



# 2022 ANNUAL REPORT

## 株洲中车时代电气股份有限公司

ZHUZHOU CRRC TIMES ELECTRIC CO., LTD.

*(A joint stock company incorporated in the People's Republic of China with limited liability)*

Stock Code: 3898



# Important Notice

- I. THE BOARD OF DIRECTORS, THE SUPERVISORY COMMITTEE, THE DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT OF THE COMPANY WARRANT THAT THE INFORMATION STATED IN THIS ANNUAL REPORT IS TRUE, ACCURATE, COMPLETE AND WITHOUT ANY FALSE REPRESENTATION, MISLEADING STATEMENT OR MATERIAL OMISSION, AND ASSUME SEVERAL AND JOINT LIABILITIES.**
- II. WHETHER THE COMPANY WAS NOT PROFIT-MAKING AT LISTING AND HAS NOT ACHIEVED PROFITABILITY**

Yes No

**III. WARNING OF SIGNIFICANT RISKS**

For the description of relevant risks, please refer to section IV "Report of the Directors" of this report.

**IV. ALL DIRECTORS OF THE COMPANY ATTENDED THE BOARD MEETING.**

**V. KPMG HUAZHEN LLP HAS ISSUED A STANDARD UNQUALIFIED AUDIT REPORT TO THE COMPANY.**

**VI. LI DONGLIN, PERSON-IN-CHARGE OF THE COMPANY, LIU ZEHUA, THE ACCOUNTING CHIEF, AND SUN SHAN, PERSON-IN-CHARGE OF THE ACCOUNTING DEPARTMENT (HEAD OF THE ACCOUNTING DEPARTMENT), WARRANT THE TRUTHFULNESS, ACCURACY AND COMPLETENESS OF THE FINANCIAL REPORT SET OUT IN THE ANNUAL REPORT.**

**VII. THE PROFIT DISTRIBUTION PROPOSAL OR PROPOSAL ON TRANSFER OF CAPITAL RESERVE FUND INTO SHARE CAPITAL FOR THE REPORTING PERIOD CONSIDERED AND APPROVED BY THE BOARD**

The Company proposes to distribute cash dividends to the Shareholders based on the total number of Shares determined on the record date fixed for the equity distribution which will be specified in the equity distribution implementation announcement. The Company proposes to distribute cash dividends of RMB5.5 (tax inclusive) for every ten Shares held by Shareholders, totaling RMB778,930,301.60 based on the total share capital of the Company of 1,416,236,912 as at 31 December 2022, accounting for 30.48% of the net profit attributable to Shareholders of the Company as contained in the consolidated financial statements for 2022. In case of any change in the total share capital of the Company from the date of the profit distribution announcement to the record date for implementation of the equity distribution, the Company proposes to maintain the payout ratio per Share unchanged, make corresponding adjustments to the total payout amount, and will publish separate announcement(s) on the specific adjustments. The above profit distribution plan has been approved at the 27th meeting of the sixth session of the Board, and is subject to consideration and approval at the 2022 annual general meeting of the Company.

**VIII. WHETHER THERE ARE IMPORTANT MATTERS SUCH AS SPECIAL ARRANGEMENTS FOR CORPORATE GOVERNANCE**

Applicable Not applicable

**IX. DISCLAIMER OF FORWARD-LOOKING STATEMENTS**

Applicable Not applicable

The forward-looking statements included in this report in relation to future plans, development strategies, etc. do not constitute any substantive commitment to investors by the Company. Investors should be reminded of the investment risks.

**X. WHETHER THE CONTROLLING SHAREHOLDER OR OTHER RELATED PARTIES HAVE MISAPPROPRIATED THE COMPANY'S FUNDS FOR NON-OPERATION PURPOSES**

No

**XI. WHETHER THE COMPANY HAS PROVIDED EXTERNAL GUARANTEES IN VIOLATION OF ANY PRESCRIBED DECISION-MAKING PROCEDURES**

No

**XII. WHETHER MORE THAN HALF OF THE DIRECTORS CANNOT GUARANTEE THE TRUTHFULNESS, ACCURACY AND COMPLETENESS OF THE ANNUAL REPORT DISCLOSED BY THE COMPANY**

No

**XIII. OTHERS**

Applicable Not applicable

**XIV. UNLESS OTHERWISE INDICATED, RENMINBI IS THE REPORTING CURRENCY IN THIS REPORT.**



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## Notes:

1. Financial information in this annual report has been presented based on the PRC Accounting Standards.
2. This annual report is prepared in both Chinese and English. In case of any inconsistencies, the former shall prevail.
3. Figures contained in this annual report are generally rounded down to two decimal places, and the difference in the last decimal place between the total and the sum of addends, if any, is a result of rounding.



# Section I Definitions

## I. DEFINITIONS

Unless otherwise stated in the context, the following terms shall have the following meanings in this report:

### DEFINITIONS OF FREQUENTLY USED TERMS

“A Share(s)”	the ordinary share(s) with a nominal value of RMB1.00 each in the share capital of the Company which are listed on the Science and Technology Innovation Board of the SSE and subscribed for and traded in Renminbi
“Articles” or “Articles of Association”	the Articles of Association of the Company
“Baoji CRRC Times”	Baoji CRRC Times Engineering Machinery Co., Ltd. (寶雞中車時代工程機械有限公司)
“Beijing Maohuan”	Beijing Maohuan Rail Transit Industry Investment Management Partnership (Limited Partnership) (北京懋峯軌道交通產業投資管理合夥企業(有限合夥))
“Board”	the board of Directors of the Company
“Company”, “Times Electric” or “CRRC Times Electric”	Zhuzhou CRRC Times Electric Co., Ltd. (株洲中車時代電氣股份有限公司)
“CRRC ZELRI”	CRRC Zhuzhou Institute Co., Ltd. (中車株洲電力機車研究所有限公司)
“CRRC Group”	CRRC Group Co., Ltd. (中國中車集團有限公司)
“CRRC”	CRRC Corporation Limited (中國中車股份有限公司)
“CSR”	former CSR Corporation Limited (中國南車股份有限公司)
“CNR”	former China CNR Corporation Limited (中國北車股份有限公司)
“CRRC Zhuzhou”	CRRC Zhuzhou Locomotive Co., Ltd. (中車株洲電力機車有限公司)
“CRRC Investment & Leasing”	CRRC Investment & Leasing Co., Ltd. (中車投資租賃有限公司)
“CRRC Times Semiconductor”	Zhuzhou CRRC Times Semiconductor Co., Ltd. (株洲中車時代半導體有限公司)
“CSRC”	China Securities Regulatory Commission (中國證券監督管理委員會)
“Group”	the Company and its subsidiaries
“H Share(s)”	overseas listed foreign share(s) with a nominal value of RMB1.00 each in the share capital of the Company, which are listed on the Main Board of the Hong Kong Stock Exchange and are subscribed for and traded in HK\$

# Section I Definitions



“SEHK Listing Rules” or “Hong Kong Listing Rules”	Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
“PRC Accounting Standards”	Accounting Standards for Business Enterprises and relevant regulations issued by the Ministry of Finance of the PRC
“the year” or “the reporting period”	the financial year ended 31 December 2022
“SFO”	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)
“SSE”	the Shanghai Stock Exchange
“SSE STAR Market Listing Rules”	Rules Governing the Listing of Stocks on the Science and Technology Innovation Board of the SSE
“SASAC”	State-owned Asset Supervision and Administration Commission of the State Council (國務院國有資產監督管理委員會)
“State Railway Group”	China State Railway Group Co., Ltd. (中國國家鐵路集團有限公司)
“Stock Exchange” or “Hong Kong Stock Exchange”	The Stock Exchange of Hong Kong Limited
“Supervisory Committee”	the supervisory committee of the Company



## Section II Chairman's Statement

Dear Investors,

Best greetings!

**On behalf of the Board of Directors, I hereby present to you the 2022 annual report of the Company, and would like to extend my heartfelt thanks to all our partners who have long supported and cared about our development.**

In 2022, a mission-critical year in the roadmap of the CPC and our country, the 20th CPC National Congress presented a grand blueprint for building a modern socialist country, and the nation took a solid step in the new journey towards Chinese-style modernisation. During the year, addressing the harsh external environment and the challenging business tasks, the Company soberly responded to external complications and firmly followed the national strategy to seize opportunities from “intelligent, digital and green development” and fulfil the overall requirements of “stabilising the economy and ensuring safe development”, forging through the difficulties in a down-to-earth manner with a focus on business quality upgrade. As revenue climbed to a new level with a year-on-year growth in net profit attributable to the parent company against the headwinds, the Company accomplished its business targets and made impressive progress across its operations.

### **(I) SCALING NEW HEIGHTS ACROSS BUSINESS SEGMENTS BOTH IN QUALITY AND EFFICIENCY THROUGH CONCERTED EFFORTS**

Under a two-winged strategy on transportation and new energy, the Company gave full play to its advantages in multidisciplinary technology chain and industry chain to build up synergy, and harvested fruits across its business segments. Rail transit traction system and other advantageous businesses secured their leadership in the industry, while new businesses such as power supply system and communication system made steady and promising progress. New energy businesses including power semiconductors, passenger car electric drive, sensors and new energy power generation made great strides with significantly improved presence and influence in the industry, thanks to the efforts in ensuring timely supply and delivery through the year.

### **(II) DELIVERING KEY AND QUALITY-MINDED ACHIEVEMENTS IN INDEPENDENT TECHNOLOGIES**

The Company focused on “four aspects” to carry forward technological innovation and built an engine for proprietary technologies unswervingly. The fruitful R&D achievements included an array of product and technology breakthroughs in key fields, such as high-efficiency converter, automatic driving and ultra-fine groove STMOS. Our influence in the industry continued to improve, as witnessed by over 500 patent applications, one patent silver prize of China for 2021 and the only one grand prize among patent prizes of Hunan Province for 2021, 11 international, national and industrial standards submitted for approval, 15 national key R&D programs approved, 16 science and technology awards at provincial and ministerial level or above, and the national key laboratory of power semiconductor and integrated technology which has passed the review and acceptance of the Ministry of Science and Technology.



## Section II Chairman's Statement

### (III) TAKING NEW STEPS IN REFINED MANAGEMENT THROUGH PROFITABILITY-ORIENTED DIGITAL TRANSFORMATION

Adhering to our digital transformation strategy targeting operational efficiency gains, we put efforts in building a high-quality digital electrical business and steering the enterprise towards more refined quantitative management. Taking profitability enhancement as the core business task, the Company vigorously promoted digital platform construction by continuing to improve the digital “cockpit” based on wide application of digitalised and structured contracts, asset management platform and attendance and work hour management, leading to better resource utilisation efficiency, data-driven business upgrades and significant profitability enhancement. Through company-wide benchmarking activities during the year, we gathered the consensus and pooled the efforts for business quality upgrade, and launched a series of effective measures to enhance profitability, thus improving the resilience to cope with the complicated business environment and the ability to steadily navigate our business through industry cycles.

### (IV) OPENING A NEW CHAPTER OF REFORM THROUGH STRUCTURE OPTIMISATION AND MOTIVATION

The Company continued to deepen the reform towards market-oriented management mechanism. Pooling internal and external resources to build a stronger engine for long-term business growth, we introduced market-oriented talent recruitment for the first time, aggressively promoted “performance commitment-based appointment”, streamlined management functions and levels, and expanded the contributor-focused incentive range of the differentiated remuneration system. Through these initiatives, we effectively motivated and vitalised our officers and employees to forge ahead, and completed the three-year plan of state-owned enterprise reform fruitfully.

Around the corner of the coldest winter is always a warm spring, and behind the steepest peaks sits the most magnificent scenery. Under the railway-prioritised strategy for a transportation power, the steadily growing rail transit industry will present more opportunities to the Company. Guided by the “carbon peak and neutrality” strategy, the evolving and fast-growing energy market is set to fuel our semiconductor, new energy power generation, passenger car electric drive, sensors and other emerging equipment businesses. Looking into 2023, the Group will seize the unprecedented strategic opportunities from “carbon peak and neutrality”, adhere to the proposition of high-quality development, and take profitability enhancement as the core business task to strengthen its three engines namely technological innovation, reform-based innovation and digital transformation. Also, we will explore synergy across technologies, markets, management, supply chain and industry chain by stimulating the synergistic effect of concentric diversification, to achieve steady business growth across the board. Especially in power semiconductor industry, we will focus on technology iteration, yield improvement and cost optimisation, accelerate popularisation and wide application of self-developed devices in rail transit, and keep track of major power grid projects, seeking to expand our share in new energy vehicle market and secure key customers in new energy power generation. In addition, we will proceed smoothly with the third phase of our IGBT production capacity expansion project to solve the capacity bottleneck as soon as possible.

The year of 2023 marks a milestone critical for the Company to step up its investment in transportation and energy businesses for a great leap forward, echoing the call of the 20th CPC National Congress. We will unremittingly sharpen core competitiveness, accelerate business development paces, move faster to take commanding heights in markets, and focus on the nature of business operation to pursue operational efficiency gains and industry leadership. We are committed to marching towards our goal of high-quality development, delivering excellent business performance on expectations of our partners, and living up to our mission in this great era.

**Li Donglin**

*Chairman*

Zhuzhou, Hunan, the PRC

30 March 2023

# Section III Corporate Profile and Key Financial Indicators

## I. CORPORATE INFORMATION

Chinese name of the Company	株洲中車時代電氣股份有限公司
Chinese abbreviation	時代電氣
English name of the Company	Zhuzhou CRRC Times Electric Co., Ltd.
English abbreviation	Times Electric
Legal representative of the Company	Li Donglin
Registered office of the Company	Times Road, Shifeng District, Zhuzhou
Previous change of registered office of the Company	None
Office address of the Company	Times Road, Shifeng District, Zhuzhou
Postal code of office address of the Company	412001
Website of the Company	www.tec.crrczic.cc
E-mail	ir@csrzic.com

## II. CONTACT PERSONS AND CONTACT METHODS

### Secretary to the Board (Domestic representative for information disclosure)

### Representative of securities affairs

Name	Yan Wu	Xiao Ying
Correspondence address	Times Road, Shifeng District, Zhuzhou	Times Road, Shifeng District, Zhuzhou
Telephone	0731-28498028	0731-28498028
Fax	0731-28493447	0731-28493447
E-mail	ir@csrzic.com	ir@csrzic.com

## III. INFORMATION DISCLOSURE AND PLACE OF INSPECTION

Newspapers and websites designated by the Company for disclosure of A-share annual reports	Shanghai Securities News (www.cnstock.com), China Securities Journal (www.cs.com.cn), Securities Times (www.stcn.com) and Securities Daily (www.zqrb.cn)
Website designated by the stock exchange for disclosure of A-share annual reports of the Company	www.sse.com.cn
Website designated by the stock exchange for disclosure of H-share annual reports of the Company	www.hkexnews.hk
Place where the annual reports of the Company are available	Board Office of Zhuzhou CRRC Times Electric Co., Ltd. at Times Road, Shifeng District, Zhuzhou



# Section III Corporate Profile and Key Financial Indicators



## IV. BASIC INFORMATION OF SHARES/DEPOSITARY RECEIPTS OF THE COMPANY

### (I) Basic information of shares of the Company

Applicable Not applicable

#### Basic information of shares of the Company

Class of share	Place of listing and market	Stock abbreviation	Stock code	Stock abbreviation before change
A shares	Science and Technology Innovation Board of the SSE	Times Electric	688187	Not applicable
H shares	Stock Exchange Main Board	Times Electric	3898	CRRC Times Elec

### (II) Basic Information of Depositary Receipts of the Company

Applicable Not applicable

## V. OTHER RELEVANT INFORMATION

Accountant engaged by the Company (onshore)	Name	KPMG HUAZHEN LLP
	Office address	8th Floor, East Block 2 Oriental Plaza, 1 East Chang An Avenue Dongcheng District, Beijing
	Name of signing accountants	Lin Ying, Lei Jiang
Sponsor institution performing the duty of continuous supervision during the reporting period	Name	China International Capital Corporation Limited
	Office address	27th and 28th Floor, China World Office 2, 1 Jianguomenwai Avenue, Chaoyang District, Beijing
	Name of signing sponsor representatives	Liao Hanqing, Li Yifan <sup>Note</sup>
	Term of continuous supervision	From the listing date of the A Shares to 31 December 2024

Note: Sponsor representative Mr. Li Yifan ceased to act as the sponsor of Times Electric for continuous supervision on 6 January 2023 due to work rearrangement, and China International Capital Corporation Limited determined to assign Mr. Li Xin to continue to perform the continuous supervision in place of Mr. Li Yifan. For details, please refer to the Announcement of Zhuzhou CRRC Times Electric Co., Ltd. on Change of Sponsor Representative (Ann No. 2023-001) disclosed by the Company on the website of the SSE on 7 January 2023.

# Section III Corporate Profile and Key Financial Indicators

## VI. KEY ACCOUNTING DATA AND FINANCIAL INDICATORS IN THE PAST THREE YEARS

### (I) Key Accounting Data

Unit: Yuan Currency: RMB

Key Accounting Data	2022	2021	Increase/ decrease from the corresponding period of last year (%)	2020
Revenue	<b>18,033,778,561</b>	15,121,167,406	19.26	16,033,898,624
Net profit attributable to shareholders of the listed company	<b>2,555,823,375</b>	2,017,694,796	26.67	2,475,454,606
Net profit attributable to shareholders of the listed company after deduction of non-recurring profit or loss	<b>1,998,118,899</b>	1,525,088,834	31.02	1,872,657,360
Net cash flow from operating activities	<b>2,041,235,459</b>	2,150,254,658	-5.07	1,747,348,457

	As at the end of 2022	As at the end of 2021	Increase/ decrease from the end of last year (%)	As at the end of 2020
Net assets attributable to shareholders of the listed company	<b>34,530,700,003</b>	32,620,993,765	5.85	23,852,468,161
Total assets	<b>48,509,554,784</b>	44,150,745,227	9.87	33,865,721,258

# Section III Corporate Profile and Key Financial Indicators



## (II) Key financial indicators

Key financial indicators	2022	2021	Increase/ decrease from the corresponding period of last year (%)	2020
Basic earnings per share (RMB/share)	<b>1.80</b>	1.63	10.43	2.11
Basic earnings per share after deduction of non-recurring profit or loss (RMB/share)	<b>1.41</b>	1.23	14.63	1.59
Weighted average rate of return on net assets (%)	<b>7.61</b>	7.56	Increased by 0.05 percentage points	10.83
Weighted average rate of return on net assets after deduction of non-recurring profit or loss (%)	<b>5.95</b>	5.71	Increased by 0.24 percentage points	8.19
R&D investment as a percentage of revenue (%)	<b>10.24</b>	11.81	Decreased by 1.57 percentage points	11.56

Explanation of key accounting data and financial indicators of the Company in the past three years as at the end of the reporting period

Applicable  Not applicable

## VII. DIFFERENCES IN ACCOUNTING DATA UNDER DOMESTIC AND OVERSEAS ACCOUNTING STANDARDS

### (I) Differences in net profit and net assets attributable to shareholders of the listed company in financial reports disclosed in accordance with international accounting standards and Chinese accounting standards

Applicable  Not applicable

### (II) Differences in net profit and net assets attributable to shareholders of the listed company in financial reports disclosed in accordance with overseas accounting standards and Chinese accounting standards

Applicable  Not applicable

### (III) Explanation of differences between domestic and overseas accounting standards

Applicable  Not applicable

# Section III Corporate Profile and Key Financial Indicators

## VIII. MAIN QUARTERLY FINANCIAL DATA FOR 2022

Unit: Yuan Currency: RMB

	The first quarter (January to March)	The second quarter (April to June)	The third quarter (July to September)	The fourth quarter (October to December)
Revenue	2,544,581,793	3,982,328,947	4,348,687,608	7,158,180,213
Net profit attributable to shareholders of the listed company	340,974,700	529,986,799	691,671,687	993,190,189
Net profit attributable to shareholders of the listed company after deduction of non-recurring profit or loss	211,721,793	406,060,956	520,650,666	859,685,484
Net cash flow from operating activities	-1,276,651,036	833,852,182	813,393,614	1,670,640,699

Explanation of differences between quarterly data and data disclosed in the periodic report

Applicable  Not applicable

## IX. NON-RECURRING PROFIT OR LOSS ITEMS AND AMOUNTS

Applicable  Not applicable

Unit: Yuan Currency: RMB

Non-recurring profit or loss items	Amounts of 2022	Notes (if applicable)	Amounts of 2021	Amounts of 2020
Profit and loss on disposal of non-current assets	<b>4,077,357</b>		-2,072,439	6,440,830
Tax rebate or tax concessions with unauthorised approval or without official approval documents or on an occasional basis				
Government grants recognised through profit or loss for the period (other than government grants which are closely related to the Company's normal business operations, which comply with national policies and can be enjoyed continuously based on a fixed amount or a fixed quantity according to a certain standard)	<b>424,349,163</b>		413,028,381	401,572,368
Gain or loss on debt restructuring				-15,276,390

# Section III Corporate Profile and Key Financial Indicators



Non-recurring profit or loss items	Amounts of 2022	Notes (if applicable)	Amounts of 2021	Amounts of 2020
Gain or loss on changes in fair value from held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities, and investment income from disposal of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities and other debt investment, except for effective hedging transactions that are related to the Company's normal operation	<b>227,070,561</b>		131,688,348	110,826,066
Reversal of the impairment provision for receivables and contract assets which are tested individually for impairment	<b>4,143,729</b>		21,884,298	108,644,750
Other non-operating income and expenses apart from the aforesaid items	<b>9,252,856</b>		14,618,143	59,368,694
Less: Effect of income tax	<b>100,279,247</b>		81,694,697	62,930,541
Effect of non-controlling interests (after tax)	<b>10,909,943</b>		4,846,072	5,848,531
Total	<b><u>557,704,476</u></b>		<u>492,605,962</u>	<u>602,797,246</u>

# Section III Corporate Profile and Key Financial Indicators

Explanations of treating non-recurring profit or loss items defined and listed in the Explanatory Announcement No. 1 on Information Disclosure by Companies Offering Securities to the Public – Non-recurring Profits or Losses as recurring profit or loss items

Applicable Not applicable

## X. ITEMS MEASURED AT FAIR VALUE

Applicable Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Closing balance	Current change	Amount of impact on current profit
Held-for-trading financial assets (structured deposit)	7,579,988,489	<b>6,700,827,160</b>	-879,161,329	229,751,112
Bills receivable measured at fair value	1,172,878,926	<b>1,117,071,219</b>	-55,807,707	–
Trade receivables measured at fair value	1,737,648,741	<b>1,801,617,618</b>	63,968,877	–
Other equity instrument investments	112,400,000	<b>152,673,525</b>	40,273,525	315,100
Total	<u>10,602,916,156</u>	<u><b>9,772,189,522</b></u>	<u>-830,726,634</u>	<u>230,066,212</u>

## XI. EXPLANATION OF PERFORMANCE INDICATORS OF NON-ENTERPRISE ACCOUNTING STANDARDS

Applicable Not applicable

## XII. EXPLANATION OF DELAYED OR EXEMPTED INFORMATION DISCLOSURE FOR STATE AND COMMERCIAL SECRET REASONS

Applicable Not applicable



## Section IV Report of the Directors

### I. DISCUSSION AND ANALYSIS OF OPERATIONS

With the accelerated construction of “eight vertical and eight horizontal” high-speed railway arteries and general-speed railway lines, and commencement of construction of the whole Sichuan-Tibet Railway line, China completed railway fixed asset investment of RMB710.9 billion in 2022; and urban rail transit construction investment stayed at a high level. According to China Association of Metros, in 2022, a total of 1,085.17 kilometers of urban rail transit lines were newly constructed in Mainland China. Under the guidance of the goal of carbon peaking by 2030 and carbon neutrality by 2060, China’s new energy industry embraced a rapid development stage. Pursuant to the National Bureau of Statistics, output of new energy vehicles in China reached 7.003 million in 2022, an increase of 90.5% over the previous year, and pursuant to the National Energy Administration, the installed capacity of wind power and photovoltaic power generation in China increased by 125 million KW, an increase of 23.8% over the previous year. In light of its new development concept, and taking profitability enhancement as the core business task through the year, the staff worked together tenaciously, and delivered remarkable results in 2022.

In the rail transit segment, under the background of subdued investment from State Railway Group in new mobile equipment, the Company took efforts in exploring new products and markets while ensuring product delivery and securing its market position. Among its key technology breakthroughs, the Company developed the high-efficiency lightweight converter technology for CR450, and completed the 10,000-ton heavy-haul railway test for locomotive automatic driving on the east section of Shuohuang Railway. The Company has led the domestic urban rail traction system industry for 11 consecutive years in terms of market share; and secured the first-ever orders in Changchun, Dongguan and other cities, marking a significant progress under the strategy of “city operation”. On maintenance and overseas businesses, the Company achieved sound progress by securing cross-platform maintenance orders, in addition to the overseas orders for locomotives and subways respectively in Europe and the Americas. On urban rail engineering vehicles, the Company maintained an industry-leading market share, secured the first order for electric passenger train detection system, and earnestly solved the worldwide challenge of high-altitude tunnel operation with self-developed dual-power rail grinding vehicles. The signal business continued to grow, as witnessed by new LKJ orders, smooth progress of the signal system renovation project for Changsha Metro Line 2, and the independently developed FAO signal system which completed the field test and verification in Ningbo, taking a key step in engineering application. In addition, the Company secured orders for new products including power supply system, vehicle bottom patrol robot and test bench.

Regarding new industries, the Company’s IGBT model business established a clear leadership with the largest share in domestic rail transit and power grid markets. Besides, the Company achieved a rapid breakthrough in the new energy market with a substantial growth in annual device delivery volume, and made a breakthrough in the 7th generation ultra-fine groove STMOS technology. Capacity of the phase II semiconductor production line continued to increase, and the semiconductor phase III project advanced rapidly. Pursuant to NE Times, the new energy passenger vehicle electric drive system business achieved a better ranking into the top six industry players in terms of annual sales volume, and successfully developed the 250kW high-pressure oil-cooled SiC automobile electric drive. On sensor business, 19 new production lines were constructed, leading to a further expansion of production capacity and a substantial increase in delivery volume. The Company secured new orders of more than 10GW for photovoltaic inverters in China; achieved bulk delivery and secured new orders for mining truck electric drive system, wind power converter and central air conditioning converter; successfully delivered the first fully Chinese-made main drive hot tandem rolling project in China; passed the safety review for driverless mining trucks; and rolled out the world’s first 55 cubic metre super-large electric shovel inverter system based on permanent magnet direct drive technology. On marine equipment business, the Company secured a number of new orders in domestic market, accelerated the electrification of deep-sea ROV, and achieved commercial operation of the “Shuilong” shallow water trencher. Moreover, the Company won the bid for the domestic first bulk order for supplying IGBT hydrogen production power supply units to Three Gorges Group, and completed development and certification of energy storage products.

Looking into the future, the Company is confident to capitalise on its industrial advantages to consolidate its industry position and grow its business, seeking to create greater value for its shareholders.



## Section IV Report of the Directors

### II. THE COMPANY'S PRINCIPAL BUSINESS, OPERATING MODELS, INDUSTRY LANDSCAPE, AND RESEARCH AND DEVELOPMENT DURING THE REPORTING PERIOD

#### (I) Principal Business and Major Products or Services

As a leading traction converter system supplier in China's rail transit industry, the Company has integrated capabilities in R&D, design, manufacturing, sales and services, and is committed to becoming a preferred supplier of comprehensive solutions for rail transit equipment in the world.

With a focus on technology R&D, the Company upholds the philosophy of "high-quality, high-efficiency operation" and the strategy of "concentric diversification" to gradually develop non-rail transit markets on the basis of consolidating the rail transit business, so as to create new growth drivers.

The Company is mainly engaged in the R&D, design, manufacturing and sales of rail transit equipment products and the provision of related services, and has an industrial structure of "components+ systems + complete machines". Its products mainly include rail transit electrical equipment (primarily traction converter systems of rail transit vehicles), railway engineering machinery and communication signal systems. Meanwhile, the Company actively expands to industries other than rail transit, and conducts business in the fields of power semiconductor devices, industrial converter products (mainly including wind, solar and hydrogen storage equipment and photovoltaic engineering converters, mining truck electric drive, air-conditioning converters, metallurgical converters and ship converters), electric drive systems for new energy vehicles, sensor devices, marine equipment, etc. After years of R&D efforts and technology accumulation, the Company has developed a complete independent intellectual property rights system, and has become a high-tech enterprise with independent intellectual property rights in the fields of electrical system technology, converter and control technology, industrial converter technology, train control and diagnosis technology, railway engineering machinery technology, power semiconductor technology, communication signal technology, data and intelligent application technology, traction power supply technology, inspection and testing technology, deep-sea robotic technology, NEV electric drive system technology, and sensor technology.

Since its establishment, the Company's principal business has not changed significantly.

#### (II) Major Operating Models

In terms of procurement mode, the Company adopts the model of "unified management, professional centralized management and separation of procurement duties", establishes a unified set of measures, methods and procedures for procurement, performs centralized procurement and promotes a unified procurement platform, so as to ensure procurement quality, reduce costs and increase efficiency.

In terms of production model, the Company adopts the planning management model of determining production by sales. Under this model, the Company formulates sales plans according to sales orders and previous sales results, maintains a safety inventory based on daily demand assessment and coordination of production, supply and sales, and then determines the production plan. Based on the principle of "lean, efficient and dynamic management and comprehensive balance", the Company has built an integrated, flexible, efficient and intelligent production planning system suitable for its development.





## Section IV Report of the Directors

In terms of service model, the Company has established a global after-sales service network covering key customers, key regions and key products. With a three-level service management model underpinned by “service headquarters, service offices, and service stations”, the Company promptly responds to customer needs and ensures that customers can obtain after-sales services, technical support, quality feedback and complaint consultation at any time.

In terms of sales model, the Company obtains orders through market-oriented public bidding, competitive negotiation, single-source procurement by customers, and customer inquiry, and produces and sells products according to customer needs. Currently, the Company mainly adopts the direct sales model to sell products.

In terms of R&D model, the Company adheres to a “strategy-driven” and “market-oriented” approach (two-wheel drive), and determines research projects and carries out scientific research work from the perspectives of strategy and market. By introducing the concept of IPD and project triangle, the Company extends technology innovation to market research and product planning and to the life cycle management of mass-produced products, thus realizing the whole process management of products from strategic planning, scientific research and development to commercialization.

### (III) Industry Landscape

#### 1. *Development stage, basic characteristics, and main technical barriers of the industry*

The Company is mainly engaged in the R&D, design, manufacturing and sales of rail transit equipment products and the provision of related services. According to the National Economic Industry Classification (GB/T4754-2017) of the National Bureau of Statistics, the Company belongs to the “C37 railway, shipbuilding, aerospace and other transportation equipment manufacturing industry”; according to the Guidelines for Industry Classification of Listed Companies (2012 Revision) issued by the China Securities Regulatory Commission, the Company belongs to the “C37 railway, shipbuilding, aerospace and other transportation equipment manufacturing industry”; according to the Classification of Strategic Emerging Industries (2018) (NBS Order No. 23) issued by the National Bureau of Statistics, the Company belongs to the “2.4 Rail transit equipment industry of 2. High-end equipment manufacturing industry”. The Company’s rail transit equipment mainly includes rail transit electrical equipment, rail engineering machinery and communication signal systems, which belong to the sub-sectors under “2.4 Rail transit equipment industry of 2. High-end equipment manufacturing industry”.

The Company’s emerging equipment includes power semiconductor devices, industrial converter products, electric drive systems for new energy vehicles, sensor devices and marine equipment, some of which are used in the field of rail transit. In 2022, revenue from emerging equipment business accounted for 28.54% of the Company’s total revenue, which was not high despite a constant year-on-year increase, so the Company belongs to the “2.4 rail transit equipment industry of 2. high-end equipment manufacturing industry” stated in the Classification of Strategic Emerging Industries (2018).

In the rail transit equipment industry which is characterized by high core technology barriers, customers have very high requirements for the safety, reliability and sustainability of products and services provided, and enterprises need to have strong anti-risk capabilities. Driven by core technologies, the Company will continue to innovate and develop smarter and greener high-end equipment based on such application scenarios as railways, urban rail transit, new energy, mining, ports and metallurgy. After years of accumulation, the Company’s self-developed core technologies, national innovation platform and multidisciplinary professional capabilities spanning from components to complete machines represent the main barriers for the rail transit industry and high-end industrial equipment industry.



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### **2. Analysis of the Company's industry position and its changes**

The Company is a leading traction converter system supplier in China's rail transit industry, and can produce traction converter systems for various vehicle models in the fields of locomotives, bullet trains and urban rail. The Company has a full spectrum of traction converter system products and a dominant market share. Take the urban rail sector as an example, according to public information on bidding in the urban rail traction converter system market, the Company has ranked first in the domestic market share for eleven consecutive years from 2012 to 2022.

In the field of railway engineering machinery, Baoji CRRC Times, a subsidiary of the Company, is one of the three manufacturers of road maintenance machinery designated by China State Railway Group ("China Railway"). With about 77 administrative licenses, it can produce more than 50 kinds of products in multiple series, including heavy railway vehicles, catenary vehicles, large road maintenance machinery, and urban rail transit engineering vehicles, and continuously expands to the passenger line and urban rail markets.

In the field of power semiconductors, the Company has built industrial bases for 6-inch bipolar devices, 8-inch IGBTs and 6-inch silicon carbide, and possesses a complete set of independent technologies for chips, modules, components and applications. The full spectrum of high-reliability IGBT products manufactured by the Company have broken the monopoly of foreign companies in core devices for rail transit and UHV transmission. Currently, the Company is trying to solve the problem of domestic production of core devices for new energy vehicles and new energy power generation equipment in China. Pursuant to NE Times, in 2022, the Company ranked among the top four in the industry in terms of installation of power modules in passenger vehicles with a market share of 12.4%.

With a focus on technology R&D, the Company adheres to the "concentric diversification" strategy and vigorously develops non-rail transit industries on the basis of consolidating rail transit business to create new growth points. In the field of industrial converters, the Company occupies a leading position in mining truck electric drive, air-conditioning inverter and other sub-sectors, and is developing new energy equipment business covering photovoltaic inverters, wind power converters, energy storage converters, hydrogen production power source and other new energy equipment businesses. In particular, photovoltaic inverters recorded a rapid growth and ranked first in bid invitation for three months internally, and the Company secured photovoltaic inverter business orders of 10GW throughout the year, rising to the top four among peers in the domestic market. Over the year, more than 167,000 sets of new energy vehicle electric drive system were installed, demonstrating a rapid increase in both installation quantity and market share, and ranked among the top six in the domestic market. The Company has the largest market share of sensor devices in China's rail transit industry, and ranks among the top players in the new energy vehicle, wind power and photovoltaic sectors.

The Company will constantly improve user experience and strengthen differentiated competitive advantages based on customer needs. Through continuous innovation in business, technology and management, the Company will provide intelligent, safe, green and comfortable high-end equipment for the society, and become a preferred supplier of integrated electrical system solutions in the transportation and energy fields.



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### **3. Development of new technologies, new industries, new business types and new models during the reporting period and their future development trends**

In 2022, the world steered into a new era amid turbulences and transformations, as witnessed by the accelerating once-in-a-century evolution of political landscape, and supply chain disruptions globally. With the conclusion of the 20th CPC National Congress, China embarked on a new journey of Chinese-style modernisation towards the historic goal of national rejuvenation. Under an ambitious new energy blueprint defined in the report of the “20th CPC National Congress”, ongoing implementation of the Outline for the Construction of a Transportation Power, the “carbon peak and neutrality” strategy and other national initiatives will bring new opportunities to the Company in developing rail transit and new energy equipment business.

The Outline for the Construction of a Transportation Power explicitly proposes to promote intelligent and digital transportation equipment, vigorously develop intelligent transportation, and advocate low-carbon and eco-friendly development. For the development of advanced rail transit equipment, China aims to develop a new generation of green, intelligent, high-speed and heavy-duty rail transit equipment system, provide users with integrated solutions across the life cycle of the system, and build a world-leading modern rail transit industry. Meanwhile, in the context of the carbon peak and neutrality strategy, the state vigorously improves railway transport capacity under the “highway to railway” initiative, and hence heavy-duty freight locomotives still have great growth potential; as a core part of the New Infrastructure Plan, intercity high-speed railway/urban rail transit has ushered in attractive development opportunities; market opportunities abound in the urban rail industry which is driven by smart technologies and integrated innovation; the rail transit maintenance market is huge in size with a significant growth momentum.

China’s “carbon peak and neutrality” strategy is a major decision made based on the international and domestic environment, and of great significance for building an ecological civilisation in China, leading global climate governance and realising the Two Centenary Goals. In the context of “carbon peak and neutrality”, China’s new energy power generation industry is booming, especially in the “wind power, photovoltaic power, energy storage, and hydrogen power” market segments. The new energy market has great prospects and unlimited business opportunities. The key to industrial development is to work with partners to build an end-to-end technology ecosystem with deep integration of wind, solar, energy storage, hydrogen and electronic control technologies. In addition, driven by the “carbon peak and neutrality” policy, the low-carbon energy transformation will fuel the rapid development of electric drive system for new energy vehicles, semiconductor devices and sensors.

#### **(IV) CORE TECHNOLOGIES AND R&D PROGRESS**

##### **1. Core technologies and their advancedness and changes during the reporting period**

Since its establishment, the Company has been deeply engaged in the field of traction converter systems of rail transit vehicles, thus developing outstanding scientific and technological innovation strength. On this basis, the Company follows the strategy of “concentric diversification” to extend to related fields. Through independent research and development, the Company has developed a range of core technologies including electrical system technology, converter and control technology, industrial converter technology, train control and diagnosis technology, railway engineering machinery technology, power semiconductor technology, communication signal technology, data and intelligent application technology, traction power supply technology, inspection and testing technology, deep-sea robotic technology, new energy vehicle electric drive system technology, and sensor technology. As at 31 December 2022, the Company had 3,588 valid domestic and foreign registered patents to protect its core technologies. Moreover, it has signed confidentiality agreements and non-compete agreements with the relevant personnel to ensure that the core technologies are not disclosed.

