerals Co. Ltd.	92,090	5,142
Contract liabilities	Chongqing Jiangjin District Tuanjiehu Construction and Operation Co., Ltd.	91,598	=
Contract liabilities	Guangxi Guoye Transportation Investment Co., Ltd.	80,681	-
Contract liabilities	Others	595,423	1,273,962
Total	_	2,320,410	2,525,795
Non-current liabilities d	ue China National Foreign Trade Financial & Leasing Co., Ltd.	227,505	196,547
	ue Minmetals Securities Co., Ltd.	-	12,583
Total		227,505	209,130
Long-term borrowings	Minmetals Securities Co., Ltd.	-	525,258
Total		_	525,258
Long-term payables	China Metallurgical Group Corporation	457,050	457,050
Long-term payables	China National Foreign Trade Financial & Leasing Co., Ltd.	95,114	85,000
Long-term payables	Jianhe Innovation Technology (Hainan) Co., Ltd.	15,017	=
Long-term payables	China Minmetals Corporation Limited	6,000	6,000
Total		573,181	548,050

For the six months ended 30 June 2022

XIII. COMMITMENTS AND CONTINGENCIES

1. Significant commitments

(1) Capital commitments

As at the balance sheet date, the Group had capital commitments contracted but not recognized in the balance sheet were as follows:

All amounts in RMB'000

Items	30 June 2022	June 2022 31 December 2021			
Buildings, structures and equipment Intangible assets	23,845,491 4,287,019	24,067,181 4,287,019			
Total	28,132,510	28,354,200			

2. Contingencies

(1) Significant contingencies at the balance sheet date

(a) Pending litigation or arbitration

As at 30 June 2022, objects of pending litigation or arbitration in which the Group acted as defendant were amounting to RMB 3,389,053,000 (as at 31 December 2021: RMB 2,940,488,000).

The Group has been named in a number of lawsuits and other legal proceedings arising in the ordinary course of business. Provision will be made for the probable losses to the Group on those claims when management can reasonably estimate the outcome of the lawsuits based on management's judgments and legal advice. No provision will be made for the above pending lawsuits if management determines the outflow of resources is not probable. As at 30 June 2022, management has made provision for pending lawsuits of RMB 247,873,000, details of which are set out in Note VII 42.

For the six months ended 30 June 2022

XIII. COMMITMENTS AND CONTINGENCIES (CONTINUED)

2. Contingencies (Continued)

- (1) Significant contingencies at the balance sheet date (Continued)
 - (b) Financial guarantees given to banks
 - (i) Mortgage guarantees

All amounts in RMB'000

Guarantor30 June 2022Mortgage guarantees9,166,039

The Group's subsidiaries in property development sector would provide mortgage guarantees to the property purchasers as it is a common practice in property development industry. Under such arrangements, the period of the guarantees is from the date of the contracts being signed to the date of the legal title of the properties finally being transferred to the purchasers and the certificates could be used as collaterals. The Group considers that the risk related to such guarantees is minor.

(ii) Loan guarantees

All amounts in RMB'000

Guarantor	Guarantee	30 June 2022
China MCC 20 Group Co.,	Zhuhai Hengqin Headquarters	
Ltd.	Building Development Co., Ltd.	410,624
MCC Real Estate Group Co.,	Zhuhai Hengqin Headquarters	
Ltd.	Building Development Co., Ltd.	636,467

In 2019, Zhuhai Hengqin Headquarters Building Development Co., Ltd. was a subsidiary of the Group within the scope of consolidation. In 2020, other shareholders of Zhuhai Hengqin Headquarters Building Development Co., Ltd. revoked their concerted action agreement with the Group, and the Group lost control of them. Zhuhai Hengqin Headquarters Building Development Co., Ltd. became a joint venture of the Group. China Twenty Metallurgical Group Co., Ltd. provided guarantee for the loan of Zhuhai Hengqin Headquarters Building Development Co., Ltd. The actual guarantee amount was RMB 410,624,000 and the maximum guaranteed amount was RMB 600,000,000, and the guarantee period was from 4 September 2019 to 4 September 2024. MCC Real Estate Group Co., Ltd. provided a guarantee for the loan of Zhuhai Hengqin Headquarters Building Development Co., Ltd. The guarantee amount was RMB 636,467,000, and the maximum guaranteed amount was RMB 930,000,000. The guarantee period was 4 September 2019 to 4 September 2024. Zhuhai Hengqin Headquarters Building Development Co., Ltd. is in good financial condition, and the management expects that there is no major debt default risk.

For the six months ended 30 June 2022

XIII. COMMITMENTS AND CONTINGENCIES (CONTINUED)

2. Contingencies (Continued)

(1) Significant contingencies at the balance sheet date (Continued)

(c) Others

In 2012, due to extreme adverse weather condition, including typhoon, the progress of the Sino Iron Project was behind the original planned schedule giving rise to the substantial project cost overrun. The management is of the view that the Group has implemented appropriate procedures to control project costs, shorten project delay and minimize the loss resulted from the project schedule delay. In respect of the compensation clause set out in the construction contract entered into between the Group and the customer regarding the loss to customer resulted from the project delay due to the contractor own reason, the Group has sufficient communications with CITIC Group who is the customer of the Sino Iron Project. Both the Group and CITIC Group believe that the project delay is due to various reasons. A consensus has been reached between the Group and CITIC Group that the second main process production line of the Sino Iron Project should be completed and available for trial run by 15 April 2013. Due to the technical issue of cyclo electric motors, the trial run of the second main process production line of the Sino Iron Project was further delayed. The cyclo electric motors were purchased by a subsidiary of CITIC Group from an overseas supplier. The Group is of the view that the Group has appropriately performed its duty and fulfilled its responsibility in constructing the second main process production line according to the consensus reached with CITIC Group. The reason for the delay in trial run of the second main process production line of the Sino Iron Project was principally due to quality issue of cyclo electronic motors which were not purchased by the Group.

As of the date of approving these financial statements, the customer has not lodged any compensation claims against the Group in respect of the project delay. The Group has already taken measures in shortening the project delay and has sufficient communications with the customer of this project. The Group is of the view that the risk of being claimed by the customer of this project is remote. Therefore, no provision for loss is recognized in these financial statements.

XIV. EVENTS AFTER THE BALANCE SHEET DATE

As of the approval date of this financial report, the Group has not had any major post-balance sheet events.

For the six months ended 30 June 2022

XV. OTHER SIGNIFICANT MATTERS

1. Segment information

(1) Accounting policies of the segment

The Group determines the operating segments based on the internal organizational structure, management requirements and internal reporting system. The reportable segments are determined based on operating segments.

Operating segment is a component of the Group which satisfied all of the following conditions:

- (a) The component is able to generate income, and expenses in daily activities;
- (b) The Group's management evaluates the operating results of that segment regularly, determines the allocation of resources, and evaluates its performance;
- (c) The Group can obtain the balance sheet, operating results, cash flow and other relevant accounting information of the segment. If two or more operating segments have similar economic characteristics and meet certain conditions, they could be combined into a single operating segment.

The management of the Group has performed assessments of the operating results of engineering contracting, property development, equipment manufacture, and resource development. The management also evaluates the operating results of the above segments generated in different geographical locations.

The information of the operating and reportable segments is derived from the information reported by the management of each respective segment. The accounting policies and measurement basis of this information are the same as the Group's accounting policies adopted in preparing these financial statements.

Intersegment transactions are based on the actual transaction price. Segment revenue and segment expenses are recognized based on the actual revenue generated and actual expenses incurred by the respective segments. Assets and liabilities are allocated to the respective segments according to the assets used or liabilities assumed in their daily operating activities.

For the six months ended 30 June 2022

XV. OTHER SIGNIFICANT MATTERS (CONTINUED)

- Segment information (Continued)
 - (2) Summarized financial information of reporting segment
 - (a) Segment information for the six months period ended 30 June 2022 and as at 30 June 2022