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The core technologies owned by the Company mainly include but are not limited to the following:

No.	Core technologies		Overview, advancedness and characteristics of technology
1	Electrical system technology	System integration technology	By establishing a scientific system of demand engineering, system stratification, system decision-making, system optimisation and system-component interaction, the Company has made breakthroughs in the research on integrated technologies such as asynchronous traction system, permanent magnet synchronous traction system, maglev traction system, electromechanical system integration and industrial equipment, forming a leading R&D system in China's rail transit industry. The traction converter systems developed by the Company are widely applied to locomotives, bullet trains, urban rail transit, maglev trains, etc.
2	Electrical system technology	System simulation technology	The Company has made breakthroughs in multi-level and multi-physical modeling technology covering operating environment, system, components, devices, etc. Based on multi-level virtual testing, verification and assessment technology covering software-in-the-loop, hardware-in-the-loop, power-in-the-loop and system-in-the-loop testing, the Company has conducted research on multi-objective optimisation design of traction converter systems with optimal performance in cost, energy consumption, power density and reliability and key components, thus comprehensively improving traction converter system products in terms of technology, performance, quality and cost
3	Converter and control technology	Overall converter technology	The Company has developed core key technologies such as power module application technology, system cooling technology, advanced converter control technology, lightweight design technology, safety design technology, circuit topology and simulation technology, structural strength simulation and optimisation technology, human factor engineering, EMC and environmental-friendly technology, and formed a serialised converter product platform that meets the application requirements of high-power locomotives, high-speed EMUs and urban rail transit vehicles
4	Converter and control technology	Converter topology technology	By developing key converter technologies such as multi-level converter technology, multiple series-parallel or cascade technology, bidirectional energy transmission technology, and common DC bus distributed coordination technology, the Company can flexibly configure the optimal topologies for different application fields and different power levels. With such topologies, relevant converter products are developed and applied to meet the application needs in the rail transit and industrial converter fields
5	Converter and control technology	Electric drive control technology	The Company has made breakthroughs in advanced motor control technology based on direct torque control, motor control without speed sensor, converter control technology based on pole constraint, and artificial intelligence technology based on deep learning, realised intelligent prediction and diagnosis of and protection from motor and converter faults, and created a high-performance control platform represented by TEC4000, which enables it to provide integrated electric drive control solutions for rail transit, industrial converter and other related fields
6	Converter and control technology	Power semiconductor device application technology	The Company has developed such key technologies as device application characteristic technology, drive and control technology, overall module technology and module reliability, and built a stable and reliable multi-voltage IGBT device application technology platform. With a mature module product platform and drive pulse control platform for rail transit and industrial transmission, the Company can meet the needs of new topology application based on converter systems and optimal application of new power semiconductor devices, and conduct low-cost and high-reliability research based on product needs to support rail transit and industrial converter sectors

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No.	Core technologies	Overview, advancedness and characteristics of technology
7	Converter and control technology Industrial converter technology	Focusing on four major industries – mining, metallurgy, HVAC and new energy, the Company has developed such key technologies as multi-device, multi-power-module and multi-converter-unit parallel integration technology, high-power multi-level converter technology, grid-connected control technology based on high and low-voltage ride-through capability of weak power grid, technology for high dynamic response control of ultra-high power electric excitation synchronous motor, anti-vibration technology in bad road conditions, high-performance adhesion control technology on wet and slippery multi-state roads, extreme cold and high-altitude environment adaptation technology, and multi-refrigerant self-optimising temperature control. On this basis, the Company has built an industrial converter and new energy converter technology and product platform with independent intellectual property rights and covering high, medium and low voltages and a capacity range of 0.1-4,000kVA, proposed and successfully applied a full-process positive product cost and quality control model, and developed a completely independent technology and industrial chain spanning from IGBT devices, power modules and converter devices to industrial system solutions, so as to provide full life cycle solutions based on customer value creation
8	Train control and diagnosis technology Network control and diagnosis technology	The Company has developed high security, strong real-time, high reliability, multi-network integration and intelligent human-computer interaction technologies for train network control and diagnosis, and built a DTECS-1 network control platform with MVB/WTB technology, a DTECS-2 modular platform with real-time Ethernet technology, a DTECS-G general chassis platform, and a serialised high-performance train display platform, and taken the lead in promoting the industrial application of new technologies and products such as real-time Ethernet and multi-network integration. Its products have been widely used in locomotives, bullet trains, urban rail and other vehicles
9	Train control and diagnosis technology Train control multi-system integration technology	The Company has developed such key technologies as deterministic Ethernet communication, virtualisation, high-performance computing, high-level security, integrated control and integrated display, designed a unified new integrated train control system architecture to break the boundaries of on-board subsystems and lay a foundation for the optimisation and intellectualisation of vehicle functions, and developed a complete set of technology and solution capabilities, so that it can provide users with solutions tailored for different application scenarios
10	Train control and diagnosis technology General train coupling application technology	The Company has developed train coupling control technology based on radio, GSM-R, LTE-R, WIFI and other wireless communication networks, solved the problems of difficulty in laying connection cables, cable loosening and aging, interface incompatibility and differences in control characteristics in flexible train formation, and realised coordinated control of multiple locomotives of different types and at different locations, covering a number of formation modes including 2+0, 1+1, 2+2, etc. By widely applying the technology in 10,000-ton and 20,000-ton heavy-haul trains and leveraging its AC-DC and internal electric mixing capabilities, the Company has formed a long-distance and zero-distance wireless connection control platform to provide heavy-duty and flexible formation solutions

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No.	Core technologies		Overview, advancedness and characteristics of technology
11	Railway engineering machinery technology	Railway engineering machinery system integration technology	The Company has developed R&D capabilities for railway vehicles, lifting railway vehicles, rail flat cars, catenary maintenance vehicles, rail flaw detection vehicles, rail grinding vehicles, integrated operation vehicles, and comprehensive inspection vehicles, and built a professional vehicle and system platform capable of fast detection, efficient operation and multiple functions. Its products have been widely applied in rail engineering machinery for railway and urban rail transit industries
12	Railway engineering machinery technology	Basic railway engineering machinery technology	With a focus on professional technical areas such as structural strength, vibration and noise reduction, industrial modeling, and new material application, the Company has applied strength and fatigue simulation analysis technology to enable the optimal design of key system components such as vehicle body, frame, bogie and brake; completed the research on sound insulation and noise reduction technology, shock absorption technology and lightweight technology, and realised the coordinated integration of spatial innovation and structural modeling, the unified assembly of vehicle body, floor and driver's desk, and the integration and standardisation of electromechanical and hydraulic components, thus improving the modular design of vehicle systems
13	Railway engineering machinery technology	Power transmission technology for rail engineering machinery	The Company has developed such power transmission technologies as internal combustion drive, electric drive and hybrid drive. The internal combustion drive, electric drive and hybrid power system products developed by the Company have been widely applied in railway dual-power grinding vehicles, metro dual-power grinding vehicles, heavy railway vehicles, tractors, catenary vehicles and other rail engineering machinery
14	Railway engineering machinery technology	Rail engineering machinery operation and control technology	The Company has developed control technology for line tamping and stable screening, rail flaw detection technology, rail grinding control technology, high-precision railway geometric parameter measurement technology, rail laser alignment technology, spike identification and positioning technology, intelligent catenary inspection technology, and comprehensive line inspection technology, and built a distributed digital network control platform for large road maintenance machinery



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No.	Core technologies		Overview, advancedness and characteristics of technology
15	Power semiconductor technology	IGBT chip technology	Through in-depth research on IGBT chip cell technology, terminal technology and back technology, the Company has developed a high-voltage planar gate IGBT chip technology system characterised by U-shaped groove and soft punch-through and a low-voltage trench gate IGBT technology system underpinned by two generations of technologies – “groove + soft through” and “fine groove”, built a professional 8-inch IGBT chip manufacturing platform with a full set of distinctive advanced technologies covering buffer layer, ultra-thin film, high-reliability semi-insulating passivation film, and global and local life control, and fully mastered the technologies for the design and manufacturing of high-voltage and low-voltage IGBT and FRD chips with independent intellectual property rights. Its full range of chip products are widely used in the rail transit, power grid and new energy fields
16	Power semiconductor technology	Silicon carbide chip technology	The Company has developed such key process technologies as high-reliability and low-interface defect gate oxynitridation, low-damage and high-aspect-ratio trench etching, submicron lithography, high-temperature selective ion implantation, and high-activation-rate rapid ion activation annealing, and power chip architecture design technologies such as active region gate oxygen electric field shielding, JFET region doping, carrier storage, and high-reliability, high-efficiency space electric field modulation field ring terminal design, mastered the technologies for the design and manufacturing of MOSFET and SBD chips with core independent intellectual property rights, and built a professional silicon carbide chip manufacturing platform with a full set of advanced silicon carbide technologies compatible for 4-inch and 6-inch chips. Its full-voltage MOSFET and SBD chip products can be used in new energy vehicle, rail transit, industrial transmission and other fields
17	Power semiconductor technology	Advanced packaging and component technology	The Company has developed such design technologies as multi-chip parallel current sharing design technology, efficient thermal management technology, and multi-physical field coupling simulation technology, built advanced packaging capabilities including large-area welding, copper terminal ultrasonic bonding, sintering, DTS, wire bonding and interface strengthening, established a complete set of standards for assessment of materials such as ceramic liners, and developed 750V-6,500V IGBT devices and 750V-3,300V SiC devices. Relevant products are widely used in the fields of locomotives, bullet trains, urban rail, flexible power transmission, mining frequency conversion, wind power, photovoltaic power, and high-end industrial equipment
18	Power semiconductor technology	Reliability technology	Through the research on reliability technology for power semiconductor devices including service life modeling, multi-stress test simulation design and accelerated testing, the Company has built a reliability assessment technology system for power semiconductor devices covering IGBT, SiC and bipolar devices across a full range of voltages. The technology system includes: stress-strain simulation modeling and reliability test design technology based on single physics and multiphysics, power semiconductor device reliability assessment technology for new packaging structures and materials such as double-sided welding, crimping and integrated packaging, service life modeling technology for power cycle and temperature cycle tests, and failure analysis technology system based on key performance testing technology of power semiconductor devices and micro-interface sample preparation and characterisation technology

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No.	Core technologies		Overview, advancedness and characteristics of technology
19	Communication signal technology	Main line railway signal system technology	The Company has developed automatic train operation technology, safety computer technology, on-board database technology, communication technology, fault diagnosis and warning technology and information system technology for main line railway. Such technologies have been successfully applied to many projects including main line railway LKJ2000 monitoring device, LKJ-15 monitoring system, ETCS train control system, vehicle-ground wireless transmission, etc.
20	Communication signal technology	Urban rail transit signal system technology	The Company has developed such professional technologies as signal integration technology, automatic train operation technology, interlocking technology, communication technology, health management technology, and fault diagnosis and warning technology for urban rail transit signal system, as well as ATP/ATO technology for urban rail transit signal system, mastered a full set of independent urban rail signal system technology, which has been successfully applied to signal engineering projects such as Changsha Metro and Foshan Metro
21	Communication signal technology	High-speed maglev signal system technology	The Company has developed long-distance, multi-zone, multi-power supply mode, complex safety system design and integration and other key technologies, and established a technology development platform for high-speed maglev signal system covering safety control model, vehicle-ground wireless communication, simulation and multi-system cooperative control
22	Data and intelligent application technology	Data processing technology	For the intelligent application of data in the rail transit and industrial converter industries, the Company can collect, store, process, classify, merge, sort, convert, analyse and retrieve data on the core products produced by the Company and other third-party systems in the industry, and ultimately provide data services for upper application systems. The construction of a big data platform has been completed. Based on the big data platform, the Company has carried out technical research on data integration, data governance, data processing, data storage and data sharing, and delivered more than 35 sets of big data platform products in the urban rail and railway fields
23	Data and intelligent application technology	On-board PHM technology	The Company has developed key technologies for fault diagnosis of capacitors, contactors, reactors, sensors, dirty filters and batteries based on online parameter identification and big data analysis, and pioneered methods for fault diagnosis of traction motor bearings, stator insulation and couplings based on the existing control signals of converters in the industry. Such technologies and methods have been applied to the state perception, fault diagnosis and warning, state evaluation, service life prediction and health management of key train systems and components, providing strong support for the condition-based repair of traction systems
24	Data and intelligent application technology	Autonomous driving technology	The Company has developed such key technologies as optimal operation planning with multi-objective constraints, precise follow-up control, smooth operation of heavy-haul trains, full-scene operational control of freight trains, simulation of heavy-haul train operation environment, and autonomous driving system integration, established a safe, stable, punctual and energy-efficient automatic driving technology system, and formed a locomotive automatic driving product platform covering electric power to internal combustion, general load to heavy load, freight to passenger transport, and main line to station. As of now, the platform has been applied in vehicles by a number of railway companies including CR Xi'an, CR Taiyuan, CR Guangzhou, Baoshen Railway and Jingshen Railway, and has reached a normal operating state with a cumulative safe operation mileage of more than 1.5 million kilometers



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No.	Core technologies		Overview, advancedness and characteristics of technology
25	Data and intelligent application technology	Intelligent sensing technology	The Company has developed such key technologies as high-performance edge computing platform technology, radar sensing technology, visual sensing technology and multi-sensor fusion, and built an intelligent sensing application platform for multiple fields and all working conditions. The technologies have been widely applied in the fields of obstacle detection, driver behavior recognition, pantograph catenary condition monitoring, vehicle maintenance safety monitoring, unmanned mining trucks, and intelligent train driving
26	Data and intelligent application technology	Data and application security technology	The Company has developed system security technologies based on data encryption and decryption, software reliability protection and device access verification, completed the research on application technologies in terms of data storage security, transmission channel security, system platform security and application software security, realised such core functions as the encrypted storage of on-board core data, the safe vehicle-ground data transmission, the identity authentication and access control of ground application system, and database security, and built a defense security system covering data encryption, access control, security isolation, audit tracking, software protection, etc. Such technologies have been widely applied to operation and maintenance-related products and passed a security risk assessment, greatly improving the security of operation and maintenance products
27	Traction power supply technology	Traction power supply converter technology	The Company has developed key technologies of AC/DC traction power supply converter system such as modularisation and miniaturisation, adaptability to all environments, high frequency and high efficiency, and resistance to lightning strikes and short-circuit currents, realised power supply and scheduling and power quality control and improvement for AC/DC traction power supply system, and built a technical system for power electronisation of traction power supply system. The technologies have been widely applied to the rectifier, energy feedback and bidirectional converter fields regarding DC traction power supply system, as well as the in-phase power supply, power quality governance and other related fields regarding AC traction power supply system
28	Traction power supply technology	Traction power supply control technology	The Company has developed such key technologies of traction converters as traction network voltage self-adaptation, switching frequency self-adjustment, efficiency and reliability optimisation, and system monitoring and coordinated protection, and realised such functions as distributed dynamic reactive power compensation, imbalance suppression, low-order harmonic compensation, regenerative energy storage, transfer and utilisation, full-automatic phase separation, in-phase power supply, etc.
29	Inspection and testing technology	Traction and control testing technology	The Company has developed such technologies for rail transit traction system as ground joint debugging technology, high-power and high-frequency isolation testing technology, low-frequency power supply testing technology, and low-speed motor efficiency testing technology, built a traction and control testing platform covering rail transit, new energy and industrial converters, and established capabilities in vehicle ground simulation testing, power grid adaptability testing, field environment simulation testing, etc.
30	Inspection and testing technology	Electromagnetic compatibility (EMC) test technology	The Company has built a test verification system for electronic and electrical products covering anti-electromagnetic radiation interference, anti-static interference, and anti-surge and burst interference, and the on-site EMC test platform which meets the needs of quantitative testing of the electromagnetic radiation levels inside and outside of vehicles and the track interference current on rail lines in operation, realises the unification of the test environment and the application environment, and further improves the EMC performance of rail transit electrical equipment such as converter, network and power supply equipment

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No.	Core technologies		Overview, advancedness and characteristics of technology
31	Inspection and testing technology	Reliability test technology	The Company has developed a test platform based on HALT & HASS, material screening and verification, accelerated life test, and field test and analysis, and formed a reliability test standard system, which meets the needs of product fault excitation, on-site fault recurrence, weak link identification, product indicator verification, and product measurement profile acquisition, and represents the Company's core competitiveness in the fields of material control and selection, product indicator verification, on-site troubleshooting, and product design defect identification
32	Inspection and testing technology	Network and communication test technology	The Company has comprehensive train Ethernet and on-board bus testing capabilities, covering physical layer, link layer and application layer, and provides inspection services for the industry. In terms of Ethernet, the Company has overcome the difficulties in protocol conformance testing of TTDP/TRDP, a train proprietary Ethernet protocol, independently designed standardised TTDP/TRDP network source, and built a comprehensive proprietary Ethernet protocol conformance testing platform. The Company designs field train test solutions which are widely used in the testing of network products for standard EMUs and urban rail lines, and strives to improve the quality of network communication and ensure the smooth operation of trains in the industry
33	Deep-sea robotic technology		The Company has developed technologies for electric propulsion of underwater robots and underwater remote high-voltage DC power transmission and distribution, established platforms for three types of products, i.e. underwater remote control operation robots, underwater trenching and cable laying robots and underwater mining equipment, and created an integrated series of operational-level marine and underwater equipment with independent intellectual property rights
34	New energy vehicle electric drive system technology		The Company has developed integrated design technologies for high-power DC/DC bidirectional converters, chargers, on-board battery chargers, generators and motor inverter units, established small, medium and high-power platforms for battery electric passenger cars and hybrid passenger cars, and built a technology development system covering single electric control, single motor, all-in-one drive and dual electric control. Its products have been widely applied in various models in the electric/hybrid power passenger car fields
35	Sensor technology		With the technical characteristics of "intelligence, miniaturisation and high reliability", the Company has created sensors and measuring devices with higher intelligence, higher integration, higher reliability, and higher consistency in mass production, developed such key technologies for power sensors, speed sensors, pressure and temperature sensors, large machinery sensors and industrial sensors, and realised a shift from the development of sensor components to the provision of sensor measurement system solutions. Its products are widely applied in rail transit, industrial converter and other related fields

The Company carries out targeted technological innovation according to the innovation and development trends of the industry, and is dedicated to the commercialisation and industrialisation of core technologies to better meet market needs. The comprehensive application of core technologies covers rail transit electrical equipment (primarily traction converter systems of rail transit vehicles), rail engineering machinery and communication signal systems as well as industries other than rail transit such as power semiconductor devices, industrial inverters, wind power, photovoltaic power, electric drive systems for new energy vehicles, sensor devices, marine equipment, etc. The development of the Company's core businesses, including product design, integration, manufacturing and delivery, fully depends on the Company's core technologies.

During the reporting period, there were no material changes in core technologies.

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## National science and technology awards

✓Applicable    Not Applicable

Award Name	Year of Award	Item	Award Level
National Science and Technology Progress Award	2010	Research, Development, Popularisation and Application of Ultra-high Power Electronic Device Technology	Second Prize
National Science and Technology Progress Award	2014	Research, Development and Application of Serialised High-power AC Drive Electric Locomotives Based on an Independent Technology Platform	Second Prize
National Technology Invention Award	2015	Key Technology and Application of Traction Control for High-speed and Heavy-haul Trains	Second Prize
National Science and Technology Progress Award	2018	A Complete Set of Technology and Equipment for Operation Safety Assurance of High-speed Railway Pantograph-Catenary System	Second Prize
National Technology Invention Award	2019	Key Technology and Application of High Voltage and High Current IGBT Chips	Second Prize

## Accreditation of specialised and new “Little Giant” enterprises and manufacturing “Individual Champions”

✓Applicable    Not Applicable

Accredited to	Accredited Title	Year of Accreditation	Product Name
Ningbo CRRC Times Transducer Technology Co., Ltd.	National Specialised and New “Little Giant” Enterprise	2021	Not applicable
Zhuzhou National Engineering Research Centre of Converters Co., Ltd.	National Specialised and New “Little Giant” Enterprise	2021	Not applicable
Hunan CRRC Signal Co., Ltd.	Individual Champions Product	2021	LKJ device

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## 2. R&D achievements during the reporting period

During the reporting period, the Company completed development, installation and on-board commissioning of the core products of 3,000 HP heavy-haul hybrid locomotive, and pioneered the three-section linear control technology for intermediate voltage of hybrid locomotives in the world; developed the longitudinal dynamics simulation technology on locomotive automatic driving for 20,000-ton heavy-haul trains, and completed the test on 10,000-ton heavy-haul line; successfully launched the standard 6MW energy scheduling system based on “renewable energy utilisation + energy storage” in the sectioning post of project owners; launched the demonstration application of the patrol robot of intelligent train inspection system in Wuxi Metro Line 2; and completed the field test and verification of the self-developed FAO full-automatic signal system in Ningbo, marking a mission-critical step in engineering application. Also, the Company achieved unmanned mining trucks “without safety officer”, thus realising full-process unmanned operation in “loading, transporting and unloading”; achieved wide application of 225kW photovoltaic inverters; expanded its energy storage outdoor converters to 1,725kW, 1,575kW, 1,375kW and 1,250kW power levels, with key performance indicators superior to the national standard; completed the development and empirical test of the world’s first high-power IGBT power supply unit for hydrogen generation; solved the worldwide challenge of high-altitude tunnel operation with self-developed dual-power rail grinding vehicles; completed trial production and commissioning of integrated maintenance operation vehicle for public works, electric service and power supply; made breakthroughs in the 7th generation ultra-fine groove ST-MOS technology, enabling significantly higher current density; developed key technologies on 250kW automobile high-pressure oil-cooled SiC electric drive insulation and electrical corrosion of motor bearings; officially applied the 4,500-metre self-developed ROV in scientific expedition activities; and applied the digital fluxgate technology for the first time in BMS of new energy vehicles and leakage current detection of charging piles. The Company was granted 443 new patents for its core technologies and main products, bringing the total number of valid patents granted to the Company to 3,588, of which over 50% are invention patents. The Company focused on technological innovation and undertook 30 research projects supported by national, provincial and ministerial government agencies and industry authorities, and took the lead or participated in the development of 31 national and industry standards.

### List of intellectual property rights obtained during the reporting period

	Increase in the year		Cumulative number	
	Number of applications	Number of approvals	Number of applications	Number of approvals
Invention patent	441	305	4,412	2,048
Utility model patent	109	127	1,796	1,371
Appearance design patent	15	11	251	169
Software copyright	19	19	373	373
Others	—	—	—	—
<b>Total</b>	<b>584</b>	<b>462</b>	<b>6,832</b>	<b>3,961</b>

## Section IV Report of the Directors

### 3. R&D investment

Unit: RMB Yuan

	Current year	Last year	Change (%)
Expensed R&D expenditure	<b>1,761,914,969</b>	1,690,047,967	4.25
Capitalised R&D expenditure	<b>84,753,817</b>	95,322,935	-11.09
Total R&D expenditure	<b>1,846,668,786</b>	1,785,370,902	3.43
Percentage of total R&D expenditure in revenue (%)	<b>10.24</b>	11.81	Decreased by 1.57 percentage points
Percentage of capitalised R&D expenditure (%)	<b>4.59</b>	5.34	Decreased by 0.75 percentage points

#### Reason for significant changes in total R&D expenditure over the previous year

Applicable Not Applicable

#### Reasons for significant changes in the proportion of capitalised R&D expenditure and explanation of rationality

Applicable Not Applicable

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## 4. Projects under development

✓Applicable    □Not Applicable

Unit: RMB0'000

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
1	Development and Application of Intelligent Train Inspection System	2,336	298	1,930	Completed the development of intelligent train inspection system and its acceptance and delivery at Wuxi Metro. The vehicle bottom patrol robot was applied in Wuxi Metro Line 2, Xuzhou and other metro lines.	To develop a set of intelligent train inspection system for metro vehicles in urban rail according to their daily inspection requirements, including vehicle bottom intelligent patrol robot, 360° image detection system, wheelset dynamic detection system and intelligent train inspection equipment integrated data management system, enabling automatic detection of defect, displacement, foreign body and other fault states of key visible components at the bottom, side and roof of trains.	The project will help develop a big data system for vehicle operation and maintenance, form a multi-dimensional big data system composed of on-board data, operation and maintenance data and advanced maintenance data, and realise the integration and sharing of data from in-transit vehicle monitoring, vehicle storage dynamic detection, vehicle operation and maintenance, and intelligent patrol robot detection, which can fill the gap of the Company's lack of intelligent inspection equipment in the vehicle operation and maintenance market.	Rail transit electrical equipment

# Section IV Report of the Directors

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
2	Integrated Maintenance Vehicle Development	2,820	352	2,710	Completed trial production and commissioning of integrated maintenance operation vehicle for public works, electric service and power supply; completed the development of medium-sized tamping vehicles and the delivery to railway operators; completed trial production of the prototype of integrated operation vehicle.	To develop a medium-sized road maintenance vehicle suitable for integrated catenary, tunnel and electrical signal maintenance, enabling three-dimensional operation of public works, electric service and power supply in the same skylight.	Currently, public works, power supply and electric service have their respective facility maintenance systems where maintenance agencies and maintenance tools are independent of each other and operation tasks are scattered. This project is to promote the integration of public works, power supply and electric service through integrated management of maintenance and production. Given the absence of such products in China, successful development of the product will provide equipment support for the reform of integrating public works, electric service and power supply.	Railway engineering machinery

# Section IV Report of the Directors

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
3	Development of the Second Generation Metro Grinding Vehicle	1,141	34	1,094	Completed prototype development and assembly, static and dynamic commissioning and turnout grinding test of metro grinding vehicles.	To develop a new type of dual-power metro grinding vehicle that meets China's Stage IV emission standards and has an axle load of not more than 13 tons under the modular and lightweight design concept.	At present, China's dual-power metro grinding vehicles have 16 grinding heads with low operation efficiency. The independently developed dual-power metro grinding vehicle under this project, which has axis control function and is compatible with 16 and 20 grinding heads, will revolutionise metro grading vehicles from the power source perspective.	Railway engineering machinery
4	Key Technology Research and Product Development of Next-generation 400 km/h EMU	1,432	542	1,368	Completed prototype trial production and test of traction converter, which meets the design requirements on efficiency and lightweight.	To develop miniaturised and lightweight converter systems suitable for rail transit vehicles, master a complete set of technologies for design, manufacturing and testing of "devices, modules and converts", and complete the development of traction converter based on new semiconductor power devices.	State Railway Group has started the research on the next generation of EMUs, and put forward top-level requirements such as ultra-high speed (operating speed of 400 km/h), energy saving, comfort, etc. The operating indicators of EMU at 400 km/h are equivalent to those of the existing "Fuxing" EMU at 350 km/h.	Rail transit electrical equipment



# Section IV Report of the Directors

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
5	Development of Electric Traction System for State Railway Group's 3,000 HP Heavy-haul Hybrid Locomotive	825	103	715	Completed prototype trial production and test of electric traction system products (including traction/ auxiliaries/charging/ control/cooling integrated converter cabinet, power battery, microcomputer network control system, etc.), production of installation-ready products, installation and on-board commissioning, and ex-factory delivery with locomotive.	To conduct research on hybrid traction converter technology and power battery charging and discharging technology based on State Railway's 3,000 HP heavy-haul hybrid locomotive scheme to capture the 3,000 HP hybrid locomotive market.	Globally, hybrid locomotives are basically in the stage of prototype trial production. 3,000 HP heavy-haul hybrid locomotives will be the main model of a new generation of energy-saving and eco-friendly shunting locomotives in China in the future. The Company leverages its experience in the development of hybrid locomotives and its expertise in permanent magnet traction systems to design the underlying system based on its self-developed electrical system platform.	Rail transit electrical equipment
6	Development of Electrical System for Fuxing Plateau Dual-Power Source Centralised EMU	1,452	212	1,391	Completed small batch production for EMUs and type test in conjunction with EMUs, which realised passenger carrying operation on Lhasa-Nyingchi Railway and Lasa-Rikaze Railway.	To develop an electric traction system for power centralised EMUs on Lhasa-Nyingchi Railway and Lasa-Rikaze Railway, including traction converters for internal combustion vehicles and electric power vehicles, auxiliary/train power supply system, and microcomputer network control system, and to complete the design, the construction drawings, the production of prototype and installation-ready products, and the installation and on-board commissioning, so as to meet the installation and application requirements on EMU.	The successful development of the Fuxing plateau dual-power source EMU has filled some technology gaps in the industry. The EMU reaches the world leading level, has excellent performance in safety, economy, energy conservation and environmental protection, and has taken the lead in gaining application experience in plateau and high altitude areas.	Rail transit electrical equipment

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No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
7	Development of Full Power Wind Power Converter Platform	361	111	345	Completed the development of product application data and control software as well as prototype test.	To complete the development of a low-voltage full power wind power converter platform, and interpedently design a 4MW low-voltage full power converter prototype.	The Company will make a system reinforcement scheme that covers 3-10MW requirements; conduct research on the development of low-cost 4MW grid-side and generator-side water cooling module platform; and develop control algorithms and grid-side control technology for full-power motors in the wind power industry, with a view to making converters more grid-friendly.	Industrial converter products
8	Development of Railway Traction Power Supply Scheduling System Platform	1,220	305	1,167	Completed the development of the standard 6MW energy scheduling system based on renewable energy utilisation and energy storage, which has been successfully put into operation in Sanfengou sectioning post with an average daily energy saving of 15,000 kWh; completed the third-party type test of the energy scheduling system; completed the engineering design specification of railway power supply products, the corresponding simulation model and the release of common parts.	To complete the planning and development of a 3-9MVA energy scheduling device platform; develop a brand-new energy scheduling device based on the needs of project owners and apply it on the Datong-Qinhuangdao Railway.	The Company will establish a standard library/gallery of key components and system including water-cooled converter of traction power supply energy scheduling device for electrified railway, enrich the product series, build a standardised, serialised and general traction power supply scheduling product platform, develop energy scheduling technology based on energy storage and utilisation, and develop a complete set of technologies, equipment and standards for electrified railway energy scheduling, with product performance indicators reaching the international leading level.	Rail transit electrical equipment

# Section IV Report of the Directors

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
9	Research and Application of Mining Truck Unmanned System	2,987	638	2,432	<p>Developed a set of mining dump truck unmanned system with completely independent intellectual property rights, which has been successfully applied in Shenyang Xiwan Open-pit Coal Mine. Completed the drive-by-wire transformation for mining dump trucks and the renovation of auxiliary operation vehicles, and realised multiple-shovel and multiple-formation intelligent scheduling, path planning and multi-system cooperative safety protection, which have been in safe and normal production for 15 months. Also developed a set of unmanned mine infrastructure construction and operation standards, which have passed the safety review by a panel of academicians and experts, and achieved three breakthroughs: the unmanned operation project with the largest mileage, the highest output and the largest formation for safe and normal rock operation by large-tonnage mining truck in China.</p>	<p>To develop a mining dump truck unmanned system with independent intellectual property rights, conduct research on hardware technology platform, and complete the design and development of core hardware and software. The system will support multiple models, enable cluster scheduling, planning and safety protection in mining areas, and has functions that can fully meet mine production and operation requirements to achieve industrialisation.</p>	<p>Through the research and application of the driverless technology platform, the Company will carry out special research on three subsystems: vehicle-mounted automatic driving system, ground management and monitoring system, and data communication system, with a view to rapidly improving comprehensive capabilities of its team. In addition, the Company will leverage its established advantages to complete the transplantation of the self-developed control platform, so as to seize the market to the greatest extent and ensure that the technology is advanced.</p>	<p>Rail transit electrical equipment</p>

# Section IV Report of the Directors

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
10	Development of Train Autonomous Operation Control System	1,829	422	1,670	Completed the integration test of TACS system; completed the submission of the results of the whole certification process, pending for obtaining the SIL4 safety certificate.	Train autonomous operation control system (TACS) is an innovative mobile closed-loop train control system which is evolving for better safety, efficiency, flexibility and economical performance. A set of train autonomous operation control system, which is developed based on vehicle-to-vehicle communication by applying 5G, big data, active identification, track environment awareness and other technologies, according to the functional requirements of full-automatic unmanned driving and through optimised system architecture and fine management on rail line resources, can realise autonomous trackside resource management, autonomous train interval protection, autonomous operation adjustment and full-automatic operation based on train operation plan and real-time positioning.	Through the direct "vehicle-vehicle" communication link and control structure, the Company will transplant the trackside core control functions of the traditional CBTC system to trains based on train self-regulation and with the characteristics of active train path and train self-protection, so as to lower the number of trackside equipment, optimise the system structure, reduce the transmission delay of train control information, improve the system control accuracy, shorten the train tracking interval, and improve railway passing capacity. This will greatly improve the operation efficiency and transport capacity of railway lines, save construction and operation costs, and substantially improve safety, intelligence, automation and networking of trains.	Communication signal systems

# Section IV Report of the Directors

No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
11	Development of Electric Control and Flat Wire Motors Based on Double-sided Water Cooling Modules	738	112	689	Completed the development and prototype verification of electric control and flat wire motors based on double-sided water cooling modules; grasped key manufacturing processes such as wire forming, twisting, welding and coating; realised localisation of key equipment for mass production; obtained independent intellectual property rights for all core technologies; and established full industrialisation capability for flat wire motors.	To master and patent the winding structure design suitable for mass production, master key manufacturing processes such as wire forming, twisting, welding and coating, realise localisation of key equipment for mass production, and obtain independent intellectual property rights for key processes and core equipment, so as to lay a foundation for large-scale market-oriented application of flat wire motors in the future.	The Company will master the structural design method of flat wire stator suitable for mass production and the mass production processes of wire forming, twisting, welding and coating, in a drive to realise the localisation of key equipment.	New energy vehicle electric drive systems
12	Development of Centralised 1+X Modular Inverter	600	408	408	Carried out market demand analysis, completed technical scheme design, detailed technical design and multiple rounds of technical review, and entered the prototype trial production stage.	To develop a centralised 1+X modular inverter which meets the requirements of Class A inverter in GB/T37408-2019 Technical Requirements for Grid-Connected Inverters of Photovoltaic Power Generation, which is composed of 1+X independent 1,100 kW modular inverters meeting the standard requirements and connected in parallel at the low voltage side of the back-end step-up transformer of the inverter to satisfy the requirements of mass production and commercial operation.	Through direct parallel connection of 1+X modular inverters, it can meet the requirements of 1.1 MW – 4.4 MW solar array, 1.15 times output overload and the highest conversion efficiency of not less than 99% in photovoltaic power stations, reaching the advanced level in the industry.	Industrial converter products

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No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
13	Product Development of High Power Density 3,300V IGBT Module	697	548	548	Completed the final product design with up-to-standard performance, improving power density of modules by 30%.	To develop a new generation of 3,300V high power density module to replace the original voltage grade module, reduce the on-state voltage drop and improve the power density.	The module has reached the advanced level in the industry, providing support for the power density improvement and lightweight development of rail transit converter.	Power semiconductor devices
14	Development of Key Technologies and Platform of Photovoltaic Power Oriented U Series IGBT	1,432	1,134	1,134	Completed the development of chip and module; the small batch of samples delivered for evaluation basically achieved the target of electrical parameters and were recognised by customers.	To develop U-series IGBT module for photovoltaics with reliability verified by relevant special standard tests.	Enriching the product spectrum of the Company, and supporting new energy development including photovoltaics to reach the international advanced level.	Power semiconductor devices
15	Research on SiC Permanent Magnet Integrated Electric Drive System Technology of Urban Rail	525	292	292	Completed product scheme, technical and construction design as well as physical production; in preparation for test verification.	To develop a new SiC permanent magnet integrated electric drive system comprising converter, control device and motor with light weight and low noise to meet the performance requirements of A/B car of metro 1,500V system.	The exploration and upgrading of the new design scheme of SiC + permanent magnet mechatronics can provide engineering application support for mass production of standard modular rail transit products.	Rail transit electrical equipment
16	Design and Research of High Speed Maglev Traction Power Supply System and Development of Hybrid Maglev System	519	280	280	Completed scheme design of high-speed maglev traction power supply system, traction control system, high-speed maglev suspension electromagnet with high floating weight ratio, and maglev ground positioning and speed measurement system; and completed the construction and communication of traction control system platform and functional verification of sub-components.	To complete the design of high-speed maglev traction power supply system, traction control system, high-speed maglev suspension electromagnet with high floating weight ratio, and maglev ground positioning and speed measurement system, and realise the construction and functional verification of traction control system platform.	Establishing traction power supply system platform and traction control system platform, simulating train running according to the schedule in the fully automatic driving operation scenario, and verifying control logic and performance of the control unit.	Rail transit electrical equipment

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No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
17	Development of Automobile-grade Sensitive Chip and Sensor	1,208	562	562	Completed the first round of automobile-grade chip packaging and performance tests, carried out chip optimisation design and the second tape-out; completed sample-A trial production and test of wheel speed, temperature and tire pressure sensor modules.	To complete the automobile-grade programmable linear Hall ASIC chip which can meet the technical requirements specified by the system, develop speed, temperature and pressure sensor modules and promote automobile-grade chip to reach the application state.	Solving the "bottleneck" of automobile-grade Hall chips, catching up with the international advanced level for performance indicators, passing the reliability verification and reaching the state of wide application. Benchmarking the wheel speed, tire pressure and temperature sensors against mainstream brands, developing competitive products, and laying the foundation for the subsequent market breakthrough of various kinds of automobile sensors.	Automobile sensing devices
18	Research on Engineering Application of Intelligent Driving Technology of Shenhua AC Drive Locomotive	660	434	434	Confirmed the satisfaction of technical conditions by the project owner, completed the review of technical scheme, and entered the site implementation stage: completed the preparation steps for delivering Shenhua locomotive equipment.	To ensure continuous, reliable, safe and automatic operation of heavy-haul trains based on the application experience of intelligent driving technology. To further optimise the intelligent driving technology of heavy-haul trains through the extended test of intelligent driving of heavy-haul freight electric locomotive, providing a good foundation and demonstration for the popularisation and application of intelligent driving system of heavy-haul trains in the field of heavy-haul railways.	Deepening the research of locomotive intelligent driving technology, solving the problems in wide engineering application of existing locomotive intelligent driving technology, and meanwhile carrying out wide application of locomotive automatic driving products and shunting safety protection products for the first time, laying a foundation for subsequent standardisation and mass promotion of locomotive automatic driving products.	Rail transit electrical equipment

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No.	Item	Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
19	Development of TAH3-SiC High Frequency Auxiliary Transformer Product Platform	216	149	149	Completed the scheme, technology and construction design of SiC auxiliary transformer, and completed prototype production for 180kVA SiC high frequency auxiliary transformer.	To develop miniaturised and lightweight auxiliary converter suitable for rail transit vehicles, master a complete set of technologies for design, manufacturing and testing of "SiC devices, modules and converts", and complete the development of auxiliary converter based on SiC semiconductor power devices.	Developing a pedigree of auxiliary converters with a capacity of 75kVA – 250kVA; conducting research on the platform of SiC auxiliary transformer products with low cost and high indicators (high integration, small size, light weight and high efficiency), and promoting performance indicators to reach the international leading level.	Rail transit electrical equipment
20	High-pressure and High-power Silicon Carbide Oil-cooled Electric Drive Assembly	854	547	547	Completed the prototype design and trial production of high-pressure oil-cooled electric drive assembly.	To develop the prototype of 250kW motor-controller-gearbox integrated electric drive system, and complete the type inspection. To develop overall technology of the electric drive system assembly that reaches the international advanced level. To master the key technologies such as integration of motor-controller-gearbox integrated electric drive system through the development of the drive motor system assembly.	Mastering the complete scheme of product design, development and verification of high-pressure oil-cooled electric drive assembly, and realising the independent design of high-pressure oil-cooled electric drive assembly.	New energy vehicle electric drive systems
Total	/	<u>23,852</u>	<u>7,483</u>	<u>19,866</u>	/	/	/	/

## Explanations

None



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## 5. R&D personnel

Unit: RMB0'000 Currency: RMB

	Basic information	
	Amount for the current period	Amount for the same period last year
Number of R&D personnel of the Company (persons)	2,822	2,728
Percentage of R&D personnel in the workforce of the Company (%)	35.30	35.28
Total remuneration of R&D personnel	84,544.02	78,074.55
Average remuneration of R&D personnel	29.96	28.62

Breakdown of R&D personnel by education		Number of personnel
Education level		
Doctorate degree		105
Master degree		1,024
Bachelor degree		1,590
Junior college degree		103

Breakdown of R&D personnel by age		Number of personnel
Age group		
Aged below 30 (exclusive of 30)		712
Aged 30-40 (inclusive of 30 and exclusive of 40)		1,549
Aged 40-50 (inclusive of 40 and exclusive of 50)		448
Aged 50-60 (inclusive of 50 and exclusive of 60)		113
Aged 60 and above		0

Note: The statistics on R&D personnel and their remuneration cover domestic entities included in the consolidated statements of the Company and exclude overseas subsidiaries and branches.

Reasons for the material changes in the composition of R&D personnel and the impact on the future development of the Company

Applicable  Not Applicable

## 6. Other explanations

Applicable  Not Applicable



# Section IV Report of the Directors

## III. ANALYSIS OF CORE COMPETITIVENESS DURING THE REPORTING PERIOD

### (I) Analysis of Core Competitiveness

Applicable Not Applicable

#### 1. *Leading market position*

As a leading traction converter system supplier in China's rail transit industry, the Company provides traction converter system products that cover a variety of models in the fields of locomotives, bullet trains and urban rail transit, breaks the international monopoly, realises domestic substitution of the core train system, and takes the lead in domestic market. As of the end of 2022, its high-speed railway and locomotive traction converter system products have been leading in the domestic market for many years. In the field of urban rail transit, according to RT Rail Transit, the Company won open bids of traction converter system orders for 2,138 of 4,264 metro vehicles in 2022, representing 50.14% of the total and leading to the Company's largest market share in the domestic market for 11 consecutive years from 2012 to 2022. In the field of railway engineering machinery, Baoji CRRC Times, a subsidiary of the Company, is one of the three manufacturers of road maintenance machinery designated by State Railway Group. With about 77 administrative licenses, it can produce more than 50 kinds of products, and continuously expands to the passenger line and urban rail markets.

Furthermore, the Company rode on the opportunities in emerging equipment to make breakthroughs, ranking ahead in a range of sectors. On power modules for passenger cars, the Company ranked among the top four in terms of installations with a market share of 12.4% (source: NE Times). On photovoltaic inverters, the Company won bids of 10GW during the year, ranking among the top four in the domestic industry (source: Solarbe.com). On electric drive system for new energy vehicles, the Company posted rapid growth both in installation rank and market share, ranking among the top six in the domestic industry (source: NE Times). On sensor devices for rail transit, the Company consistently ranked No. 1 in term of domestic market share, while staying in the forefront across energy vehicle, wind power and photovoltaic sectors.

#### 2. *Innovation-driven technological capabilities*

The Company is deeply engaged in the field of traction converter systems of rail transit vehicles, and has developed outstanding technological innovation strength. On this basis, the Company follows the strategy of "concentric diversification" to extend to related fields. The Company has built a well-established R&D system with continuous innovation capabilities in product design, manufacturing and testing. The Company has set up the Technical Committee to provide decision-making support for scientific research and technology development, introduced CMMI, IPD and other management systems and concepts, and established a R&D model featuring a synergy between industry product application technology and innovative cutting-edge technology. With strong capabilities in scientific research experiment, testing and detection, the Company has established a detection and testing system consisting of more than 20 laboratories including electrical system laboratory, motor laboratory, large vibration laboratory, reliability laboratory and TSN network consistency laboratory, covering research tests, type tests and ex-factory tests in various business areas.



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The Company has 6 national technological innovation platforms, 7 provincial technological innovation platforms, and 1 postdoctoral workstation. The Company has been granted a total of 3,588 valid patents at home and abroad, including 2,048 invention patents; and led or participated in the formulation of 48 international standards and 149 domestic standards (including national standards, industry standards and group standards). In aggregate, the Company has obtained approvals for 31 national programs (including 27 national key research and development programs), and received a number of important awards including National, Provincial and Ministerial Science and Technology Awards, Science and Technology Award of China Electrotechnical Society, China Machinery Industry Science and Technology Award, Science and Technology Award of China Railway Society, and China Quality Award. This demonstrates its industry-leading strength in comprehensive scientific and technological innovation. In 2022, the Company passed the review and acceptance by the Ministry of Science and Technology on its National Key Laboratory for Power Semiconductor and Integrated Technology, and was successfully granted the qualifications for the Engineering Research Center for Energy Conservation Control and Evaluation of Railway Industry, and the Engineering Technology Research Center for Autonomous Train Operation Control System of Hunan Province.

### **3. Highly reliable quality and service advantages**

The Company always regards product quality as the foundation of survival. To comply with the changing management requirements of the international railway market and continuously improve the management ability and level of its quality system, the Company has passed a series of international quality management system certifications including ISO9001, EN15085 CL1, ISO/TS 22163, and IATF16949 certifications, has obtained CRCC certification for relevant railway products, and conducts quality control of products in the production process. In addition, the Company has established a life-cycle quality management and assurance system covering design, development, procurement, manufacturing, marketing and services. Specifically, the Company identifies improvement opportunities through process review, process inspection, internal and external audit, regular management review, irregular quality inspection, data analysis and process improvement, and assigns relevant responsibilities to ensure that the improvement goals are achieved. The well-established quality management system and the whole life cycle quality management model ensure the high reliability and efficiency of products. The Company was awarded the title of Industrial Enterprise Quality Benchmarking Enterprise by the Ministry of Industry and Information Technology in 2013, and won the second China Quality Award in 2016. The Company always upholds the quality concept of “quality-driven era”, implements rigorous quality and safety control measures, and has built a company-wide quality culture emphasizing that “quality is the lifeline and the supreme responsibility and honor of the Company”.

In after-sale service, the Company established the “Greenshade Service” brand in 2004 and registered the only “Greenshade (綠蔭)” service trademark for after-sale service in the domestic rail transit industry. Upholding the tenet of “fast, effective and satisfactory services”, the Company provides customers with around-the-clock, one-stop quality onsite service and continues to create value for customers. In addition, in line with strategic maintenance planning of State Railway Group and in an ongoing effort to expand and optimise its maintenance coverage, the Company has established maintenance branches in Qingdao and Luoyang, as well as a number of local maintenance bases across the country.



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### **4. Synergy across the whole industry chain**

Based on “two rails” and centering on “technology” and “market”, the Company has built presence in diverse industries and formed a complete industry chain comprising “basic components, devices and systems, complete machines and engineering”. The Company’s main products include rail transit electrical equipment (primarily traction converter systems of rail transit vehicles), railway engineering machinery, communication signal systems, power semiconductor devices, etc. In addition, leveraging its technologies, channels, brands and other advantageous resources in the field of rail transit equipment, the Company actively expands to industries other than rail transit, and comprehensively improves product strength through ongoing lean production, intensified process control, supplier management, etc. The complete industry chain structure and the growing emerging equipment business not only bring the Company profit growth drivers, but also serve as an important guarantee for the Company to master the whole industry chain resources and build a supplier system with self-developed core technologies and effective cost control.

### **5. Industry leading high-caliber personnel**

The Company has a group of talents who master the core technologies, high-end skills and management expertise in the industry. Their professional backgrounds cover the fields of mechanical electronics, electrical engineering, automatic control, power electronics and materials, and their specialties are highly complementary. Among them, the R&D team is led by academicians of Chinese Academy of Engineering and consists of 2,822 engineering and technical professionals, accounting for 35.3% of the total workforce. More than one-third of them have a graduate degree or above. The excellent team has laid a solid foundation for the Company to develop key technologies and maintain a technical edge.

In addition, the Company’s management team has extensive industry experience in the field of rail transit equipment manufacturing. Mr. Ding Rongjun, the former Chairman, has more than 38 years of experience in the rail transit industry. He was awarded the 7th Zhan Tianyou Railway Science and Technology Award and Achievement Award in 2005, was selected as an academician of the Chinese Academy of Engineering in 2011, and was named a Figure to Pay Tribute to for the 50th Anniversary of Urban Rail Transit in China in 2019. The traction converter technology developed by Mr. Ding Rongjun has been widely applied in rail transit vehicles, and he has led the team to build a semiconductor technology system with independent intellectual property rights. Li Donglin, the current Chairman of the Company, and Mr. Liu Ke’an, the Vice Chairman of the Company, also have more than 28 years of experience in the rail transit industry. Mr. Li Donglin received the Locomotive Medal of the All-China Railway Federation of Trade Unions and the title of Outstanding Entrepreneur of Hunan Province in 2011, and won the first prize of National SOE Management Innovation Achievements in 2017. Mr. Liu Ke’an received the title of Outstanding Entrepreneur in the National Electronic Information Industry and the Hunan Provincial Governor Quality Award in 2014, and was awarded the title of Contemporary Inventor in 2020 and the title of “National Outstanding Entrepreneur for 2021-2022” in 2022. Over the years, the management team with rich industry experience has led the Company to accurately seize industry development opportunities and achieve leapfrog growth.

### **(II) Events which have a Serious Impact on the Company’s Core Competitiveness, Impact Analysis and Countermeasures During the Reporting Period**

Applicable Not Applicable



# Section IV Report of the Directors

## IV. RISK FACTORS

### (I) Risk of Making No Profits Yet

Applicable Not Applicable

### (II) Risk of a Sharp Decline or Loss in Earnings

Applicable Not Applicable

### (III) Core Competitiveness Risk

Applicable Not Applicable

As a railway transit equipment supplier, the Company is required to launch constant research into new technologies and products, and invest tremendous manpower, capital and resources based on market demands and industry technological improvements. Given the uncertainties in technological research and development, in case that the Company misjudges the development trends of technologies and products, suffers a delay in technological research and development, fails to achieve the expected research and development results, or encounters difficulties in transformation of technological results, the Company's research and development of new technologies and products may end up as a failure, or the marketed new products cannot generate the expected revenue for the Company, which will have an adverse impact on the operating performance of the Company.

**Countermeasures:** The Company will keep abreast of industry technological dynamics both at home and abroad, gain insight into market trends, reinforce the interconnection between technological R&D and market operation, strengthen market research, improve innovation capability, expedite the independent research and development of core technologies and enhance product quality.

### (IV) Operating Risk

Applicable Not Applicable

The Company's overseas operations are exposed to risks in the increasingly complicated world economic environment, driven by various factors such as international political emergencies and changes in international relations. The lingering headwinds such as shortage of overseas human resources, tight component supply overseas and the rising project costs might have a negative impact on the existing overseas business operation of the Company. In addition, the Company's overseas projects featuring long execution cycle and strict technical requirements typically follow international standards and local requirements and involve multiple stakeholders including general contractors, project owners and suppliers, thus posing higher requirements on project execution, progress of works and project management.

**Countermeasures:** The Company will strengthen the identification of risk areas of its overseas projects in execution, implement rational qualitative and quantitative risk analysis, and develop an overall risk response plan; continue to improve its overseas marketing model and explore to diversify overseas market participation models; and establish a long-term tracking mechanism for market and project information, and maintain customer relationships effectively.



## Section IV Report of the Directors

### (V) Financial Risk

Applicable Not Applicable

With the progress of our globalization strategy, the Company continues to enhance efforts in market development, export of products and overseas mergers and acquisitions, which results in various risks arising from fluctuations in interest rates. For instance, international economic turbulence and unpredictable fluctuation of the foreign exchange market will lead to risks such as the increase in loss from assets and liabilities denominated in foreign currencies held by the Company, sales and procurement transactions settled in foreign currencies, as well as increase in cost. Meanwhile, due to the reverse change of the market, forward foreign exchange locking will increase the cost of purchasing foreign exchanges to a certain extent.

**Countermeasures:** The Company will strengthen the risk prevention awareness of relevant personnel and pay constant attention to the trend of foreign exchange rate movements; establish a whole-process exchange rate risk management mechanism, formulate and implement appropriate foreign exchange risk management plans; and adopt foreign exchange risk management scheme to lock in foreign exchange risks in the early stage of foreign currency business.

### (VI) Industry Risk

Applicable Not Applicable

Amid the evolving national new energy subsidy policies and the intensifying price competition in parts of new energy vehicles, domestic and foreign giants as well as relevant companies might leverage their scale advantages and low-cost strategies to seize market share, compete for the existing and potential customers, and gain market share from others. Moreover, the accelerating evolution of new energy vehicle market, together with more and more new entrants to market competition and the increasingly shorter technology upgrade cycle, will pose higher requirements on technology iteration speed and R&D capabilities for the next-generation products.

**Countermeasures:** The Company will proactively collect information on national policies and industry dynamics, strengthen research on market trends and operation strategies, establish a market risk early warning mechanism, and improve its market operation strategy; and strengthen technological innovation to enhance product competitiveness continuously.



## Section IV Report of the Directors

### (VII) Macro Environment Risk

Applicable Not Applicable

Amid the heightened international trade protectionism, the intensifying international competition in the industry leads to more uncertainties and uncontrollable factors across international markets. Domestic entities of the Company need to purchase certain raw materials from overseas and sell to overseas markets, and the Company has also set up a number of operating entities overseas for local business operation and development. The Company's overseas operations are influenced by international trade policies and the political and economic environment of local countries, which might lead to higher product costs and more difficulties in securing orders.

**Countermeasures:** The Company will keep abreast of local political, economic and industry information and dynamics of the countries and regions where it operates overseas business, strengthen risk assessment over overseas projects, and effectively preclude risks while conducting business in the overseas market.

### (VIII) Risks Related Depository Receipts

Applicable Not Applicable

### (IX) Other Material Risks

Applicable Not Applicable

Based on its two-winged strategy on rail transit and new energy, the Company has expanded its operations to the new energy industry. For expansion into fully competitive industries, due to uncertainties in industry competition, customer acceptance, product technology, quality reliability and cost control, etc., the Company is exposed to risks in the inability to meet product and technical requirements of project owners and slower-than-expected development, launch and delivery of new products, which may make it difficult to realise intended development goals in the new industries. In addition, as the new industries evolve rapidly, the increasingly complicated business portfolio of the Company would put forward higher requirements on its management ability for diversified operations.

**Countermeasures:** The Company will keep informed of industry dynamics, continue its efforts in benchmarking against industry leaders, and conduct research into and learn from them. Besides, the Company will deploy adequate resources to scientifically venture into new industries, stringently control risks relating to project quality, safety, progress and cost, attach importance to process management and control, and sharpen the focus on risk events. Furthermore, the Company will strengthen its management ability for diversified operations, step up the reforms, accelerate the digital transformation, deepen and utilise proven management practices, further stimulate vitality of the organisation, and improve its operation and management efficiency.



# Section IV Report of the Directors

## V. PRINCIPAL OPERATIONS DURING THE REPORTING PERIOD

During the reporting period, the Company achieved operating revenue of RMB18.034 billion, representing a year-on-year increase of 19.26%, primarily attributable to an increase in revenue from the emerging equipment business; net profit attributable to the parent company of RMB2.556 billion, representing a year-on-year increase of 26.67%, primarily due to the increase in revenue; and basic earnings per share of RMB1.80, representing a year-on-year increase of 10.43%, and weighted average return on net assets of 7.61%, representing a year-on-year increase of 0.05 percentage points. As at the end of the reporting period, our total assets amounted to RMB48.510 billion, representing an increase of 9.87% from the beginning of the period, and equity attributable to owners of the parent company of RMB34.531 billion, representing an increase of 5.85% from the beginning of the period, primarily attributable to an increase in revenue.

### (I) Principal Business Analysis

#### 1. Analysis of changes in relevant items in income statement and cash flow statement

Unit: Yuan Currency: RMB

Item	Amount for the current period	Amount for the same period last year	Change (%)
Revenue	<b>18,033,778,561</b>	15,121,167,406	19.26
Cost of sales	<b>12,139,166,025</b>	10,019,418,812	21.16
Selling expenses	<b>1,098,172,993</b>	1,050,331,762	4.55
Administrative expenses	<b>889,981,843</b>	813,021,020	9.47
Finance costs	<b>-190,899,478</b>	-73,805,176	N/A
R&D expenses	<b>1,761,914,969</b>	1,690,047,967	4.25
Net cash flow from operating activities	<b>2,041,235,459</b>	2,150,254,658	-5.07
Net cash flow from investing activities	<b>-2,262,987,012</b>	-6,013,742,315	N/A
Net cash flow from financing activities	<b>-591,383,415</b>	6,974,927,470	-108.48

Reasons for changes in revenue: revenue increased by 19.26% from the corresponding period last year, primarily due to an increase in revenue from the emerging equipment business of RMB2.575 billion.

Reasons for changes in cost of sales: cost of sales increased by 21.16% from the corresponding period last year, primarily due to a corresponding increase in revenue. The growth rate of cost of sales exceeded that of revenue, primarily due to a change in product sales mix.





## Section IV Report of the Directors

Reasons for changes in selling expenses: selling expenses increased by 4.55% from the corresponding period last year, primarily due to an increase in provision made for product quality guarantee as a result of the increase in revenue.

Reasons for changes in administrative expenses: administrative expenses increased by 9.47% from the corresponding period last year, primarily due to an increase in, among other things, employee salaries, amortization and depreciation expenses and facilities maintenance expenses.

Reasons for changes in finance costs: net finance income increased by 158.65% from the corresponding period last year, primarily due to an increase in interest income earned from the certificate of deposits purchased by the Company.

Reasons for changes in R&D expenses: R&D expenses increased by 4.25% from the corresponding period last year, primarily due to an increase in employee salaries, amortization and depreciation expenses and technical service fees.

Reasons for changes in net cash flow from operating activities: net cash flow from operating activities decreased by 5.07% from the corresponding period last year, basically remaining the same from last year.

Reasons for changes in net cash flow from investing activities: changes in net cash flow from investing activities were primarily due to redemption of wealth management products upon maturity.

Reasons for changes in net cash flow from financing activities: changes in net cash flow from financing activities were primarily due to receipt of proceeds from the initial public issuance of A shares in the previous year.

Detailed explanation of the significant changes in the Company's business types, profit composition or profit sources in the current period

Applicable Not Applicable



## Section IV Report of the Directors

### 2. Revenue and cost analysis

Applicable Not Applicable

In 2022, the Company achieved revenue of RMB18.034 billion (2021: RMB15.121 billion), representing a year-on-year increase of 19.26%.

#### 1. Revenue from the emerging equipment products achieved leapfrog growth

In 2022, the Company achieved revenue of RMB5.147 billion from emerging equipment products, representing a year-on-year increase of 100.09% as compared with RMB2.572 billion in 2021. In particular, revenue from power semiconductor devices reached RMB1.835 billion, representing a year-on-year increase of 71.83% as compared with RMB1.068 billion in 2021; revenue from industrial converter products reached RMB1.374 billion, representing a year-on-year increase of 160.20% as compared with RMB528 million in 2021; revenue from electric drive systems of new energy vehicles reached RMB1.093 billion, representing a year-on-year increase of 139.75% as compared with RMB456 million in 2021; revenue from marine equipment reached RMB437 million, representing a year-on-year increase of 50.21% as compared with RMB291 million in 2021; and revenue from sensor devices reached RMB409 million, representing a year-on-year increase of 77.68% as compared with RMB230 million in 2021.

#### 2. Revenue from the rail transit equipment products maintained growth amid stability

In 2022, the Company achieved revenue of RMB12.656 billion from the rail transit equipment products, representing a year-on-year increase of 3.30% as compared with RMB12.252 billion in 2021. In particular, revenue from the rail transit electrical equipment business reached RMB9.766 billion, representing a year-on-year increase of 3.38% as compared with RMB9.447 billion in 2021; revenue from the rail engineering machinery business reached RMB1.703 billion, representing a year-on-year decrease of 19.93% as compared with RMB2.127 billion in 2021; revenue from the communication signal business reached RMB657 million, representing a year-on-year increase of 140.01% as compared with RMB274 million in 2021; and revenue from other rail transit equipment business reached RMB530 million, representing a year-on-year increase of 31.27% as compared with RMB404 million in 2021.

#### 3. Revenue from other businesses recorded a decline

In 2022, other businesses achieved revenue of RMB230 million, representing a year-on-year decrease of 22.59% as compared with RMB297 million in 2021, primarily due to a year-on-year decrease in revenue from resale of materials.

In 2022, the Company achieved gross profit of RMB5.895 billion, representing a year-on-year increase of 15.54% as compared with RMB5.102 billion in 2021, primarily due to a corresponding increase in revenue.

# Section IV Report of the Directors

(1) Results of principal operations by industry, product, region and sales model

Unit: Yuan Currency: RMB

Principal operations by industry						
By industry	Revenue	Cost of sales	Gross profit margin (%)	Change in revenue from the previous year (%)	Change in cost of sales from the previous year (%)	Change in gross profit margin from the previous year (%)
Rail transit equipment and extension business	18,033,778,561	12,139,166,025	32.69	19.26	21.16	Decreased by 1.05 percentage points

Principal operations by product						
By product	Revenue	Cost of sales	Gross profit margin (%)	Change in revenue from the previous year (%)	Change in cost of sales from the previous year (%)	Change in gross profit margin from the previous year (%)
Rail transit equipment business	12,656,446,123	8,128,334,673	35.78	3.30	5.29	Decreased by 1.21 percentage points
Emerging equipment business	5,147,312,108	3,823,934,299	25.71	100.09	85.93	Increased by 5.66 percentage points
Others	230,020,330	186,897,053	18.75	-22.59	-23.04	Increased by 0.48 percentage points

Principal operations by region						
By region	Revenue	Cost of sales	Gross profit margin (%)	Change in revenue from the previous year (%)	Change in cost of sales from the previous year (%)	Change in gross profit margin from the previous year (%)
Mainland China	17,228,783,533	11,526,054,368	33.10	19.33	22.05	Decreased by 1.49 percentage points
Other countries or regions	804,995,028	613,111,657	23.84	17.92	6.47	Increased by 8.19 percentage points

Principal operations by sales model						
By sales model	Revenue	Cost of sales	Gross profit margin (%)	Change in revenue from the previous year (%)	Change in cost of sales from the previous year (%)	Change in gross profit margin from the previous year (%)
Direct sales	17,720,004,652	11,957,281,166	32.52	20.01	21.92	Decreased by 1.06 percentage points
Distribution	313,773,909	181,884,859	42.03	-11.73	-14.26	Increased by 1.71 percentage points

Description of results of principal operations by industry, product, region and sales model

None

## Section IV Report of the Directors

(2) Analysis of production and sales volume

Applicable Not Applicable

Main product	Unit	Production	Sales volume	Inventory level	Change in production from the previous year (%)	Change in sales volume from the previous year (%)	Change in inventory level from the previous year (%)
Semiconductor device	10,000 devices	275.91	248.36	63.00	158.66	120.39	110.14
Railway engineering machinery	vehicle	325	325	0	6.21	6.21	0

### Description of production and sales volume

The traction converter systems of rail transit vehicles produced by the Company need to be customised based on customer needs, and the core of the system includes software and system integrated modules and involves many types of hardware and devices. Some non-critical hardware may be obtained through purchase. Accordingly, the traditional concept of production capacity is not applicable to such product.

The production and sales volume of the Company's power semiconductor devices (device products) and railway engineering machinery (complete machines) are set out above. Among them, the sales volume of power semiconductor devices includes the volume of sales to companies included in the Company's consolidated scope.

(3) Performance of material purchase contracts and sales contracts

Applicable Not Applicable

# Section IV Report of the Directors

## (4) Cost analysis

Unit: RMB

Analysis by industry							
By industry	Cost components	Amount for the current period	As a percentage of total cost for the current period (%)	Amount for the same period last year	As a percentage of total cost for the same period last year (%)	Year-on-year change in the amount (%)	Note
Rail transit equipment and extension business	Direct material cost	10,882,707,887	89.65	8,773,374,809	87.56	24.04	
Rail transit equipment and extension business	Direct labor cost	303,320,377	2.50	376,678,380	3.76	-19.47	
Rail transit equipment and extension business	Manufacturing cost	953,137,761	7.85	869,365,623	8.68	9.64	

Analysis by product							
By product	Cost components	Amount for the current period	As a percentage of total cost for the current period (%)	Amount for the same period last year	As a percentage of total cost for the same period last year (%)	Year-on-year change in the amount (%)	Note
Rail transit equipment business	Direct material cost	7,830,854,722	64.51	7,076,444,465	70.64	10.66	
Rail transit equipment business	Direct labor cost	63,360,640	0.52	190,314,929	1.90	-66.71	
Rail transit equipment business	Manufacturing cost	234,119,311	1.93	453,116,787	4.52	-48.33	
Emerging equipment business	Direct material cost	2,872,317,971	23.66	1,462,246,091	14.59	96.43	
Emerging equipment business	Direct labor cost	239,959,736	1.98	186,363,451	1.86	28.76	
Emerging equipment business	Manufacturing cost	711,656,591	5.86	408,082,856	4.07	74.39	
Others	Direct material cost	179,535,195	1.48	234,684,253	2.34	-23.50	
Others	Manufacturing cost	7,361,859	0.06	8,165,980	0.08	-9.85	

Other notes to cost analysis

None

(5) Changes in the scope of consolidation due to major changes in equity in subsidiaries during the reporting period

Applicable  Not Applicable

(6) Significant changes or adjustments in the Company's business, products or services during the reporting period

Applicable  Not Applicable

## Section IV Report of the Directors

(7) Major customers and major suppliers

A. Information about major customers of the Company

Applicable Not Applicable

The sales to the top five customers was RMB9,495,899,158, accounting for 52.67% of the total annual sales, of which sales to related parties was RMB6,624,817,235, accounting for 36.74% of the total annual sales.

### Top five customers of the Company

Applicable Not Applicable

Unit: RMB Currency: RMB

No.	Customer name	Sales	As a percentage of total annual sales (%)	Whether a related party of the Company
1	CRRC Group	6,624,817,235	36.74	Yes
2	Customer 2	1,705,127,731	9.46	No
3	Customer 3	487,119,921	2.70	No
4	Customer 4	390,683,392	2.17	No
5	Customer 5	288,150,879	1.60	No
Total	/	9,495,899,158	52.67	/

**Sales to a single customer exceeded 50% of the total, the top 5 customers included new customer(s), or there was a heavy reliance on few customers during the reporting period**

Applicable Not Applicable

During the reporting period, no sales to a single customer accounted for more than 50% of our total sales, and we did not unduly rely on a few customers. Of the five major customers, customer 5 is our existing customer and became one of our five major customers during the reporting period.

## Section IV Report of the Directors

### B. Information about major suppliers of the Company

Applicable Not Applicable

The purchase from the top five suppliers was RMB2,421,760,553, accounting for 21.16% of the total annual purchase amount, of which purchase from related parties was RMB1,770,960,862, accounting for 15.48% of the total annual purchase amount.

#### Top five suppliers of the Company

Applicable Not Applicable

Unit: Yuan Currency: RMB

No.	Supplier name	Purchase amount	As a percentage of total annual purchase amount (%)	Whether a related party of the Company
1	CRRC Group	1,770,960,862	15.48	Yes
2	Supplier 2	214,225,204	1.87	No
3	Supplier 3	175,244,874	1.53	No
4	Supplier 4	143,191,977	1.25	Yes
5	Supplier 5	118,137,636	1.03	No
Total	/	2,421,760,553	21.16	/

#### Purchase from a single supplier exceeded 50% of the total, the top 5 suppliers included new supplier(s), or there was a heavy reliance on few suppliers during the reporting period

Applicable Not Applicable

During the reporting period, no purchase from a single supplier accounted for more than 50% of our total purchases, and we did not unduly rely on a few suppliers. Of the five major suppliers, supplier 4 is our existing supplier and became one of our five major suppliers during the reporting period.

Among the Group's five major customers and suppliers, the largest customer and supplier was CRRC Group. Save as disclosed above, none of the Directors, Supervisors, their close associates or shareholders of the Company who, to the knowledge of the Directors, own more than 5% of the issued share capital of the Company held any interests in the Group's five major customers or five major suppliers in 2022.

### 3. Expenses

Applicable Not Applicable

Reasons for changes in selling expenses: selling expenses for the current year amounted to RMB1.098 billion, representing a year-on-year increase of 4.55%, primarily due to a year-on-year increase in product quality guarantee provision as a result of increase in revenue.



## Section IV Report of the Directors

Reasons for changes in administrative expenses: administrative expenses for the current year amounted to RMB890 million, representing a year-on-year increase of 9.47%, primarily due to an increase in, among other things, employee salaries, amortization and depreciation expenses and facilities maintenance expenses.

Reasons for changes in finance costs: net finance income for the current year amounted to RMB191 million, as compared with net finance income of RMB74 million for the previous year, primarily due to a year-on-year increase in interest income from certificates of deposit.

Reasons for changes in R&D expenses: R&D expenses for the current year amounted to RMB1.762 billion, representing a year-on-year increase of 4.25%, primarily attributable to an increase in employee salaries and technical service fees.

#### 4. Cash flow

Applicable Not Applicable

Reasons for changes in net cash flow from operating activities: net cash inflow from operating activities for the current year amounted to RMB2.041 billion, basically remaining the same from last year.

Reasons for changes in net cash flow from investing activities: net cash outflow from investing activities for the current year amounted to RMB2.263 billion, primarily due to an increase in cash received from redemption of wealth management products upon maturity.

Reasons for changes in net cash flow from financing activities: net cash outflow from financing activities for the current year amounted to RMB591 million, representing a decrease of 108.48% from the previous year, primarily due to cash inflow of proceeds from initial public issuance of A shares in the previous year.

#### (II) Explanation on Material Changes in Profit Caused by Non-principal Business

Applicable Not Applicable



# Section IV Report of the Directors

## (III) Analysis of Assets and Liabilities

✓Applicable    □Not Applicable

### 1. Assets and liabilities

Unit: Yuan    Currency: RMB

Item	Closing balance of the current period	Percentage of closing balance of the current period in total assets (%)	Closing balance of the previous period	Percentage of closing balance of the previous period in total assets (%)	Change in closing balance of the current period over the previous period (%)	Note
Prepayments	715,524,335	1.48	344,522,352	0.78	107.69	(1)
Contract assets	431,453,713	0.89	308,318,797	0.70	39.94	(2)
Other current assets	322,397,826	0.66	852,738,172	1.93	-62.19	(3)
Other equity instruments investment	152,673,525	0.31	112,400,000	0.25	35.83	(4)
Construction in progress	453,599,990	0.94	921,284,020	2.09	-50.76	(5)
Right-of-use assets	207,002,345	0.43	129,873,626	0.29	59.39	(6)
Other non-current assets	4,145,141,437	8.54	1,846,646,362	4.18	124.47	(7)
Bills payable	2,618,840,644	5.40	1,640,341,546	3.72	59.65	(8)
Trade payables	6,086,488,039	12.55	4,677,716,033	10.59	30.12	(9)
Taxes payable	301,155,951	0.62	190,170,858	0.43	58.36	(10)
Other payables	983,217,920	2.03	753,174,560	1.71	30.54	(11)
Other current liabilities	68,792,364	0.14	99,227,805	0.22	-30.67	(12)
Lease liabilities	135,377,795	0.28	78,253,791	0.18	73.00	(13)



## Section IV Report of the Directors

### Other explanations

- (1) Mainly due to increase in prepaid material expenses during the current year;
- (2) Mainly due to increase in quality guarantee deposit under the rail transit segment;
- (3) Mainly due to a decrease in tax credit as we received tax refunds deductible against such tax credits;
- (4) Mainly due to investment in Jinhua CRRC Rail Vehicles Co., Ltd. and Xicheng CRRC (Wuxi) Urban Transit Transport Engineering Co., Ltd. during the current year;
- (5) Mainly due to transfer from construction in progress to fixed assets;
- (6) Mainly due to lease of buildings, machinery and equipment as a result of capacity expansion of the new business operations;
- (7) Mainly due to an increase in certificates of deposits with a term of over 12 months as at the end of the reporting period;
- (8) Mainly due to an increase in bank acceptance notes;
- (9) Mainly due to an increase in inventories;
- (10) Mainly due to an increase in value-added tax and corporate income tax payable;
- (11) Mainly due to an increase in amounts incurred for purchase and construction of assets;
- (12) Mainly due to a decrease in taxes payable for advancement in relation to sales contracts;
- (13) Mainly due to lease of buildings, machinery and equipment as a result of capacity expansion of the new business operations.

### 2. **Overseas assets**

Applicable Not Applicable

#### (1) *Asset size*

Where: Overseas assets amounted to RMB1,448,288,924, accounting for 2.99% of total assets.

## Section IV Report of the Directors

(2) *Explanation on the high proportion of overseas assets*

Applicable Not Applicable

3. *Restrictions on major assets as at the end of the reporting period*

Applicable Not Applicable

Bills receivable endorsed or discounted but not yet due at the balance sheet date of RMB49,702,001.

4. *Other explanations*

Applicable Not Applicable

(IV) **Analysis of Industry Operational Information**

Applicable Not Applicable

For details, please refer to "Section II Chairman's Statement" and "Section IV Report of the Directors".

(V) **Investment Analysis**

*Overall analysis of external equity investment*

Applicable Not Applicable

Unit: Yuan Currency: RMB

Investment during the reporting period (RMB)	Investment in the same period last year (RMB)	Change
616,244,407	724,127,358	-14.90%

As of the end of the reporting period, balance of the Group's equity investments reached RMB616,224,407, representing a decrease of 14.90% from RMB724,127,358 as at the beginning of the year. In particular, balance of long-term equity investments in associates and joint ventures reached RMB463,550,882, representing a decrease of 24.22% from RMB611,727,358 as at the beginning of the year. For details, please refer to "V. Notes to Key Items of the Consolidated Financial Statements-12. Long-term Equity Investments" in the financial report as set out in Section XII.

# Section IV Report of the Directors

## 1. Material equity investment

✓Applicable □Not Applicable

Unit: Yuan Currency: RMB

Investee name	Principal operations	Investment mode	Investment amount	Shareholding	Source of funding	Progress as at the end of the reporting period	Investment gain or loss in the current period	Disclosure date and index (if any)
FAW-CRRC Electric Drive System Co., Ltd.	General operations: Manufacturing of automobile parts and accessories; development, manufacturing, sale, after-sale and services of electric drive system for new energy vehicles (including motors, inverters, power transmission assemblies and components); sale of special equipment, key systems and components for rail transit; development of communication signal system for rail transit; manufacturing of high-speed railway equipment and accessories; sale of high-speed railway equipment and accessories; manufacturing of urban rail transit equipment; sale of engineering machinery and parts for rail transit; manufacturing of railway-dedicated measuring or inspection instruments; sale of railway-dedicated measuring or inspection instruments; manufacturing of railway rolling stock accessories; and sale of railway rolling stock accessories (to independently carry out business activities defined in business license other than those subject to approval according to law)	Newly established	250,000,000	50%	Internal financial resources	FAW-CRRC Electric Drive System Co., Ltd. was established on 23 September 2022 and its first batch of registered capital of RMB150 million was contributed in 2022.	-	For details, please refer to the "Announcement on Voluntary Disclosure of External Investment and Establishment of a Joint Venture by Zhuzhou CRRC Times Electric Co., Ltd." (Announcement No.: 2022-026) published by the Company on the SSE on 17 August 2022
Zhuzhou CRRC Times Semiconductor Co., Ltd.	Research, development, production and sales of power semiconductors and related products; providing relevant technical consultation, technical services and technology transfer; independent management and agency of import and export business of commodities and technologies (except those prohibited and restricted by national laws and regulations); venue lease; equipment leasing; general cargo transportation; warehousing (Projects subject to approval according to law can only be operated after approval by relevant departments)	Capital increase	2,459,573,225.23	96.1680%	Internal financial resources	Capital was contributed on 7 December 2022	-	For details, please refer to the "Announcement on Voluntary Disclosure of Capital Increase and Transfer of Assets to a Controlling Subsidiary by Zhuzhou CRRC Times Electric Co., Ltd." (Announcement No.: 2022-046) published by the Company on the SSE on 26 November 2022
Total	/	/	<u>2,709,573,225.23</u>	/ /	/	/	/	/

## Section IV Report of the Directors

### 2. Material non-equity investment

Applicable  Not Applicable

To enhance its influence and seize a commanding height in the third-generation semiconductor industry in China, CRRCTimes Semiconductor based on its adequate research and justification intends to launch out a technological improvement construction project for silicon carbide chip production line based on its established SiC chip line. CRRCTimes Semiconductor intends to invest RMB461.6 million (the final investment amount is subject to actual investment) to implement the technological improvement construction project for silicon carbide chip production line. For details, please refer to the "Announcement on Voluntary Disclosure of the Technological Improvement Construction Project for Silicon Carbide Chip Production Line Invested by a Controlled Subsidiary of Zhuzhou CRRCTimes Electric Co., Ltd." (Announcement No.: 2022-016) published by the Company on the website of the SSE on 12 April 2022. As of now, the project is in progress.

At the 23rd meeting of the sixth session of the Board of Directors and the 2022 first extraordinary general meeting respectively held on 22 September 2022 and 21 October 2022, the Proposal on the Low and Medium Voltage Power Device Industrialisation Construction Project of CRRCTimes Semiconductor was considered and adopted to approve the low and medium voltage power device industrialisation construction project with a total investment of approximately RMB11,118.69 million. Among it, the low and medium voltage power device industrialisation (Yixing) first-phase construction project ("Yixing Subproject") will be undertaken by Yixing CRRCTimes Semiconductor Co., Ltd., a wholly-owned subsidiary of Zhuzhou CRRCTimes Semiconductor Co., Ltd., with an investment of approximately RMB5,825.83 million; and the low and medium voltage power device industrialisation (Zhuzhou) construction project ("Zhuzhou Subproject") will be undertaken by CRRCTimes Semiconductor, with an investment of approximately RMB5,292.86 million. For details of the above, please refer to the "Announcement on Investment of a Controlled Subsidiary in the Low and Medium Voltage Power Device Industrialisation Construction Project" (Announcement No.: 2022-035) and the "Announcement on Progress of the Low and Medium Voltage Power Device Industrialisation Construction Project Invested by a Controlled Subsidiary of Zhuzhou CRRCTimes Electric Co., Ltd." (Announcement No.: 2022-039, 2022-040, 2022-044 and 2023-003) published by the Company on the website of the SSE respectively on 23 September 2022, 1 October 2022, 11 October 2022 and 25 October 2022. As of now, the project is in progress.

### 3. Financial assets measured at fair value

Applicable  Not Applicable

Unit: Yuan Currency: RMB

Asset type	Opening amount	Profit or loss from fair value changes in the current period	Accumulated fair value changes included in equity	Impairment provision in the current period	Purchase amount during the current period	Disposal/redemption amount during the current period	Other changes	Closing balance
Financial assets held for trading	7,579,988,489	174,283,210	-	-	20,476,100,000	21,350,100,000	-179,444,539	6,700,827,160
Bills receivable measured at fair value	1,172,878,926	-	6,824,682	-	-	-	-62,632,389	1,117,071,219
Trade receivables measured at fair value	1,737,648,741	-	-10,194,251	-	-	-	74,163,128	1,801,617,618
Other equity instrument investment	112,400,000	-	-	-	40,273,525	-	-	152,673,525
<b>Total</b>	<b>10,602,916,156</b>	<b>174,283,210</b>	<b>-3,369,569</b>	<b>-</b>	<b>20,516,373,525</b>	<b>21,350,100,000</b>	<b>-167,913,800</b>	<b>9,772,189,522</b>

### Securities investment

Applicable  Not Applicable



## Section IV Report of the Directors

### Private fund investment

Applicable  Not Applicable

### Derivatives investment

Applicable  Not Applicable

As of 31 December 2022, in order to prevent systematic risks brought about by exchange rate fluctuations and lock operating profits, the Company had carried out foreign exchange derivatives exchange transactions totaling RMB314,053,314 in accordance with the principle of derivatives hedging and the principle of neutral exchange rate risk management.

#### 4. Progress of major asset restructuring and consolidation during the reporting period

Applicable  Not Applicable

### (VI) Sale of Major Assets and Equity Interests

Applicable  Not Applicable

At the 25th meeting of the sixth session of the Board of Directors on 25 November 2022, the Proposal on Capital Increase in and Asset Transfer to Zhuzhou CRRCTimes Semiconductor Co., Ltd. by the Company was considered and adopted to approve a capital increase of RMB2,459,573,225.23 in cash by the Company into CRRCTimes Semiconductor, of which RMB1,688,594,670 shall be included in the registered capital and the rest included in the capital reserve. The capital increase is financed by the Company's internal financial resources. The proceeds from the capital increase will be used by CRRCTimes Semiconductor to purchase certain assets of the automobile components supporting construction project of the Company. The Company shall transfer certain assets of its automobile components supporting construction project to CRRCTimes Semiconductor through a privately negotiated agreement, i.e., CRRCTimes Semiconductor shall purchase certain assets of the automobile components supporting construction project from the Company at a cash price of RMB2,459,573,225.23 (tax exclusive) or RMB2,774,489,286.28 (tax inclusive), as determined based on the appraised value. For details, please refer to the "Announcement on Voluntary Disclosure of Capital Increase in and Asset Transfer to a Controlled Subsidiary of Zhuzhou CRRCTimes Electric Co., Ltd." (Announcement No.: 2022-046) published by the Company on 26 November 2022. The capital increase amount was contributed in full on 7 December 2022, and the proceeds from the asset transfer were received on 19 December 2022. CRRCTimes Semiconductor has completed the business registration change procedures for the capital increase.

### (VII) Analysis of Major Subsidiaries and Associates

Applicable  Not Applicable

For details, please refer to section XII "Financial Report – IX Interests in Other Entities".

### (VIII) Structured Entities Controlled by the Company

Applicable  Not Applicable



## Section IV Report of the Directors

### VI. DISCUSSION AND ANALYSIS ON THE FUTURE DEVELOPMENT OF THE COMPANY

#### (I) Industry Landscape and Trends

Applicable Not Applicable

As an important part of the modern transportation system and a major livelihood undertaking, railway has long occupied an important position in the national economy. According to the Outline of Powerful Nation Railway Advance Planning in the New Era, by 2035, China's railway network will reach approximately 200,000 kilometers, including approximately 70,000 kilometers of high-speed railway. Cities with a population of more than 200,000 will be covered by railway, and cities with a population of more than 500,000 will be accessible by high-speed railway. The regional coordinated development strategy will be further implemented. As the state implements major national strategies such as "new infrastructure", accelerating the contraction of rail transit network in urban agglomerations and metropolitan areas, and speeding up the development of urban (suburban) railways in metropolitan areas, the development of intercity and urban (suburban) railways will enjoy prosperity. As existing rail transit facilities continue to grow, a certain amount of rail transit facilities will enter the maintenance period, representing a sizable after-sales maintenance market. In terms of competition landscape, Beijing Zongheng Electromechanical Technology Co., Ltd., a subsidiary of China Academy of Railway Sciences Corporation Limited, maintains a strong competitive edge in the EMU traction converter system market by virtue of its rich experience in product development, production, and application. In addition, CRRC Qingdao Sifang Rolling Stock Research Institute Co., Ltd., CRRC Yongji Electric Co., Ltd., CRRC Dalian Institute Co., Ltd., and CRRC Dalian Electric Traction Research and Development Center Co., Ltd., which are subsidiaries of CRRC, are also engaged in business operations related to traction converter systems of rail transit vehicles, and compete with the Company in certain business areas.

Urban rail transit construction is slowing down as the growth of infrastructure investment is dampened by high debt leverage ratios of local governments and tightening fiscal policies. In order to guard against the hidden debt risks of local governments, the government strictly controls urban rail transit construction. Cities with subway impose strict control over the approval of a new round of construction plans. Given the general slowdown of subway construction, urban rail transit and low-to-medium-haul railway may embrace development opportunities. In addition, under China's carbon peak and neutrality strategy, China Association of Metros issued the Action Plan for Green Urban Rail Transit Construction of China in August 2022, which clearly put forward the requirements on building a green urban rail transit system. Accordingly, intelligent and low-carbon integrated urban rail transit solutions will be increasingly favoured by users in the future. In terms of competition landscape, Xinyu Bombardier Traction System Co., Ltd. and CRRC Yongji Electric Co., Ltd. made progress respectively in Chengdu and Xi'an markets in 2022, leveraging their deep partnerships with project owners in some areas. In addition, Shanghai Alstom Communications Electric Co., Ltd. and Kingway Rail Transportation Equipment Co., Ltd. are also players with meaningful market competitiveness.



## Section IV Report of the Directors

Achieving carbon peak and neutrality is an extensive and profound social and economic reform which will give rise to a new energy market that is worth hundreds of billions of yuan and has great growth potential. Emerging industries such as wind, solar, energy storage and hydrogen equipment and photovoltaic engineering, electric drive system for new energy vehicles, semiconductors and sensors, which are highly aligned with China's "carbon peak and neutrality" strategy, are on a fast track and also provide a broad market space for industry players. In terms of competition landscape, in the photovoltaic inverter market with obvious oligopoly effect, Huawei Technologies Co., Ltd., Sungrow Power Supply Co., Ltd., Sineng Electric Co., Ltd. and Zhuzhou National Engineering Research Centre of Converters Co., Ltd. have a combined market share of over 80%. In the wind power converter market, the top three players namely Sungrow Power Supply Co., Ltd., Shenzhen Hopewind Electric Co., Ltd. and Xinjiang Goldwind Science and Technology Co., Ltd. have a significant market share ahead of other peers, while enterprises such as Ruineng New Energy Technology (Tianjin) Co., Ltd. and Guangdong Rifeng Electric Cable Co., Ltd. have also established presence. In 2022, the Company's new energy vehicle electric drive system business ranked into the top six of the industry for the first time, but still faced fierce competition from Nidec Corporation, Shenzhen Inovance Technology Co., Ltd. and other peers, and the top four competitors accounted for a half of domestic market share. In the semiconductor market, StarPower Semiconductor Co., Ltd. that started its business under the model of "Infineon chips + Self-packaging" stayed in a fast track in domestic IGBT segment in the fields of automobile, photovoltaic and wind power. In addition, international top players led by Infineon Technologies AG and Mitsubishi Electric Corporation are drawing upon their long-established expertise and first-mover advantages to extend presence and take over technical and market commanding heights. In the sensor market, LEM Holding SA ranks No. 1 in power sensors globally and has been a pacesetter in the industry.

### (II) The Company's Development Strategy

Applicable Not Applicable

In light of its philosophy of "high-quality, high-efficiency operation" and the strategy of "concentric diversification", the Company is deeply engaged in the rail transit industry with "smart technologies", and rides on tailwinds from the "carbon peak and neutrality" strategy to innovatively develop emerging businesses. Upholding a market-oriented approach, the Company leverages its advantages in vertical integration of industry chain and cross-disciplinary technical expertise to promote the complementary coordination and innovative integration of systems, continuously enhances business efficiency and quality through fine management, optimises the allocation of resources and improves asset management, creates sustainable value for shareholders and achieves sound development, in an effort to become an electrical system comprehensive solution provider in the fields of transportation and energy at a faster pace.

### (III) Business Plan

Applicable Not Applicable

In 2023, under the guidance of Xi Jinping's vision on the socialism with Chinese characteristics for a new era and the keynote of the Report to the 20th CPC National Congress, the Company will further practice the philosophy of "high-quality, high-efficiency operation", seize opportunities from the "smart technologies" and "carbon peak and neutrality" strategies, vigorously promote digital transformation and management quality and efficiency, and steadily improve business scale and performance with a focus on enhancing profitability through quality innovation and reform as a driving force.

### (IV) Others

Applicable Not Applicable





## Section IV Report of the Directors

### VII. MATTERS THAT THE COMPANY FAILED TO DISCLOSE IN ACCORDANCE WITH RELEVANT RULES DUE TO THE INAPPLICABILITY OF THE RULES OR OTHER SPECIAL REASONS SUCH AS INVOLVEMENT OF STATE SECRETS OR TRADE SECRETS AND EXPLANATION OF REASONS

Applicable  Not Applicable

### VIII. OTHER DISCLOSURES

#### Corporate Information

The Company is a joint stock limited company incorporated in the PRC on 26 September 2005. The Company's H Shares were listed on the Main Board of the Hong Kong Stock Exchange on 20 December 2006. The Company's A shares were listed on the Science and Technology Innovation Board of the SSE on 7 September 2021.

The basic information of the Company is set out in section III "Company Profile and Key Financial Indicators" of this annual report.

#### Reserves

Details of changes in the reserves of the Company are set out in the Consolidated Statement of Changes in Equity of this annual report prepared under the China Accounting Standards for Business Enterprises.

#### Reserves Available for Distribution

For details of the reserves of the Company available for distribution, please refer to "42. Retained Earnings" to the financial report of this annual report prepared under the China Accounting Standards for Business Enterprises.

#### Taxation

Details of the taxation of the Group for 2022 are set out in note "(IV) Taxation" to the financial report of this annual report.

#### Events after the Balance Sheet Date

Details of the events after the balance sheet date of the Group are set out in the note "XIII Events after the Balance Sheet Date" to the financial report of this annual report.

#### Share Capital

For details of the share capital of the Company, please refer to the relevant section headed "Changes in Shares and Particulars of Shareholders" of this annual report.

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

During the reporting period, neither the Company nor its subsidiaries purchased, sold or redeemed any of the Company's listed securities within the meaning of the SEHK Listing Rules.



## Section IV Report of the Directors

### Performance and Distribution

The performance of the Group for the year ended 31 December 2022 and the financial position of the Group as at 31 December 2022 are set out in “Financial Report” of this report.

The implementation of cash dividend policy of the Company during the reporting period is set out in section VI “Corporate Governance Report – X. Plan for Distribution of Profits or Transfer of Capital Reserve Fund” of this annual report.

### Distribution Plan and Policy of Dividend

The Company’s distribution plan and policy of dividend is set out in section VI “Corporate Governance Report-X. Plan for Distribution of Profits or Transfer of Capital Reserve Fund” of this annual report.

### Bank Loans and Other Loans

Details of the bank loans and other loans of the Company as at 31 December 2022 are set out in Note “(V) Notes to Key Items of the Consolidated Financial Statements – 23. Short-term Borrowings” and “32. Long-term Borrowings” in “Notes to the Financial Statements” to the financial report of this annual report prepared under the China Accounting Standards for Business Enterprises.

### Property, Plant and Equipment

Details of changes in the property, plant and equipment of the Company in 2022 are set out in Note “(V) Notes to Key Items of the Consolidated Financial Statements – 14. Fixed Assets” and “16. Right-of-use Assets” to the financial report of this annual report prepared under the China Accounting Standards for Business Enterprises.

### Information of Directors, Supervisors and Senior Management of the Company

Details of information of Directors, Supervisors and senior management of the Company are set out in section V “Directors, Supervisors, Senior Management and Employees” of this annual report.

### Service Contracts with Directors and Supervisors

The Company has entered into service contracts with all Directors and supervisors which set out, among other things, their terms of office and remuneration. Each session of the Board has a term of three years. Directors elected as the members of any new session of the Board will have a term of office commencing from the date on which he/she is elected up to the date on which members of the next session of the Board are elected or for a shorter period as may be decided upon at the general meeting. Directors appointed to fill casual vacancy will have a term of office commencing from the date of his/her appointment up to the next general meeting or for a shorter period as may be decided upon at the general meeting. Similarly, each session of the Supervisory Committee of the Company has a term of three years and the term of office of the supervisors are determined similarly as the Directors except that references to general meeting should be replaced by the meeting of the representatives of the employees in respect of the employee representative supervisor. The period of notice of termination of the service contracts given by either party shall not be less than three months.

None of the Directors nor supervisors (including but not limited to those Directors proposed for re-election at the forthcoming general meeting of the Company and those supervisors proposed for re-election at the forthcoming general meeting or meeting of the representatives of the employees) has a service contract with the Company which is not determinable by the Company within one year without payment of compensation (other than statutory compensation).



## Section IV Report of the Directors

### Remuneration of Directors, Supervisors and Senior Management

Details of the remunerations of Directors, Supervisors and five highest paid individuals of the Company are set out in the note “(X) Related Parties and Related Party Transactions – 5. Transactions Between the Group and its Related Parties – (7) Remuneration of Key Management Personnel” to the financial report of this annual report.