	Engineering	Property	Equipment	Resource		Unallocated	Elimination between	
Items	contracting	development	manufacture	development	Others	amounts	segments	Total
		· ·		· ·				
Operating revenue	270,794,824	9,030,921	6,799,675	3,592,811	2,761,577	_	(3,778,066)	289,201,742
Including: Revenue from external customers	268,455,691	9,028,602	6,672,317	3,581,685	1,463,447	-	-	289,201,742
Revenue between segments	2,339,133	2,319	127,358	11,126	1,298,130	-	(3,778,066)	_
Operating costs	247,642,999	8,040,299	5,980,936	1,929,190	2,182,385	-	(3,585,589)	262,190,220
Including: External costs	245,508,774	8,040,299	5,973,446	1,776,917	890,784	-	-	262,190,220
Costs between segments	2,134,225	-	7,490	152,273	1,291,601	-	(3,585,589)	_
Operating profit/(loss)	7,381,531	16,324	119,975	1,186,431	173,685	(84,436)	(182,641)	8,610,869
Including: Gains/(losses) on investments in associates								
and joint ventures	137,252	(220,391)	66	_	(8,895)	-	-	(91,968)
Non-operating income	93,140	3,953	14,929	2,934	1,258	-	-	116,214
Non-operating expenses	67,944	5,036	1,311	3,678	683	-	-	78,652
Total profit/(loss)	7,406,727	15,241	133,593	1,185,687	174,260	(84,436)	(182,641)	8,648,431
Income tax expense	1,071,703	128,397	26,309	116	67,177	_	_	1,293,702
Net profit/(net loss)	6,335,024	(113,156)	107,284	1,185,571	107,083	(84,436)	(182,641)	7,354,729
Assets	468,067,989	164,202,676	21,909,314	17,442,241	31,510,391	3,661,813	(96,505,086)	610,289,338
Including: Long-term equity investments in associates								
and joint ventures	28,520,989	938,549	9,789	43	383,647	-	-	29,853,017
Non-current assets	57,233,200	9,813,468	4,281,987	9,752,450	29,818,857	-	(20,187,302)	90,712,660
Liabilities	356,173,914	126,547,782	18,567,264	14,316,019	14,677,678	31,680	(75,896,203)	454,418,134
Depreciation and amortization expenses	1,142,288	133,445	122,573	398,380	126,689		_	1,923,375
Impairment losses of assets and impairment of credit		,						
losses	(2,330,764)	(404,861)	(80,142)	(5,516)	(97,844)	_	_	(2,919,127)
Increase in other non-current assets other than long-	() / / /	(, , , ,	() /	() - 1	, , ,			() /
term equity investments	4,735,239	13,592	165,256	847,792	40,995	_	_	5,802,874

For the six months ended 30 June 2022

XV. OTHER SIGNIFICANT MATTERS (CONTINUED)

1. Segment information (Continued)

(2) Summarized financial information of reporting segment (Continued)

(b) Segment information for the six months period ended 30 June 2021 and as at 31 December 2021

				-			Elimination	
Items	Engineering contracting	Property development	Equipment manufacture	Resource	Others	Unallocated	between	Total
Itellis	contracting	development	manuracture	development	Others	amounts	segments	TOTAL
Operating revenue	231,256,834	11,326,380	6,065,257	3,477,786	3,128,092	-	(4,251,162)	251,003,187
Including: Revenue from external customers	229,349,512	10,839,626	5,943,832	3,469,446	1,400,771	-	=	251,003,187
Revenue between segments	1,907,322	486,754	121,425	8,340	1,727,321	-	(4,251,162)	-
Operating costs	211,909,292	8,977,852	5,226,656	2,002,779	2,554,634	-	(4,114,193)	226,557,020
Including: External costs	209,479,577	8,874,738	5,223,577	1,945,390	1,033,738	-	=	226,557,020
Costs between segments	2,429,715	103,114	3,079	57,389	1,520,896	-	(4,114,193)	-
Operating profit/(loss)	5,327,444	1,290,255	174,787	1,063,555	244,978	(78,828)	(133,008)	7,889,183
Including: Gains/(losses) on investments in associates								
and joint ventures	6,994	120,624	380	_	(4,860)	-	-	123,138
Non-operating income	141,790	5,172	22,042	958	489	-	-	170,451
Non-operating expenses	20,765	4,826	2,801	159	251	-	-	28,802
Total profit/(loss)	5,448,469	1,290,601	194,028	1,064,354	245,216	(78,828)	(133,008)	8,030,832
Income tax expense	974,931	317,076	45,590	4,650	97,678	-	_	1,439,925
Net profit/(net loss)	4,473,538	973,525	148,438	1,059,704	147,538	(78,828)	(133,008)	6,590,907
Assets	424,197,724	131,264,586	21,252,536	18,314,799	66,824,909	3,245,450	(121,629,857)	543,470,147
Including: Long-term equity investments in associates								
and joint ventures	26,051,931	3,818,578	222	64	457,971	-	=	30,328,766
Non-current assets	43,646,621	21,958,563	4,285,700	10,484,190	43,726,777	-	(34,888,212)	89,213,639
Liabilities	330,972,715	99,619,235	17,832,369	13,893,544	29,119,912	79,243	(99,434,630)	392,082,388
Depreciation and amortization expenses Impairment losses of assets and impairment of credit	1,309,692	38,984	77,937	306,237	52,043	=	-	1,784,893
losses	(2,052,931)	(3,457)	(33,094)	(20,433)	(467)	=	-	(2,110,382)
Increase in other non-current assets other than long- term equity investments	2,400,423	13,277	59,912	53,858	79,071	-	_	2,606,541

For the six months ended 30 June 2022

XV. OTHER SIGNIFICANT MATTERS (CONTINUED)

Segment information (Continued)

Other notes (3)

(a) Revenue from external customers classified by countries/regions and non-current assets classified by geographical locations

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
China Other countries/regions	279,572,449 9,629,293	240,580,770 10,422,417
Total	289,201,742	251,003,187

All amounts in RMB'000

Items	30 June 2022	31 December 2021
China Other countries/regions	81,061,393 9,651,267	80,407,265 8,806,374
Total	90,712,660	89,213,639

The above non-current assets do not include deferred tax assets and financial assets.