### Permitted Indemnity

The Company has arranged appropriate liability insurance policies for Directors, supervisors and senior management members, for the purpose of covering their liability arising out of the Group’s corporate activities.

### Directors’ and Supervisors’ Interests in Contracts

During the year and as at 31 December 2022, none of the Directors or supervisors had a material interest, whether directly or indirectly, in any transaction, arrangement or contract of significance to the business of the Group to which the Company, its holding company or any of its subsidiaries was a party.

### Loans Provided to Directors, Supervisors and Senior Management of the Company

The Company did not provide Director(s), Supervisor(s) or other senior management with any loans or quasi-loans.

### Directors’ Interests in Competing Business

During the year and as at 31 December 2022, none of the Directors, directly or indirectly, had an interest in any business which competes or may compete with the business of the Company and/or its subsidiaries.

### Interests and Short Positions of Directors, Supervisors and the General Manager in the Shares and Debentures

During the year and as at 31 December 2022, none of the Directors, supervisors and the general manager of the Company or their respective associates had any personal, family, corporate or other interests or short positions in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO, required to be notified to the Company and the Stock Exchange pursuant to Part XV of the SFO, or any interests or short positions in the shares required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or any personal, family, corporate or other interests or short positions required to be notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the SEHK Listing Rules (the “Model Code”).

### Directors’ and Supervisors’ Rights to Acquire Shares or Debentures

At no time during the year were rights to acquire benefits by means of the acquisition of shares or debentures of the Company granted to any Directors, supervisors or their respective spouse or children under 18 years of age, or were any such rights exercised by them, or was the Company, its holding company or any of its subsidiaries a party to any arrangement to enable the Directors and supervisors to acquire such rights in any other body corporate.

### Employee Retirement Plan

Details of the employee retirement plan of the Company are set out in Note “(XIII) Events after the Balance Sheet Date – 9. Other Financial Information” to the financial report of this annual report prepared under the China Accounting Standards for Business Enterprises.



## Section IV Report of the Directors

### Staff

Staff is the key for the Group's sustainable development. Details of the staff of the Group are set out in section V "Directors, Supervisors, Senior Management and Employees" of this report.

### Mechanism for Protecting Non-controlling Interests

To protect non-controlling interests, the Company has established and implemented certain governance measures, which include:

- (1) In accordance with the Articles, directors who are interested in the transactions should disclose their respective interest, and shall not vote in respect of the transactions in which they are interested and shall not be counted towards the quorum of the meeting. Therefore, for the connected transactions between the Group and CRRC Group, Mr. Li Donglin, Mr. Liu Ke'an, Mr. Shang Jing and Mr. Zhang Xinning did not vote in respect of the relevant Board resolutions and were not counted towards the quorum of the meetings approving the relevant resolutions due to conflict of interest.
- (2) An independent professional management team of the Group responsible for negotiating and reviewing the terms of transactions with the suppliers and customers (including CRRC Group) has been established. The members of the management team include the staff of the Group with relevant techniques and sales expertise, and the terms of duties of the management team allow it to make independent business judgments. The management team reports to the Board, while the Board is accountable to the Shareholders of the Company as a whole.
- (3) The Company's auditor has provided quarterly reports to the independent non-executive Directors on all transactions conducted between the Group and CRRC Group.
- (4) When making purchases, the Group has endeavoured to obtain tenders or quotations from a number of independent suppliers, and select successful bidders (where applicable) based on objective standards such as the price and quality of products, delivery schedule and services.
- (5) Subject to (1) above, all independent non-executive Directors have attended the Board meetings for deciding whether the Group should conduct special transactions with CRRC Group.
- (6) The terms for the supply and purchase arrangements entered into between the Group and CRRC Group are subject to quarterly review by the independent non-executive Directors, and opinions regarding such transactions are disclosed by the Company to the Shareholders by way of announcements. Independent non-executive Directors may request an independent party having at least 10 years' experience in the locomotive and rolling stock manufacturing industry to participate in assessing the terms of the sales and purchases agreements, and to provide their opinions to the independent non-executive Directors.



## Section IV Report of the Directors

### Non-competition and Indemnity Deeds

The Company entered into a non-competition and indemnity deed with CRRC ZELRI and CRRC Group on 30 November 2006 (the “Non-Competition and Indemnity Deed”), pursuant to which CRRC ZELRI and CRRC Group respectively undertook not to, and procure any of its associates (as defined under the Hong Kong Listing Rules, excluding the Group) not to carry on businesses that are in competition with the Group’s businesses. In 2015, CSR merged with CNR and formed CRRC; China Northern Locomotive & Rolling Stock Industry (Group) Corporation merged with CSR Group and formed CRRC Group. As certain businesses of the subsidiaries of CNR overlap with those of the Group, there are certain business overlaps between CRRC Group and the Group. Accordingly, CRRC issued an undertaking letter regarding the avoidance of competition with the Company (the “Undertaking Letter”) to the Company on 5 August 2015, in which it provided non-competition undertakings as follows:

- CRRC will grant the Company a call option, pursuant to which, the Company will be entitled to elect, at its own discretion, when to request CRRC to sell the competing businesses of CRRC to Company;
- CRRC further granted the Company a pre-emptive right, pursuant to which, if CRRC proposes to sell the competing business to an independent third party, CRRC shall offer to the Company the competing business first on the same conditions, and the sale to the third party may only be effected after the Company declined to purchase the competing business;
- the decision of the Company to exercise the aforesaid option and the pre-emptive right to purchase shall be made by the independent non-executive Directors of the Company;
- the exercise of the aforesaid option and the pre-emptive right to purchase will be subject to the applicable regulatory and disclosure requirements and Shareholders’ approval at the general meeting in the places of listing of CRRC and the Company respectively;
- the aforesaid non-competition undertaking will be effective from the date of issuance to the time when the Company is de-listed or CRRC ceases to be an indirect controlling Shareholder of the Company.

The independent non-executive Directors have reviewed the compliance issue of the Non-Competition and Indemnity Deed with CRRC ZELRI and CRRC Group (excluding the Group) for the year ended 31 December 2022, and reviewed relevant information provided by CRRC ZELRI and CRRC Group (excluding the Group). The independent non-executive Directors were of the opinion that:

(1) CRRC ZELRI complied with the relevant terms of the Non-Competition and Indemnity Deed in 2022. CRRC ZELRI carried on its businesses independent of the Group’s businesses, having different technology applications and different customers, which would not be in competition with that of the Group; (2) in 2022, CRRC Group continued to procure CRRC to perform its undertakings to the Company; and (3) the Board operated and managed the Company’s businesses independently in the interests of the Company and the Shareholders as a whole.

In December 2020, in order to meet the requirements of the issue and listing of A Shares of the Company, each of CRRC Group and CRRC ZELRI has further issued to the Company, among others, an undertaking letter regarding the avoidance of competition with the Company (the “2020 Undertaking Letters”). For details, please refer to the section headed “Significant Events – Performance of Undertakings” in this annual report.



## Section IV Report of the Directors

### Sufficiency of Public Float

According to publicly available information and as far as the Directors were aware, as at the date of this report, there was a sufficient public float of the Company's issued shares as required under the SEHK Listing Rules.

### Taxation

Pursuant to the provisions of the Corporate Income Tax Law of the PRC and the Implementing Regulations of the Corporate Income Tax Law of the PRC implemented in 2008, effective from 1 January 2008, any PRC domestic enterprise shall withhold the corporate income tax upon the distribution of dividends payable to the Shareholders being non-resident enterprises (legal persons) for accounting periods starting from 1 January 2008, and the payer shall serve as the withholding agent. The Company will strictly abide by the law and identify all Shareholders who are subject to the withholding and payment of corporate income tax, whose names appear in the Company's register of members as holders of H shares on the record date and who are not individuals (including HKSCC Nominees Limited, other corporate nominees or trustees, and other entities or organisations which are all considered as non-resident enterprise Shareholders, but excluding any H shares of the Company registered in the name of HKSCC Nominees Limited which are held by China Securities Depository and Clearing Corporation Limited as nominee Shareholder on behalf of investors who invest in the H shares of the Company through Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect), the Company will distribute the relevant dividends after deducting corporate income tax of 10%.

Pursuant to the requirements of Notice of the Ministry of Finance and the State Administration of Taxation on Certain Policies Regarding Individual Income Tax (Cai Shui Zi [1994] 020) (《財政部、國家稅務總局關於個人所得稅若干政策問題的通知》(財稅字[1994]020號)), individual foreigners are exempt from individual income tax on dividend and bonus from foreign-invested enterprises in the PRC. As the Company is a foreign-invested joint stock limited company, the individual Shareholders who hold the H shares of the Company and appear in the H-share registrar are not required to pay the individual income tax of the PRC.

Pursuant to the relevant requirements under the Notice on the Tax Policies Related to the Pilot Program of the Shanghai-Hong Kong Stock Connect (Cai Shui [2014] No. 81) (《關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》)(財稅[2014]81號), for dividends received by domestic investors from investing in H shares listed on the Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, the H shares companies shall withhold and pay individual income tax at the rate of 20% on behalf of the investors. For dividends received by domestic securities investment funds from investing in H shares listed on the Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, the tax payable shall be the same as that for individual investors. The H shares companies will not withhold and pay the income tax of dividends for domestic enterprise investors and those domestic enterprise investors shall report and pay the relevant tax themselves.

Pursuant to the Notice on Tax Policies for Shenzhen-Hong Kong Stock Connect Pilot Program (Cai Shui [2016] No.127) (《關於深港股票市場交易互聯互通機制試點有關稅收政策的通知》)(財稅[2016]127號), for dividends received by domestic investors from investing in H shares listed on the Hong Kong Stock Exchange through Shenzhen-Hong Kong Stock Connect, the H shares companies shall withhold and pay individual income tax at the rate of 20% on behalf of the investors. For dividends received by domestic securities investment funds from investing in H shares listed on the Hong Kong Stock Exchange through Shenzhen-Hong Kong Stock Connect, the tax payable shall be the same as that for individual investors. The H shares companies will not withhold and pay the income tax of dividends for domestic enterprise investors and those domestic enterprise investors shall report and pay the relevant tax themselves.





## Section IV Report of the Directors

Save as disclosed above, for the year ended 31 December 2022, no foreign shareholder who is non-PRC resident is liable to individual or corporate income tax, capital gains tax, stamp duty or estate duty of the PRC in relation to their holding of the H shares of the Company. Shareholders are urged to consult their tax advisers regarding the applicable PRC and Hong Kong tax laws and other tax consequences of the ownership and disposal of the H shares of the Company.

### Management Contracts

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into by the Group or existed during the reporting period.

### Interests and Short Positions of Substantial Shareholders in Shares and Underlying Shares

The shareholdings of substantial shareholders in the Company are set out in section IX “Changes in Shares and Particulars of Shareholders – (VI) Interests and short positions of substantial shareholders in shares and underlying shares of the Company” of this report.

### Arrangements for Share Pre-emptive Right and Stock Option

In 2022, no arrangement for Share pre-emptive right and stock option was made by the Company, as there are no specific provisions under the PRC laws or the Articles of Associations of the Company regarding share pre-emptive right.

### Connected Transactions

The connected transactions of the Company are set out in section VIII “Significant Events” of this report.

### Related Party Transactions

The Group entered into certain transactions with the relevant parties considered to be “related parties” pursuant to applicable accounting standards during the reporting period. Details of the related party transactions entered into by the Group during the reporting period are disclosed in note “X. Related Parties and Related Party Transactions” to the financial report. Save as disclosed in this report, the related party transactions disclosed in note “X. Related Parties and Related Party Transactions” were neither considered to be connected transactions as defined by the Hong Kong Listing Rules nor exempted from the reporting, announcement and shareholders’ approval requirements pursuant to the Hong Kong Listing Rules.

### Non-exempt Connected Transactions

Save as those disclosed in this report, there were no other non-exempt connected transactions as defined by the Hong Kong Listing Rules entered into by the Company with its connected persons during the reporting period.

### Audit Committee

The audit committee of the Company has reviewed the annual results and the annual report of the Company for 2022 as well as the audited consolidated financial statements for the year ended 31 December 2022 of the Company.

### Accounting Policies

Changes to the accounting policies of the Company are set out in “(III) Significant Accounting Policies and Accounting Estimates – 33. Changes in Significant Accounting Policies and Accounting Estimates” to the financial report of this annual report.



## Section IV Report of the Directors

### Auditors

At the 2021 annual general meeting of the Company held on 17 June 2022, the Resolution on Engagement of Auditor of the Company for 2022 was considered and approved, pursuant to which, the Company engaged KPMG Huazhen LLP as its auditor for financial reporting and internal control audit in 2022.

Details on change of auditors by the Company in the past three years are set out in “Explanation on the Change in the Employment of Auditors during the Audit Period” under Section VIII “Significant Events”.

### Environmental Policy and Performance

For details, please refer to the 2022 Corporate Social Responsibility Report of Zhuzhou CRRC Times Electric Co., Ltd. published by the Company on the websites of the SSE and the Stock Exchange.

### Compliance with Laws and Regulations

The Group has formulated the compliance procedures to ensure compliance with the applicable laws, rules and regulations that have a significant impact on it. The securities and legal affairs department and other relevant departments of the Company are responsible for supervising the policies and practices for compliance with laws and supervision by reviewing the same regularly. The relevant employees and subsidiaries will be notified from time to time of any material change in the applicable laws, rules and regulations.

The Group has complied with relevant applicable laws, rules and regulations of the jurisdictions in which the Group operates in all material aspects and has obtained relevant qualifications required for the provision of products and/or services. During the year and as far as the Company is aware, there was no material breach of or non-compliance with the applicable laws and regulations by the Group that has a significant impact on its business and operations.

### Relationship with Employees

The Group provides a harmonious and professional working environment to employees and ensures that all of them are reasonably remunerated. The Company regularly optimises and updates its policies on remuneration and benefits, training as well as occupational health and safety in accordance with laws and policy requirements at all levels. Details of the employees of the Company are set out in “Employees and remuneration policy”.

During the reporting period, there were no material disputes between the Group and its employees.

### Relationship with Customers

The customers of the national railway business are mainly the automakers under the CRRC Group and the railway bureaus under State Railway Group. The target customers of the said market are clear. The customers in urban railway market and industrial markets are relatively dispersed. The Group recognises the importance of maintaining good cooperative relationship with its customers to achieve win-win results. In the course of business operation, the Company pays close attention to the benefits of the customers and communicates with them smoothly through dedicated account managers, green service centers, customer satisfaction and compatibility survey, and business and technology exchange, with a view to fully understanding, collecting and analysing their concerns and making responses positively, so as to continuously improve its own operation ability and the ability to serve its customers.

During the reporting period, there were no material disputes between the Group and its customers.





## Section IV Report of the Directors

### Relationship with Suppliers

The raw materials and parts of the Group are mainly obtained from external procurement, with some provided by internal production of the corporation. The Group implements strategic procurement and values the development of long-term relationship with its business partners. It has always striven to cooperate with its business partners to create and share value to achieve mutual development and win-win results. The Group established direct and stable supply channels with the suppliers. Through whole life cycle management and performance evaluation of the suppliers, the overall supply risk is reduced and the risk of excessive reliance on a single supplier is lower.

During the reporting period, there were no material disputes between the Group and its suppliers.

### Donations

The Group did not make donations during the year.

### Social Responsibility Report

For details of the performance of social responsibilities by the Group during the reporting period, please refer to the Corporate Social Responsibility Report of Zhuzhou CRRC Times Electric Co., Ltd. published by the Company on the websites of the SSE and the Stock Exchange on the same date.

By order of the Board

**Li Donglin**

*Chairman of the Board*

# Section V Directors, Supervisors, Senior Management and Employees

## I. THE CHANGES IN SHAREHOLDING AND REMUNERATIONS OF CURRENT AND RESIGNED DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND CORE TECHNICIANS DURING THE REPORTING PERIOD

✓ Applicable    □ Not Applicable

Unit: share

Name	Position (note)	Gender	Age	Commencement date of term of office	Termination date of term of office	Shareholding at the beginning of the year	Shareholding at the end of the year	Changes in shareholding during the year	Reason for change	Total before-tax remuneration obtained from the Company during the reporting period (RMB'000)	Whether to receive any remuneration from any related party of the Company
Li Donglin	Chairman of the Board, executive Director	Male	56	23 June 2020	22 June 2023	-	-	-	-	0	Yes
Liu Ke'an	Vice Chairman of the Board, executive Director	Male	52	23 June 2020	22 June 2023	-	-	-	-	0	Yes
Shang Jing	Executive Director, general manager	Male	46	28 September 2020	22 June 2023	-	-	-	-	160.49	No
Yan Wu	Executive Director Deputy general manager Secretary to the Board General Legal Counsel	Male	56	23 June 2020 15 June 2012 17 December 2007 30 October 2019	22 June 2023 22 June 2023 22 June 2023 22 June 2023	-	-	-	-	93.14	No
Zhang Xinning	Non-executive Director	Male	59	23 June 2020	22 June 2023	-	-	-	-	0	Yes
Chan Kam Wing, Clement	Independent non-executive Director	Male	65	23 June 2020	22 June 2023	-	-	-	-	27.03	No
Pao Ping Wing	Independent non-executive Director	Male	76	23 June 2020	22 June 2023	-	-	-	-	27.03	No
Liu Chunru	Independent non-executive Director	Female	52	23 June 2020	22 June 2023	-	-	-	-	11.90	No
Chen Xiaoming	Independent non-executive Director	Male	60	23 June 2020	22 June 2023	-	-	-	-	11.90	No
Gao Feng	Independent non-executive Director	Male	46	23 June 2020	22 June 2023	-	-	-	-	11.90	No
Li Kaiguo	Independent non-executive Director	Male	61	21 October 2022	22 June 2023	-	-	-	-	1.34	No
Li Lüe	Chairman of the Supervisory Committee, Supervisor	Male	54	23 June 2020	22 June 2023	-	-	-	-	0	Yes
Pang Yiming	Employee representative Supervisor	Male	59	23 June 2020	22 June 2023	-	-	-	-	41.66	No
Zhou Guifa	Employee representative Supervisor	Male	59	23 June 2020	22 June 2023	-	-	-	-	125.48	No
Geng Jianxin	Independent Supervisor	Male	69	23 June 2020	22 June 2023	-	-	-	-	11.90	No
Niu Jie	Secretary of Party Committee Deputy general manager	Male	55	29 October 2018 15 June 2012	- 22 June 2023	-	-	-	-	115.74	No
Tan Yongneng	Secretary of Discipline Committee Chief administration officer Chairman of the labour union	Male	53	30 January 2018 19 January 2010 19 January 2010	- 22 June 2023 -	-	-	-	-	95.51	No

# Section V Directors, Supervisors, Senior Management and Employees

Name	Position (note)	Gender	Age	Commencement date of term of office	Termination date of term of office	Shareholding at the beginning of the year	Shareholding at the end of the year	Changes in shareholding during the year	Reason for change	Total before-tax remuneration obtained from the Company during the reporting period (RMB'000)	Whether to receive any remuneration from any related party of the Company
Yan Changqi	Deputy general manager	Male	55	29 January 2016	22 June 2023	-	-	-	-	94.21	No
Gong Tong	Deputy general manager	Male	49	18 March 2020	22 June 2023	-	-	-	-	89.36	No
Yu Kang	Deputy general manager	Male	45	18 March 2020	22 June 2023	-	-	-	-	100.02	No
Liu Zehua	Deputy general manager, financial director	Male	55	31 March 2020	22 June 2023	-	-	-	-	81.85	No
Yi Weihua	Deputy general manager	Male	41	2 November 2020	22 June 2023	-	-	-	-	85.76	No
Cao Weichen	Deputy general manager	Male	40	2 November 2020	22 June 2023	-	-	-	-	83.64	No
Li Peng	Deputy general manager	Male	42	23 February 2022	22 June 2023	-	-	-	-	74.07	No
Wang Yeliu	Deputy general manager of Hunan CRRC Signal and core technician	Male	41	29 April 2020	-	-	-	-	-	59.47	No
Zhu Hongjun	Deputy general manager of Baoji CRRC Times and core technician	Male	52	14 March 2019	-	-	-	-	-	49.43	No
Zhang Dongfang	Deputy general manager of CRRC Times Electronics and core technician	Male	43	29 April 2020	-	-	-	-	-	52.35	No
Lv Yang	Deputy general manager of Ningbo CRRC Times and core technician	Male	41	7 May 2018	-	-	-	-	-	68.53	No
	Secretary of the general party branch and chief engineer of Ningbo CRRC Times			2 April 2021	-	-	-	-	-		
Liu Liangjie	Director of the UK R&D centre of Times Electric and core technician	Male	41	17 July 2020	-	-	-	-	-	141.09	No
Zhang Dinghua	Deputy general manager of Shanghai CRRC SMD and core technician	Male	44	1 July 2019	-	-	-	-	-	58.96	No
Zhang Min	Deputy general manager of the power supply system division of Times Electric	Male	42	8 September 2021	-	-	-	-	-	53.81	No
	Deputy general manager of Chongqing CRRC Times Electric Technology Co., Ltd. and core technician			8 September 2021	-						
He Wen	Deputy general manager of the equipment technology division of Times Electric and core technician	Male	54	23 March 2020	-	0	1,163	1,163	Share purchase in the secondary market	47.23	No
Liu Yongjiang	Head of the Rail Transit Technology Centre of Times Electric and core technician	Male	38	27 November 2020	-	-	-	-	-	76.17	No
Liu Yong	Director of the data and intelligent technology centre of Times Electric and core technician	Male	42	28 November 2020	-	-	-	-	-	91.79	No
Mei Wenqing	Former deputy general manager, chief engineer	Male	41	2 November 2020	20 March 2023	-	-	-	-	81.63	No
Xu Shaolong	Former deputy general manager	Male	39	2 November 2020	25 January 2022	-	-	-	-	9.04	No
Total	/	/	/	/	/	-	1,163	1,163	/	2,133.43	/

# Section V Directors, Supervisors, Senior Management and Employees

- Notes:
1. Remunerations, bonuses and subsidies actually paid in 2022 under “total before-tax remuneration obtained from the Company during the reporting period” are calculated on a cash basis, which do not include the employee benefits and social insurance, housing provident fund and annuities undertaken by the Company. Total actual remunerations paid in 2022 include (budget) settlement amount that was not granted in 2021 and payment of long-term principal in previous years, and therefore there exist differences among individuals.
  2. Commencement dates of term of office of the above Directors and Supervisors refers to the term of office of the current session of the Board and the Supervisory Committee.
  3. The shareholding above refers to the number of shares directly held by the individuals. As of 31 December 2022, Liu Yongjiang indirectly held shares of the Company through his 9.04% interest in the No. 1 Collective Asset Management Plan for Employees’ Participation in Strategic Placement on the Science and Technology Innovation Board of Times Electric managed by CICC (the “No. 1 Asset Management Plan of Times Electric”). 4,598,422 shares were issued for the purpose of the No. 1 Asset Management Plan of Times Electric upon strategic placement, and as of 31 December 2022, it still held 190,422 shares of the Company. Shares held by the aforesaid asset management plan represented circulating shares of the Company.

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Li Donglin	<p>Mr. Li Donglin, born in 1967, a Chinese citizen without permanent residency abroad. Mr. Li graduated from Southwest Jiaotong University with a bachelor's degree in Electric Traction and Drive Control in 1989. He is a senior engineer. Mr. Li joined CRRC ZELRI in July 1989 and held the positions of deputy chief engineer, deputy general manager of the rail transport department, director of the manufacturing centre, deputy general manager of the sales and marketing centre of CRRC ZELRI. Mr. Li served as the chief marketing officer of the Company from September 2005 to December 2007 and vice president and Party secretary of the Company from December 2007 to December 2009. From January 2010 to April 2010, he served as the general manager of the Company. From April 2010 to January 2016, he served as an executive director and the general manager of the Company. Mr. Li was a director, the general manager and deputy Party secretary of CRRC ZELRI from December 2015 to May 2018. He has been the chairman of the board of directors and Party secretary of CRRC ZELRI since May 2018. Mr. Li was the Vice Chairman of the Board and an executive Director of the Company from March 2017 to July 2018, and has been the Chairman of the Board and an executive Director of the Company since July 2018. He currently serves as the Chairman of the Board and an executive Director of the Company.</p>
Liu Ke'an	<p>Mr. Liu Ke'an, born in 1971, a Chinese citizen without permanent residency abroad. Mr. Liu graduated from the Department of Electrical Engineering of Tongji University with a bachelor's degree in Industrial Electrical Automation in 1994 and graduated from Zhongnan University of Economics and Law with a master's degree in Corporate Management in 2008, and graduated from Central South University in December 2015 with a doctor's degree in transportation and communication engineering. He is a professorate senior engineer. He joined CRRC ZELRI in August 1994 and served as engineer, the chief engineer, senior engineer and the chief designer of CRRC ZELRI. Mr. Liu held various positions such as director of the drive technology department of technology centre, director of systems project department of the technology centre, deputy director and director of the technology centre of the Company since September 2005. He was an employee representative supervisor of the Company from December 2007 to January 2010, the chief technology officer of the Company from January 2010 to June 2012 and the vice general manager and the chief engineer of the Company from June 2012 to January 2016. From January 2016 to August 2020, he served as an executive director and the general manager of the Company. Mr. Liu has been a director and the general manager of CRRC ZELRI since August 2020, and has been the Vice Chairman of the Board and an executive Director of the Company since September 2020. He currently serves as the Vice Chairman of the Board and an executive Director of the Company.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Shang Jing	<p>Mr. Shang Jing, born in 1977, a Chinese citizen without permanent residency abroad. Mr. Shang graduated with a bachelor's degree in Mechanical and Electrical Engineering and a master's degree in Power System and Automation from Southwest Jiaotong University in July 2000 and April 2003, respectively. In December 2016, he graduated from Central South University with a doctor degree in control science and engineering. He is a professorate senior engineer. He joined CRRC ZELRI in July 2003 as an engineer at the R&amp;D centre. He served as an engineer at the R&amp;D centre, the director and the deputy director of the industrial drive department of the Company from September 2005 to May 2011, and the deputy director and the director of the foundation and platform research and development centre of CRRC ZELRI Research Institute from June 2011 to February 2015, respectively. He was also the vice chief engineer and the director of the foundation and platform research and development centre of CRRC ZELRI Research Institute from February 2015 to January 2016. He has been serving as the deputy director of the Management Committee of the National Key Laboratories of New Power Semiconductor Devices since February 2016. From January 2016 to September 2020, he served as a vice general manager and chief engineer of the Company. He has been serving as an executive director and the general manager of the Company since September 2020.</p>
Yan Wu	<p>Mr. Yan Wu, born in 1967, a Chinese citizen without permanent residency abroad. Mr. Yan graduated from Northwestern Polytechnical University with a bachelor's degree in Electro-Technology in 1989 and a master's degree in Aircraft Navigation and Control in 1992. He is a senior engineer. He joined CRRC ZELRI in 1992. Mr. Yan served as the director of the technical standards department of the Company from September 2005 to December 2007 and as the director of the securities and legal affairs department of the Company from January 2007 to January 2014. From December 2010 to March 2014, he served as a non-executive director of the Company. Mr. Yan was appointed as the secretary to the Board of the Company in December 2007, a vice general manager of the Company in June 2012, an executive director of the Company in March 2014 and the General Legal Counsel of the Company in October 2019. He currently serves as an executive director, vice general manager, the secretary to the Board and the General Legal Counsel of the Company.</p>
Zhang Xinning	<p>Mr. Zhang Xinning, born in 1964, a Chinese citizen without permanent residency abroad. Mr. Zhang graduated from Northern Jiaotong University (currently known as Beijing Jiaotong University) with a bachelor's degree in electric traction and transmission control in 1986 and a master's degree in system engineering in 2001, respectively. He is a professorate senior engineer entitled to the special government subsidy from the State Council. Mr. Zhang served as the deputy head of the Equipment Technology Division of the Department of Technology and Education of the Ministry of Railways, the deputy chief engineer, deputy chief engineer and the general manager of the locomotives business department of CSR Group. He also served as the deputy general manager and chief engineer of CRRC Zhuzhou, the chief engineer of CSR Group as well as the chief engineer of CSR. Since June 2015, he has been serving as the chief engineer of CRRC. Mr. Zhang has been a non-executive Director of the Company since August 2017.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Chan Kam Wing, Clement	<p>Mr. Chan Kam Wing, Clement, born in 1958, an Australian citizen with permanent residence in Hong Kong and Australia. Mr. Chan obtained a bachelor's degree in Accounting and a master's degree in Commerce in the United Kingdom and Australia, respectively. He is a certified public accountant in Hong Kong. Mr. Chan was the Asian regional director and a board member of Horwath International from 1996 to April 2009. Mr. Chan has been the managing director of BDO Limited since May 2009. Mr. Chan was elected as a council member of the HKICPA from 2007 to 2014, during which he was elected as the vice president of the HKICPA in 2012 and 2013, and was further elected as the president of HKICPA in 2014. From 2010 to 2013, he was appointed as the chairman of the financial reporting standards committee of the HKICPA and was responsible for the research, editing and promulgation of the Hong Kong Financial Reporting Standards. From December 2015 to September 2021, he was appointed as the honorary advisor of the Hong Kong Financial Reporting Council. Mr. Chan also served as the chairman of the Asian-Oceanian Standard Setters Group in 2014 and 2015 and attended various international conferences on the setting of accounting standards on behalf of Hong Kong. In addition, he was awarded an Honorary Fellowship by the Open University of Hong Kong in 2018 in recognition of his contribution to society and outstanding achievements. From May 2019 to July 2021, he was appointed as a non-executive director of the Hong Kong Securities and Futures Commission. Mr. Chan founded the Hong Kong Association of Registered Public Interest Entity Auditors Limited (香港上市公司審核師協會) in 2021 and served as its chairman. Mr. Chan was appointed as the chairman of Hong Kong Consumer Council (香港消費者委員會) in July 2022. He was awarded the Medal of Honour in 2019 and appointed as a Justice of the Peace in 2020. Mr. Chan has been an independent non-executive Director of the Company since September 2005.</p>
Pao Ping Wing	<p>Mr. Pao Ping Wing, born in 1947, a Chinese citizen with permanent residence in Hong Kong. He graduated from Asian Institute of Technology (Thailand) in 1979, and obtained a master's degree in human settlements planning science. Since 1987, Mr. Pao has been appointed as the independent non-executive director of various companies listed on the Stock Exchange. Mr. Pao has substantial experiences in corporate governance. Mr. Pao is currently an independent non-executive director of Oriental Enterprise Holdings Limited, Sing Lee Software (Group) Limited, Maoye International Holdings Limited, Capital Environment Holdings Limited and Soundwill Holdings Limited. Mr. Pao was appointed as a Justice of Peace in 1987. He was also appointed by the Hong Kong government as a member of the Town Planning Board, the Advisory Council on the Environment, the Hong Kong Housing Authority and the Land Development Corporation. Mr. Pao has been an independent non-executive Director of the Company since September 2005.</p>
Liu Chunru	<p>Ms. Liu Chunru, born in 1971, a Chinese citizen without permanent residency abroad. Ms. Liu graduated from Chongqing University with a bachelor's degree in Engineering in 1994 and graduated from Tsinghua University with a master's degree in Business Administration in 2008. She is a certified assets valuer. Ms. Liu was the vice president of Beijing China Enterprise Appraisal Co., Ltd. and the president of Zhongfa International Appraisal Co., Ltd. She has been an executive director of Huibao Shuanghe (Beijing) Investment Management Co., Ltd. since September 2011, a director of Beijing Boviss Technology Co., Ltd. since November 2011 and the vice chairman of the board of Beijing Zhuoxindahua Appraisal Co., Ltd since September 2012. Ms. Liu was a supervisor of the Company from September 2005 to April 2008. Ms. Liu has been an independent non-executive Director of the Company since June 2008.</p>



# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Chen Xiaoming	<p>Mr. Chen Xiaoming, born in 1963, a Chinese citizen without permanent residency abroad. Mr. Chen graduated from the Law Department of Southwest University of Political Science &amp; Law with a bachelor's degree in Laws in 1985. He graduated from the Law Department of Southwest University of Political Science &amp; Law in 1988 with a master's degree in Laws. He is a lawyer. Mr. Chen was a lawyer of Shenzhen Foreign Economic Law Firm from July 1988 to December 1993. Mr. Chen was a partner and lawyer of Guangdong Huaye Law Firm from January 1994 to December 2002. He was a partner and lawyer of Guangdong Shengdian Law Firm from January 2003 to December 2006. He has been a lawyer, a partner and currently a consultant of Beijing Zhonglun (Shenzhen) Law Firm since January 2007. He has been an independent non-executive Director of the Company since March 2017.</p>
Gao Feng	<p>Mr. Gao Feng, born in 1977, a Chinese citizen without permanent residency abroad. Mr. Gao graduated from Tsinghua University majoring in Electrical Engineering with a bachelor's degree and a master's degree in 2000 and 2003, respectively. He also obtained a doctor's degree in Electrical Engineering from University of Washington in the United States of America in June 2008. He is a professorate senior engineer. Mr. Gao served as a senior researcher at the sustainable energy and electrical grid laboratory at the Technical University of Berlin in Germany from January 2008 to April 2010. Between April 2010 to April 2015, he was a senior researcher of IBM China Research Institute. Since April 2015, Mr. Gao has been serving as the vice president of the Energy Internet Research Institute of Tsinghua University. From June 2015 to December 2019, Mr. Gao served as a director of Beijing Tsingsoft Technology Co., Ltd.* (北京清軟創新科技股份有限公司). Mr. Gao has been an independent non-executive Director of the Company since August 2018.</p>
Li Kaiguo	<p>Mr. Li Kaiguo, born in 1962, a Chinese citizen without permanent residency abroad. Mr. Li graduated from Hunan University in the PRC with a bachelor's degree in Engineering in 1983. He is a researcher level senior engineer, a Machinery Industrial Scientific Technology Specialist of the PRC, an expert entitled to special grants of the State Council, and the first batch of national candidates for the New Century Hundred-Thousand-Ten Thousand Talents Project* (新世紀百千萬人才工程國家級人選). During the period from August 1983 to February 2000, Mr. Li successively served as an engineer, the deputy head and the head of Component Testing Laboratory of Chongqing Automobile Research Institute* (重慶汽車研究所) ("CARI") (currently known as China Automotive Engineering Research Institute Co., Ltd* (中國汽車工程研究院股份有限公司) ("CAERI"), (stock code: 601965.SH)). Between July 1995 and February 2000, he also concurrently served as the general manager of the Automotive Test Equipment Development Centre* (汽車試驗設備開發中心) of CARI. Between February 2000 and November 2007, Mr. Li served as the deputy director and member of party committee of CARI. Between November 2007 and October 2013, Mr. Li served as the director, deputy general manager and member of party committee of China Automotive Engineering Research Institute Co., Ltd* (中國汽車工程研究院有限公司) (currently known as CAERI). Between October 2013 and May 2022, Mr. Li successively served as director, general manager, deputy secretary of party committee, secretary of party committee and chairman of CAERI. Since May 2022, Mr. Li has been the expert of CAERI and concurrently served as the head of automobile inspection and testing technology committee of China General Technology (Group) Holding Co Ltd (中國通用技術(集團)控股有限責任公司). Mr. Li has been an independent non-executive Director of the Company since October 2022.</p>



# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Li Lüe	<p>Mr. Li Lüe, born in 1969, a Chinese citizen without permanent residency abroad. Mr. Li graduated from the Hunan Finance and Economics College in July 1990 majoring in accounting. From September 2000 to June 2003, he studied accounting at the Hunan University Network College. In December 2010, Mr. Li graduated from Kunming University of Science and Technology with a master's degree in business administration. He is a professor-level senior accountant. Mr. Li Lüe joined CRRC Zhuzhou in July 1990, where he held several positions including an accountant and chief accountant of the branch, an accountant and the deputy director of the finance department as well as the director of the restructuring office. From November 2005 to March 2006, Mr. Li successively served as the director of the audit department and the secretary to Party branch of CRRC Zhuzhou. From March 2006 to January 2008, he served as chief accountant of CSR Shijiazhuang Vehicle Factory. From January 2008 to December 2010, he served as deputy director general and chief financial officer of CSR Shijiazhuang Vehicle Co., Ltd. From January 2011 to August 2018, he served as deputy general manager and chief financial officer of Guangzhou Locomotive Co., Ltd. From August 2018 to May 2019, he served as deputy general manager of Guangzhou Locomotive Co., Ltd. Since May 2019, Mr. Li has been serving as deputy general manager and chief financial officer of CRRC ZELRI. Mr. Li has been the Chairman of the Supervisory Committee and a supervisor of the Company since June 2019.</p>
Pang Yiming	<p>Mr. Pang Yiming, born in 1964, a Chinese citizen without permanent residency abroad. Mr. Pang graduated from Central South University in 2004. Mr. Pang joined CRRC ZELRI in October 1982 and held the positions of assistant to the general manager of the manufacturing centre of CRRC ZELRI and deputy general manager, the chief production officer and director of the production department of Times Electronics. Mr. Pang served as assistant director of the marketing management department of the marketing centre of the Company from January 2007 to January 2009, director of the marketing management department of the Company from January 2009 to December 2009, and director of the operation management department of the Company from January 2010 to December 2011. Mr. Pang was the general manager and the secretary to Party branch of the printed circuit business department of the Company from January 2012 to July 2016. He was the general manager of the electrical interconnection technology division of the Company from July 2016 to March 2018. Mr. Pang has been a chairman of expert committee of the industrial development committee (preparation) of the Company since March 2018. Mr. Pang has been an employee representative supervisor of the Company since September 2005.</p>
Zhou Guifa	<p>Mr. Zhou Guifa, born in 1964, a Chinese citizen without permanent residency abroad. Mr. Zhou graduated from Dalian Railway Institute with a bachelor's degree in Engineering in 1985, obtained a master's degree in Engineering from Central South University in 1997 and a doctor's degree in Engineering from Tongji University in 2009. He joined CRRC ZELRI in 1985 and has held various positions such as engineer, senior engineer and professorate engineer at the R&amp;D centre of CRRC ZELRI and the technology centre of the Company. Mr. Zhou served as the chief technology officer of Shanghai branch of the technology centre of the Company from September 2005 to December 2006, and has been the chief expert of the Company since January 2007. He was voted as the chief technical expert of CSR in 2011, as the Principal Design Expert of CRRC in 2016 and as a scientist of CRRC in 2018. Mr. Zhou has been an employee representative supervisor of the Company since January 2010.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Geng Jianxin	<p>Mr. Geng Jianxin, born in 1954, a Chinese citizen without permanent residency abroad. In 1987, Mr. Geng graduated from Zhongnan University of Economics and Law majoring in accounting and obtained a master's degree in economics. In 1993, he graduated from Renmin University of China majoring in accounting and obtained a doctorate in management. He is entitled to the special government subsidy from the State Council. From 1993 to 2019, he served as associate professor, professor, doctoral supervisor, director of teaching and research section, executive deputy director, secretary of the Party Committee of the School of Business and chairman of the Academic Committee of the School of Business at Renmin University of China. He is currently a consultant of the China Audit Society, deputy director of the Accounting Society of China, and also serves as an independent director of Capitalonline Data Service Co., Ltd, New China Life Insurance Company Ltd., Suzhou QingYue Optoelectronics Technology Co Ltd. and Norinco International Cooperation Ltd. Mr. Geng has been an independent supervisor of the Company since June 2011.</p>
Niu Jie	<p>Mr. Niu Jie, born in 1968, a Chinese citizen without permanent residency abroad. Mr. Niu graduated from Central South University in June 2003 with an undergraduate certificate of graduation in machinery design, manufacturing and automation. He is an engineer. Mr. Niu was a technician and office director of the loading and unloading machinery plant of Lanzhou Railway Bureau from February 1988 to October 1994. He joined CRRC ZELRI in October 1994 and served as the director of the production department of the PCB plant, the sales director of the production and operation department and the vice general manager of the marketing centre of CRRC ZELRI. He was the deputy general manager of the marketing centre of the Company from September 2005 to December 2006 and the general manager of the locomotives business department of the marketing centre of the Company from January 2007 to December 2008. He was the general manager of the locomotives business department of the Company from January 2009 to May 2013 and was deputy chief economist of the Company from January 2010 to June 2012. Mr. Niu has been a vice general manager of the Company since June 2012 and the Party secretary of the Company since October 2018. He currently serves as the Party secretary and a deputy general manager of the Company.</p>
Tan Yongneng	<p>Mr. Tan Yongneng, born in 1970, a Chinese citizen without permanent residency abroad. Mr. Tan graduated from Xiangtan University majoring in Electrical Technology in 1995. He attended the on-the-job postgraduate programme in Psychology and Human Resources of Peking University in 2000, and obtained a certificate of graduation by completing the full postgraduate programme in July 2002. He attended the on-the-job MBA programme of Business School of Central South University in 2003 and obtained a certificate of graduation by completing the full postgraduate programme in July 2005. He joined CRRC ZELRI in July 1990, and has held various positions such as director of general manager's office of Times Electronics, director of department of Party and mass affairs and director of Party office of CRRC ZELRI. He was director of department of Party and mass affairs and director of department of auditing of the Company from December 2004 to December 2005, director of department of Party and mass affairs and director of Party office of CRRC ZELRI from December 2005 to December 2007, and director of administration office and director of secretary office of decision-making committee of CRRC ZELRI from January 2008 to January 2010. Mr. Tan was the chief administration officer and the chairman of the labour union of the Company from January 2010 to January 2018, and has been the secretary of Party discipline inspection commission, the chief administration officer and the chairman of the labour union of the Company since January 2018.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Yan Changqi	<p>Mr. Yan Changqi, born in 1968, a Chinese citizen without permanent residency abroad. Mr. Yan graduated with a bachelor's degree in Machinery Manufacturing Technology and Equipment (機械製造工藝與設備) from Xi'an Jiaotong University in 1991. He is a senior engineer. He joined CRRC ZELRI in August 1991 and has held various positions such as the director of the sales department of the marketing centre, the deputy director of Foreign Economic Cooperation Office (FECO), a vice general manager of the marketing centre of CRRC ZELRI, the chief marketing officer of Times Electronics and the chief marketing officer of the passenger car electric business department. Mr. Yan served as the general manager of the EMU business department of the Company from January 2007 to December 2009, a vice chief economist of the Company from January 2010 to January 2013, the assistant to general manager and the general manager of the EMU business department of the Company from February 2013 to May 2013, and the assistant to general manager and the general manager of the railway business department of the Company from May 2013 to January 2016. Mr. Yan has been a vice general manager of the Company since January 2016.</p>
Gong Tong	<p>Mr. Gong Tong, born in 1974, a Chinese citizen without permanent residency abroad. Mr. Gong graduated from Southwest Jiaotong University with a bachelor's degree in Electric Traction and Transmission Control in July 1996. He is a senior engineer. Mr. Gong joined CRRC ZELRI in August 1996 and has worked for the technical service department, after-sales service department and quality service department of the electrical equipment factory of CRRC ZELR, Zhuzhou Times Fittings Technical Service Co., Ltd. and the technical service department. He has taken various positions as a marketing centre service director, director of the quality and safety department, general manager of after-sales service department and director of planning and development department of the Company from January 2005 to July 2011, a general manager of Guangzhou CRRC Times from July 2011 to April 2013, a deputy general manager of the business division for urban railway equipment of the Company from May 2013 to February 2016, a deputy chief economist, director of planning and development department, general manager of the business division for new industry of the Company from February 2016 to July 2017, and a deputy chief economist and general manager of the business division for urban railway equipment of the Company from July 2017 to March 2020. Mr. Gong has been a deputy general manager of the Company since March 2020.</p>
Yu Kang	<p>Mr. Yu Kang, born in 1978, a Chinese citizen without permanent residency abroad. Mr. Yu graduated from Nanchang Hangkong University with a bachelor's degree in Mechanical and Electrical Engineering in July 2000. He is a senior engineer. Mr. Yu joined CRRC ZELRI in August 2000 and has worked for the equipment department and engineering technology department of the manufacturing centre of CRRC ZELRI. He has taken various positions such as a director of the electronic equipment factory of the manufacturing centre and a director of the general management department of the Company from June 2005 to January 2011, a director of the general manager's office of the Company from January 2011 to February 2016, a director of the general manager's office and a general manager of the business division for automobile of the Company from February 2016 to March 2017, a general manager of the business division for automobile of the Company from March 2017 to February 2018, and a deputy chief economist and general manager of the business division for automobile of the Company from February 2018 to March 2020. Mr. Yu has been a deputy general manager of the Company since March 2020.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Liu Zehua	<p>Mr. Liu Zehua, born in 1968, a Chinese citizen without permanent residency abroad. Mr. Liu graduated from the Hunan Finance and Economics College in 1992. In 1999, he graduated from Sichuan University with a bachelor's degree in accounting. He is a senior accountant. He joined CRRC Zhuzhou from 1992 to 2004 where he served as an accountant and the head of cost team of the finance department. From 2004 to 2007, Mr. Liu served as the chief financial officer of Zhuzhou Jiufang Casting Co., Ltd. From 2007 to 2016, he served successively as an assistant to the head of the Company's financial assets department and head of the financial assets department of the Company. From April 2016 to March 2020, he served as deputy general manager of the wind power division and chief financial officer of CRRC ZELRI. Mr. Liu has been a deputy general manager and chief financial officer of the Company since March 2020.</p>
Yi Weihua	<p>Mr. Yi Weihua, born in 1982, a Chinese citizen without permanent residency abroad. Mr. Yi graduated from East China Jiaotong University with a bachelor's degree in electrical engineering and automation in July 2004 and graduated from Central South University with a master's degree in business administration in November 2017. He is a senior engineer. From August 2004 to March 2010, he served as a process engineer in the engineering technical department of the Company's manufacturing centre. From March 2010 to July 2012, he served as the head of the engineering technical department of the Company's manufacturing centre. He served as deputy director and director of the pilot plant of the Company's manufacturing centre from July 2012 to February 2016. From February 2016 to March 2017, he served as the deputy director of the rail transit technology centre and deputy director of the manufacturing centre of the Company. From March 2017 to April 2017, he served as the head of the operation management department of the Company. He served as the head of the operation management department and director of the Environmental Protection Office of the Company from April 2017 to February 2018. From February 2018 to March 2020, he served as the director of the Company's manufacturing centre. From March 2020 to October 2020, he served as the Company's deputy chief economist and director of the manufacturing centre. Mr. Yi has been the deputy general manager of the Company since 2 November 2020.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Cao Weichen	<p>Mr. Cao Weichen, born in 1983, a Chinese citizen without permanent residency abroad. Mr. Cao graduated from Hunan University of Technology with a bachelor's degree in English in June 2007 and graduated from Hunan University with a master's degree in software engineering in December 2017. He is an engineer. From August 2007 to June 2011, he served as the intellectual property specialist of the Technology Management Department of the Company. From June 2011 to November 2011, he served as the sales manager of the second sales department of the Company's EMU business department. From November 2011 to June 2013, he served as the sales manager of the first sales department of the Company's EMU business department. From June 2013 to January 2014, he served as the head of the second sales department of the Company's EMU business department. From January 2014 to April 2015, he served as the head of the EMU marketing department of the Company's railway business department. From April 2015 to January 2016, he served as the deputy general manager (intercity market) of the Company's railway business department. From January 2016 to January 2019, he served as deputy director of the General Manager's Office of CRRC ZELRI. From January 2019 to March 2020, he served as director of the General Manager's Office of CRRC ZELRI. From March 2020 to October 2020, he served as the general manager of the Company's urban rail business department. Mr. Cao has been the deputy general manager of the Company since 2 November 2020.</p>
Li Peng	<p>Mr. Li Peng, born in 1981, a Chinese citizen without permanent residency abroad. He graduated from Southwest Jiaotong University with a bachelor's degree in electrical engineering and automation in July 2004, and from Zhejiang University with a master's degree in electrical engineering in December 2016. Mr. Li Peng is a senior engineer. He joined the Company in August 2004, and successively served as the chief designer of the converter technology department, head and deputy director of the system department of the Company's technology centre. From March 2017 to January 2019, he served as the deputy director of the Company's product management centre. From January 2019 to January 2021, he served as general manager of the Company's railway division. From January 2021 to February 2022, he served as deputy chief economist and general manager of the railway division of the Company. He has been the deputy general manager of the Company since 23 February 2022.</p>
Wang Yeliu	<p>Mr. Wang Yeliu, born in 1982, a Chinese citizen without permanent residency abroad. He graduated from East China Jiaotong University with a bachelor's degree in communication engineering in 2004; and from Central South University with a master's degree in business administration in 2018. Mr. Wang Yeliu is a senior engineer. From August 2004 to February 2010, he served as an engineer of the technical centre of the communication and signal division of the Company. From March 2010 to February 2011, he served as the head of the control department I of the technical centre of the communication and signal division of the Company. From March 2011 to February 2012, he served as the deputy director of the technical centre of the communication and signal division of the Company. From March 2012 to March 2016, he served as the director of the technical centre of the communication and signal division of the Company. From March 2016 to February 2017, he served as deputy chief engineer of the communication and signal division of the Company. From March 2017 to April 2020, he served as deputy chief engineer of Hunan CRRC Signal. He has served as the deputy general manager of Hunan CRRC Signal since May 2020.</p>



## Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Zhu Hongjun	<p>Mr. Zhu Hongjun, born in 1971, a Chinese citizen without permanent residency abroad. He graduated from Dalian Railway College with a bachelor's degree in fluid control in 1995, and from Lanzhou Jiaotong University with a master's degree in vehicle engineering in 2018. Mr. Zhu Hongjun is a professor-level senior engineer. From July 1995 to October 2005, he successively served as trainee, assistant engineer and engineer in the assembly workshop of Baoji Construction Machinery Factory under the Ministry of Railways. From December 2005 to March 2009, he served as director of the technology division and deputy chief engineer of China Railway Baoji Machinery Co., Ltd. Xintie Company. From April 2009 to August 2013, he served as deputy director of the technical centre of Baoji CSR Times Construction Machinery Co., Ltd. From September 2013 to February 2016, he served as a senior engineer of the technical centre and equipment technology development department of the railway engineering machinery division of the Company. From March 2016 to October 2017, he served as the director and senior engineer of the technical centre of the railway engineering machinery division of the Company. From November 2017 to February 2018, he served as the director of the equipment technology development department of the railway engineering machinery division of the Company. From March 2018 to February 2019, he served as the deputy chief engineer of Baoji CRRC Times. He has served as the deputy general manager of Baoji CRRC Times since March 2019.</p>
Zhang Dongfang	<p>Mr. Zhang Dongfang, born in 1980, a Chinese citizen without permanent residency abroad. He graduated from East China Jiaotong University with a bachelor's degree in electrical engineering and automation in 2003. Mr. Zhang Dongfang is a senior engineer. From August 2003 to September 2005, he served as an engineer in the R&amp;D centre of CRRC ZELRI. From September 2005 to April 2016, he served as assistant engineer, engineer and senior engineer of the Company. From April 2016 to May 2018, he served as the head of the diesel locomotive product department of the Company's rail transit technology centre. From May 2018 to September 2018, he served as assistant director of the Company's rail transit technology centre. From September 2018 to April 2020, he served as the director of technology centre of CRRC Times Electronics. He has served as the deputy general manager of CRRC Times Electronics since April 2020.</p>
Lv Yang	<p>Mr. Lv Yang, born in 1982, a Chinese citizen without permanent residency abroad. He graduated from Xiangtan University with a bachelor's degree in electronic information engineering in 2004; and from Chongqing University of Posts and Telecommunications with a master's degree in control theory and control engineering in 2008. Mr. Lv Yang is a professor-level senior engineer. From September 2008 to October 2012, he served as the leader of the control platform group of the transmission control department of the Company's technical centre. From November 2012 to February 2017, he served as the platform hardware leader of the converter control platform department of the foundation and platform R&amp;D centre of CRRC ZELRI. From February 2017 to May 2018, he served as the EMU system engineer of the system project department of the Company's technical centre. He served as the deputy general manager of Ningbo CRRC Times from May 2018 to April 2021, and has been the secretary of the general party branch, deputy general manager and chief engineer of Ningbo CRRC Times since April 2021.</p>

# Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
Liu Liangjie	Mr. Liu Liangjie, born in 1982, a Chinese citizen without permanent residency abroad. He graduated from Zhejiang University with a bachelor's degree in electrical engineering in 2004. Mr. Liu Liangjie is a professor-level senior engineer. From August 2004 to September 2011, he served as an engineer of the Company's technical centre. From September 2011 to February 2016, he served as the head of the transmission control department and the head of the system project department of the Company's rail transit technology centre. From February 2016 to March 2020, he served as the deputy director of the Company's rail transit technology centre. From March 2020 to July 2020, he served as the deputy director of the UK R&D centre of the Company. He has served as the director of the UK R&D centre of the Company since July 2020.
Zhang Dinghua	Mr. Zhang Dinghua, born in 1979, a Chinese citizen without permanent residency abroad. He graduated from Hunan University of Science and Technology with a bachelor's degree in automation in 2003; from Central South University with a master's degree in control theory and control engineering in 2006; and from Central South University with a doctorate degree in control science and engineering in 2011. Mr. Zhang Dinghua is a professor-level senior engineer. From June 2006 to June 2011, he served as the control engineer of CRRC National Centre of Converters. From June 2011 to July 2015, he served as the project manager of the foundation and platform R&D centre of CRRC ZELRI. From July 2015 to February 2018, he served as deputy chief engineer of ROV Division of UK CRRC SMD. From February 2018 to July 2019, he served as the deputy director of the Company's industrial transmission technology centre. He has served as the deputy general manager of Shanghai CRRC SMD since July 2019.
Zhang Min	Mr. Zhang Min, born in 1981, a Chinese citizen without permanent residency abroad. He graduated from Tongji University with a bachelor's degree in electronic information engineering in 2004, and from Zhejiang University with a master's degree in electrical engineering in 2016. Mr. Zhang Min is a professor level senior engineer. From July 2004 to July 2016, he served as the designer and head of the technical centre of CRRC National Centre of Converters. From August 2016 to May 2018, he served as manager of the intelligent monitoring product division of Zhuzhou CRRC Times Equipment Technology Co., Ltd. From May 2018 to March 2020, he served as the deputy director of the Company's industrial transmission technology centre. He has been the deputy general manager of the Company's power supply system division since March 2020, and the deputy general manager of Chongqing CRRC Times Electric Technology Co., Ltd. since September 2021.

## Section V Directors, Supervisors, Senior Management and Employees

Name	Major working experience
He Wen	<p>Mr. He Wen, born in 1969, a Chinese citizen without permanent residency abroad. He graduated from Xi'an Jiaotong University with a bachelor's degree in industrial electrical automation in 1991. Mr. He Wen is a professor-level senior engineer. From August 1991 to July 1992, he served as an intern in the trial workshop of CRRC ZELRI. From August 1992 to May 1994, he served as a commissioning engineer in the trial workshop of CRRC ZELRI. From June 1994 to March 2002, he served as the design engineer of the wire room and converter development department of CRRC ZELRI. From April 2002 to February 2006, he served as head of locomotive product department of CRRC ZELRI. From March 2006 to April 2007, he served as the deputy director of the Company's technical centre. From May 2007 to January 2008, he served as the chief designer of the Company's technical centre. From February 2008 to January 2011, he served as deputy chief engineer and general manager of screen door project of Ningbo CSR Times Sensor Technology Co., Ltd. From February 2011 to May 2013, he served as the deputy general manager (technical director) of Ningbo CSR Times Sensor Technology Co., Ltd. From May 2013 to February 2018, he served as deputy general manager of Zhuzhou CRRC Times Equipment Technology Co., Ltd. From February 2018 to March 2020, he served as the deputy general manager of CRRC National Centre of Converters. He has served as the deputy general manager of the equipment technology division of the Company since March 2020.</p>
Liu Yongjiang	<p>Mr. Liu Yongjiang, born in 1985, a Chinese citizen without permanent residency abroad. He graduated from East China Jiaotong University with a bachelor's degree in electrical engineering and automation in 2008; and from Southwest Jiaotong University with a master's degree in power system automation in 2011. Mr. Liu Yongjiang is a senior engineer. From July 2011 to April 2015, he served as a product R&amp;D engineer in the traction converter department of the Company's technical centre. From April 2015 to March 2017, he served as the leader of the system group of the traction converter department of the Company's rail transit technology centre. From March 2017 to May 2018, he served as the head of the traction converter department of the Company's rail transit technology centre. From May 2018 to March 2020, he served as the deputy director of the Company's rail transit technology centre. From March 2020 to November 2020, he served as the deputy director of the Company's product management centre. He has served as the director of the Company's rail transit technology centre since November 2020.</p>
Liu Yong	<p>Mr. Liu Yong, born in 1981, a Chinese citizen without permanent residency abroad. He graduated from Xiangtan University with a bachelor's degree in mechanical design, manufacturing and automation in 2003; from Harbin Institute of Technology with a master's degree in mechanical design and theory in 2005; and from Harbin Institute of Technology with a doctorate degree in mechanical design and theory in 2010. Mr. Liu Yong is a professor-level senior engineer. From June 2010 to April 2011, he served as the inverter control engineer of the transit control department of the Company's technical centre. From May 2011 to December 2013, he served as the inverter control engineer of the converter control platform department of the foundation and platform R&amp;D centre of CRRC ZELRI. From January 2014 to March 2016, he served as the head of the inverter control group of the converter control platform department of the foundation and platform R&amp;D centre of CRRC ZELRI. From April 2016 to June 2017, he served as the director of converter control platform department of the foundation and platform R&amp;D centre of CRRC ZELRI. From July 2017 to November 2020, he served as the deputy director of the Company's data and intelligent technology centre. He has served as the director of the Company's data and intelligent technology centre since November 2020.</p>



# Section V Directors, Supervisors, Senior Management and Employees

## Other explanations

Applicable  Not Applicable

### (II) The Equity Incentives Granted to the Directors, Senior Management and Core Technicians during the Reporting Period

#### 1. Stock Option

Applicable  Not Applicable

#### 2. The first type of restricted stocks

Applicable  Not Applicable

#### 3. The second type of restricted stocks

Applicable  Not Applicable

# Section V Directors, Supervisors, Senior Management and Employees

## **(III) The Evaluation Mechanism for Senior Management, as well as the Establishment and Implementation of Incentive Mechanism during the Reporting Period**

✓ Applicable     Not Applicable

According to the relevant requirements of the annual assessment system for management members, the principal positions of the Company's management team are assessed from two aspects: corporate asset management responsibility system, key acts and organisational construction, and the deputy positions of the management team are assessed from three aspects: corporate asset management responsibility system, annual major work objectives, key acts and organisational construction, so as to complete the inspection of the duty performance of the Company's executives and annual performance appraisal, and determine the annual remunerations of the Company's senior management according to the assessment results.

The annual remunerations of senior management are determined according to post responsibilities, post importance, performance evaluation and remuneration level of relevant positions in competitive industries. In the annual remuneration of senior management members, the basic remuneration is primarily determined according to factors such as post responsibilities, post importance and employees' average remuneration level, performance remuneration is determined according to performance evaluation, and special rewards are determined according to outstanding contributions.

## **(IV) Directors', Supervisors' and the Company's Chief Executives' Interests and Short Positions in Shares, Underlying Shares and Debentures of the Company and its Associated Corporations**

As at 31 December 2022, none of the Directors, Supervisors or chief executives of the Company had any interests and/or short positions in the Shares, underlying Shares or debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) which will have to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which he is taken or deemed to have under such provisions of the SFO) or which will be required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein, or will be required, pursuant to the Model Code, to be notified to the Company and the Hong Kong Stock Exchange.

## **(V) Securities Transactions by Directors and Supervisors**

The Company has adopted a code of conduct no less exacting than that as provided in the Model Code as the code of conduct for all the Directors and Supervisors trading securities of the Company ("code of conduct"). Upon specific enquiries made to all the Directors and Supervisors, all the Directors and Supervisors of the Company have confirmed that they have complied with the standards as stipulated by the code of conduct for the period ended 31 December 2022.

# Section V Directors, Supervisors, Senior Management and Employees

## II. POSITIONS HELD BY CURRENT AND RESIGNED DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

### (I) Positions Held in Shareholder Entities

✓ Applicable    □ Not Applicable

Name	Name of Shareholder entity	Position held in the Shareholder entity	Commencement date of term of office	Termination date of term of office
Li Donglin	CRRC ZELRI	Chairman of the board and secretary to the Party Committee	May 2018	–
Liu Ke'an	CRRC ZELRI	Director, general manager	August 2020	–
Shang Jing	Zhuzhou Guochuang Railway Technology Co., Ltd.	Vice chairman of the board	June 2020	–
Zhang Xinning	CRRC	Chief engineer	June 2015	–
Li Lüe	CRRC ZELRI	Deputy general manager, financial director	May 2019	–
Li Lüe	Zhuzhou Times New Materials Technology Co., Ltd. (listed on the SSE, stock code: 600458)	Director	July 2019	April 2024
Li Lüe	CRRC Times Electric Vehicle Co., Ltd.	Chairman of the supervisory committee	May 2019	May 2022
Li Lüe	CRRC Beijing Heavy Industry and Mechanics Co., Ltd.	Supervisor	June 2019	September 2022
Li Lüe	CRRC Zhuzhou Institute (Hong Kong) Co., Ltd.	Director	June 2019	September 2022
Tan Yongneng	Shanghai CRRC Hange Shipping and Marine Engineering Co., Ltd.	Chairman of the board	July 2021	–
Mei Wenqing	CRCC Zhuzhou Traction Electrical Equipment Test & Certification Co., Ltd.	Director	April 2021	–
Cao Weichen	Xicheng CRRC (Wuxi) Urban Transit Transport Engineering Co., Ltd.	Director	April 2021	–
Explanation on positions held in Shareholder entities	None			

# Section V Directors, Supervisors, Senior Management and Employees

## (II) Positions Held in Other Entities

✓ Applicable    □ Not applicable

Name	Name of other entities	Positions held in other entities	Commencement date of term of office	Termination date of term of office
Shang Jing	Zhuzhou Shiling Transportation Equipment Co., Ltd.	Chairman of the board	April 2021	October 2022
Shang Jing	Wuxi CRRC Hofer Powertrain Co., Ltd.	Chairman of the board	June 2021	January 2023
Chan Kam Wing, Clement	BDO Limited	Managing director	May 2009	–
Chan Kam Wing, Clement	Securities and Futures Commission of Hong Kong	Non-executive director	May 2019	July 2021
Chan Kam Wing, Clement	Hong Kong Mortgage Corporation Limited	Non-executive director	May 2019	–
Chan Kam Wing, Clement	Hong Kong Financial Reporting Council	Honorary advisor	December 2015	September 2021
Pao Ping Wing	Oriental Enterprise Holdings Limited (listed on the Stock Exchange, stock code: 00018)	Independent non-executive director	July 1987	–
Pao Ping Wing	Sing Lee Software (Group) Limited (listed on the Stock Exchange, stock code: 8076)	Independent non-executive director	December 2003	–
Pao Ping Wing	Maoye International Holdings Limited (listed on the Stock Exchange, stock code: 848)	Independent non-executive director	August 2007	–
Pao Ping Wing	Soundwill Holdings Limited (listed on the Stock Exchange, stock code: 878)	Independent non-executive director	November 2009	–
Pao Ping Wing	Capital Environment Holdings Limited (listed on the Stock Exchange, stock code: 03989)	Independent non-executive director	June 2006	–
Liu Chunru	Beijing Zhuoxindahua Appraisal Co., Ltd	Vice chairwoman	September 2012	–
Liu Chunru	Beijing Boviss Technology Co., Ltd.	Director	November 2011	–
Liu Chunru	Huibao Shuanghe (Beijing) Investment Management Co., Ltd.	Executive director	September 2011	–
Liu Chunru	Beijing Gujin Micro Loan Co., Ltd.	Director	June 2012	–

# Section V Directors, Supervisors, Senior Management and Employees

Name	Name of other entities	Positions held in other entities	Commencement date of term of office	Termination date of term of office
Chen Xiaoming	Beijing Zhonglun (Shenzhen) Law Firm	Consultant and lawyer	–	–
Gao Feng	Energy Internet Research Institute of Tsinghua University	Vice president	April 2015	–
Gao Feng	Liaoning Clean Energy Group Co., Ltd.	Independent non-executive director	April 2020	August 2021
Li Kaiguo	China General Technology (Group) Holding Co Ltd	Head of automobile inspection and testing technology committee	May 2022	–
Li Kaiguo	National Gas Vehicle Engineering and Research Centre	Head	April 2003	–
Li Kaiguo	China Society of Automotive Engineers	Vice president	2016	–
Li Kaiguo	China Automotive Talents Society	Vice president	2016	–
Li Kaiguo	Gas Fuel Automobile Branch of the China Association of Automobile Manufacturers	President	2017	–
Li Kaiguo	China Association of Automobile Manufactures	Vice president	2020	–
Li Kaiguo	National Automotive Standardisation Technical Sub-committee	Committee member	2020	–
Li Kaiguo	Gas Vehicle Standards Committee	Chairman	2020	–
Li Kaiguo	Qingling Motors (Group) Co., Ltd.	Independent director	June 2022	–
Li Kaiguo	SERES Co., Ltd. (listed on the SSE, stock code: 601127)	Independent director	November 2022	–
Geng Jianxin	China Audit Society	Advisor	July 2019	July 2023
Geng Jianxin	Accounting Society of China	Deputy director	September 2016	August 2024
Geng Jianxin	Capitalonline Data Service Co., Ltd (listed on the Shenzhen Stock Exchange, stock code: 300846)	Independent director	September 2018	–
Geng Jianxin	New China Life Insurance Company Ltd. (listed on the SSE, stock code: 601336; and the Stock Exchange, stock code: 01336)	Independent director	September 2017	–
Geng Jianxin	Suzhou QingYue Optoelectronics Technology Co Ltd.	Independent director	October 2020	–

# Section V Directors, Supervisors, Senior Management and Employees

Name	Name of other entities	Positions held in other entities	Commencement date of term of office	Termination date of term of office
Geng Jianxin	Norinco International Cooperation Ltd. (listed on the Shenzhen Stock Exchange, stock code: 000065)	Independent director	August 2020	–
Yan Changqi	Zhejiang Times LANP New Energy Co., Ltd.	Director	September 2019	September 2021
Yan Changqi	Zhuzhou Shiling Transportation Equipment Co., Ltd.	Director	December 2014	–
Yan Changqi	Zhuzhou Shiling Transportation Equipment Co., Ltd.	Chairman of the board	October 2022	–
Yan Changqi	Siemens Traction Equipment Ltd., Zhuzhou	Director	December 2018	–
Gong Tong	Foshan Zhongshi Zhihui Communications Technology Co., Ltd.	Vice chairman of the board	June 2021	–
Yu Kang	Wuxi CRRC Hofer Powertrain Co., Ltd.	Director	October 2018	–
Yu Kang	Wuxi CRRC Hofer Powertrain Co., Ltd.	Chairman of the board	January 2023	–
Yu Kang	Wuxi CRRC Hofer Powertrain Co., Ltd.	General manager	March 2020	January 2023
Yu Kang	Wuxi Times Intelligent Transportation Research Institute Co., Ltd.	Chairman of the board	February 2021	–
Yi Weihua	Zhuzhou Shiling Transportation Equipment Co., Ltd.	Director	April 2021	–
Yi Weihua	Hunan Green Industry Federation	President	January 2021	–
Yi Weihua	Zhuzhou Intelligent Manufacturing Association	President	March 2023	–
Cao Weichen	Fuzhou Jintou Intelligent Rail Transit Equipment Co., Ltd.	Director	April 2020	November 2022
Li Peng	Zhejiang Times LANP New Energy Co., Ltd.	Director	September 2021	–

Explanation on positions held in other entities

In October 2022, LANP Electrical Co., Ltd. was renamed as “Zhejiang Times LANP New Energy Co., Ltd. (浙江時代蘭普新能源有限公司)”.

# Section V Directors, Supervisors, Senior Management and Employees

## (III) Positions Held in Controlling Subsidiaries

Name	Name of controlling subsidiaries	Positions held in controlling subsidiaries
Shang Jing	Zhuzhou CRRC Times Semiconductor Co., Ltd.	Chairman of the board
Yan Wu	CRRC Times Electric (Hong Kong) Co., Limited	Director
Niu Jie	CRRC Times Electric USA, LLC (中車時代電氣(美國)有限公司)	Director
	CRRC Times Electric Australia Pty Ltd. (中車時代電氣(澳洲)有限責任公司)	Director
	CRRC Times Electric Brasil Ltda. (中車時代電氣(巴西)有限責任公司)	Director
	Zhuzhou Times Electronic Technology Co., Ltd. (株洲時代電子技術有限公司)	Executive director
Tan Yongneng	Qingdao CRRC Electric Equipment Co., Ltd.	Director
Yan Changqi	Qingdao CRRC Electric Equipment Co., Ltd.	Chairman of the board
	Ningbo CRRC Times Transducer Technology Co., Ltd.	Executive director
	Lanzhou CRRC Times Rail Transit Technology Co., Ltd. Shanghai CRRC Rail Transit Technology Co., Ltd.	Director
Gong Tong	Chongqing CRRC Times Electric Technology Co., Ltd.	Chairman of the board
	Hunan CRRC Times Signal & Communication Co., Ltd.	Executive director
Yu Kang	Specialist Machine Developments (Shanghai) Co., Ltd.	Chairman of the board
	FAW-CRRC Electric Drive System Co., Ltd.	Chairman of the board
Mei Wenqing	Zhuzhou CRRC Times Semiconductor Co., Ltd.	Director
Cao Weichen	Guangzhou CRRC Times Electric Technology Co., Ltd.	Chairman of the board
	Hangzhou CRRC Times Electric Equipment Co., Ltd.	Director
	Chengdu CRRC Times Electric Technology Co., Ltd.	Executive director
Li Peng	Lanzhou CRRC Times Rail Transit Technology Co., Ltd.	Director
	Shanghai CRRC Rail Transit Technology Co., Ltd.	Director

# Section V Directors, Supervisors, Senior Management and Employees

## III. REMUNERATION OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND CORE TECHNICAL PERSONNEL

✓ Applicable     Not Applicable

Unit: 0'000 Currency: RMB

The decision-making procedure for the remunerations of Directors, Supervisors and senior management	The Remuneration Committee of the Board of Directors formulates and reviews the remuneration policies and plans of Directors and senior management personnel of the Company, and develops the assessment standards of Directors and senior management personnel of the Company and conducts the assessment.
The basis for determining remunerations of Directors, Supervisors and senior management	Determine the remunerations of Directors, Supervisors and senior management personnel of the Company according to the Articles of Association of Zhuzhou CRRC Times Electric Co., Ltd. and relevant regulations.
Actual payment of remunerations of Directors, Supervisors and senior management	Mr. Li Donglin, Mr. Liu Ke'an, Mr. Zhang Xinning and Mr. Li Lüe do not receive remuneration from the Company, and other Directors, Supervisors and senior management are paid by the Company according to relevant regulations.
Total actual remunerations received by all Directors, Supervisors and senior management at the end of the reporting period	1,615.02
Total actual compensations received by core technical personnel at the end of the reporting period	819.28

Notes: Total remuneration includes the social insurance, housing provident fund and annuity contributed by the Company.

Remunerations of Xu Shaolong are included in those of the senior management, and therefore not repetitively accounted in those of core technicians.



# Section V Directors, Supervisors, Senior Management and Employees

## IV. THE CHANGES IN THE COMPANY'S DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND CORE TECHNICAL PERSONNEL

Applicable  Not applicable

Name	Position held	Changes	Reason of changes
Xu Shaolong	Deputy general manager and core technician	Resignation	Work rearrangement
Li Peng	Deputy general manager	Appointment	Work needs
Li Kaiguo	Independent non-executive Director	Election	Work needs
Mei Wenqing	Deputy general manager and chief engineer	Resignation	Work rearrangement

On 25 January 2022, Mr. Xu Shaolong resigned as a deputy general manager and core technician of the Company due to work rearrangement.

On 23 February 2022, pursuant to the Proposal on Appointment of Mr. Li Peng as a Deputy General Manager of the Company considered and approved at the 19th meeting of the sixth session of the Board, the Company approved the appointment of Mr. Li Peng as a deputy general manager of the Company.

On 21 October 2022, the Proposal on Election of Mr. Li Kaiguo as an Independent Non-executive Director of the Company was considered and approved at the 2022 first extraordinary general meeting of the Company.

On 20 March 2023, Mr. Mei Wenqing resigned as a deputy general manager and chief engineer of the Company due to work rearrangement.

## V. EXPLANATION ON PENALTIES IMPOSED BY SECURITIES REGULATORY AUTHORITIES IN THE RECENT THREE YEARS

Applicable  Not applicable

# Section V Directors, Supervisors, Senior Management and Employees

## VI. EMPLOYEES OF THE PARENT COMPANY AND MAJOR SUBSIDIARIES AS AT THE END OF THE REPORTING PERIOD

### (I) Employees

Number of in-service employees of the parent company	3,752
Number of in-service employees of major subsidiaries	4,242
Total number of in-service employees	7,994
Number of resigned and retired employees with expenses borne by the parent company and major subsidiaries	0

#### Profession composition

Category	Number
Technical personnel	4,763
Including: R&D personnel	2,822
Production personnel	1,371
Sales personnel	836
Management	1,024
Total	7,994

#### Educational background

Category	Number (individual)
Master degree and above	1,673
Bachelor degree	4,886
College and junior college	1,435
Total	7,994

Note: The above information only covers domestic employees. As of 31 December 2022, the total number of overseas employees of Times Electric was 511.



# Section V Directors, Supervisors, Senior Management and Employees

## (II) Remuneration Policy

Applicable  Not applicable

The Company made constant efforts to improve the remuneration management system. It focused on the “Talent Empower” strategy, and forged the talent motivation mechanism from aspects including strengthening positive incentive, refining the talent incentive mechanism, reinforcing overall remuneration management, earnestly promoting mid-to-long-term incentive, optimising internal allocation management, and improving staff benefits. Meanwhile, the Company stepped up performance management to effectively achieve the incentive effect.

Adhering to the guiding principle of “value creation – value appraisal – value allocation”, the Company devised, optimised and effectively linked value appraisal to value allocation, in a bid to stimulate value creation. The Company adopted the following key measures: exploring the value-based remuneration mechanism, improving the performance-linked remuneration system, minimising internal friction on business objective balancing, and aligning with the external incremental output; promoting the performance-driven salary mechanism for employees featured with “position-specific salaries and performance-based bonuses”, and linking responsibilities to salaries, and conducting earnest analysis into remuneration incentive, including external competition and internal fairness, and identifying potential improvements in value allocation.

## (III) Training Plan

Applicable  Not applicable

According to the Company’s human resources strategic planning and talent development requirements in the “14th Five-Year” period, the human resources department of the Company investigated into and formulated training plans in light of the general requirements. Based on the analysis of the Company’s development strategy, business lines and demand of employees for trainings in career development, it closely aligned courseware, lectures and other resources with post requirements, made effective use of resources, and launched trainings at different levels, in multiple means and of various aspects through engaging internal and external lecturers, dispatching staff to external enterprises for further study and inviting professionals to the Company for lecturing. The Company also made innovations in construction of the training management system. Through enhancing the monitoring and benchmarking of training plans, the Company ensured implementation of training projects from the organisational level. It independently designed learning map based on post, competence and career development, and integrated internal and external curriculum resources to facilitate employees to improve their learning motivation, capability and perseverance, and help them to learn in a more specific and targeted manner. In order to meet the requirements of the Company’s strategic human resource management, realise the common development of employees and the Company, and standardise and coordinate the training management within the Company, in 2022, the Company focused on the training classification and hierarchy, and continued to build its own training brand and established the brand image of the training development center among employees, customers and external enterprises.

# Section V Directors, Supervisors, Senior Management and Employees

Talent pool is the core competitiveness of the Company and plays an extremely important role in the development of the Company. The Company has been committed to the cultivation of talents and the construction of talent teams, and has cultivated a number of core talent teams, such as reserve talent team, international talent team, professional talent team (in marketing, technology, professional management, etc.), and internal lecturer team. Trainings mainly focus on the optimisation of performance management to empower employees in practical operation, so as to continuously optimise performance management and improve performance. In 2022, the Company provided more than 20 special trainings, involving a total of 1,000 employees, including over 600 employees recruited through social recruitment and unified recruitment, over 300 employees recruited internationally, and over 300 employees in technology, marketing and backup department. The Company systematically devised over 10 online trainings, involving 80% of the Company's employees such as professional management, skilled craftsmen, marketing and trade, and engineering technology personnel. The smooth development of talent training has provided a solid human resource guarantee for the Company's high-quality development and the accomplishment of the 14th Five-Year plan.

## (IV) Labour Outsourcing

Applicable  Not applicable

Total number of working hours of outsourced labour  
Total remuneration paid to outsourced labour

7,305,912 hours  
RMB352,379,055.2

## VII. OTHERS

Applicable  Not applicable



# Section VI Corporate Governance Report

## I. RELEVANT EXPLANATIONS ON CORPORATE GOVERNANCE OF THE COMPANY

Applicable  Not Applicable

During the reporting period, the Company was committed to the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, made unremitting efforts to implement the new development concept, aligned itself with the spirit of the Opinions of the State Council on Further Improving the Quality of Listed Companies (《國務院關於進一步提高上市公司質量的意見》) and other documents, and upheld compliance corporate governance to ensure sustainable and sound development in strict accordance with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Rules for Corporate Governance of Listed Companies and other applicable laws, regulations as well as requirements of the SSE and the Stock Exchange. Besides, Directors, Supervisors and senior management of the Company diligently fulfilled their responsibilities according to law to safeguard the interests of the Company and its Shareholders as a whole. Over the year, the Company achieved an improvement in corporate governance mechanism and witnessed a constant increase in governance capability.

The Company has always been dedicated to improving the quality of its corporate governance, and maximising long-term value to the Shareholders by increasing the Group's accountability and transparency through strict implementation of corporate governance practices.

During the year ended 31 December 2022, the Company has fully complied with all the code provisions of the CG Code set out in Appendix 14 to the SEHK Listing Rules.

The Board and the management of the Company make every effort to comply with the CG Code in order to protect and enhance the interests of the Shareholders. As the Company continues to grow, the Company will monitor and revise its corporate governance policy on an ongoing basis in order to ensure the relevant policy will be in compliance with the requirements of the relevant laws and regulations and the general standards expected from the Shareholders.

In accordance with the relevant laws and regulations, the Company has set up a structure with general meetings, the Board, committees of the Board, the Supervisory Committee and the management to act as check and balance against one another. The division of responsibilities among the general meetings, the Board, committees of the Board, the Supervisory Committee and the management are distinct, and each of them is assigned with clearly defined responsibilities. The Board has delegated the execution and daily operations of the Group's business to the management. However, clear directions are given to the management as to the matters that must be approved by the Board before decisions are made on behalf of the Group. The Company will continue to improve its corporate governance mechanism, exercise discipline in the fulfilment of corporate duties, and enhance the disclosure of information.

Reasons for significant difference, if any, between corporate governance of the Company and relevant requirements of laws, administrative regulations and stipulations of the CSRC on corporate governance of listed companies

Applicable  Not Applicable

# Section VI Corporate Governance Report

## II. EXPLANATION OF THE COMPANY ON LOSING INDEPENDENCE OR INDEPENDENT MANAGEMENT ABILITY WITH RESPECT TO ISSUES CONCERNING BUSINESS, PERSONNEL, ASSETS, INSTITUTIONS, FINANCE, ETC. WITH ITS CONTROLLING SHAREHOLDERS

Applicable  Not Applicable

Information on controlling shareholders, actual controllers and other entities under their control engaging in the same or similar business activities of the Company, corresponding impact on the Company due to horizontal competition or a material change in horizontal competition, measures adopted to address the impact, progress and follow-up countermeasures

Applicable  Not Applicable

Horizontal competition due to business activities engaged in by controlling shareholders, actual controllers and other entities under their control which have a material negative impact on the Company

Applicable  Not Applicable

## III. BRIEF INTRODUCTION TO THE GENERAL MEETINGS

Session	Date of meeting	Index of website designated for publication of the resolutions	Date of disclosure	Resolutions approved at the meeting
2021 annual general meeting, 2022 first class meeting of holders of A shares and 2022 first class meeting of holders of H Shares	17 June 2022	www.sse.com.cn www.hkexnews.hk	18 June 2022	For details, please refer to the Announcement on Resolutions Passed at the 2021 Annual General Meeting, 2022 First Class Meeting of Holders of A Shares and 2022 First Class Meeting of Holders of H Shares of Zhuzhou CRRC Times Electric Co., Ltd. published on the website of the SSE (Ann No. 2022-022), and Poll Results of the Annual General Meeting for Year 2021 and the First Class Meeting of Holders of H Shares of 2022 Held on 17 June 2022 of Zhuzhou CRRC Times Electric Co., Ltd. published on the website of the Hong Kong Stock Exchange
2022 first extraordinary general meeting	21 October 2022	www.sse.com.cn www.hkexnews.hk	22 October 2022	For details, please refer to the Poll Results Announcement of the 2022 First General Meeting of Zhuzhou CRRC Times Electric Co., Ltd. (Ann No. 2022-022) published on the website of the SSE and the Results of the First Extraordinary General Meeting of 2022 Held on 21 October 2022 of Zhuzhou CRRC Times Electric Co., Ltd. published on the website of the Hong Kong Stock Exchange



## Section VI Corporate Governance Report

Request for Convening of Extraordinary General Meeting by Preferred Shareholders with Restored Voting Rights

Applicable  Not Applicable

Explanation on the General Meetings

Applicable  Not Applicable

All the resolutions proposed at the above general meetings have been considered and approved, and no resolution was vetoed. The convening and holding procedures of the general meetings, qualifications of the convenor and attendees and the voting procedures complied with the requirements of the Company Law and the Articles of Association, and the resolutions passed at the general meetings were legal and valid.

### IV. SHAREHOLDERS' RIGHTS

#### 1. Convening extraordinary general meetings

According to the Articles of Association, where Shareholders request to hold an extraordinary general meeting or class meeting, the following procedures shall be followed:

Any Shareholder(s) individually or in aggregate holding more than 10% of the Company's shares carrying the right to vote at the meeting proposed to be held may sign one or more written request(s) of identical form and substance requesting the board to convene an extraordinary general meeting or a class meeting and stating the subject of the meeting. The above Shareholders shall ensure that the contents of the proposal comply with the provisions of the laws, regulations and the Articles of Association. The board shall, in accordance with the laws, regulations and the Articles of Association, furnish a written reply on whether or not to convene the extraordinary general meeting or class meeting within 10 days after receiving such request. The aforesaid number of shares shall be calculated at the market close on the date which the Shareholder(s) propose such written request (if it falls on a non-trading date, the trading date immediately prior to the date which the Shareholder(s) propose such written request).

If the Board agrees to convene an extraordinary general meeting or a class meeting, it shall serve the notice of such meeting within five days after the resolution is passed by the Board. Consent of the relevant Shareholder(s) shall be obtained in the event of any changes made to the original proposal in the notice.

If the Board does not agree to convene an extraordinary general meeting or a class meeting or fails to furnish a written reply within 10 days after receiving such proposal, any Shareholder(s) individually or in aggregate holding more than 10% of the Company's Shares carrying the right to vote at the meeting proposed to be held is/are entitled to propose to the Supervisory Committee for convening an extraordinary general meeting or a class meeting and such proposal shall be made in writing.

If the Supervisory Committee agrees to convene an extraordinary general meeting or a class meeting, it shall serve the notice of such meeting within five days after receiving such proposal. Consent of such Shareholder(s) shall be obtained in the event of any changes made to the original proposal in the notice.



## Section VI Corporate Governance Report

If the Supervisory Committee fails to serve any notice of an extraordinary general meeting or a class meeting within the prescribed period after receiving such proposal, the Supervisory Committee is deemed not to convene and preside over such meeting, in which case the Shareholder(s) individually or in aggregate holding more than 10% of the Company's Shares carrying the right to vote at the meeting proposed to be held for more than 90 consecutive days may convene and preside over such a meeting on his or their own accordingly.

The Board of Directors shall not, after the notice of the meeting is served, raise any new proposal. Unless agreed by the proposing Shareholder(s), the date of the general meeting shall not be changed or postponed.

### 2. Enquiries to the Board

To ensure effective communication between the Board and the Shareholders, the Company adopted a Shareholders' communication policy (the "Policy") on 29 March 2012. Under the Policy, the Company's information shall be communicated to the Shareholders mainly through general meetings (including annual general meetings), the Company's financial reports (interim reports and annual reports), and its corporate communications posted on the Company's website and the Hong Kong Stock Exchange's HKExnews website.

Shareholders may at any time make a request for the Company's information which is publicly available. For holders of H Shares, any relevant enquiries shall be first directed to the company secretary at the Company's principal place of business in Hong Kong at 1106, 11/F, Jubilee Centre, 18 Fenwick Street, Wanchai, Hong Kong, or the Company's Hong Kong share registrar, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong or, for holders of the A Shares, any relevant enquiries shall be directed to the registered office address of the Company at Times Road, Shifeng District, Zhuzhou, Hunan Province, 412001, the PRC.

### 3. Putting proposals to general meetings

When the Company convenes a general meeting, the Board of Directors, the Supervisory Committee, or Shareholder(s) individually or in aggregate holding more than 3% of the Shares of the Company shall have the right to propose new proposals in writing.

Shareholder(s) individually or in aggregate holding more than 3% of the Shares of the Company may submit their provisional proposals in writing to the convener 10 days before the convening of the general meeting. The convener shall issue a supplementary notice of the general meeting within two days after receiving the proposals to notify the content of the provisional proposals, and shall submit such provisional proposals to the general meeting for consideration. The content of the provisional proposals shall fall within the scope of power of the general meeting, the subject issues for discussion and the specific matters to be resolved shall be clearly stated therein.

Save as the circumstances provided in the preceding paragraphs, after the issue of the notice of the general meeting by the convener, no changes shall be made to the proposals stated in the notice of the general meeting nor shall new proposals be added.

Proposals not stated in the notice of the general meeting or which do not meet the requirements in Article 76 and paragraph 2 of Article 78 of the Articles of Association, shall not be voted or resolved at the general meeting.





## Section VI Corporate Governance Report

### 4. Communication with Shareholders and investors/investors relations

The Company places great emphasis on communication with investors and employs a variety of ways to deepen investors' understanding about the Company. The Company has established a department and arranged full-time staff to handle affairs regarding investor relation. When investors come to visit the Company, reception and site visit will be arranged by designated staff. The Company actively participates in various meetings concerning investor relations.