(b) The dependency on major customers

> No revenue was generated from sales to a single customer which amounted to 10% or more than 10% of the Group's revenue.

2. Net current assets and total assets less current liabilities

Net current assets (1)

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Current assets Less: Current liabilities Net current assets	475,531,511 416,207,368 59,324,143	412,315,644 358,889,666 53,425,978

(2) Total assets less current liabilities

Items	30 June 2022	31 December 2021
Total Assets Less: Current liabilities Total assets less current liabilities	610,289,338 416,207,368 194,081,970	543,470,147 358,889,666 184,580,481

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS

1. Accounts receivable

(1) Aging analysis of accounts receivable

All amounts in RMB'000

Aging	30 June 2022	31 December 2021
Within 1 year	281,505	154,970
1 to 2 years 2 to 3 years 3 to 4 years	_	308 308
4 to 5 years Over 5 years	71,545	- 71,545
Total book value	353,050	226,823
Less: Provisions for credit losses Carrying amount	55,810 297,240	53,498 173,325

Settlement of trade receivables generated through engineering and construction services is made in accordance with terms specified in the contracts governing the relevant transactions. The aging of accounts receivable is calculated based on the date of issue of bill of construction service or date of revenue recognition.

(2) Provision for credit losses of accounts receivable

All amounts in RMB'000

Item	31 December 2021	Provision	30 June 2022
Provision for credit losses	53,498	2,312	55,810

The five largest accounts receivable collected by arrears at the end of the period (3)

All amounts in RMB'000

Name of entity	Relationship with the Company	30 June 2022 Book value	30 June 2022 Provision of bad debt	As a percentage of total accounts receivable (%)
				(,0)
Party 1	Third party	119,001	2,559	33.71
Party 2	Third party	110,229	_	31.22
Party 3	Third party	52,274	_	14.81
Party 4	Third party	46,454	46,454	13.16
Party 5	Subsidiary	18,294		5.18
Total	1	346,252	49,013	98.08

(4) In the current period, the Company had no non-recourse factoring of accounts receivable and did not derecognize accounts receivable through asset securitization (For the six months period ended 30 June 2021: Nil).

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Other receivables

Presentation of other receivables (1)

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Interest receivables Dividends receivable Other receivables	7,637,654 3,769,198 56,737,812	6,610,448 3,451,124 50,317,595
Total	68,144,664	60,379,167

(2) Interest receivables

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Subsidiaries of the Company Less: Provisions for credit losses	7,969,997 332,343	6,932,411 321,963
Total	7,637,654	6,610,448

(3) Dividends receivable

All amounts in RMB'000

Item	30 June 2022	31 December 2021
Subsidiaries of the Company	3,769,198	3,451,124
Total	3,769,198	3,451,124

As at 30 June 2022, the closing balance of dividends receivable aged more than one year was RMB 2,554,082,000 (as at 31 December 2021: RMB 2,470,433,000).

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Other receivables (Continued)

(4) Aging analysis of other receivables

All amounts in RMB'000

Aging	30 June 2022	31 December 2021
Within 1 year	8,985,743	14,406,193
1 to 2 years	11,045,742	3,087,855
2 to 3 years	6,819,462	5,401,878
3 to 4 years	9,528,145	10,684,742
4 to 5 years	11,367,320	3,687,257
Over 5 years	15,248,105	19,234,640
Total book value	62,994,517	56,502,565
Less: Provisions for credit losses	6,256,705	6,184,970
Carrying amount	56,737,812	50,317,595

(5) Other receivables classified by nature

All amounts in RMB'000

Nature of other receivables	30 June 2022	31 December 2021
Subsidiaries of the Company	62,338,986	55,939,161
Guarantees and deposits	365,731	356,159
Others	289,800	207,245
Total	62,994,517	56,502,565

Provision of credit losses of other receivables (6)

Items		Phase 3 Lifetime expected credit losses (Credit-impaired)	Total
Provision for credit losses at 31 December	(2007)		222
2021	_	6,184,970	6,184,970
Change of exchange rate	_	71,735	71,735
Provision for credit losses at 30 June			
2022	19419	6,256,705	6,256,705

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Other receivables (Continued)

(7) The five largest other receivables at the end of the period

Name of entity	Relationship with the Company	Nature of other receivables	Aging	30 June 2022	Provision of bad debt	As a percentage of total other receivables (%)
Party 1	Subsidiary	Advances/	Over 5 years	36,130,259	=	57.35
Party 2	Subsidiary	Advances/ internal loans	Over 5 years	6,789,140	3,719,055	10.78
Party 3	Subsidiary	Advances/ internal loans	Over 5 years	2,485,755	2,485,755	3.95
Party 4	Subsidiary	Advances/ internal loans	Over 5 years	2,362,063	-	3.75
Party 5	Subsidiary	Advances/ internal loans	Over 5 years	1,082,200	-	1.72
Total	1	1	/	48,849,417	6,204,810	77.55

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

3. Long-term receivables

(1) Long-term receivables

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Subsidiaries of the Company	401,986	771,250
Others	2,037	2,037
Total book value	404,023	773,287
Less: Provisions for credit losses of long-term receivables Total net book value	138,435 265,588	138,660 634,627
Less: Long term receivables due within one year, net	2,037	2,037
Long term receivables due after one year, net	263,551	632,590

(2) Provision for credit losses of long-term receivables

As of 30 June 2022, the changes in the credit loss provision for long-term receivables based on 12-month expected credit losses and lifetime expected credit losses are as follows:

Items	Phase 1 Future 12-month expected credit losses	Phase 2 Lifetime expected credit losses (Non-credit- impaired)	Phase 3 Lifetime expected credit losses (Creditimpaired)	Total
Provisions for credit losses at 31 December 2021	-	-	138,660	138,660
Other movements	-	-	(225)	(225)
Provisions for credit losses at 30 June 2022	-	-	138,435	138,435

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Long-term equity investments

All amounts in RMB'000

Items	Carrying amount	30 June 2022 Provision for impairment	Book value	3 Carrying amount	1 December 2021 Provision for impairment	Book value
Subsidiaries Joint ventures and	97,550,588	175,034	97,375,554	97,450,588	175,034	97,275,554
associates	487,346	113,146	374,200	485,193	113,146	372,047
Total	98,037,934	288,180	97,749,754	97,935,781	288,180	97,647,601

Subsidiaries (1)

Name of investee	31 December 2021	Movements for the current period	30 June 2022	Provision for impairment losses for the current period	Carrying amount at 30 June 2022	Impairment provision at 30 June 2022
ACRE Coking & Refractory						
Engineering Consulting						
Corporation, MCC	1,898,546	-	1,898,546	-	1,898,546	-
Northern Engineering &						
Technology Corporation, MCC	826.271		826,271		826,271	
	1,219,670	_	1,219,670	_	1,219,670	_
China MCC 3 Group Co., Ltd. Shen Kan Engineering &	1,219,070	_	1,219,070	_	1,219,070	_
Technology Corporation,						
MCC	344.972		344,972		344,972	
MCC Overseas Ltd.	475,644		475,644		475,644	
MCC Communication	475,044		473,044		473,044	
Construction Group Co.,						
Ltd.	9,056,533	_	9,056,533	_	9,056,533	_
MCC International	0,000,000		0,000,000		0,000,000	
Incorporation Ltd.	110,804	_	110,804	_	110,804	_
Ramu NiCo Management	1.0,001		,		,	
(MCC) Ltd.	3	_	3	_	3	_
MCC Finance Corporation Ltd.	1,583,970	_	1,583,970	_	1,583,970	_
MCC Tongsin Resources Ltd.	3,558,261	_	3,558,261	_	3,558,261	_
MCC-JJJ Mining Development						
Company Limited	2,849,805	_	2,849,805	_	2,849,805	_
MCC Capital Engineering &						
Research Incorporation						
Limited	7,175,684	-	7,175,684	-	7,175,684	-
MCC Real Estate Group Co.,						
Ltd.	5,814,517	-	5,814,517	-	5,814,517	-

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Long-Term Equity Investments (Continued)

(1) Subsidiaries (Continued)