During the reporting period, the Company has disclosed all necessary information to the Shareholders in compliance with the SEHK Listing Rules, SSE STAR Market Listing Rules and the Articles of Association, and has reported to Shareholders and investors through various formal channels, which include (1) publishing quarterly reports, interim reports and annual reports; (2) holding annual general meetings and extraordinary general meetings to provide a platform for Shareholders to express their opinions and to communicate with the Board; (3) holding press conference and investors conferences from time to time; (4) organising the management to conduct roadshows; (5) publishing corporate communications such as announcements and circulars on the websites of the Stock Exchange, SSE and the Company; and (6) responding to the queries from Shareholders and investors in a timely manner.

The Company has reviewed its shareholder communication policy, and considered that such policy has been effectively implemented during the year.

The Company will continue to improve its relationship with investors, establish platforms to facilitate effective communication with investors through diverse means, so as to further enhance the Company's transparency.

## V. PERFORMANCE OF DUTIES OF DIRECTORS

### (I) Directors and Board of Directors

#### 1. Composition of the Board

As at the date of this report, the Board consists of 11 Directors, among whom Mr. Li Donglin is the Chairman of the Board and an executive Director; Mr. Liu Ke'an is the Vice Chairman of the Board and an executive Director; Mr. Shang Jing and Mr. Yan Wu are the other two executive Directors; Mr. Zhang Xinning is the non-executive Director; and Mr. Chan Kam Wing, Clement, Mr. Pao Ping Wing, Ms. Liu Chunru, Mr. Chen Xiaoming, Mr. Gao Feng and Mr. Li Kaiguo are the 6 independent non-executive Directors.

The Company has entered into a service contract with each of the Directors which sets out, among other things, the term of office and remuneration. Each session of the Board has a term of three years. Directors elected as the members of any new session of the Board will have a term of office commencing from the date on which he/she is elected up to the date on which members of the next session of the Board are elected or for a shorter period as may be decided upon at the general meeting. Directors appointed to fill casual vacancy will have a term of office commencing from the date of his/her appointment up to the next general meeting or for a shorter period as may be decided upon at the general meeting. Notice shall be given by either party not less than three months prior to termination of the service contract.

The Directors of the Company have strictly complied with their undertakings, and have been honest, trust-worthy and diligent in the performance of their duties. The number of Board members and the composition of the Board have complied with the relevant laws and regulatory requirements, as well as the Articles of Association. Other than working relationship, there is no other relationship among the members of the Board (especially the Chairman and the general manager), including any financial, business, family or other material or relevant relationship.

The Directors have distinguished themselves in their respective fields of expertise, and have demonstrated high standards of personal and professional ethics and integrity. All Directors have devoted sufficient time and attention to the Company's affairs. The Board believes that the ratio of executive Directors to non-executive Directors is reasonable and adequate to provide checks and balances that safeguard the interests of the Shareholders and the Company as a whole.

## Section VI Corporate Governance Report

### 2. *Independent non-executive Directors*

Throughout the year ended 31 December 2022, the Board complied with the requirements of the SEHK Listing Rules relating to the appointment of at least three independent non-executive Directors, representing at least one-third of the Board, and with at least one of them possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received the annual confirmation letters of their independence from each of the independent non-executive Directors, namely, Mr. Chan Kam Wing, Clement, Mr. Pao Ping Wing, Ms. Liu Chunru, Mr. Chen Xiaoming, Mr. Gao Feng and Mr. Li Kaiguo as required under Rule 3.13 of the SEHK Listing Rules and the Company considers that they remain independent in accordance with the guidelines set out in the SEHK Listing Rules.

### 3. *Chairman of the Board and general manager*

The offices of the Chairman and the general manager (equivalent to the role of a chief executive officer) of the Company are held by different persons. Currently, Mr. Li Donglin, being an executive Director, is the Chairman, and Mr. Shang Jing, being an executive Director, is the general manager. The division of responsibilities between the Chairman and the general manager of the Company has been clearly established and set out in the Articles. The Chairman is responsible for leadership of the Board and chairing Board meetings, while the general manager is responsible for the Company's day-to-day operations.

According to the Articles, the Chairman mainly exercises the following powers:

- (1) to preside at the general meetings, and to convene, preside the meetings of the Board;
- (2) to urge, supervise and check the implementations of the Board resolutions;
- (3) to urge, supervise and check the work of special committees;
- (4) to listen to the regular or irregular work reports of the Company's general manager and other senior management personnel, and to provide guidance on the implementation of the resolutions of the board of directors;
- (5) in case of force majeure, major crisis or material impact on production and operation, and in case of an emergency where a Board meeting cannot be held in time, exercise the special rights to deal with the Company's affairs in accordance with the law and in the interest of the Company, and report to the Board of Directors or the general meeting afterwards;
- (6) to nominate the secretary to the Board of Directors of the Company;
- (7) to sign the shares, corporate bonds and other marketable securities of the Company;
- (8) to sign important documents of the Board of Directors and sign important legally binding documents on behalf of the Company;
- (9) to organise the formulation of various rules and regulations for the operation of the Board of Directors and coordinate the work of the Board of Directors;



## Section VI Corporate Governance Report

- (10) to approve the plan for the use of the working funds of the Board of Directors of the Company;
- (11) to exercise other functions and powers that shall be exercised by the Chairman and granted by the Board of Directors in accordance with the relevant laws, administrative regulations and rules;
- (12) other powers and duties stipulated by laws and regulations or the Articles of Association and given by the Board.

The general manager is responsible to the Board of Directors. The general manager and the management team under his leadership mainly exercise the following powers as delegated by the Board:

- (1) to be in charge of the Company's production, operation and management and to organise the implementation of the resolutions of the Board and report his/her work to the Board;
- (2) to organise the implementation of the Company's annual business plan and investment plan;
- (3) to draft plans for the establishment of the Company's internal management structure;
- (4) to draft the Company's basic management system;
- (5) to formulate the basic rules and regulations for the Company;
- (6) to propose the appointment or removal of other senior management personnel;
- (7) to appoint or remove management personnel other than those required to be appointed or removed by the Board;
- (8) to determine the wages, benefits, incentives and punishments of the employees, the appointment and removal, promotion and demotion, salary increment and decrement, appointment, employment, removal or resignation of the employees;
- (9) to propose the convening of the extraordinary meeting of the Board; and
- (10) other powers and duties conferred by the laws, regulations, regulatory documents and the securities regulatory rules of the place(s) where the shares of the Company are listed and the Articles of Association or the Board.

#### **4. Non-executive Directors**

According to the Articles, non-executive Directors of the Company are elected at general meetings for a term of three years. Upon expiry of terms of office, non-executive Directors are eligible for re-election.

#### **5. Nomination of Directors**

In accordance with the Articles, Directors are elected at general meetings. Written notice of intention to nominate a candidate for appointment as director and the candidate's consent to be nominated must be given to the Company after the notice of the general meeting has been issued at least seven days prior to the holding of the general meeting. Nomination policy took effect on 1 January 2019 which was approved by the Board on 26 March 2019 are posted on the Company's website and the Hong Kong Stock Exchange's HKExnews website.

## Section VI Corporate Governance Report

### 6. Operation of the Board

The Board of Directors is responsible to the general meetings of the Shareholders in relation to the leadership and supervision of the Company. The Board is responsible for formulating the Group's overall development strategies, reviewing and monitoring the Group's business performance, and preparing and reviewing its financial statements. The Board delegates the day-to-day management, administration and operation of the Group to the management. The delegated functions are reviewed by the Board periodically to ensure that they accommodate the needs of the Group. Please refer to the subsection headed "Corporate Governance Report – Chairman of the Board and general manager" below for the specific powers exercised by the management.

The Board convenes regular and ad hoc meetings in accordance with legal procedures and complies strictly with the relevant laws and regulations and the Articles in the exercise of its authorities with an emphasis on protecting the interests of the Company and the Shareholders as a whole.

All Directors are given no less than 14 days' notice of regular Board meetings and are generally given reasonable prior notice of Board meetings other than regular meetings.

The secretary to the Board records and prepares documents concerning matters that are discussed during the Board meetings. The minutes of every Board meeting are circulated to all Directors for their review. After the Board minutes have been finalized, the minutes will be signed by all Directors who have attended the meeting, the secretary to the Board and the person(s) recording the meeting and will be permanently kept as an important record of the Company at the Company's registered office.

### 7. Responsibilities of the Board of Directors

The Board of Directors is responsible to the general meeting. According to the Articles, the Board of Directors exercises the following powers:

- (1) to be responsible for convening general meetings and to report on its works to the general meeting;
- (2) to implement the resolutions of the general meetings;
- (3) to decide on the Company's business plans, investment plans and annual financing plans;
- (4) to draw up the Company's proposed annual financial budgets and final budgetary reports;
- (5) to draw up the Company's profit distribution plan and plan for making up losses;
- (6) to draw up proposals for increases or reductions of the Company's registered capital and the issue of debentures or other securities and listing plan;
- (7) to draw up plans for the material acquisitions, repurchase of its shares or merger, split, reorganisation and dissolution of the Company and change of company type;
- (8) to appoint or remove the Company's general manager and secretary to the board, to appoint or remove the other senior management personnel based on the nominations by the general manager, and to determine the matters relating to their remuneration, incentives and punishments; and to decide on appointment or removal of deputy manager, financial controller and other senior management personnel of the Company based on the nominations by the general manager, and to determine the matters relating to their remuneration, incentives and punishments;



## Section VI Corporate Governance Report

- (9) to decide on the establishment of the Company's internal management structure;
- (10) to decide on the establishment of the special committees of the Board and consider and approve the proposals put forward by the special committees of the Board;
- (11) to draw up the Company's basic management system;
- (12) to draw up proposals for any modifications to the Articles of Association, the Rules of Procedures for the General Meetings and the Rules of Procedures for the Board of Directors;
- (13) within the scope as authorised by the general meeting, to decide on matters relating to investment, financing and borrowing and to decide on the investment, acquisition and disposal of assets, asset pledge, external guarantee, entrusted wealth management, entrusted loans, related party transactions, external donation and other matters; as well as to organise the general manager to exercise its right under certain circumstances pursuant to this provision;
- (14) to propose to the general meeting to engage, dismiss or not to reappoint the auditors of the Company;
- (15) to listen to the work report of the Company's general manager and inspect the work of the general manager and other senior management personnel;
- (16) to formulate the Company's equity incentive plan;
- (17) to manage information disclosure of the Company;
- (18) to decide on other major affairs and administrative matters of the Company subject to the compliance with the relevant laws, regulations and the requirements of the Articles of Association, save for matters to be resolved at general meetings as required by relevant laws, regulations, and the Articles of Association;
- (19) other powers and functions conferred by the Articles of Association or the general meetings.

Except the resolutions of the Board in respect of the matters specified in paragraphs (6), (7) and (12) above which shall be passed by more than two-thirds of the Directors, the guarantee-related matters within the scope of authority of the Board shall be approved by more than half of all Directors and two-thirds of the Directors present at the Board meeting, and the resolutions of the Board in respect of all other matters may be passed by more than half of all Directors.

Where the above matters within the powers of the board of directors or any transaction or arrangement of the Company are subject to consideration by the general meeting or go beyond the scope as authorised by the general meeting according to the securities regulatory rules of the place(s) where the Company's Shares are listed, such matters shall be submitted to the general meeting for consideration. The Board shall act in strict accordance with the authorisation of the general meeting and the Articles of Association and shall not reach resolutions that go beyond such scope of authorisation.

## Section VI Corporate Governance Report



All Directors have access to the advice and services of the company secretary. The Company provides all Directors with the necessary information and data to enable them to make scientific, timely and prudent decisions. Any Director can make requests to the general manager, or through the general manager, to request the Company's relevant department to provide him/her with any necessary information and explanation to enable him/her to make scientific, timely and prudent decisions. If any Director considers necessary, an independent institution can be engaged to provide independent opinions to assist his/her in decision-making. The Company is responsible for arranging the engagement of independent institution at the Company's costs.

When voting on any connected transaction of the Company, Director(s) with interest in such connected transaction shall abstain from voting. If a resolution cannot be passed due to the concerned Director(s) abstaining from voting, the resolution will be submitted directly to the Shareholders at a general meeting for consideration and approval.

The Company has arranged appropriate liability insurance policies for Directors, supervisors and senior management members, for the purpose of covering their liability arising out of the Group's corporate activities.

The Board is responsible for the following corporate governance functions:

1. to formulate and review, and make recommendations to the Company's corporate governance policy and practices;
2. to review and monitor the trainings and continuing professional development of the Directors and senior management members;
3. to review and monitor the Company's policies and practices on compliance with laws and regulations;
4. to formulate, review and monitor any code of conduct and compliance manual, where available, applicable to Directors and employees; and
5. to review the Company's compliance with the CG Code and the disclosure in the corporate governance report as set out in the annual report of the Company.

# Section VI Corporate Governance Report

## VI. BOARD MEETINGS CONVENED DURING THE REPORTING PERIOD

Session	Date of meeting	Resolutions approved at the meeting
18th meeting of the sixth session of the Board	25 January 2022	1 resolution was considered and approved: Resolution on Replacing the Self-financed Capital Invested in Advance and Paid for Issuance Expenses with Raised Proceeds
19th meeting of the sixth session of the Board	23 February 2022	1 resolution was considered and approved: Resolution on Appointment of Mr. Li Peng as a Deputy General Manager of the Company
20th meeting of the sixth session of the Board	29 March 2022	30 resolutions were considered and approved, including, among others, Resolution on the Company's 2021 Annual Report and its Abstract, Resolution on the Company's 2021 Final Financial Report, Resolution on the Company's 2021 Profit Distribution Plan, and Resolution on the Company's External Guarantee Plan in 2022
21st meeting of the sixth session of the Board	26 April 2022	8 resolutions were considered and approved, including, among others, Resolution on the Company's 2022 First Quarterly Report, Resolution on Engagement of Auditor of the Company for 2022, and Resolution on Amendments to the Articles of Association
22nd meeting of the sixth session of the Board	26 August 2022	7 resolutions were considered and approved, including, among others, Resolution on the Company's 2022 Interim Report and its Abstract, Resolution on the Special Report Regarding Deposit and Utilisation of Raised Proceeds in the First Half of 2022, and Resolution on Financing Investment Projects with Self-financed Capital and Acceptance Bills in Advance and Replacing with Raised Proceeds with the Same Amount
23rd meeting of the sixth session of the Board	22 September 2022	1 resolution was considered and approved: Resolution on Medium and Low Voltage Power Devices Industrialisation Construction Project of CRRC Times Semiconductor

## Section VI Corporate Governance Report

Session	Date of meeting	Resolutions approved at the meeting
24th meeting of the sixth session of the Board	14 October 2022	2 resolutions were considered and approved: Resolution on the Company's 2022 Third Quarterly Report, and Resolution on Change of Use of Raised Proceeds and Capital Increase in a Subsidiary
25th meeting of the sixth session of the Board	25 November 2022	3 resolutions were considered and approved, including, among others, Resolution on Capital Increase in and Transfer of Assets to Zhuzhou CRRC Times Semiconductor Co., Ltd. by the Company, and Resolution on Construction Delay of Certain Investment Projects, Introducing New Implementation Subjects to Certain Investment Projects and Granting Loans to Such New Implementation Subjects with Raised Proceeds to Implement Investment Projects
26th meeting of the sixth session of the Board	28 December 2022	1 resolution was considered and approved: Resolution on Entering into the 2023-2025 Product and Supporting Service Mutual Supplying Framework Agreement and Routine Related Party Transaction Between the Company and Qingdao CRRC Electric Equipment Co., Ltd.



# Section VI Corporate Governance Report

## VII. PERFORMANCE OF DUTIES OF DIRECTORS

### (I) Attendance of the Board Meetings and General Meetings by the Directors

Name of Director	Independent Director or not	Number of attendance at Board meetings during the year	Attendance at Board meetings				Attendance at general meetings	
			Number of attendance in person	Number of attendance by means of telecommunications	Number of attendance by proxy	Number of absence	Failure to attend in person for two consecutive times	Number of attendance at the general meetings
Li Donglin	No	9	9	3	0	0	No	4
Liu Ke'an	No	9	9	3	0	0	No	4
Shang Jing	No	9	9	3	0	0	No	4
Yan Wu	No	9	9	3	0	0	No	4
Zhang Xinning	No	9	9	3	0	0	No	4
Chan Kam Wing, Clement	Yes	9	9	3	0	0	No	4
Pao Ping Wing	Yes	9	9	3	0	0	No	4
Liu Chunru	Yes	9	9	3	0	0	No	4
Chen Xiaoming	Yes	9	9	3	0	0	No	4
Gao Feng	Yes	9	9	3	0	0	No	4
Li Kaiguo	Yes	2	2	1	0	0	No	0

The Explanation of Failure to Attend Meetings of the Board in Person for Two Consecutive Times

Applicable  Not Applicable

Number of the Board meetings held for the year	9
Including: number of meetings held onsite	0
Number of meetings held by means of telecommunications	3
Number of meetings held onsite and by means of telecommunications simultaneously	6

# Section VI Corporate Governance Report

## (II) Objections Raised by Directors against Relevant Matters of the Company

Applicable  Not Applicable

## (III) Others

Applicable  Not Applicable

## (IV) Directors' Continuous Training and Development Program

Pursuant to the CG Code, all Directors should participate in continuous professional development program to develop and refresh their knowledge and skills. This is to ensure that their contribution to the Board remains fully informed and relevant.

All Directors of the Company have received regular briefings and updates on the Group's business, operations, risk management and corporate governance matters, and have been provided with material information on new laws and ordinances or changes to important laws and ordinances applicable to the Group. All Directors are required to provide the Company with their respective training records pursuant to the CG Code.

During the reporting period, the Company has provided the Directors with appropriate and continuous training, and professional development courses, the Directors attended the relevant training, and some of the independent non-executive Directors attended relevant trainings arranged by other organizers. The Company has received from each of the Directors the confirmation on attending continuous professional trainings. The trainings received by each Director in 2022 are as follows:

### Executive Directors

Li Donglin	A, B, D
Liu Ke'an	A, B, D
Shang Jing	A, B, D
Yan Wu	A, B, D, F

### Non-executive Director

Zhang Xinning	A, B, D
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# Section VI Corporate Governance Report

## Independent non-executive Directors

Chan Kam Wing, Clement	A, B, C, D
Pao Ping Wing	A, B, C, D
Liu Chunru	A, B, D
Chen Xiaoming	A, B, D
Gao Feng	A, B, D
Li Kaiguo	D, E

Note: A, B, C, D, E and F in the above table represent trainings of the following types respectively:

- A Attending trainings on Information Disclosure Risk (H Shares) and Legal Risks of Non-compliance in Financial and Business Information Disclosure provided by intermediary institutions engaged by the Company.
- B Attending trainings provided by regulatory authorities and China Association for Public Companies.
- C Attending trainings in relation to connected transactions, Directors' responsibilities, the CG Code and accounting standards etc. arranged by other organisers.
- D Studying and reading briefings and analysis on the Group's business, operations, risk consciousness and corporate governance matters.
- E Attending pre-post trainings for independent directors required by the main board of the SSE.
- F Attending follow-up trainings for secretary of the board of directors required by the Science and Technology Innovation Board of the SSE.

## (V) Special Committees under the Board

Applicable  Not Applicable

### (1) Members of the special committees under the Board

Committee	Name of members
Strategy committee	Li Donglin (chairman), Liu Ke'an, Shang Jing, Zhang Xinning, Gao Feng and Li Kaiguo
Audit committee	Chan Kam Wing, Clement (chairman), Pao Ping Wing, Liu Chunru, Chen Xiaoming, Gao Feng and Li Kaiguo
Risk control committee	Liu Ke'an (chairman), Yan Wu and Chan Kam Wing, Clement
Remuneration committee	Pao Ping Wing (chairman), Liu Chunru and Chen Xiaoming
Nomination committee	Liu Chunru (chairman), Li Donglin and Pao Ping Wing

## Section VI Corporate Governance Report

### (2) The strategy committee held 2 meetings during the reporting period

During the reporting period, the strategy committee acted in strict accordance with the Implementation Rules and Regulations of the Strategy Committee of the Company and performed its duties independently and objectively. The strategy committee is responsible to the Board, and its major responsibilities include providing research reports on government policies and industry trends, studying the Company's long-term sustainable development strategies and business philosophy, and investigating into major investment and financing schemes and major capital operation projects.

Date of meeting	Subject	Major opinions and suggestions	Other duties performed
29 March 2022	3 resolutions were considered, including, among others, Resolution on the Work Report of the Strategy Committee of the Board for 2021 and the Resolution on Investment Budget of the Company for 2022	The strategy committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted all resolutions after earnest discussion.	None
22 September 2022	Resolution on Medium and Low Voltage Power Devices Industrialisation Construction Project of CRRC Times Semiconductor was considered	The strategy committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted the resolution after earnest discussion.	None

Set out below is the attendance of each member Director:

Name	Times of attendance/ meeting	Attendance
Li Donglin	2/2	100%
Liu Ke'an	2/2	100%
Shang Jing	2/2	100%
Zhang Xinning	2/2	100%
Gao Feng	2/2	100%
Li Kaiguo	0/0	–

Note: Mr. Li Kaiguo served as a member of the strategy committee of the Board commencing from 21 October 2022.

## Section VI Corporate Governance Report

### (3) The audit committee held 5 meetings during the reporting period

During the reporting period, the audit committee under the Board acted in strict accordance with the Implementation Rules and Regulations of the Audit Committee of the Board and performed its duties independently and objectively. The audit committee is responsible to the Board, and its major responsibilities include proposing engagement or replacement of external auditor and monitoring and evaluating the work of external auditor, review of the Company's financial information and its disclosure, supervision of the internal audit system and its implementation, review of the Company's internal control and risk management policy and system as well as communication between internal audit department and external auditor.

Date of meeting	Subject	Major opinions and suggestions	Other duties performed
28 March 2022	11 resolutions were considered, including, among other things, Resolution on the Company's 2021 Annual Report and its Abstract, and Resolution on the Final Financial Report of the Company for 2021	The audit committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted all resolutions after earnest discussion.	Members of the audit committee communicated separately with the auditors on the Company's 2021 audit report.
26 April 2022	2 resolutions were considered: the Resolution on the Company's 2022 First Quarterly Report, and Resolution on Engagement of Auditor of the Company for 2022	The audit committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted both resolutions after earnest discussion.	
25 August 2022	3 resolutions were considered, including, among other things, Resolution on the Company's 2022 Interim Report and its Abstract	The audit committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted all resolutions after earnest discussion.	Members of the audit committee communicated separately with the auditors on the Company's 2022 interim financial report.
14 October 2022	1 resolution was considered: Resolution on the Company's 2022 Third Quarterly Report	The audit committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted the resolution after earnest discussion.	

# Section VI Corporate Governance Report

Date of meeting	Subject	Major opinions and suggestions	Other duties performed
28 December 2022	3 resolutions were considered, including, among other things, Resolution on the Company's 2022 Audit Plan	The audit committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted all resolutions after earnest discussion.	Members of the audit committee communicated separately with the auditors on the Company's 2022 audit plan.

Set out below is the attendance of each member Director:

Name	Times of attendance/ meeting	Attendance
Chan Kam Wing, Clement	5/5	100%
Pao Ping Wing	5/5	100%
Liu Chunru	5/5	100%
Chen Xiaoming	5/5	100%
Gao Feng	5/5	100%
Li Kaiguo	1/1	100%

Note: Mr. Li Kaiguo served as a member of the audit committee of the Board commencing from 21 October 2022.

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### (4) The risk control committee held 1 meeting during the reporting period

During the reporting period, the risk control committee under the Board acted in strict accordance with the Implementation Rules and Regulations of the Risk Control Committee of the Board and performed its duties independently and objectively. The risk control committee is responsible to the Board, and its major responsibilities include formulating, reviewing and revising the Company's risk strategy, reviewing and periodically assessing its risk strategy and risk management policy, and examining and reviewing its risk management and control system.

Date of meeting	Subject	Major opinions and suggestions	Other duties performed
29 March 2022	3 resolutions were considered, including, among other things, Resolution on the Company's 2021 Internal Control Assessment Report and Internal Control Audit Report	The risk control committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted all resolutions after earnest discussion.	

Set out below is the attendance of each member Director:

Name	Times of attendance/ meeting	Attendance
Liu Ke'an	1/1	100%
Yan Wu	1/1	100%
Chan Kam Wing, Clement	1/1	100%

## Section VI Corporate Governance Report

### (5) The remuneration committee held 3 meetings during the reporting period

During the reporting period, the remuneration committee under the Board acted in strict accordance with the Implementation Rules and Regulations of the Remuneration Committee of the Board and performed its duties independently and objectively. The remuneration committee is responsible to the Board, and its major responsibilities include formulating an overall remuneration structure, scheme, proposal and/or policy based on the major scope, responsibilities and importance of the managerial position of directors and senior management members, as well as the levels of remunerations of relevant positions in relevant enterprise and setting up the procedures which shall be followed in relation to formulating the remuneration structure, scheme, proposal and/or policy (such procedures must be formal and transparent). The remuneration structure, scheme, proposal and/or policy shall include but not limited to appraisal standard, procedures and the principal appraisal system, the main proposal and system for reward and penalties; which shall be submitted to the Board for consideration.

Date of meeting	Subject	Major opinions and suggestions	Other duties performed
23 February 2022	1 resolution was considered: Resolution on Proposed Remuneration of Mr. Li Peng as a Deputy General Manager of the Company	The remuneration committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted the resolution after earnest discussion.	
29 March 2022	3 resolutions were considered, including, among other things, Resolution on the Work Report of the Remuneration Committee of the Board in 2021, and Resolution on Annual Remunerations of the Directors of the Company in 2021	The remuneration committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted all resolutions after earnest discussion.	
26 August 2022	2 resolutions were considered, including, among other things, Resolution on Proposed Remuneration of Mr. Li Kaiguo as an Independent Non-executive Director of the Company	The remuneration committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted both resolutions after earnest discussion.	



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Set out below is the attendance of each member Director:

Name	Times of attendance/ meeting	Attendance
Pao Ping Wing	3/3	100%
Liu Chunru	3/3	100%
Chen Xiaoming	3/3	100%

### **(6) The nomination committee held 3 meetings during the reporting period**

During the reporting period, the nomination committee under the Board acted in strict accordance with the Implementation Rules and Regulations of the Nomination Committee of the Board and performed its duties independently and objectively. The nomination committee is responsible to the Board, and its major responsibilities include reviewing the structure, scale, size, composition and membership diversity of the Board, studying and formulating systems and policies relating to the nomination of Directors and senior management members and identifying suitable qualified candidates to become Directors and senior management members, and selecting and nominating the relevant person for appointment as a Director and senior management member or making recommendations to the Board of Directors on such matter.

Pursuant to the nomination policy, the nomination committee is responsible for, among other things, identifying suitably qualified candidates to become Board members and senior management members, and selecting and nominating the relevant person for appointment as a Director (and senior management member) or make recommendations to the Board on such matter. When identifying suitable candidates, the nomination committee shall comply with the principle of meritocracy, consider the strengths of the relevant candidate, the contributions they can make to the Board and give due consideration to the benefits of membership diversity in terms of objective conditions. When making recommendations to the Board on the appointment of independent non-executive Directors, the nomination committee shall take into account the process used for identifying that person, the reasons for the person to be independent and to be able to devote sufficient time to perform the duties of a director, the perspectives, skills and experience that the person can bring to the Board, and how the person would contribute to the diversity of Board members.

The Board has adopted a board diversity policy effective on 11 October 2013, which was subsequently amended by the Board on 26 March 2019 to take effect on 1 January 2019. When determining the composition of the Board, the Company seeks to achieve board diversity through the consideration of a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service and any other factors that the Board may consider relevant and applicable from time to time. All appointments of the Board will be based on meritocracy, and candidates will be considered against objective criteria, having due regard to the benefits of diversity of the Board. Selection of candidates will be based on a range of diversity perspectives as mentioned above. The ultimate decision will be based on merits of the candidates and the contribution that they may bring to the Board, having due appropriate regard to the benefits of diversity to the Board and also the needs of the Board without focusing on a single diversity aspect.

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The Board has set measurable objectives (including the aforesaid measurable objectives) to implement the policy and the nomination committee is responsible for reviewing such objectives from time to time to ensure their appropriateness and monitoring the progress made towards achieving those objectives, and reviewing the policy, as appropriate, to ensure its continued effectiveness from time to time.

During the reporting period, in order to further enhance corporate governance, satisfy the board diversity requirements and strengthen the scientific decision-making capabilities of the Board, the nomination committee proposed to elect Mr. Li Kaiguo as an independent non-executive Director candidate, which was considered and approved at the general meeting following consideration and approval by the Board. With independent Directors accounting for more than half of the members of the Board, the Company further regulated its corporate governance. The nomination committee has considered the board diversity policy and whether the Board has the appropriate balance of skills, experience and diversity of perspectives necessary to enhance the effectiveness of the Board and to maintain high standards of corporate governance.

The current Board composition has demonstrated the diversity of each member in terms of, among other things, educational background, professional knowledge, industry experience and seniority (for details, please refer to the section headed "Directors, Supervisors, Senior Management and Employees"). The table below sets out an overview of the Board diversity during the reporting period:

	Gender	Age	Position in the Board	Professional field and experience	Educational background and professional qualification
Mr. Li Donglin	Male	56	Chairman of the Board and an executive Director	Electric traction and drive control, electrical engineering and system engineering	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Electric Traction and Drive Control</li> <li>• Professor-level senior engineer</li> </ul>
Mr. Liu Ke'an	Male	52	Vice Chairman of the Board and an executive Director	Electric traction and drive control, electrical engineering and system engineering	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Industrial Electrical Automation in the Department of Electrical Engineering</li> <li>• Holding a master's degree in Corporate Management</li> <li>• Holding a doctor's degree in transportation and communication engineering</li> <li>• Professor-level senior engineer</li> </ul>

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	Gender	Age	Position in the Board	Professional field and experience	Educational background and professional qualification
Mr. Shang Jing	Male	46	Executive Director	Electric traction and drive control, electrical engineering and system engineering	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Mechanical and Electrical Engineering</li> <li>• Holding a master's degree in Power System and Automation</li> <li>• Holding a doctor degree in control science and engineering</li> <li>• Professor-level senior engineer</li> </ul>
Mr. Yan Wu	Male	56	Executive Director and secretary of the Board	Electric traction and drive control, electrical engineering and system engineering	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Electro-Technology</li> <li>• Holding a master's degree in Aircraft Navigation and Control</li> <li>• Senior engineer</li> </ul>
Mr. Zhang Xinning	Male	59	Non-executive Director	Electric traction and drive control, electrical engineering and system engineering	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in electric traction and drive control</li> <li>• Holding a master's degree in system engineering</li> <li>• Professor-level senior engineer</li> </ul>
Mr. Chan Kam Wing, Clement	Male	65	Independent non-executive Director	Finance, accounting and internal control	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Accounting</li> <li>• Holding a master's degree in Commerce</li> <li>• A certified public accountant in Hong Kong</li> </ul>

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	Gender	Age	Position in the Board	Professional field and experience	Educational background and professional qualification
Mr. Pao Ping Wing	Male	76	Independent non-executive Director	Human settlements planning science and corporate governance	<ul style="list-style-type: none"> <li>• Holding a master's degree in human settlements planning science</li> </ul>
Ms. Liu Chunru	Female	52	Independent non-executive Director	Business administration and asset appraisal	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Engineering</li> <li>• Holding a master's degree in Business Administration</li> <li>• Certified assets valuer</li> </ul>
Mr. Chen Xiaoming	Male	60	Independent non-executive Director	Law	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Laws</li> <li>• Holding a master's degree in Laws</li> <li>• Lawyer</li> </ul>
Mr. Gao Feng	Male	46	Independent non-executive Director	Electrical engineering	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Electrical Engineering</li> <li>• Holding a master's degree in Electrical Engineering</li> <li>• Holding a doctor's degree in Electrical Engineering</li> <li>• Professor-level senior engineer</li> </ul>
Mr. Li Kaiguo	Male	61	Independent non-executive Director	Engineering technology	<ul style="list-style-type: none"> <li>• Holding a bachelor's degree in Engineering</li> <li>• Researcher level senior engineer</li> <li>• A Machinery Industrial Scientific Technology Specialist of the PRC</li> </ul>



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After due consideration, the nomination committee considered that the current composition of the Board is a balanced and diversified combination that suits the business development of the Company and satisfies the board diversity policy for the year under review. Looking ahead, the Company will take into full account of relevant factors when considering Board composition or appointing new Directors to the Board, so as to achieve and constantly comply with the Board diversity policy.

Date of meeting	Subject	Major opinions and suggestions	Other duties performed
23 February 2022	1 resolution was considered: Resolution on Proposed Appointment of Mr. Li Peng as a Deputy General Manager of the Company	The nomination committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted the resolution after earnest discussion.	
29 March 2022	1 resolution was considered: Resolution on the Work Report of the Nomination Committee of the Board in 2021	The nomination committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted the resolution after earnest discussion.	
26 August 2022	2 resolutions were considered, including, among other things, Resolution on Proposed Election of Mr. Li Kaiguo as an Independent Non-executive Director Candidate of the Company	The nomination committee faithfully performed its duties in strict accordance with relevant laws, administrative regulations and departmental rules, and unanimously adopted both resolutions after earnest discussion.	

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Set out below is the attendance of each member Director:

Name	Times of attendance/ meeting	Attendance
Liu Chunru	3/3	100%
Li Donglin	3/3	100%
Pao Ping Wing	3/3	100%

### **(7) Details of Matters to which Objections have been Raised**

Applicable  Not Applicable

## VIII. SUPERVISORY COMMITTEE

As at the date of this report, the Supervisory Committee comprises four supervisors. Mr. Li Lue is the Chairman of the Supervisory Committee, Messrs. Pang Yiming and Zhou Guifa are the employee representative Supervisors, and Mr. Geng Jianxin is an independent Supervisor.

During the reporting period, pursuant to the Company Law of the PRC, the Articles, the SEHK Listing Rules, the SSE STAR Market Listing Rules and the Rules of Meetings of the Supervisory Committee, members of the Supervisory Committee performed their duties prudently and effectively with respect to the supervision of the Company's operations and business activities in accordance with the applicable rules and regulations in order to safeguard Shareholders' and the Company's interests.

The Supervisory Committee is accountable to the general meeting and exercises the following powers in accordance with law:

- (1) to review the Company's periodic reports and provide written review opinions;
- (2) to examine the Company's financial condition;
- (3) to monitor whether the Directors, general managers, deputy general managers and other senior management of the Company act in contradiction with the laws, administrative regulations or the Articles of Association; to make suggestions on the removal of Directors or senior management personnel who violate laws and regulations, the Articles of Association or the resolutions of the general meeting, and where the Supervisory Committee identifies violation of laws and regulations, the relevant provisions of the stock exchange(s) where the Company's shares are listed and the Articles of Association by the Directors or senior management personnel, it shall notify the Board or report to the general meeting and disclose the same in a timely manner;
- (4) to demand rectification from a Director, the general manager, deputy general managers or other members of the senior management of the Company when the acts of such persons are prejudicial to the Company's interests;



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- (5) to verify the financial information such as the financial report, business report and plans for distribution of profits to be submitted by the Board to the general meetings and, should any queries arise, to organise, in the name of the Company, a re-examination by the registered accountants and practicing auditors;
- (6) to conduct investigations into any irregularities identified in the operation of the Company and, if necessary, may engage the professional institutions, including accounting firms and law firms to assist its work and the expenses so incurred shall be borne by the Company;
- (7) to propose to convene an extraordinary general meeting, and to convene and preside over the general meeting when the Board of Directors fails to perform its duty of convening and presiding over the general meeting as prescribed by law;
- (8) to put forward proposals to the general meeting;
- (9) to represent the Company in negotiation with Directors and senior management personnel or to institute an action against the Directors and senior management personnel; and
- (10) other powers specified in the laws, regulations, departmental rules, and relevant provisions of the securities regulatory authorities where the Company's shares are listed, the Articles of Association and granted by the general meeting.

### IX. EXPLANATION OF THE SUPERVISORY COMMITTEE ON DISCOVERY OF THE COMPANY'S RISKS

Applicable  Not Applicable

### X. PLAN FOR DISTRIBUTION OF PROFITS OR TRANSFER OF CAPITAL RESERVE FUND

#### (I) Formulation, implementation or adjustment of cash dividend policy

Applicable  Not Applicable

##### 1. Formulation of cash dividend policy

While pursuing sustainable and healthy business development, the Company attaches great importance to generating reasonable investment returns to the Shareholders. In accordance with the requirements of the CSRC, the Company has made specific stipulations regarding the consideration process of cash dividends and profit distribution. The profit distribution policy of the Company complies with the requirements as set out in the Articles of Association and is designated with defined and clear distribution standards and proportion, subject to complete and sound decision-making mechanism and procedures.

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### **2. Implementation of the cash dividend policy in 2021**

At the 15th meeting of the sixth session of the Board held on 12 October 2021, the Resolution on the 2021 Interim Dividend Distribution Plan of the Company was considered and approved, pursuant to which, the Company proposed to distribute cash dividends of RMB4.5 (tax inclusive) for every ten Shares held by Shareholders based on the total share capital of the Company as at 30 September 2021. The resolution was considered and approved at the 2021 first extraordinary general meeting of the Company held on 9 November 2021. The 2021 interim dividends were distributed on 17 December 2021.

At the 20th meeting of the sixth session of the Board held on 29 March 2022, the Resolution on the Profit Distribution Plan of the Company for 2021 was considered and approved, pursuant to which, the Company proposed to distribute cash dividends to the Shareholders based on the total number of Shares determined on the record date fixed for the equity distribution which will be specified in the equity distribution implementation announcement. The Company proposed to distribute cash dividends of RMB4.5 (tax inclusive) for every ten Shares held by Shareholders, totaling RMB637,306,610.40 based on the total share capital of the Company of 1,416,236,912 as at 31 December 2021, accounting for 31.59% of the net profit attributable to Shareholders of the Company as contained in the consolidated financial statements for 2021. The profit distribution plan was considered and approved at the Company's 2021 annual general meeting. The 2022 annual dividends were distributed on 22 July 2022.

Cash dividends for 2021 (including the 2021 interim cash dividend already paid) accounted for 63.17% of the net profit attributable to the shareholders of the parent company as stated in the Company's consolidated financial statements.

### **3. Information of 2022 annual profit distribution plan**

At the 27th meeting of the sixth session of the Board held on 30 March 2023, the Resolution on the Profit Distribution Plan of the Company for 2022 was considered and approved, pursuant to which, the Company proposes to distribute cash dividends to the Shareholders based on the total number of Shares determined on the record date fixed for the equity distribution which will be specified in the equity distribution implementation announcement. The Company proposes to distribute cash dividends of RMB5.5 (tax inclusive) for every ten Shares held by Shareholders, totaling RMB778,930,301.60 based on the total share capital of the Company of 1,416,236,912 as at 31 December 2022, accounting for 30.48% of the net profit attributable to Shareholders of the Company as contained in the consolidated financial statements for 2022. In case of any change in the total share capital of the Company from the date of the profit distribution announcement to the record date for implementation of the equity distribution, the Company proposes to maintain the payout ratio per Share unchanged, make corresponding adjustments to the total payout amount, and will publish separate announcement(s) on the specific adjustments. The above profit distribution plan is subject to consideration and approval at the 2022 annual general meeting of the Company. The independent non-executive Directors performed their fiduciary obligations, conducted an earnest review on the resolution regarding the cash dividend policy and issued independent opinions thereon.





## Section VI Corporate Governance Report

### (II) Special explanations on the cash dividend policy

Applicable  Not Applicable

Whether in compliance with the Articles of Association or resolutions passed at the general meeting

Yes  No

Whether with established and clear cash dividend standards and ratio

Yes  No

Whether determined with sound decision-making procedures and mechanism

Yes  No

Whether the independent Directors fulfill due diligence obligations and exercise the prescribed functions

Yes  No

Whether opportunities are available to minority shareholders for full and adequate expression of opinions and demands, and whether their legitimate rights and interests are fully protected

Yes  No

### (III) Detailed reasons for not distributing cash dividends when the Company is profit-making during the reporting period and the parent company achieves positive distributable profits, and utilisation and purpose of the undistributed profits

Applicable  Not Applicable

# Section VI Corporate Governance Report

## (IV) Profit Distribution and Transfer of Capital Reserve Fund into Share Capital during the Reporting Period

Applicable  Not Applicable

Unit: Yuan Currency: RMB

Bonus shares for every 10 shares (share)	–
Profit declared for every 10 shares (RMB) (tax inclusive)	5.5
Transfer of capital reserve fund into share capital for every 10 shares (share)	–
Total cash dividend (tax inclusive)	778,930,301.60
Net profit attributable to the ordinary Shareholders of the Company as shown in the consolidated statements in the profit distribution year	2,555,823,375
As a percentage of net profit attributable to the ordinary Shareholders of the Company as shown in the consolidated statements (%)	30.48
Cash repurchase of shares included in cash dividend	–
Total profit distribution (tax inclusive)	778,930,301.60
Total profit distribution as a percentage of net profit attributable to the ordinary Shareholders of the Company as shown in the consolidated statements (%)	30.48

## XI. INFORMATION ABOUT THE COMPANY'S SHARE INCENTIVE PLAN, EMPLOYEE STOCK OWNERSHIP PLAN OR OTHER EMPLOYEE INCENTIVE MEASURES AND THEIR IMPACTS

### (I) General information of share incentive plan

Applicable  Not Applicable

### (II) Relevant incentive events disclosed in the temporary announcements and with no progress or change in subsequent implementation

Applicable  Not Applicable

Other explanations

Applicable  Not Applicable

Employee stock ownership plan

Applicable  Not Applicable

Other incentive measures

Applicable  Not Applicable



## Section VI Corporate Governance Report

### (III) The equity incentives granted to the Directors, senior management and core technicians during the reporting period

#### 1. Stock option

Applicable  Not Applicable

#### 2. The first type of restricted stocks

Applicable  Not Applicable

#### 3. The second type of restricted stocks

Applicable  Not Applicable

### (IV) Establishment and implementation of evaluation and incentive mechanisms for senior management during the reporting period

Applicable  Not Applicable

According to the relevant requirements of the annual assessment system for management members, the principal positions of the Company's management team are assessed from two aspects: corporate asset management responsibility system, key acts and organisational construction, and the deputy positions of the management team are assessed from three aspects: corporate asset management responsibility system, annual major work objectives, key acts and organisational construction, so as to complete the inspection of the duty performance of the Company's executives and annual performance appraisal, and determine the annual remunerations of the Company's senior management according to the assessment results.

The annual remunerations of senior management are determined according to post responsibilities, post importance, performance evaluation and remuneration level of relevant positions in competitive industries. In the annual remuneration of senior management members, the basic remuneration is primarily determined according to factors such as post responsibilities, post importance and employees' average remuneration level, performance remuneration is determined according to performance evaluation, and special rewards are determined according to outstanding contributions.