Name of investee	31 December 2021	Movements for the current period	30 June 2022	Provision for impairment losses for the current period	Carrying amount at 30 June 2022	Impairment provision at 30 June 2022
China 13th Metallurgical						
Construction Corporation	372,399	-	372,399	-	372,399	-
MCC TianGong Group						
Corporation Limited.	2,261,984	-	2,261,984	-	2,261,984	-
China 22MCC Group Co., Ltd.	3,487,199	-	3,487,199	-	3,487,199	-
China Non-ferrous Engineering						
Co., Ltd.	4,357,614	_	4,357,614	-	4,357,614	-
China Second Metallurgical	4 000 005		4 000 005		4 000 005	
Group Corporation Limited	1,262,835	-	1,262,835	-	1,262,835	-
Central Research Institute of						
Building and Construction	2.050.040		2.050.040		2.050.040	
Co., Ltd. China Huaye Group Co., Ltd.	3,059,049 2,412,037	_	3,059,049	_	3,059,049	_
Beijing Metallurgical	2,412,007	_	2,412,037	_	2,412,037	_
Equipment Research						
Design Institute Co., Ltd.	789,593	_	789,593	_	789,593	_
CISDI Group Co., Ltd.	4,368,886	_	4,368,886	_	4,368,886	_
China MCC 5 Group Co., Ltd.	5,022,567	_	5,022,567	_	5,022,567	_
China Metallurgical	0,022,007		0,022,001		0,0==,001	
Construction Engineering						
Group Co., Ltd.	2,085,910	_	2,085,910	_	2,085,910	_
China MCC 19 Group Co., Ltd.	3,414,357	_	3,414,357	_	3,414,357	_
MCC Baosteel Technology					, ,	
Services Co., Ltd.	1,091,924	_	1,091,924	_	1,091,924	_
China MCC 20 Group Co., Ltd.	1,680,279	_	1,680,279	-	1,680,279	-
Shanghai Baoye Group Co.,						
Ltd.	6,710,953	_	6,710,953	-	6,710,953	-
Huatian Engineering &						
Technology Corporation,						
MCC	2,156,648	-	2,156,648	-	2,156,648	-
China MCC 17 Group Co., Ltd.	1,755,361	-	1,755,361	-	1,755,361	-
China MCC International						
Economic and Trade Co.,						
Ltd.	69,392	-	69,392	-	69,392	-
WISDRI Engineering &						
Research Incorporation						
Limited	5,453,492	-	5,453,492	-	5,453,492	-
China First Metallurgical Group	0.045.055					
Co., Ltd.	2,045,090	-	2,045,090	_	2,045,090	-

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Long-Term Equity Investments (Continued)

(1) Subsidiaries (Continued)

Name of investee	31 December 2021	Movements for the current period	30 June 2022	Provision for impairment losses for the current period	Carrying amount at 30 June 2022	Impairment provision at 30 June 2022
MCC Changtian International						
Engineering Co., Ltd. Wuhan Surveying Geotechnical	991,130	-	991,130	-	991,130	-
Research Institute Co., Ltd. of MCC	523,777		523,777		523,777	_
MCC-SFRE Heavy Industry	525,111	_	323,111	_	525,111	_
Equipment Co., Ltd.	1,110,635	-	1,110,635	-	1,110,635	-
MCC Mining (Western	400 007		400.007			400.007
Australia) Pty Ltd. MCC Australia Holding Pty Ltd.	126,807 48,227	Ī	126,807 48,227	_	_	126,807 48,227
MCC Holding (Hong Kong)	40,221	_	40,221	_	_	40,221
Corporation Limited	6,485	_	6,485	_	6,485	_
MCC Financial Leasing Co.,						
Ltd.	127,500	-	127,500	-	127,500	-
MCC South China Construction						
Investment Co., Ltd.	51,000	-	51,000	-	51,000	-
MCC Rail Transit Co., Ltd.	91,490	-	91,490	_	91,490	-
MCC Zhongyuan Construction Investment Co., Ltd.	20,000	_	20,000	_	20,000	_
MCC Integrated Pipe Network	20,000		20,000		20,000	
Technology & Development						
Co., Ltd.	50,000	_	50,000	-	50,000	_
MCC Urban Investment						
Holding Co., Ltd.	150,000	-	150,000	-	150,000	-
China Metallurgical (Hainan)						
Investment Development	04.000		04.000		04.000	
Co., Ltd. MCC (Shanghai) Steel	24,000	-	24,000	_	24,000	_
Structure Technology						
Corp., Ltd.	180,401	_	180,401	_	180,401	_
MCC Road&Bridge	, .		, -			
Construction Co., Ltd.	286,887	100,000	386,887	_	386,887	-
MCC Ecological Environmental						
Protection Group Co., Ltd.	50,000	-	50,000	-	50,000	-
MCC (Yunnan) Engineering						
Investment and	60,000		60.000		60,000	
Construction Co., Ltd. MCC Fujian Investment and	60,000	-	60,000	_	60,000	
Construction Co., Ltd.	60,000	_	60,000	_	60,000	_

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

- **Long-Term Equity Investments (Continued)**
 - (1) Subsidiaries (Continued)

Name of investee	31 December 2021	Movements for the current period	30 June 2022	Provision for impairment losses for the current period	Carrying amount at 30 June 2022	Impairment provision at 30 June 2022
Tianjin United Huixin						
Investment Partnership (Limited Partnership)	1,000,000	_	1,000,000	_	1,000,000	_
Tianjin United Huitong	1,000,000		1,000,000		1,000,000	
Investment Partnership						
(Limited Partnership)	1,500,000	_	1,500,000	-	1,500,000	_
Tianjin Hongxin Investment						
Partnership (Limited						
Partnership) MCC International Investment	1,500,000	_	1,500,000	-	1,500,000	-
Development Co., Ltd.	600,000		600,000		600,000	
MCC (South Asia) Investment	000,000	_	000,000	_	000,000	_
Development Co., Ltd.	20,000	_	20,000	_	20,000	_
MCC (Guizhou) Construction						
Investment Development						
Co., Ltd.	100,000	_	100,000		100,000	_
Total	97,450,588	100,000	97,550,588	-	97,375,554	175,034

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Long-term equity investments (Continued)

(2) Joint ventures and associates

All amounts in RMB'000

	Movements during the current period					
Name of joint ventures and associates	Carrying amount at 31 December 2021	Share of (losses)/profits	Other comprehensive income	Declaration of cash dividends	Carrying amount at 30 June 2022	Provision for impairment at 30 June 2022
Beijing Jingxi Travel Industry Investment Fund (limited						
partnership)	103,336	98	(4,276)	(2,488)	96,670	-
MCC-Huafa Integrated Pipe						
Network Co., Ltd. MCC Jianxin Investment Fund	103,588	174	-	-	103,762	-
Management Co., Ltd. Shenzhen MCC Utility	72,201	10,119	-	-	82,320	-
Tunnel Construction and Investment Co., Ltd. Yingtan MCC Xinyin industry development partnership	11,670	(1,511)	-	-	10,159	-
(limited partnership) MCC Xiangxi Mining Industry	81,252	2,994	-	(2,957)	81,289	-
Co., Ltd.	=	-	-	-	-	113,146
Total	372,047	11,874	(4,276)	(5,445)	374,200	113,146

In the reporting period, there were no significant restrictions on withdrawing the above long-term equity investments.

5. **Short-term borrowings**

Categories of short-term borrowings

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Credit loans: RMB USD Others	18,445,728 14,169,599 4,168,556 107,573	16,032,447 12,862,888 3,058,252 111,307
Total	18,445,728	16,032,447

As at 30 June 2022, there were no significant short-term borrowings overdue but not yet paid (as at 31 December 2021: Nil).

For the current period, the weighted average interest rate of short-term borrowings was 3.03% per annum (for the period ended 30 June 2021: 2.91% per annum).

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Other payables

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Amounts due to subsidiaries External dividends payable Others	40,298,618 2,280,709 227,749	32,588,028 165,567 148,996
Total	42,807,076	32,902,591

7. Non-current liabilities due within one year

All amounts in RMB'000

Items	30 June 2022	31 December 2021
Long-term borrowings due within one year (Note XVI 8)	_	2,002,375
Long-term employee benefits payable due within one year Long-term payables due within one year	3,776 241,769	3,776 241,726
Bonds payable due within one year Lease liabilities due within one year	810,861 21,651	582,334 513
Total	1,078,057	2,830,724

8. Long-term borrowings

All amounts in RMB'000

Items	30 June 2022	31 December 2021
		A-
Credit loans	2,000,000	2,002,375
Total	2,000,000	2,002,375
Less: Long-term borrowings due within one year (Note XVI 7)	_	2,002,375
Long-term borrowings due over one year	2,000,000	<u> </u>

For the current period, the weighted average interest rate of long-term borrowings was 4.28% per annum (for the period ended 30 June 2021: 4.12% per annum).

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Presentation of operating revenue and operating costs

(1) Operating revenue and operating costs

All amounts in RMB'000

	Amount for the c	Amount for the current period		Amount for the prior period	
Items	Operating revenue	Operating costs	Operating revenue	Operating costs	
Principal business Other business	815,798 44,499	810,263 249	2,237,606 29,698	2,234,518 243	
Total	860,297	810,512	2,267,304	2,234,761	

(2) Breakdown of operating revenue

Classified by industry (a)

All amounts in RMB'000

Item	Amount for the current period	Amount for the prior period
Engineering contracting	815,798	2,237,606
Total	815,798	2,237,606

(b) Classified by geographic location

Item	Amount for the current period	Amount for the prior period
Other countries/regions	815,798	2,237,606
Total	815,798	2,237,606

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

- 9. Presentation of operating revenue and operating costs (Continued)
 - (3) Information of major customers from which the revenue generated accounted for more than 10% of the total revenue

All amounts in RMB'000

Items	Relationship with the Company	Operating revenue	As a percentage of total operating revenue of the Company
Party 1	Third party	471,932	54.86
Party 2	Third party	209,066	24.30
Total	1	680,998	79.16

The project contracting services provided by the Company usually constitute a single performance obligation as a whole and are performance obligations performed within a certain period of time. As of 30 June 2022, some of the Company's project contracting service contracts were still in the process of implementation. The trading price allocated to non-implemented (or partly non-implemented) performance obligations is related to the performance progress of each project contracting service contract. It will be recognized as revenue within the future performance period of each project contracting service contract according to the performance progress.