## XII. DEVELOPMENT OF INTERNAL CONTROL SYSTEMS AND IMPLEMENTATION DURING THE REPORTING PERIOD

Applicable  Not Applicable

During the reporting period, the Company launched internal control supervision and assessment into itself and its subsidiaries in strict accordance with the requirements of the CSRC, SSE, the Company Law and the Articles of Association, based on industry characteristics and actual operating condition of the Company from significant supervision aspects including finance supervision, operation supervision, compliance supervision, overseas business supervision and risk prevention. The Company supervised the prompt rectifications of internal control deficiencies to ensure the effectiveness and sound operation of the internal control system, and effectively control operating risks.

## Section VI Corporate Governance Report

The Company re-constructed the internal control system featured with “one system (the internal control system), two levels (corporate level and business level), four pillars (corporate elements, logistics and information, capital and ancillary support), and N internal control themes (35 internal control themes including production management, procurement management and sales management)”, and re-prepared the Internal Control Application Manual of Times Electric. As such, the Company further enhanced and improved its internal control, provided exercisable physical tools, and clarified the roles and responsibilities of the Board, each special committee under the Board, senior management, departments and subsidiaries in the internal control system. The Company systematically identified the key aspects and their control points in its daily business activities, evaluated the importance of risks at each control point, and covered the main business processes with risk control. The Company established the relationship between the responsible subjects in the key aspects of business and the specific control activities, and implemented the control responsibility. The internal control system met the actual needs of the Company’s operation and management, guaranteed the compliance operation of the Company and the truthfulness and fairness of its financial reports, and promoted the “social benefit and economic benefit” management. It played an important role in guiding the Company to standardise internal control construction and implement various internal control tasks according to the latest national requirements, and provided evaluation standards and self-evaluation tools for the Company’s internal control self-evaluation and internal control audit required by external regulatory authorities. Meanwhile, all business functional departments of the Company implemented control measures according to the requirements of the internal control system, and the audit department carried out regular internal control evaluation and supervision and inspection to ensure the effective implementation and operation of the internal control system.

Explanation of any significant defects in internal control during the reporting period

Applicable  Not Applicable

### XIII. INFORMATION OF MANAGEMENT AND CONTROL OVER SUBSIDIARIES DURING THE REPORTING PERIOD

Applicable  Not Applicable

During the reporting period, according to the Company Law, Articles of Association and other relevant laws and regulations, the Company implemented management control over subsidiaries, instructed subsidiaries to establish and improve corporate governance structure, strengthened party leadership in corporate governance, improved the construction of the Board, optimised the corporate governance system, refined the decision-making procedures for “three categories of major issues and use of significant amount of capital”, and management rules such as the Rules of Procedures for the Board of Directors, and expedited the compliance operation of subsidiaries to enhance risk prevention capabilities in strict accordance with the requirements of internal control systems of the Company. The Company leveraged strategic planning, comprehensive budget, performance appraisal and other means to motivate and restrict the daily operation and management activities of its subsidiaries, so as to constantly improve their value creation capabilities.



## Section VI Corporate Governance Report

### XIV. RELEVANT INFORMATION ABOUT AUDIT REPORT ON INTERNAL CONTROL

Applicable  Not Applicable

The Company engaged KPMG Huazhen LLP to audit the effectiveness of the internal control relating to financial reporting, and KPMG Huazhen LLP has issued a standard unqualified audited report.

For details, please refer to the 2022 Internal Control Audit Report of Zhuzhou CRRC Times Electric Co., Ltd. issued by KPMG Huazhen LLP which is published on the website of the SSE on the same date.

Whether to disclose the audit report on internal control: Yes

Opinion type of internal control audit report: standard unqualified opinion

### XV. RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledged that it is responsible for the establishment, improvement and effective implementation of risk management and internal control systems as well as carrying out supervision on the effectiveness of the risk management and internal control systems of the Company and its subsidiaries. However, such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss.

The Company has a sound organisation system of internal control and has established the audit and risk control department in charge of internal audit. Guided by the Board, the audit committee and the risk control committee, the audit and risk control department carries out supervision and evaluation for internal controls of the Company and its branches and subsidiaries in respect of important control functions such as financial monitoring, operation monitoring, compliance monitoring, overseas business monitoring and risk prevention and management, and supervises and timely rectifies internal control deficiencies, so as to guarantee the effectiveness and sound operation of the internal control system, and effectively control operating risks.

## Section VI Corporate Governance Report

The Company re-constructed the internal control system featured with “one system, two levels, four pillars, and N internal control themes”, which basically met the needs of the Company’s business development and reform, and aligned the important elements such as processes and key control points with changes in the external environment, industry laws and internal management changes, and satisfied the requirements of Hong Kong Stock Exchange and SASAC on internal control. Meanwhile, in accordance with the Basic Standards for Internal Control and the Company’s internal control manual, during the reporting period, the Company focused on promoting the system integration of internal control, risk management, compliance management and accountability for violations, expedited accomplishment of key tasks in the three-year state-owned enterprise reform, implemented the specific work proposed in the compliance management enhancement year, and facilitated the implementation of joint supervision. Through streamlining and improving the audit management system, the Company strengthened the implementation of control tasks, and launched closed-loop rectification for problems identified in audit, and implemented the effective rectification, thereby strengthening its internal control environment. Leveraging comprehensive assessment of the overseas risks, the Company improved the overseas operation and investment management and control level and risk prevention capabilities, systematically strengthened the internal control and compliance management, improved the ability and level of internal control and compliance management, and tapped on the role of compliance management in promoting standardization and risks preventing. The Company controlled the risks within tolerable bounds through various controlling measures such as authorisation approval, process governance, comprehensive budgeting, cost control, asset management, lean management, information security control. Through annual internal monitoring and evaluation, the Company ensured the reasonable design, effective operation and appropriate implementation of internal monitoring systems. During the reporting period, the Company had no material internal control defects and monitoring failure, and had effective procedures in relation to financial reporting and compliance with requirements of the listing rules of the places where the Company is listed.

The Directors have conducted one review of the effectiveness of risk management and the internal control system of the Company and its subsidiaries during the year and considered that the risk management and internal control systems are effective and adequate to allow the continuing protection and improvement of the Company’s internal control activities and ensure the Company’s ability to meet the internal business requirements and external environment changes from financial, operational, compliance, overseas operation and risk control perspectives, so as to safeguard the Company’s asset and interests of Shareholders.

### XVI. DIVIDEND POLICY

The Board adopted a dividend policy on 26 March 2019 to take effect on 1 January 2019, which aims to provide the Shareholders with stable dividends and sets out the principles and guidelines for declaring, paying and distributing the profits of the Company as dividends.

In deciding whether to propose a dividend and determining the amount of dividend, the Board takes into account (i) the Company’s actual and expected financial performance, (ii) retained earnings and distributable reserves of the Company and each of the members of the Group, (iii) the debts to equity ratio, return on equity and relevant financial covenants of the Group, (iv) the Group’s expected working capital requirements and future strategic plans, (v) the general economic conditions, the Group’s financial conditions, business cycle of the Group’s business and other internal or external factors that may have an impact on the business or financial performance and status of the Group, and (vi) other factors that the Board deems appropriate.

The Company does not have any pre-determined dividend distribution ratio. The declaration and payment of dividends is subject to the absolute discretion of the Board, and any restrictions under the Articles, the Company Law of the PRC, the Corporate Income Tax Law of the PRC and any other applicable laws and regulations. The Board will periodically review the dividend policy and reserves the right in its sole and absolute discretion to amend the policy at any time.

# Section VI Corporate Governance Report

## XVII. REMUNERATION OF THE AUDITOR

KPMG Huazhen LLP (“KPMG Huazhen”) is the auditor of the Company. For the year ended 31 December 2022, the services provided by KPMG Huazhen and the remuneration are as follows:

	<i>(RMB'000)</i>
<b>Service provided:</b>	
Audit Service	4,900
Non-audit Services (Note)	—
Total	<u>4,900</u>

Note: Non-audit services include tax service of related party transactions and contemporaneous documentation and tax advisory.

## XVIII. DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE FINANCIAL REPORTS

The Directors acknowledged their responsibilities for the preparation of financial statements, and to give a true and fair view of the Group's financial status and operating results for the financial year ended 31 December 2022. The statement by the external auditors of the Company regarding its reporting responsibilities on the consolidated financial statements of the Group is set out in the “Auditors’ Report” on pages 233 to 238 of this annual report.

The Directors also confirmed that there were no material uncertainties which may materially affect the ability of the Company to carry on as a going-concern.

## XIX. COMPANY SECRETARY

Mr. Tang Tuong Hock, Gabriel was appointed as the company secretary of the Company in July 2006. Mr. Tang Tuong Hock, Gabriel, born in 1953, a Malaysian citizen with permanent residency in Hong Kong. Mr. Tang has been a member of the Institute of Chartered Accountants in England and Wales since 1981 and is also a member of the Chartered Association of Certified Accountants in the United Kingdom. Mr. Tang has more than 20 years of experience in accounting and management in various industries. He was appointed as qualified accountant and joint company secretary of the Company from July 2006 to June 2011. Mr. Tang served as the joint company secretary and the authorised representative of CRRC from December 2017 to December 2021. Mr. Tang has served as the company secretary and the authorized representative of the Company since July 2011.

Mr. Tang took no less than 15 hours of relevant professional training during the financial year ended 31 December 2022 as required under Rule 3.29 of the SEHK Listing Rules.

## XX. CONSTITUTION

During the reporting period, the Articles of Association approved by way of special resolution at the 2021 annual general meeting of the Company held on 17 June 2022 came into effect on 17 June 2022. The Articles currently in force are available on the websites of the Stock Exchange, SSE and the Company.

# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

## I. BOARD STATEMENT ON ESG GOVERNANCE

The Board of Directors of the Company well recognises the importance of sound corporate governance and risk management process, including management over the ESG issues, which is crucial to the sustainable development of the Company, and undertakes that the Company will act in strict accordance with the disclosure requirements for environmental, social and governance (“ESG”) reports issued by stock exchanges on which the Company is listed.

The Board of Directors is responsible for overseeing the undertakings and performance of the Company in terms of key ESG issues. According to the latest requirements of the Guide on Environmental Information Disclosure of Listed Companies on the Shanghai Stock Exchange and the Environmental, Social and Governance Reporting Guide issued by the Hong Kong Stock Exchange, and in strict accordance with relevant State laws, regulations, CSRC requirements and requirements of the Hong Kong Stock Exchange, the Company releases periodical reports and discloses information to the public to ensure that investors and stakeholders have timely access to the operation and management condition of the Company. Based on external economic, social, environmental factors and corporate development strategy, the Board regularly reviews major ESG issues, discusses and determines the Company’s ESG risks and opportunities, focuses on management and improvement of major issues, which will be deemed as the annual ESG strategic task, takes such issues into consideration while formulating the overall strategies of the Company, and supervises the management over ESG issues and performance.

In 2023, the Board will further optimise ESG risk management, information collection and reporting system, to continuously upgrade the Company’s ESG management level.

## II. ENVIRONMENTAL INFORMATION

Whether an environmental protection mechanism has been established	Yes
Environmental protection expenditure during the reporting period (Unit: RMB0’000)	519

### (I) Whether Classified as the Key Pollutant Discharging Units Announced by the Environmental Protection Department

Yes  No

The Company always upholds the EHS philosophy of “people-oriented, continuous improvement, green and environmental, health and safety”. In 2022, Zhuzhou CRRC Times Semiconductor Co., Ltd., a major subsidiary of the Company, was identified as a key pollutant discharging unit as announced by the environmental protection department, and is required to publicise environmental protection information on the National Sewage Permit Management Information Platform on a monthly basis. Its waste water, waste gas and noise are discharged up to standard according to the corresponding discharge standards, and hazardous wastes are disposed of in accordance with laws and regulations. Its pollution prevention and control facilities are under normal operation.

#### 1. Sewage discharge information

Applicable  Not Applicable

Industrial wastewater discharged by the Company contains ammonia nitrogen, fluoride, chemical oxygen demand and total phosphorus, which is treated according to comprehensive wastewater discharge third-level standard as required under the discharge permit. The wastewater generated in production process of the Company is recycled after treatment, instead of discharged to outside. In 2022, the Company generated total sewage of 982,100 tons; and disposed of sewage of 982,100 tons, including 869,900 tons of sewage from production process.



# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

In 2022, the Company invested over RMB2 million in classified collection and classified disposal of acid waste gas and alkaline waste gas, to further improve the treatment efficiency for them. On the basis of activated carbon treatment units for organic waste gas in place, the Company invested over RMB1.5 million to acquire three additional sets of photocatalytic oxidation treatment units, which further improved the treatment efficiency for organic waste gas.

Set out below is the sewage discharge information of Zhuzhou CRRC Times Semiconductor Co., Ltd., a major subsidiary of the Company in 2022:

Holder of sewage discharge permit	Issuer of sewage discharge permit	Sewage discharge permit management category	Total sewage generated in 2022 (0'000 tons)	Reclaimed water reused in 2022 (0'000 tons)	Sewage disposed of in 2022 (0'000 tons)	Sewage discharged in 2022 (0'000 tons)	Hazardous waste disposed of in 2022 (tons)
Zhuzhou CRRC Times Semiconductor Co., Ltd.	Zhuzhou Ecological Environment Bureau	Management focus	91.29	14.26	91.29	91.29	1,067.065

## 2. Construction and operation of pollution prevention and control facilities

Applicable  Not Applicable

### (1) Use of clean energy

Based on its energy consumption mix, the Company proactively popularised the use of clean energy, focused on the construction of integrated energy system within the industrial park, and established the integrated photovoltaic power storage system in Tianxin Industrial Park to reduce carbon emissions from power generation.

### (2) Improving technologies in relation to energy conservation

The Company eliminated equipment with high energy consumption and innovated on energy conservation technologies to reduce energy consumption and carbon emissions of equipment. The Company also earnestly expedited the use of recycled resources, waste materials and reclaimed water to minimise carbon emissions from wastes.

## 3. Environmental impact assessment of construction projects and other environmental protection administrative licensing

Applicable  Not Applicable

The Company adheres to the “three simultaneous steps” for new, renovation and expansion projects, to ensure that the environmental protection facilities and construction projects will be designed, constructed and put into operation at the same time. During the process of production and operation management, the Company has strictly complied with the relevant national, Ministry of Ecology and Environment, provincial and municipal environmental protection laws, regulations and statutes, and timely obtained, updated and conveyed the relevant environmental protection regulations and standards. The Company conducted its day-to-day internal environmental protection management based on these new regulations and standards. Meanwhile, the Company actively fulfilled its corporate environmental protection responsibilities and obligations and implemented the principles and policies of national energy saving and emission reduction. In 2022, the Company was not subject to any penalties imposed by the relevant departments due to any violation of environmental regulations.

## Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

### 4. Contingency plans for unexpected environment-related issues

Applicable  Not Applicable

The Company further strengthened environmental education and training through various forms such as programs outside and within its premise, and organised a diversity of education and training activities to improve safety response ability of employees to unexpected environment-related issues. The Company and its major branches and subsidiaries involving environmental protection have established the Contingency Plan for Unexpected Environment-related Issues and completed the registration with local environmental authorities according to law.

### 5. Self-monitoring environmental program

Applicable  Not Applicable

The Company ensures that all types of pollutants discharged from its processes, products and activities meet the relevant requirements, and engages third-party professional institutions to detect pollutants and issue reports to ensure the pollutants after treated by environmental protection facilities are discharged up to standard. The Company actively advocates employees to save energy and strives to minimise the impact of its operations on environment. In 2022, its waste water, waste gas and noise were discharged 100% up to standard, and hazardous wastes were disposed of 100% in accordance with laws and regulations.

### 6. Other discloseable environmental information

Applicable  Not Applicable

Pursuant to the requirements of local environmental authorities, subsidiaries of the Company disclose relevant environmental information through websites of local environmental authorities or corporate websites, and release periodic corporate social responsibility reports pursuant to the Environmental, Social and Governance Reporting Guide, in which environmental information is disclosed.

## (II) Administrative Penalties Due to Environmental Issues During the Reporting Period

None.

## (III) Information on Consumption of Resources and Energy and Emission

Applicable  Not Applicable

### (1) Waste water and waste gas management

Industrial wastewater discharged by the Company and its major branches and subsidiaries involving environmental protection contains ammonia nitrogen, fluoride, chemical oxygen demand, etc., which are discharged up to stand as required under the discharge permit. In 2022, the Company generated total sewage of 982,100 tons; and disposed of sewage of 982,100 tons, including 869,900 tons of sewage from production process.

In 2022, the Company invested over RMB2 million in classified collection and classified disposal of acid waste gas and alkaline waste gas, to further improve the treatment efficiency for them. On the basis of activated carbon treatment units for organic waste gas in place, the Company invested over RMB1.5 million to acquire three additional sets of photocatalytic oxidation treatment units, which further improved the treatment efficiency for organic waste gas.

# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



## (2) Solid waste management

The Company classifies wastes into hazardous wastes and industrial solid wastes with reference to the National Catalogue of Hazardous Wastes and the environmental assessment report. Hazardous wastes are handed over to parties with hazardous waste disposal license for compliance disposal. In 2022, 1,168.3 tons of hazardous wastes were disposed of. Industrial solid wastes are mainly calcium fluoride sludge, which is delivered to qualified brick factories for brick making as auxiliary materials. In 2022, 1,453.57 tons of industrial solid wastes were disposed of, effectively reducing the environmental impact of sludge.

### 1. Greenhouse gas emissions

✓ Applicable  Not Applicable

The Company actively identifies risks and opportunities in climate change, and has set up a leading group and working organisation for carbon peak and neutrality initiatives to carry forward relevant initiatives in a coordinated manner. Through an array of measures to reduce carbon emission intensity including increasing the proportion of clean energy, implementing energy-saving renovations, tapping the potential of energy conservation and carbon reduction, the Company completed the annual target of energy conservation and carbon reduction.

### 2. Resource and energy consumption

✓ Applicable  Not Applicable

Energy required in the Company's production mainly includes electricity and natural gas. In 2022, pursuant to the Detailed Rules for Assessment of Energy Management, the Company strengthened energy consumption management during production and office processes, and continuously optimised production process to reduce unit energy consumption of products, thus reducing overall energy consumption of the Company.

### 3. Waste and pollutant discharge

✓ Applicable  Not Applicable

Industrial wastewater discharged by the Company and its major branches and subsidiaries involving environmental protection contains ammonia nitrogen, fluoride, chemical oxygen demand, etc., which are discharged up to stand as required under the discharge permit. In 2022, the Company generated total sewage of 982,100 tons; and disposed of sewage of 982,100 tons, including 869,900 tons of sewage from production process.

In 2022, the Company invested over RMB2 million in classified collection and classified disposal of acid waste gas and alkaline waste gas, to further improve the treatment efficiency for them. On the basis of activated carbon treatment units for organic waste gas in place, the Company invested over RMB1.5 million to acquire three additional sets of photocatalytic oxidation treatment units, which further improved the treatment efficiency for organic waste gas.

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# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

**Table: Wastewater discharge indicators**

	2022
Wastewater discharge (0'000 tons)	98.21
Wastewater disposal (0'000 tons)	98.21
Industrial wastewater discharge (0'000 tons)	86.99

The Company's environmental protection management system

Applicable  Not Applicable

The Company strictly implements the environmental protection system and the requirements on up-to-standard discharge of waste water, waste gas, noise, solid wastes and other environmental pollutants, and comprehensively standardises its environmental management system and working procedures. To improve the environmental management framework, the Company has formulated the environmental protection management system, established a management mechanism for standardising environmental protection assessment and accountability, and earnestly pressed ahead with various environmental protection activities, to effectively promote the construction of a resource-conservative and environment-friendly enterprise. In 2022, the Company passed the supervisory audit of ISO14001 environmental management system.

#### **(IV) Measures Taken to Reduce Carbon Emissions During the Reporting Period and Effects**

Whether carbon reduction measures are adopted Yes

Carbon dioxide emission reduction equivalent (unit: ton) —

Types of carbon reduction measures (such as using clean energy for power generation, applying carbon reduction technologies in production process, developing and producing new products conducive to carbon reduction, etc.)	Using clean energy, improving technologies in relation to energy conservation, and strengthening carbon management
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Description

Applicable  Not Applicable

- (1) Using clean energy. Based on its energy consumption mix, the Company proactively popularised the use of clean energy, focused on the construction of integrated energy system within the industrial park, and established the integrated photovoltaic power storage system in Tianxin Industrial Park to reduce carbon emissions from power generation.
- (2) Improving technologies in relation to energy conservation. The Company eliminated equipment with high energy consumption and innovated on energy conservation technologies to reduce energy consumption and carbon emissions of equipment. The Company also earnestly expedited the use of recycled resources, waste materials and reclaimed water to minimise carbon emissions from wastes.

## Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



- (3) Strengthening carbon management. The Company carried out carbon emission verification, carbon neutrality planning consultation and carbon emission management system construction with a focus on research into carbon footprints of main products and carbon reduction initiatives of major production lines, targeting to facilitate the implementation of carbon peak and neutrality initiatives and contribute to the achievement of carbon peak and neutrality goal.

### (V) New Technologies, Products and Services for Carbon Emission Reduction

✓ Applicable    Not Applicable

The Company proactively responded to the “carbon peak and neutrality” strategy introduced by the State, and aspired to serve the global transportation and energy industries with an unswerving commitment to developing and manufacturing “intelligent, safe, green and comfortable” high-end equipment, so as to provide sufficient resource support for the R&D of new products and technologies. The Company launched technological enhancement initiatives in the fields of high-efficiency converters, new power devices, energy management, wind power generation and photovoltaic power generation, thereby contributing to energy conservation and carbon reduction. The Company developed 3,000 HP heavy-haul hybrid locomotive, which innovatively adopts integrated hybrid power for electric traction system to provide users with an integrated complete system solution for hybrid locomotive. Under typical pushing-hump operation conditions, the hybrid locomotive can save single-day fuel consumption by more than 25% compared with that of traditional diesel locomotive. The 6 MW energy dispatching device developed by the Company has been successfully put into operation in CR Taiyuan under the completed engineering design specifications for railway power supply product. It is developed based on the renewable energy storage system structure, which can significantly improve the quality of power supply system and comprehensive energy efficiency, and save 15,000 kWh of electricity on average per day with utilisation rate of renewable energy exceeding 50%. By optimising the doubly-fed circuit topology, the Company developed a three-level high-power wind-cooled doubly-fed wind power converter, with the power level significantly increasing to 8.XMW. The first three-level 10 MW full-power converter for offshore wind power was officially put into operation, which can generate approximately 192 MWh per day under strong wind conditions and will facilitate the high-power driven development of wind power new energy industry. By researching into permanent magnet frequency conversion technology, the Company developed the world’s first set of water-cooled permanent magnet frequency conversion system for 55 cubic metre super-large electric shovel, featuring a permanent magnet direct drive frequency conversion control technology firstly adopted in the industry with a total rated power of 12 MW. Through the innovative permanent magnet direct drive frequency conversion control technology, it can effectively reduce transmission links and save device energy consumption by over 10%, and has successfully passed the OEM ex-factory test.

The Company has set up a leading group and working organisation for carbon peak and neutrality initiatives to carry forward relevant initiatives in a coordinated manner, and minimise carbon emissions leveraging multiple measures. Based on its energy consumption mix, the Company proactively popularised the use of clean energy, focused on the construction of integrated energy system within the industrial park, and established the integrated photovoltaic power storage system in Tianxin Industrial Park to reduce carbon emissions from power generation. Besides, the Company vigorously improved technologies in relation to energy conservation, eliminated equipment with high energy consumption and innovated on energy conservation technologies to reduce energy consumption and carbon emissions of equipment. The Company also earnestly expedited the use of recycled resources, waste materials and reclaimed water to minimise carbon emissions from wastes. In addition, the Company is actively carrying out carbon emission verification, carbon neutrality planning consultation and carbon emission management system construction with a focus on research into carbon footprints of main products and carbon reduction initiatives of major production lines, targeting to facilitate the implementation of carbon peak and neutrality initiatives and contribute to the achievement of carbon peak and neutrality goal.

# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

## (VI) Relevant Information Conducive to Protecting Ecology, Preventing Pollution and Fulfilling Environmental Responsibilities

✓ Applicable     Not Applicable

Adhering to the EHS philosophy of “people-oriented, continuous improvement, green and environmental, health and safety”, the Company continues to improve the environmental protection management system, strictly implements the environmental protection system and the requirements on up-to-standard discharge of environmental pollutants, and strengthens asset life-cycle management, to effectively promote the construction of a resource-conservative and environment-friendly enterprise. In 2022, the Company passed the supervisory audit of ISO14001 environmental management system.

In 2022, the Company invested over RMB2 million in classified collection and classified disposal of acid waste gas and alkaline waste gas, to further improve the treatment efficiency for them. On the basis of activated carbon treatment units for organic waste gas in place, the Company invested over RMB1.5 million to acquire three additional sets of photocatalytic oxidation treatment units, which further improved the treatment efficiency for organic waste gas. Furthermore, the Company actively organised employees to carry out a tree planting activity for public interest, guiding its young employees to plant green trees and engrave the concept of “carbon peak and neutrality” in their hearts. Over 100 employees participated in the event and planted more than 200 saplings.

## III. PERFORMANCE OF SOCIAL RESPONSIBILITIES

### (I) Social Contribution of Principal Business and Key Indicators of Industry

Based on its Yuexing Volunteers Association with the optimised operational mechanism and platform structure, the Company established a registered volunteer team that volunteers to engage in enterprise service, social welfare and educational aid activities. By attracting 107 registered volunteers, it delivered volunteer services on a regular basis, and played its role as a new force for “emergent and challenging” tasks internally as well as a window to the public showcasing the responsible state-owned enterprise, to light up their youth in dedication.

### (II) Forms and Contributions of Charitable Activities

Form	Quantity	Note
Donations Including: Cash (RMB0'000) Value of goods (RMB0'000)		
Public welfare projects Including: Cash (RMB0'000) Number of people assisted (persons)		
Rural revitalisation Including: Cash (RMB0'000)	20	The Company purchased fruits and vegetables of approximately RMB200,000 for the benefit of farmers engaged in planting business in counties (districts) of Zhuzhou City
Value of goods (RMB0'000) Number of people assisted for employment (persons)		

# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



## 1. Detailed information on engagement in charitable activities

Applicable  Not Applicable

1. Taking the “Month of Learning from Lei Feng” as an opportunity, the Company devised and carried out a series of voluntary service activities during the year, including over 20 activities in various forms such as voluntary blood donation, free oral check, voluntary cleanup and warehouse arrangement, to convey the volunteer spirit of “dedication, friendship, mutual assistance and progress” through concrete actions;
2. Proactively responding to the “carbon peak and neutrality” strategy introduced by the State, the Company organised employees to carry out a tree planting activity for public interest, guiding its young employees to plant green trees and engrave the concept of “ carbon peak and neutrality” in their hearts. Over 100 employees participated in the event and planted more than 200 saplings.

## 2. Details on consolidation and expansion of achievements of poverty alleviation and information about rural revitalisation

Applicable  Not Applicable

In 2022, the Company purchased fruits and vegetables of approximately RMB200,000 for the benefit of farmers, to offer ongoing assistances to them and contribute to the sustainable development of planting industry in counties (districts) of Zhuzhou City.



# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

## (III) Protection of the Rights and Interests of Shareholders and Creditors

The Board of the Company is comprised of 11 directors with different industry backgrounds and expertise. The Board has clearly defined duties and the convening procedures of Board meetings comply with the Articles of Association and other relevant laws, regulations and systems. It formulates the Company's development strategy and monitors the implementation of management and finance within the terms of reference as required in the Articles of Association and in accordance with the procedures set out in the Rules of Procedures of the Board, and takes long-term performance and returns as its priority. Five specific committees, namely strategy committee, audit committee, risk management committee, nomination committee and remuneration committee are established under the Board, which has further improved the Company's governance structure, internal control system, and its standardised, steady and sustainable development. The Company has 6 independent directors, representing more than half of the total number of directors. Independent non-executive directors focus on the improvement of corporate governance and major decisions of the Company, express fair and objective advice on major matters and connected transactions of the Company, and employ scientific approaches in the decision-making of the Board so as to safeguard the interests of the Company and minority shareholders. In 2022, a total of 9 Board meetings were held.

The supervisory committee is comprised of 4 supervisors, including 1 independent supervisor, 1 shareholder representative supervisor and 2 employee representative supervisors. The supervisory committee exercises supervision rights independently according to the law and supervises the legitimacy and compliance of the Company's directors and senior management in performing their duties, so as to safeguard the legal rights and interests of shareholders, the Company and its employees. In 2022, a total of 7 meetings of the supervisory committee were held.

The Company disclosed the 2021 Internal Control Evaluation Report to shareholders according to the corporate internal control standard system. It is the responsibility of the Board of Directors of the Company to establish, improve and effectively implement internal control, evaluate its effectiveness and truthfully disclose the internal control evaluation report. The supervisory committee shall oversee the establishment and implementation of internal control by the Board of Directors. The management is responsible for organising and leading the daily operation of the internal control. The goal of the Company's internal control is to reasonably ensure the legitimacy and compliance of business management, asset security, truthfulness and completeness of financial reports and relevant information, improve business efficiency and performance, and promote the realisation of development strategies.

The Company always attaches importance to the protection of the rights and interests of its shareholders and creditors, earnestly fulfils the responsibilities of listed companies, and proactively protects the legitimate rights and interests of shareholders such as their right to return, governance right and right to know.

## (IV) Protection of Employees' Rights and Interests

### 1. Diversified recruitment forms

Pursuant to the requirements under the Labour Law, the Labour Contract Law, the Law on the Protection of Minors, the Law on the Protection of Rights and Interests of Women and the relevant laws and regulations and according to different needs of talents for various positions, the Company followed the work post specific recruitment standards to recruit employees through various recruitment channels, including internal recommendation, internal recruitment, open recruitment and campus recruitment. It also introduced innovative measures to conduct recruitment of mature talents overseas talents, to provide the Company with talents supporting its major industrial development. The Company maintained a sound staff recruitment process and strictly carried out reviews on the basic information of job applicants. The Company forbade the employment of child labour and forced labour, and adhered to the principle of equality between men and women. The Company does not discriminate against staff on nationality, race, age, gender and marital status. In 2022, the Company did not recruit any child workers or minors, and had no employment contracts with any employees aged below 18 years. As of the end of 2022, the Group had 7,994 employees in the domestic consolidated financial statements under the labour contract system, with sound employee stability. Employee turnover rate of the Company in the past three years stayed within 5%, which was 4.19% in 2022.



# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



## **2. Remuneration and benefits**

In accordance with the requirements of national and regional laws and regulations, the Company provides and maintains statutory benefits for its staff, including basic pension insurance, basic medical insurance (including medical insurance for serious illnesses), work injury insurance, maternity insurance, unemployment insurance and housing provident fund, etc. It also provides the staff with various benefits at the discretion of the Company, including corporate annuities, supplemental medical insurance, meal subsidies, health allowance, physical examination, convalescence, mutual aid and commercial insurance, etc. In addition to weekends, statutory holidays, wedding, funeral and maternity leaves, the Company also grants annual leaves pursuant to the National Regulations on Paid Annual Leave for Employees and the Implementation Measures for Paid Annual Leave for Employees. The Company implements a work and rest system of 5 working days a week and 8 standard working hours per working day which include 7 fixed working hours and 1 flexible working hour, so that employees can work with peace of mind and enjoy the life.

The Company promotes the concept of overall remuneration. It extends the concept of remuneration to include benefits and non-economic compensation involving honours and career development opportunities, so that employees can totally understand the rewards granted by the Company and the Company may attract and retain talents. The Company employed dispatched labour in auxiliary, temporary and replaceable positions. Dispatched labourers and employees of the Company under the labour contract system are subject to the same salary and welfare policy.

## **3. Democratic participation**

In strict accordance with the Trade Union Law of the People's Republic of China, the Labour Contract Law, the Rules on Enterprise Workers' Congress, the Provisions on Enterprise Democratic Management, the Implementation Measures on Transparent Operation and other relevant institutional documents, the Company continues to improve the communication and coordination mechanism and channels, actively promote democratic management, diversify and open up channels for expressing opinions, encourage employees to make suggestions for the Company's development, and fully mobilise employees to participate in democratic management, democratic supervision and democratic decision-making, to strengthen employees' sense of ownership and responsibility.

### *(1) Workers' Congress*

Based on the principle of democratic centralism, the Company established its Workers' Congress system in accordance with relevant requirements under the Trade Union Law. The Council of Trade Union is the operating authority of the Workers' Congress and is responsible for the daily work of the Workers' Congress. It has 147 existing staff representatives, involving personnel from various fields of the Company, such as management, technology, production and marketing.

### *(2) Transparent operation*

Work union organisations at all levels of the Company conscientiously implement the system of transparent operation, and publicise the major issues in the Company's production and operation, the integrity and self-discipline of executives, the disposal of major assets, etc., according to the four principles of "seeking truth from facts, diversity of forms of public supervision, making adjustments to time and events, and the combination of publicity and supervision", through Workers' Congress, party committees, decision-making committees and documents, among others. The Company adopted democratic supervision on transparent operation, and assisted the administrative organisations to carry out annual democratic review on nearly 200 cadres from 30 assessment groups.

## Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

### (3) *Collective consultation system*

The Group entered into the “Collective Contract” and the “Special Collective Contract for the Protection of Women Workers’ Rights and Interests”, which cover salary guarantee, labour protection, occupational health and safety, and the protection of women employees. In case of major operational changes that might affect employees’ employment (with a contract change), the Company will in advance give full consideration to the placement and resettlement of employees, develop a special plan, survey employees on their intentions and solicit their opinions. Such plan will be finalised and publicised in accordance with the democratic process, and the relevant procedures and data will be recorded and archived.

Information on employee shareholding

During the reporting period, the Company maintained no employee stock ownership plan.

### (V) **Protection of Rights and Interests of Suppliers, Customers and Consumers**

For details, please refer to the 2022 Corporate Social Responsibility Report of Zhuzhou CRRC Times Electric Co., Ltd. disclosed by the Company on the websites of the SSE and the Stock Exchange on the same date.

### (VI) **Product Safety Guarantee**

As a large-scale rail transit equipment manufacturing enterprise integrating research and development, production and sales and a core supplier of components for railway locomotive vehicles, the Company’s products are widely used in high-speed trains, and the safety and reliability of its products are therefore directly related to the lives and safety of millions of passengers. Product quality equals to safety, and safety is the life assurance of millions of passengers, which is also the golden rule for an enterprise’s survival. The Company has always regarded product safety as the core of its product quality work. Based on the technology safety policy of “Complying with railway safety standards to establish product safety concept; Understanding product safety effectiveness to improve safety rules and norms; Producing safe and reliable products to ensure train traffic safety”, the Company implements strict control measures on various aspects including marketing, design, procurement, production, delivery and after-sales, and resolutely puts an end to product quality and safety problems. In 2022, the Company carried out quality and safety work across the board in accordance with the requirements and arrangements such as “keeping the bottom line, remedying defects, eliminating hidden dangers and guarding against risks” required by State Railway Group, the “Quality and Safety Month” put forward by the National Railway Administration and the “100-day Special Campaign” during the 20th National Congress. In 2022, the Company did not violate relevant laws and regulations in relation to health and safety for the products and services provided.

### (VII) **Other Circumstances in Undertaking Social Responsibilities**

Applicable    Not Applicable

For details, please refer to the 2022 Corporate Social Responsibility Report of Zhuzhou CRRC Times Electric Co., Ltd. disclosed by the Company on the websites of the SSE and the Stock Exchange on the same date.

# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



## IV. OTHER CORPORATE GOVERNANCE ISSUES

### (I) Party Building

✓ Applicable    Not Applicable

Empowering production and operation with Party building. The Company's Party Committee adheres to deep integration of Party building into business operation to identify the springboard for serving production and operation, bringing employees together and building the teams, in order to promote the implementation of corporate production and operation tasks with high-quality Party building work, and test the effectiveness of the Party organisation's work using the achievements of corporate reform and development.

Deeply integrated into production and operation. In 2022, the Company's Party Committee continued to roll out the "1+N" Party-masses brand building matrix of CRRC ZELRI. Taking "one theme and one feature for one Party branch" as the entry, it launched 4 brand demonstration sites and 2 brand cultivation sites for characteristic Party-masses work at the level of CRRC ZELRI, and promoted 17 programs of CRRC ZELRI and 9 programs of the Company on a project operation basis, thus enhancing the integration of Party building into production and operation from multiple perspectives such as market interaction, contributions, talent cultivation, supervision and discipline enforcement.

Deeply integrated into customer relationship maintenance. In 2022, we organised 35 joint Party building activities with 32 collaborators, with an aim at greater co-building achievements covering co-learning the Party's history, coordinated actions, co-planning, business co-development and knowledge sharing. With joint efforts of the corporate publicity team of Shuohuang Company of China Energy Group, a special press release and promotional video on technology-enabled heavy-haul railways were co-developed under an innovative model for harmonious customer relationship. The general Party branch of the centralised procurement center held a forum for joint Party building, seeking to build a clean culture with suppliers under jointly signed undertakings.

Deeply integrated into the care for employee. Efforts were taken to hedge from the danger of online fraud through current situation education, shooting educational short films, signing the notification letters and other forms. The "Flying Flag" Ben Ben Energy Station led primary-level Party organisations to carry out the "3+N" energy campaign, setting up a psychological platform to advocate positive attitude and deliver psychological care at the Party branch level. The "Flying Flag" public opinion liaison station organised over 40 discussion meetings and 13 questionnaires, collected 236 questions and solved 165 out of them during the year.

## Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

Deeply integrated into talent management. We adhere to the principle of “talents under the Party”, and take the talent-empowered strategy as the decisive factor for high-quality corporate development. In a thirst for talents, we improved the market-oriented compensation and distribution mechanism, which helped to stabilise the core talent team. Fostering talents meticulously, we continued to provide training to general managers, first-appointed cadres and management talent reserves across our business segments, to explore a leadership development model catering to the needs of corporate development. With a focus on “Cultivating artisans for a great country”, we held a range of skill competitions covering chip manufacturing, wiring and welding, so as to improve skills of employees and enhance social influence of skilled workers. To attract talents earnestly, we developed differentiated recruitment policies and compensations to ensure the supply of talents to the growing segments. Taking the International Business Division as a pilot, we took the first step towards market-oriented appointment and formation of leader team as well as a compensation fulfilment mechanism benchmarking against market peers, which demonstrated our thirst to attract talents flexibly to boost our business development.

Empowering discipline inspection and supervision with Party building. Staying committed to building a “multi-in-one” supervision system, we promoted the “three non-corruptions” system and mechanism to deepen the law-based governance of the Party in an all-round manner and foster a clean and integrity environment for our business growth. Joint supervision is deeply integrated into promotion of corporate governance capacity. We carried out special supervision programs covering special patrol inspection and rectification, decision-making management on “three significant and one major” events, bidding and procurement management, selection and appointment of middle-level managers, travel expenses, capital management, etc., in order to steer all supervision activities in a same direction through strict intra-Party supervision. “Innovation and brand establishment” is deeply integrated with corporate discipline construction. We launched a number of “innovation and brand establishment” programs including the “precise inspection and solid foundation of integrity” cultivation program and the “four-in-one” clean culture and education system construction program. In addition, we carried out integrity education activities such as the “Clean Culture Week”, “Reading the Disciplines Aloud for a Clean Family” and “Disciplines in the Eyes of Discipline Inspection Cadres” to improve the effectiveness of integrity risk prevention and control. Digital supervision is deeply integrated into the development strategy. Taking the development of “digital electric business” as a guiding principle, we established and implemented an integrity risk prevention and control evaluation system, and continuously optimised the digital supervision platform for official vehicles, so as to proactively explore “digital supervision”.

Empowering the success of civil groups with Party building. Sticking to the leading role of Party building for the building of the trade union and the Youth League, we closely focused on cohesion to roll out high-quality projects for civil groups in an innovative and thoughtful way. The success of young people is deeply integrated with profitability enhancement. Riding on the century-old heritage with an unchanged commitment, the Youth League Committee of the Company launched a “Star of Lean Youth” program to spark off the success of young employees. A string of events were held, including the “Five Stars” (Star of Lecturer, Star of Role Models, Star of Best Practices, and Star of Contests), a Lean Youth Vanguard, a Lean-themed Forum, and a “Lean R&D and Design” brand competition, which motivated young employees to innovate and boost efficiency, and live up to their youthful time by seeking profitability based on lean production. Employee care is deeply integrated into cohesion initiatives. The Company’s trade union delivered care directly to the production front. As a part of the “Echo of Hearts” program, the chairman of the trade union visited primary business units and led the “six handouts and three focuses” activity continuously to extend care to employees with practical acts.

# Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



Empowering brand building with Party building. Carrying forward the corporate culture of “realistic, respectful, innovative and fruitful”, we promoted the “right conduct” behaviour identification system and the management convention of CRRC ZELRI, to create a name card for corporate culture construction with inheritance and innovation and facilitate high-quality corporate development with good value orientation and business principles. The Company established a WeChat official account with a “righteous, warm and inquisitive” image, as an integral part of CRRC’s new media matrix. The “Youth at CRRC” video account and the “Flying Flag” official account at WeChat helped to build up cohesion and corporate culture within the Group while serving as a window for our brand and corporate image. Brand promotion is deeply integrated into industrial development. To fully support the launch and product promotion of the new energy power generation segment, we took a matrix of initiatives including exhibitions, events, mutual recommendation among industry influencers, league table ranking, among others, to increase the voice of our non-rail transit segments and underpin their growth in an all-round manner. Focusing on hot topics such as “carbon peak and neutrality” and “digital intelligence”, we publicised new technologies and achievements to the public through platforms such as the “Smart China” channel of CCTV.

In 2022, the Company’s Party Committee strengthened Party building to support the building of the trade union and the Youth League, leading to well-recognised achievements of Party building, including: the title of “Advanced Primary-level Party Organisation” of CRRC ZELRI; the title of “Advanced Unit of Innovative Corporate Culture Construction in Hunan Province”, and 6 brand building achievements including the “Flying Flag” for Party building that were recommended for inclusion into CRRC’s research papers and case study on Party building theory; and a first prize granted to the feature film “Love Across Mountains and Seas” in the Fifth Short Video Competition of Central Enterprises.

## (II) Investor Relations and Protection

Type	Times	Relevant information
Performance briefing	3	The Company held the 2021 annual performance briefing, the 2022 interim performance briefing and the 2022 third quarterly performance briefing at the SSE Roadshow Center respectively on 30 March, 2 September and 25 November 2022, to present the Company’s results to investors.
Developing investor relations management activities leveraging new media	–	On 29 September 2022, the Company participated in the 2022 Online Group Reception Day for Investors of listed companies in Hunan. Through its WeChat official account, the Company is committed to timely communicating its key updates to investors and the market and publicising its core intrinsic value. After publishing its annual, quarterly or interim results, the Company promptly released the key points in a single picture to help investors better understand its operations.
Setting up investor relations column in official website	✓ Yes    □ No	www.tec.crrczic.com

## Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues

### ***Detailed information on investor relations management and protection***

✓ Applicable  Not Applicable

In 2022, the Company communicated with investors and analysts via performance briefings, conference calls, roadshows, shareholders' general meetings and other channels, to answer questions from investors and analysts in relation to investor concerns such as corporate governance, operating conditions and future development of the Company and expand the Company's influence in the capital market.

The Company holds a performance briefing after releasing quarterly report, interim report and annual report, at which senior management will present the Company's performance and latest development, and answer questions from investors and analysts.

The Company held the 2021 annual performance briefing, the 2022 interim performance briefing and the 2022 third quarterly performance briefing at the SSE Roadshow Center respectively on 30 March, 2 September and 25 November 2022, to present the Company's results to investors.