Among the above operating income, revenue from contracts with customers was RMB 860,297,000 (for the six months period ended 30 June 2021: RMB 2,267,304,000).

10. Investment income

All amounts in RMB'000

Amount for the current period	Amount for the prior period
1,543,003 11,874	2,164,109 6,775
1,554,877	2,170,884
	1,543,003 11,874

There is no major restriction of investment income repatriation to the Company.

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

Credit impairment (losses)/reversal

All amounts in RMB'000

Items	Amount for the current period	Amount for the prior period
Credit losses Including: Credit (loss)/reversal of other receivables Credit (loss)/reversal of long-term receivables Credit loss of accounts receivable	(84,202) (82,115) 225 (2,312)	29,252 24,347 4,905
Total	(84,202)	29,252

12. Supplementary information to the cash flow statement

(1) Supplementary information to the cash flow statements

Supplementary information	Amount for the current period	Amount for the prior period
Reconciliation of net profit to cash flows from operating		
activities:		
Net profit	1,064,929	2,194,943
Add: Credit loss provision	84,202	(29,252)
Reversal of impairment losses on assets	(3,137)	-
Depreciation of fixed assets and right-of-use		
assets	11,604	11,351
Amortization of intangible assets	702	884
Losses on write-off of fixed assets	16	59
Losses/(gains) on changes of fair value	129,151	(45,327)
Financial expenses	293,224	40,912
Investment income	(1,554,877)	(2,170,884)
Decrease in inventories	130	30
Decrease in contract assets	352,181	311,202
Decrease in contract liabilities	(210,449)	_
Increase in receivables from operating activities	257,566	(1,396,850)
Increase in payables from operating activities	54,783	711,457
Net cash flows from operating activities	480,025	(371,475)
		(2, 2)
Net changes in cash and cash equivalents:		
Cash and cash equivalents at end of period	8,688,785	2,294,377
Less: Cash and cash equivalents at beginning of		
period	5,006,514	9,606,574
Net increase/(decrease) in cash and cash equivalents	3,682,271	(7,312,197)

For the six months ended 30 June 2022

XVI. NOTES TO KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS (CONTINUED)

12. Supplementary information to the cash flow statement (Continued)

(2) Cash and cash equivalents

All amounts in RMB'000

Items	30 June 2022	31 December 2021
I. Cash	8,688,785	5,006,514
Including: Cash on hand	4,377	4,007
Bank deposits without restriction	8,684,408	5,002,507
II. Cash and cash equivalents at end of period	8,688,785	5,006,514

XVII.SUPPLEMENTARY INFORMATION

1. Breakdown of non-recurring profit or loss

Items	Amount for the current period
Government grants recognized in profit or loss (except for the government grants that	
are closely related to the business of the Company and granted according to the	
unified national standards)	246,468
Other non-operating income or expenses other than the above items	17,516
Profit or loss on disposal of non-current assets	103,781
Profit or loss arising from changes in fair value of trading financial assets, derivative financial instruments and other financial assets except for those relating to the	
hedging transactions under the Company's normal operating business	(130,695)
Reversal of provision for credit losses individually assessed for large-amount	
accounts receivable	95,632
Profit or loss of debt restructuring	3,694
Profit or loss on disposal of long-term equity investments	20,546
Less: Impact on income tax	(59,397)
Impact on non-controlling interests (after tax)	(45,058)
Total	252,487

For the six months ended 30 June 2022

XVII.SUPPLEMENTARY INFORMATION (CONTINUED)

Return on net assets and earnings per share ("EPS") 2.

	Weighted average rate of return on	EPS (RMB)	
Profit during the reporting period	net assets	Basic EPS	Diluted EPS
Net profit attributable to ordinary shareholders of the Company Net profit after deduction of non-recurring profits or losses attributable to ordinary	5.65	0.24	0.24
shareholders of the Company	5.36	0.22	0.22

Chairman: Chen Jianguang

Date of Approval from the Board: 30 August 2022





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