The Company designated special personnel to answer phone calls and receive e-mails from investors, and record and answer their questions patiently.

Explanation of other channels to communicate with investors

✓ Applicable  Not Applicable

The Company replied to investors' questions on SSE E-Interaction from time to time.

### **(III) Transparency of Information Disclosure**

✓ Applicable  Not Applicable

The Company strictly complies with the regulatory requirements of laws, regulations and normative documents such as the Company Law, the Securities Law, the SSE STAR Market Listing Rules and the SEHK Listing Rules in fulfilling its obligation of information disclosure, so as to ensure the truthfulness, accuracy, completeness, timeliness and fairness of information disclosure, guarantee all shareholders have equal opportunities to obtain information and safeguard the interests of all shareholders, especially the interests of minority shareholders. It ensures that investors and stakeholders can keep abreast of the Company's operation and management. Besides, the Company has also established dedicated departments, positions and specific mailbox to enhance communication and exchange with its investors. The Company strictly fulfils the confidentiality obligations in information disclosure and there was no significant prior divulgence or misstatement of information in 2022.

### **(IV) Protection of Intellectual Property Rights and Information Security**

✓ Applicable  Not Applicable

The Company has formulated a series of management systems and guiding documents, such as the Measures for the Administration of Intellectual Property Rights, the Measures for the Administration of Intellectual Property Rights for Scientific Research Projects, the Workbook for Intellectual Property Management and the Measures for the Examination of Intellectual Property Rights for Scientific Papers, etc., to further govern its intellectual property management. In 2022, the Company submitted 565 patent applications in total and was granted 443 patents, including 305 invention patents.

## Section VII Environmental, Social Responsibilities and Other Corporate Governance Issues



The Company gives high priority to security and privacy of customer information. In strict accordance with the Civil Code of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China and the relevant laws and regulations, the Company continues to improve its company-wide information security management mechanism and strengthen the protection of customer information. In 2022, the Company had no divulgence incident for customer privacy information.

### (V) Institutional Investors' Participation in Corporate Governance

Applicable  Not Applicable

The Company attaches importance to establishing long-term, stable and sound relationships with institutional investors, and encourages them to participate in corporate governance through votes at shareholders' general meetings, among others. During the reporting period, the Company held 4 shareholders' general meetings, of which institutional investors participated in the voting in all three meetings except the 2022 first H-share class meeting. In addition, the Company continued to improve the channels for institutional investors to participate in corporate governance, and helped institutional investors to thoroughly understand the Company's business and corporate value through strategy seminars, telephone conferences and site surveys.

### (VI) Other Corporate Governance Issues

Applicable  Not applicable



# Section VIII Significant Events

## I. THE PERFORMANCE OF UNDERTAKINGS

### (I) Undertakings during or carried forward to the reporting period by the Company's actual controller, shareholders, related parties, acquirers and the Company and other relevant parties

✓ Applicable     Not applicable

Note: Both the "Group" and the "Company" stated in the undertakings contained in this section represent the party/parties giving the undertakings.

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking performed timely, please state the plan in the next step
Undertakings associated with the initial public offering	Restricted shares	CRC Group	CRC Group has given the following undertakings in respect of shares lock-up: 1. within 36 months from the date of the A Shares Issue and Listing of Times Electric, Times Electric's domestic shares (transferred into A Shares upon the A Shares Issue and Listing, not including the A Shares newly purchased from the public market after the A Shares Issue and Listing of Times Electric, hereinafter referred to as the "Above Shares") directly or indirectly held by the group prior to the A Shares Issue and Listing shall not be transferred or entrusted to others for management, nor shall Times Electric be proposed to repurchase the Above Shares; 2. if the group reduces its holdings in the Above Shares directly or indirectly held by it within two years from the expiration of the lock-up period, the reduction price shall not be lower than the issue price. If the closing price of the A Shares for 20 consecutive trading days (except for all-day suspension of Times Electric's A Shares) is lower than the issue price of the A Shares Issue and Listing within six months after the A Shares Issue and Listing of Times Electric, or the closing price as at the end of six months after the A Shares Issue and Listing (if the day is not a trading day, it is the first trading day after that day) is lower than the issue price of the A Shares Issue and Listing, the lock-up period of the Above Shares directly or indirectly held by the group will be automatically extended for six months after the expiration of the above lock-up period. The issue price refers to the issue price of the A Shares Issue and Listing of Times Electric. If Times Electric performs ex-right and ex-dividend for reasons such as profit distribution, conversion of the reserve into share capital, additional issuance, placement etc. after the A Shares Issue and Listing, it shall do so in accordance with the relevant provisions of the Shanghai Stock Exchange; 3. if relevant laws, regulations and regulatory documents or securities regulatory authorities such as China Securities Regulatory Commission and Shanghai Stock Exchange have other requirements for the lock-up period of shares, the group agrees to adjust the lock-up period of the Above Shares directly or indirectly held by it accordingly; and 4. the group undertakes to assume all the loss caused to Times Electric and companies under its control and indemnify them for breaches of the above undertakings or relevant laws, regulations and regulatory documents.	Time of undertakings: 28 December 2020 Term: within 36 months from the date of the listing of Times Electric's A Shares	Yes	Yes	-	-



# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Restricted shares	CRRC ZELRI, CRRC Zhuzhou, CRRC Investment & Leasing	CRRC ZELRI, CRRC Zhuzhou, CRRC Investment & Leasing	<p>CRRC ZELRI, CRRC Zhuzhou and CRRC Investment &amp; Leasing have given the following undertakings in respect of shares lock-up: 1. within 36 months from the date of the A Shares issue and Listing of Times Electric, Times Electric's domestic shares (transferred into A Shares upon the A Shares Issue and Listing, not including the A shares newly purchased by the company from the public market after the A Shares Issue and Listing of Times Electric, hereinafter referred to as the "Above Shares") directly or indirectly held by the company prior to the A Shares Issue and Listing shall not be transferred or entrusted to others for management, nor shall Times Electric be proposed to repurchase the Above Shares; 2. if the company reduces its holdings in the Above Shares held by it within two years from the expiration of the lock-up period, the reduction price shall not be lower than the issue price. If the closing price of the A Shares for 20 consecutive trading days (except for all-day suspension of Times Electric's A Shares) is lower than the issue price of the A Shares issue and Listing within six months after the A Shares Issue and Listing of Times Electric, or the closing price as at the end of six months after the A Shares Issue and Listing (if the day is not a trading day, it is the first trading day after that day) is lower than the issue price of the A Shares Issue and Listing, the lock-up period of the Above Shares held by the company will be automatically extended for six months after the expiration of the above lock-up period. The issue price refers to the issue price of the A Shares Issue and Listing of Times Electric. If Times Electric performs ex-right and ex-dividend for reasons such as profit distribution, conversion of the reserve into share capital, additional issuance, placement etc. after the A Shares Issue and Listing, it shall do so in accordance with the relevant provisions of the Shanghai Stock Exchange; 3. if relevant laws, regulations and regulatory documents or securities regulatory authorities such as China Securities Regulatory Commission and Shanghai Stock Exchange have other requirements for the lock-up period of shares, the company agrees to adjust the lock-up period of the Above Shares held by it accordingly; and 4. the company undertakes to assume all the loss caused to Times Electric and companies under its control and indemnify them for breaches of the above undertakings or relevant laws, regulations and regulatory documents.</p>	<p>Time of undertakings: 28 December 2020</p> <p>Term: within 36 months from the date of the listing of Times Electric's A Shares</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Restricted shares	Restricted shares	CRCCE	CRCCE has given the following undertakings in respect of shares lock-up: 1. within 12 months from the date of the A Shares Issue and Listing of Times Electric, Times Electric's domestic shares (transferred into A Shares upon the A Shares Issue and Listing, not including the A Shares newly purchased by the company from the public market after the A Shares Issue and Listing of Times Electric, hereinafter referred to as the "Above Shares") directly or indirectly held by the company prior to the A Shares Issue and Listing shall not be transferred or entrusted to others for management, nor shall Times Electric be proposed to repurchase the Above Shares; 2. if relevant laws, regulations and regulatory documents or securities regulatory authorities such as China Securities Regulatory Commission and Shanghai Stock Exchange have other requirements for the lock-up period of shares, the company agrees to adjust the lock-up period of the Above Shares held by it accordingly; and 3. the company undertakes to assume all the loss caused to Times Electric and companies under its control and indemnify them for breaches of the above undertakings or relevant laws, regulations and regulatory documents.	Time of undertakings: 28 December 2020 Term: within 12 months from the date of the listing of Times Electric's A Shares	Yes	Yes	-	-
Restricted shares	Restricted shares	Beijing Maohuan	Beijing Maohuan has given the following undertakings in respect of shares lock-up: 1. within 12 months from the date of the A Shares Issue and Listing of Times Electric, Times Electric's domestic shares (transferred into A Shares upon the A Shares Issue and Listing, not including the A Shares newly purchased by the company from the public market after the A Shares Issue and Listing of Times Electric, hereinafter referred to as the "Above Shares") directly or indirectly held by the joint venture prior to the A Shares Issue and Listing shall not be transferred or entrusted to others for management, nor shall Times Electric be proposed to repurchase the Above Shares; 2. if relevant laws, regulations and regulatory documents or securities regulatory authorities such as China Securities Regulatory Commission and Shanghai Stock Exchange have other requirements for the lock-up period of shares, the joint venture agrees to adjust the lock-up period of the Above Shares held by it accordingly; 3. the joint venture undertakes to assume all the loss caused to Times Electric and companies under its control and indemnify them for breaches of the above undertakings or relevant laws, regulations and regulatory documents.	Time of undertakings: 28 December 2020 Term: within 12 months from the date of the listing of Times Electric's A Shares	Yes	Yes	-	-

# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		CRRZ ZEIRI, CRRZ Zhuzhou, CRRZ Investment & Leasing	<p>CRRZ ZEIRI, CRRZ Zhuzhou and CRRZ Investment &amp; Leasing have given the following undertakings in respect of intention of shareholding reduction: 1. the company will implement the relevant share lock-up matters in strict accordance with relevant laws and regulations, regulatory documents, requirements of securities regulatory authorities, and relevant undertakings given by the company;</p> <p>2. after the expiration of the lock-up period, the company will, according to its own needs, reduce its holdings of Times Electric's A Shares through methods such as centralised price bidding, block trade and transfer by agreement in accordance with relevant laws, regulations and regulatory documents in force at that time; 3. if the company reduces its holding of Times Electric's A Shares within two years from the expiration of the lock-up period, the total number of Times Electric's A Shares transferred each year shall not exceed the limit under relevant laws, regulations and regulatory documents in force at that time, and the reduction price shall not be lower than the issue price of the A Shares issue and Listing of Times Electric. If Times Electric performs ex-right and ex-dividend for dividend payment, bonus issue, conversion of the reserve into share capital, additional issuance, placement etc. after the A Shares issue and Listing and before the shareholding reduction of the company, the lower limit of the reduction price and the number of shares shall be adjusted accordingly; 4. when the company reduces its holdings in A Shares of Times Electric, it will publish an announcement in respect of the specific reduction plan in accordance with the law, and comply with relevant reduction methods, reduction ratio, reduction price, information disclosure and other requirements in accordance with relevant laws and regulations and regulatory documents such as the Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange (Shang Zheng Fa [2019] No. 22), the Several Provisions on Shareholding Reduction by Shareholders, Directors, Supervisors and Senior Management of Listed Companies (China Securities Regulatory Commission Announcement [2017] No. 9) and the Detailed Implementing Rules of the Shanghai Stock Exchange for Shareholding Reduction by Shareholders, Directors, Supervisors and Senior Executives of Listed Companies (Shang Zheng Fa [2017] No. 24), so as to ensure the reduction of Times Electric's A Shares complies with requirements of China Securities Regulatory Commission and Shanghai Stock Exchange; and 5. the company will strictly comply with the above undertakings, if the company will voluntarily turn over the proceeds from the reduction to Times Electric and agree that such proceeds shall belong to Times Electric. If the company fails to hand over the above-mentioned proceeds from irregular shareholding reduction to Times Electric, Times Electric shall have the right to withhold from the cash dividends payable to the company an amount equal to the company's proceeds from irregular shareholding reduction that should be turned over to it.</p>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		The Company, CRRZ ZELRI and the Company's Directors	<p>The Company, CRRZ ZELRI (one of the controlling shareholders) and the Company's Directors (excluding independent non-executive Directors) and senior management have given the following undertakings in respect of A Shares price stabilisation measures:</p> <p><b>I. Conditions for Activation and Cessation of the Share Price Stabilisation Measures</b></p> <p>1. Conditions for Activation of the Share Price Stabilisation Measures</p> <p>During the three years from the date of the A Shares Issue and Listing of the Company, other than as a result of force majeure, the implementation of the share price stabilisation measures by the Company and the relevant entities will be triggered when the daily closing price of the Company's A shares is lower than the publicly disclosed latest audited net assets per share of the Company (after the reference date of the latest audit, should there be any change in the net assets or the total number of shares of the Company as a result of matters such as profit allocation, capitalisation of capital reserve, issue of additional shares and placing, the net assets per share shall be adjusted accordingly, the same hereinafter) for 20 consecutive trading days (except for trading days on which trading of A shares of the Company is suspended for the whole day, the same hereinafter) while the requirements of the relevant laws, regulations and regulatory documents regarding the relevant repurchase and increase of the shareholding in the Company are satisfied.</p> <p>2. Conditions for Cessation of the Share Price Stabilisation Measures</p> <p>Upon satisfaction of the conditions for activation of the share price stabilisation measures, in the event that any of the following circumstances occurs, the formulated or announced share price stabilisation measures shall be terminated, and the share price stabilisation measures which have begun implementation shall be deemed to have been completed without the need for further implementation: 1. during or before the implementation of the specific share price stabilisation measures in the undertaking, where the closing price of the Company's A Shares is not lower than the latest audited net asset per share of the Company for five consecutive trading days; 2. continued implementation of the share price stabilisation measures will result in non-compliance of the shareholding structure of the Company with the listing conditions under the listing rules of the place(s) where shares of the Company are listed or violation of the relevant prohibitive regulations in force at the time, or the shareholding increase in the Company will trigger the general takeover bid obligations.</p>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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## II. Specific Measures of the Share Price Stabilisation Plan

Upon satisfaction of the conditions for activation of the share price stabilisation measures, depending on the actual circumstances of the Company and the stock market, the share price stabilisation measures may be implemented in the following priority: 1. increase of shareholding in A Shares of the Company by the controlling shareholders of the Company, 2. repurchase of A Shares by the Company, 3. increase of shareholding in A Shares of the Company by the directors of the Company (excluding independent non-executive Directors, the same hereinafter) and the senior management of the Company.

1. Share Price Stabilisation Measures by the Controlling Shareholders of the Company
  - (1) Where the controlling shareholders increase shareholding in A Shares for the purpose of share price stabilisation, they shall do so in compliance with the provisions of the relevant laws, regulations and regulatory documents, including the Measures for the Administration of Acquisition of Listed Companies 《上市公司收购管理办法》 and the Guidelines on Shareholding Increase by Shareholders and Parties Acting in Concert of Listed Companies 《上市公司股东及其一致行动人增持股份行为指引》, and shall not lead to non-compliance of the shareholding structure of the Company with the listing conditions under the listing rules of the place(s) where the shares of the Company are listed.
  - (2) Should the conditions for activating the share price stabilisation measures arise, the controlling shareholders of the Company shall notify the Company in writing of whether there is a specific plan to increase shareholding in A Shares of the Company within 20 trading days after the conditions for activation of the share price stabilisation measures are triggered, and the Company shall publish announcement(s) in this regard. If there is a specific plan, information such as the quantity of the shareholding in A Shares proposed to be increased, price range, source of capital, method and completion schedule shall be disclosed, and the total amount of proposed increase shall not be less than RMB100 million.

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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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2. Share Price Stabilisation Measures by the Company
  - (1) Where the Company repurchases A Shares for the purpose of A Shares price stabilisation, it shall do so in compliance with the relevant laws, regulations and regulatory documents, including the Administrative Measures for Repurchase of Public Shares by Listed Companies (Trial) 《上市公司回购社会公众股份管理办法(试行)》, the Supplementary Provisions on Share Repurchases by Listed Companies through Centralised Bidding 《關於上市公司以集中競價交易方式回購股份的補充規定》, the Opinions on Supporting Share Repurchase by Listed Companies 《關於支持上市公司回購股份的意見》 and the Detailed Rules for the Implementation of Share Repurchase by Listed Companies on Shanghai Stock Exchange 《上海證券交易所上市公司回購股份實施細則》, and shall not lead to non-compliance of the shareholding structure of the Company with the listing conditions under the listing rules of the place(s) where the shares of the Company are listed.
  - (2) If the controlling shareholders fail to notify the aforementioned specific plan for shareholding increase in A Shares as scheduled, or explicitly indicates that there is no plan for shareholding increase in A Shares, the board of directors of the Company will announce whether there is a specific A Shares repurchase plan within 20 trading days after the conditions for activation of the share price stabilisation measures are triggered for the first time. If so, such information as the quantity of A Shares proposed to be repurchased, price range, source of capital, completion schedule, etc. of the shares to be repurchased, and the total amount of such repurchase shall not be less than RMB 100 million. The Company shall implement the share price stabilisation measures after performing the relevant procedures stipulated in relevant laws, regulations and regulatory documents and obtaining the necessary approval.

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			<p>3. Share Price Stabilisation Measures by the Directors and Senior Management of the Company</p> <p>(1) Where the Directors and senior management of the Company increase shareholding in A Shares for the purpose of A Shares price stabilisation, they shall do so in compliance with the conditions and requirements of the laws, regulations and regulatory documents, including the Measures for the Administration of Acquisition of Listed Companies 《上市公司收购管理办法》 and the Rules for the Administration of Shares and Changes in Shares Held by Directors, Supervisors and Senior Management of Listed Companies 《上市公司董事、监事和高级管理人员所持本公司股份及其变动管理规则》, and shall not lead to non-compliance of the shareholding structure of the Company with the listing conditions under the listing rules of the place(s) where the shares of the Company are listed.</p> <p>(2) If the Board of Directors of the Company fails to announce the aforementioned A Shares repurchase plan as scheduled, or the aforementioned A Shares repurchase plan fails to be passed at the Board meeting or the general meeting due to various reasons, subject to compliance with the laws, regulations, the listing rules of the place(s) where shares of the Company are listed and relevant policy requirements, the then Directors and senior management of the Company shall, within 30 trading days (if there are N trading days during which the Directors and senior management are restricted from acquiring and selling A Shares, then the Directors and senior management shall, within 30+N trading days) after the conditions for activation of the A Share price stabilisation measures are triggered or within 10 trading days (if there are N trading days during which the Directors and senior management are restricted from acquiring and selling A Shares, then the Directors and senior management shall, within 10+N trading days) after the aforementioned A Share repurchase plan fails to be passed at the Board meeting or the general meeting, notify the Company in writing of the specific plan for shareholding increase in A Shares, and the Company shall publish announcement(s) on information including but not limited to the quantity of the shareholding in A Shares proposed to be increased, price range and completion schedule. The respective accumulated amount for shareholding increase by Directors and senior management shall not be less than 10% of their total remuneration (after tax) received from the Company in the previous year.</p>					

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- (3) The Directors and senior management personnel newly appointed by the Company within three years from the date of the A Shares Issue and Listing shall perform relevant obligations in accordance with the undertakings in respect of share price stabilisation given by the Directors and senior management as to the A Shares Issue and Listing.
4. The purpose of the Company's A Shares price stabilisation measures is not for the share price to exceed the net asset per share. Within 120 trading days after the implementation of the A Shares price stabilisation measures, the obligations of the controlling shareholders, the Company, the directors and senior management to increase their shareholdings in A Shares or repurchase will be automatically relieved. Commencing from the 121st trading day after the fulfillment of any discretionary increase or repurchase measures specified in the preceding three paragraphs, if the activation conditions for share price stabilisation measures are triggered again, the controlling shareholders, the Company, the Directors and senior management personnel will activate the next round of specific A Share price stabilisation measures according to the provisions of the preceding paragraphs.
5. The controlling shareholders, the Company, the Directors and senior management shall, when performing their repurchase or shareholding increase obligations of A Shares, fulfill the corresponding information disclosure obligations in accordance with the relevant laws, regulations, the listing rules of the place(s) where shares of the Company are listed and other applicable regulatory provisions, and shall comply with the relevant stipulations such as the regulation of state-owned assets.



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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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### III. Relevant Restraint Measures

- 1. Restraint Measures for Violation of the Undertakings by the Controlling Shareholders of the Company**

If the specific plan for the increase of shareholding in A Shares by the controlling shareholders of the Company has been announced but cannot be actually implemented due to subjective reasons, the Company shall withhold the cash dividends payable to the controlling shareholders in the amount equal to shareholding increase obligations of A Shares of such controlling shareholders, until the controlling shareholders have fulfilled their obligations for shareholding increase in A Shares. At the same time, the A Shares of the Company held by the controlling shareholders shall not be transferred until the controlling shareholders have adopted and implemented the corresponding A Shares price stabilisation measures in accordance with the provisions of the undertakings.
- 2. Restraint Measures for Violation of the Undertakings by the Company**

If the Company has announced the A Shares repurchase plan of the Company but fails to actually implement it due to subjective reasons, the Company shall bear corresponding responsibilities according to the relevant laws, administrative regulations, departmental rules and regulations as well as the provisions of the listing rules of the place(s) where shares of the Company are listed and the requirements of regulatory authorities.
- 3. Restraint Measures for Violation of the Undertakings by the Directors and Senior Management of the Company**

If the Directors and senior management of the Company fail to fulfil their obligations to increase their shareholdings in A Shares as agreed in the undertakings due to subjective reasons during their tenure, the Company shall freeze 30% of the monthly salary and cash dividends (if any) of the relevant personnel from the month when they fail to fulfil their agreed obligations and the accumulated frozen amount shall equal the amount payable to fulfil their obligations to increase their shareholdings in A Shares, until the relevant Directors and senior management have implemented and completed the corresponding share price stabilisation measures stipulated under the undertakings.

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4. If the controlling shareholders, the Company, the Directors and senior management cannot fulfill their obligations of shareholding increase in A Shares or share repurchase within a certain period of time due to the minimum shareholding ratio of A Shares by public shareholders stipulated in the securities regulatory regulations such as the listing rules of the place(s) where the Company's shares are listed or other relevant prohibitive regulations, the relevant responsible subjects may be exempted from the aforementioned restraint measures, but other measures shall be actively taken to stabilise the price of the A Shares.

Time of undertakings:  
28 December 2020  
Term: long-term effective

Others		The Company	<p><b>The Company's Measures and Undertakings in respect of Share Repurchase and Share Buy-back</b></p> <p>The issuer has given the following undertakings in respect of share repurchase and share buy-back:</p> <ol style="list-style-type: none"> <li>The Company undertakes that there are no false records, misleading statements or material omissions in the prospectus and other information disclosure materials of the issuance, and shall bear corresponding legal responsibilities for its authenticity, accuracy and completeness.</li> <li>In case of false records, misleading statements or material omissions in the prospectus and other information disclosure materials, or fraudulence in seeking approval on an originally unqualified IPO application which results in losses to shareholders and social public investors in trading securities of the Company, the Company shall bear civil compensation liabilities and compensate shareholders and social public investors for losses in accordance with the provisions of relevant laws, regulations and regulatory documents based on the final decision or effective judgment of the CSRC or the people's court and other competent departments.</li> <li>Where the CSRC, Shanghai Stock Exchange or other competent departments determine that the information of the prospectus and other information disclosure materials contains any false records, misleading statements or material omissions which have a significant and substantial impact on judging whether the Company meets the issuance and listing conditions stipulated in laws, regulations and regulatory documents, the Company undertakes to repurchase all the A Shares issued under the issuance in the manners set out below:</li> </ol>	Yes	Yes		
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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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- To the extent as permitted by law, if the above-mentioned circumstances occur during the period when the A Shares under the issuance have been issued but yet to be listed, the Company shall repurchase all the A Shares issued by the Company from online successful subscribers and offline placement participants at the issue price plus the interest accrued thereon at the current bank deposit rate within 5 business days from the date on which the CSRC, Shanghai Stock Exchange or other competent departments determine that the above-mentioned circumstances have occurred to the Company.
- To the extent as permitted by law, if the above-mentioned circumstances occur after the A Shares have been issued and listed, the Board of directors of the Company shall initiate the procedures for share repurchase within 10 business days from the date on which the CSRC, Shanghai Stock Exchange or other competent departments determine that the above-mentioned circumstances have occurred to the Company, to repurchase all the A Shares issued by the Company in accordance with the applicable laws, regulations, regulatory documents and the articles of association of the Company, at a price not lower than the issue price plus the interest accrued thereon at the current bank deposit rate during the relevant period from the date of issuance to the date of repurchase or other prices recognised by the CSRC (such prices shall be adjusted accordingly in case of ex-right and ex-dividend such as dividends, payout, bonus issue, transfer of capital reserve fund to share capital and rights issue).

In the event that the aforesaid undertakings fail to be fulfilled, explicitly cannot be fulfilled or cannot be fulfilled on schedule, the Company shall publicly explain the specific reasons for such failure in the media designated by the CSRC, and apologise to shareholders and public investors. Shareholders and public investors shall have the right to require the Company to fulfill its undertakings through legal channels. If the Company fails to fulfill its undertakings and thus causes losses to shareholders and public investors, the Company shall make compensations according to law.

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Others		CRRCL ZEIRI	<p>CRRCL ZEIRI has given the following undertakings in respect of share repurchase and share buy-back:</p> <ol style="list-style-type: none"> <li>There are no false records, misleading statements or material omissions in the prospectus and other information disclosure materials of the Issuance of Times Electric, and the company shall bear corresponding legal responsibilities for its authenticity, accuracy and completeness.</li> <li>In case of false records, misleading statements or material omissions in the prospectus and other information disclosure materials of Times Electric, or fraudulence in seeking approval on an originally unqualified IPO application which results in losses to other shareholders and social public investors in trading securities of Times Electric, the company shall bear civil compensation liabilities and compensate other shareholders and social public investors for losses in accordance with the provisions of relevant laws, regulations and regulatory documents based on the final decision or effective judgment of the CSRC or the people's court and other competent departments.</li> <li>Where the CSRC, Shanghai Stock Exchange or other competent departments determine that the information of the prospectus and other information disclosure materials of Times Electric contains any false records, misleading statements or material omissions which have a significant and substantial impact on judging whether Times Electric meets the issuance and listing conditions stipulated in laws, regulations and regulatory documents, the company shall use its controlling shareholder status to urge Times Electric to repurchase all A Shares of Times Electric under the issuance in accordance with the law.</li> </ol>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-
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In the event that the aforesaid undertakings fail to be fulfilled, explicitly cannot be fulfilled or cannot be fulfilled on schedule, the company shall publicly explain the specific reasons for such failure in the media designated by the CSRC, and apologise to other shareholders of Times Electric and public investors. Other shareholders of Times Electric and public investors shall have the right to require the company to fulfill its undertakings through legal channels. If the company fails to fulfill its undertakings and thus causes losses to other shareholders of Times Electric and public investors, the company shall make compensations according to law.

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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
	Others	CRCR Group	<p>CRCR Group has given the following undertakings in respect of share repurchase and share buy-back:</p> <ol style="list-style-type: none"> <li>There are no false records, misleading statements or material omissions in the prospectus and other information disclosure materials of the Issuance of Times Electric, and the group shall bear corresponding legal responsibilities for its authenticity, accuracy and completeness.</li> <li>In case of false records, misleading statements or material omissions in the prospectus and other information disclosure materials of Times Electric, or fraudulence in seeking approval on an originally unqualified IPO application which results in losses to shareholders of Times Electric and social public investors in trading securities of Times Electric, the group shall bear civil compensation liabilities and compensate shareholders of Times Electric and social public investors for losses in accordance with the provisions of relevant laws, regulations and regulatory documents based on the final decision or effective judgment of the CSRC or the people's court and other competent departments.</li> <li>Where the CSRC, Shanghai Stock Exchange or other competent departments determine that the information of the prospectus and other information disclosure materials of Times Electric contains any false records, misleading statements or material omissions which have a significant and substantial impact on judging whether Times Electric meets the issuance and listing conditions stipulated in laws, regulations and regulatory documents, the group will urge Times Electric to repurchase all A Shares of Times Electric under the Issuance in accordance with the law.</li> </ol> <p>In the event that the aforesaid undertakings fail to be fulfilled, explicitly cannot be fulfilled or cannot be fulfilled on schedule, the group shall publicly explain the specific reasons for such failure in the media designated by the CSRC, and apologise to shareholders of Times Electric and public investors. Shareholders of Times Electric and public investors shall have the right to require the group to fulfill its undertakings through legal channels. If the group fails to fulfill its undertakings and thus causes losses to shareholders of Times Electric and public investors, the group shall make compensations according to law.</p>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		The Company	<p>The Company has given the following undertakings in respect of no-fraud in the issuance and listing.</p> <ol style="list-style-type: none"> <li>1. The Company guarantees that there is no fraud in the issuance.</li> <li>2. In the event that the Company does not meet the issuance and listing conditions, seeks approval on an originally unqualified IPO application and has completed issuance and listing, the Company shall initiate the share repurchase procedure within 5 business days after confirmation by the China Securities Regulatory Commission and other competent departments to repurchase all the new shares under the public offering of the Company.</li> </ol>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-
Others		CRRC ZELRI	<p>CRRC ZELRI has given the following undertakings in respect of no-fraud in the issuance and listing.</p> <ol style="list-style-type: none"> <li>1. The company guarantees that there is no fraud in the issuance of Times Electric.</li> <li>2. In the event that Times Electric does not meet the issuance and listing conditions, seeks approval on an originally unqualified IPO application and has completed issuance and listing, the company shall initiate the share repurchase procedure within 5 business days after confirmation by the China Securities Regulatory Commission and other competent departments to repurchase all the new shares under the public offering of Times Electric.</li> </ol>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-
Others		CRRC Group	<p>CRRC Group has given the following undertakings in respect of no-fraud in the issuance and listing.</p> <ol style="list-style-type: none"> <li>1. The group guarantees that there is no fraud in the issuance of Times Electric.</li> <li>2. In the event that Times Electric does not meet the issuance and listing conditions, seeks approval on an originally unqualified IPO application and has completed issuance and listing, the group shall initiate the share repurchase procedure within 5 business days after confirmation by the China Securities Regulatory Commission and other competent departments to repurchase all the new shares under the public offering of Times Electric.</li> </ol>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-

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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others	Others	The Company	The Company has given the following undertaking in respect of remedial measures for dilution of immediate returns as a result of the issue and listing: the Company undertakes that it will adopt measures after the A Shares issue and listing to continuously strengthen technological research and development and product innovation, improve operation and management efficiency, strengthen management over the raised proceeds, reinforce investor return mechanism, increase sales revenue and future yields and enhance shareholder returns, so as to remedy the dilution of immediate returns due to the A Shares issue and Listing.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-
Others	Others	CRCZ ZELRI	CRCZ ZELRI has given the following undertakings on the remedial measures for dilution of immediate returns in respect of the Issue and Listing: 1. The company will strictly implement various laws, regulations and rules on the governance of listed companies to protect the interests of Times Electric and the public shareholders, and will not overstep their authority to interfere with the operation and management activities of Times Electric. 2. The company undertakes not to encroach on the interests of Times Electric in any way, and will abide by relevant laws and regulations and regulatory documents. 3. The company undertakes to strictly perform the above undertakings given by it. If the company has violated the undertakings or refuse to perform the undertakings, the company will perform explanation, apology and other corresponding obligations in accordance with the Guidance on Matters Related to Dilution of Immediate Returns as a result of Initial Issue, Refinancing and Major Asset Reorganisation (《關於首次發行及再融資、重大資產重組籌備期間回報事項的指導意見》) and other relevant regulations, and agrees to the regulatory measures or self-discipline regulatory measures made by China Securities Regulatory Commission, Shanghai Stock Exchange and China Association for Public Companies in accordance with the law. If losses are caused to Times Electric or other shareholders of Times Electric, the company is willing to be liable for corresponding compensation liabilities according to law.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
	Others	CRRC Group	<p>CRRC Group has given the following undertakings on the remedial measures for dilution of immediate returns in respect of the Issue and Listing:</p> <ol style="list-style-type: none"> <li>The group will strictly implement various laws, regulations and rules on the governance of listed companies to protect the interests of Times Electric and the public shareholders, and will not overstep their authority to interfere with the operation and management activities of Times Electric.</li> <li>The group undertakes not to encroach on the interests of Times Electric in any way, and will abide by relevant laws and regulations and regulatory documents.</li> <li>The group undertakes to strictly perform the above undertakings given by it. If the group has violated the undertakings or refuse to perform the undertakings, the group will perform explanation, apology and other corresponding obligations in accordance with the Guidance on Matters Related to Dilution of Immediate Returns as a result of Initial Issue, Refinancing and Major Asset Reorganisation (《關於首次及再融資、重大資產重組籌期回報有關事項的指導意見》) and other relevant regulations, and agrees to the regulatory measures or self-discipline regulatory measures made by China Securities Regulatory Commission, Shanghai Stock Exchange and China Association for Public Companies in accordance with the law. If losses are caused to Times Electric or shareholders of Times Electric, the group is willing to be liable for corresponding compensation liabilities according to law.</li> </ol>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-



# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		The Directors and senior management of the Company	<p>The Directors and senior management of the Company have given the following undertakings on the remedial measures for dilution of immediate returns in respect of the Issue and Listing:</p> <ol style="list-style-type: none"> <li>undertake not to transfer benefits to other units or individuals free of charge or under unfair conditions, and not to damage the Company's interests by other means;</li> <li>undertake to restrict the post consumption behaviour of directors and senior management;</li> <li>undertake not to appropriate the Company's assets to engage in investment and consumption activities unrelated to the performance of their duties;</li> <li>undertake to actively promote the improvement of the Company's salary system and render it more in line with the requirements of remedies for dilution of immediate returns; support the linkage between the remuneration system and the implementation of the Company's remedial measures for dilution of immediate returns as formulated by the Board of directors or the remuneration committee, and strictly abide by such systems;</li> <li>undertake to actively support the linkage between the exercise conditions of equity incentive and the implementation of the Company's remedial measures for dilution of immediate returns in case that the Company establishes an equity incentive plan (if any);</li> <li>I will strictly abide by the remedial measures formulated by the Company, and will actively take all necessary and reasonable measures to urge the implementation of the remedial measures formulated by the Company within the scope of my authority according to the relevant regulations issued by the CSRC, the Shanghai Stock Exchange and other regulatory agencies in the future;</li> <li>after the date of issue of these undertakings and before the completion of the A Shares Issue and Listing, if the CSRC or the Shanghai Stock Exchange separately promulgate new regulatory provisions on the remedial measures for dilution of immediate returns and the undertakings thereof, and if the above undertakings cannot meet the requirements of the CSRC or the Shanghai Stock Exchange, I promise to issue supplementary undertaking(s) in accordance with the provisions of the CSRC or the Shanghai Stock Exchange.</li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
	Profit distribution	The Company	<p>The Company has given the following undertakings in respect of profit distribution policies: The Company will distribute profits to shareholders in strict accordance with the profit distribution policies stipulated by relevant laws and regulations, the Articles of Association of Zhuzhou CRRC Times Electric Co., Ltd., and Three-year Distribution Plan for Shareholders after the Initial Public Issue and Listing of A Shares on the Science and Technology Innovation Board of Zhuzhou CRRC Times Electric Co., Ltd., and strictly implement the review procedures for the profit distribution plan. If the violation of the above undertakings causes losses to the investors, the Company shall be liable to the investors according to law.</p>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-
	Others	The Company	<p>The Company has given the following undertakings in respect of compensation under the law or compensation liabilities:</p> <ol style="list-style-type: none"> <li>There are no false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, and the Company shall bear corresponding legal responsibilities for the authenticity, accuracy and completeness of the contents contained in the prospectus and other information disclosure materials.</li> <li>In case of false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, which results in losses to investors in the issue and trading of securities, the Company shall bear civil compensation liabilities and compensate investors for losses in accordance with the provisions of relevant laws and regulations. The amount of the compensation for such losses shall be limited to the direct losses actually incurred by the investors. The specific compensation standard, scope of compensation subject, amount of compensation and other details shall be determined according to the final compensation scheme or the way or amount determined by the China Securities Regulatory Commission, Shanghai Stock Exchange or judicial authorities when the above situations actually occur.</li> <li>Where there were discrepancies in the requirements among the laws, regulations, regulatory documents, the China Securities Regulatory Commission or the Shanghai Stock Exchange in respect of the related liabilities and consequences liable for as a result of breach of the above undertakings by the Company, the Company shall voluntarily and unconditionally abide by such requirements.</li> </ol>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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Others		CRRC ZELRI	<p>CRRC ZELRI has given the following undertakings in respect of compensation under the law or compensation liabilities:</p> <ol style="list-style-type: none"> <li>There are no false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, and CRRC ZELRI shall bear corresponding legal responsibilities for the authenticity, accuracy and completeness of the contents contained in the prospectus and other information disclosure materials.</li> <li>In case of false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, which results in losses to investors in the issue and trading of securities, the company shall bear civil compensation liabilities and compensate investors for losses in accordance with the provisions of relevant laws and regulations. The amount of the compensation for such losses shall be limited to the direct losses actually incurred by the investors. The specific compensation standard, scope of compensation subject, amount of compensation and other details shall be determined according to the final compensation scheme or the way or amount determined by the China Securities Regulatory Commission, Shanghai Stock Exchange or judicial authorities when the above situations actually occur.</li> <li>Where there were discrepancies in the requirements among the laws, regulations, regulatory documents, the China Securities Regulatory Commission or the Shanghai Stock Exchange in respect of the related liabilities and consequences liable for as a result of breach of the above undertakings by the company, the company shall voluntarily and unconditionally abide by such requirements.</li> </ol>	<p>Time of undertakings: 28 December 2020 Term: long-term effective</p>	Yes	Yes	-	-
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# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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Others		CRRC Group	CRRC Group has given the following undertakings in respect of compensation under the law or compensation liabilities: 1. There are no false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, and CRRC Group shall bear corresponding legal responsibilities for the authenticity, accuracy and completeness of the contents contained in the prospectus and other information disclosure materials. 2. In case of false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, which results in losses to investors in the issue and trading of securities, the group shall bear civil compensation liabilities and compensate investors for losses in accordance with the provisions of relevant laws and regulations. The amount of the compensation for such losses shall be limited to the direct losses actually incurred by the investors. The specific compensation standard, scope of compensation subject, amount of compensation and other details shall be determined according to the final compensation scheme or the way or amount determined by the China Securities Regulatory Commission, Shanghai Stock Exchange or judicial authorities when the above situations actually occur. 3. Where there were discrepancies in the requirements among the laws, regulations, regulatory documents, the China Securities Regulatory Commission or the Shanghai Stock Exchange in respect of the related liabilities and consequences liable for as a result of breach of the above undertakings by the group, the group shall voluntarily and unconditionally abide by such requirements.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-
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# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		Directors, supervisors and senior management of the Company	<p>The Directors, supervisors and senior management of the Company have given the following undertakings in respect of compensation under the law or compensation liabilities:</p> <ol style="list-style-type: none"> <li>There are no false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, and I shall bear corresponding legal responsibilities for the authenticity, accuracy and completeness of the contents contained in the prospectus.</li> <li>In case of false records, misleading statements or material omissions in the contents contained in the prospectus and other information disclosure materials, which results in losses to investors in the issue and trading of securities, I shall bear civil compensation liabilities and compensate investors for losses in accordance with the provisions of relevant laws and regulations. The amount of the compensation for such losses shall be limited to the direct losses actually incurred by the investors. The specific compensation standard, scope of compensation subject, amount of compensation and other details shall be determined according to the final compensation scheme or the way or amount determined by the China Securities Regulatory Commission, Shanghai Stock Exchange or judicial authorities when the above situations actually occur.</li> <li>Where there were discrepancies in the requirements among the laws, regulations, regulatory documents, the CSRC or stock exchanges in respect of the related liabilities and consequences liable for as a result of breach of the above undertakings by me, I shall voluntarily and unconditionally abide by such requirements.</li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others	The Company	The Company	<p>The Company agrees to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings:</p> <ol style="list-style-type: none"> <li>Where the relevant undertakings made publicly by the Company in the prospectus already contain restrictive measures, such restrictive measures specified in the undertakings shall prevail. If the Company violates such undertakings, the Company agrees to take the restrictive measures already specified in the undertakings.</li> <li>Where the relevant undertakings made publicly by the Company in the prospectus do not contain restrictive measures and the Company fails to fully or effectively fulfill such undertakings due to reasons other than force majeure, it agrees to adopt the following restrictive measures: <ol style="list-style-type: none"> <li>The Company shall publicly explain the specific reasons for failure to fulfill its undertakings and apologise to shareholders and social public investors on newspapers designated by the general meeting, the Shanghai Stock Exchange and China Securities Regulatory Commission;</li> <li>The Company shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;</li> <li>If shareholders and social public investors suffer losses in securities trading due to the Company's failure to fulfill the above undertakings, the Company shall compensate shareholders and social public investors for the losses according to law;</li> <li>The Company shall not raise the salary or allowance in any form to the Directors, supervisors and senior management personnel who are personally responsible for the Company's failure to fulfill relevant undertakings until the Company has completely eliminated the adverse effects caused by the failure to fulfill relevant undertakings;</li> <li>Other measures available for adoption according to the then prevailing regulations.</li> </ol> </li> </ol>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		CRRC ZEIRI	<p>CRRC ZEIRI agrees to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings:</p> <ol style="list-style-type: none"> <li>Where the relevant undertakings made publicly by the company in the prospectus already contain restrictive measures, such restrictive measures specified in the undertakings shall prevail. If the company violates such undertakings, the company agrees to take the restrictive measures already specified in the undertakings.</li> <li>Where the relevant undertakings made publicly by the company in the prospectus do not contain restrictive measures and the company fails to fully or effectively fulfill such undertakings due to reasons other than force majeure, it agrees to adopt the following restrictive measures:               <ol style="list-style-type: none"> <li>The company shall publicly explain the specific reasons for failure to fulfill its undertakings and apologise to other shareholders of Times Electric and social public investors on newspapers designated by the Shanghai Stock Exchange and China Securities Regulatory Commission;</li> <li>The company shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;</li> <li>If other shareholders of Times Electric and social public investors suffer losses in securities trading due to the company's failure to fulfill the above undertakings, the company shall compensate other shareholders of Times Electric and social public investors for the losses according to law;</li> <li>Other measures available for adoption according to the then prevailing regulations.</li> </ol> </li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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Others		CRRIC Group	<p>CRRIC Group agrees to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings:</p> <ol style="list-style-type: none"> <li>Where the relevant undertakings made publicly by the group in the prospectus already contain restrictive measures, such restrictive measures specified in the undertakings shall prevail. If the group violates such undertakings, the group agrees to take the restrictive measures already specified in the undertakings.</li> <li>Where the relevant undertakings made publicly by the group in the prospectus do not contain restrictive measures and the group fails to fully or effectively fulfill such undertakings due to reasons other than force majeure, it agrees to adopt the following restrictive measures:               <ol style="list-style-type: none"> <li>The group shall publicly explain the specific reasons for failure to fulfill its undertakings and apologise to shareholders of Times Electric and social public investors on newspapers designated by the Shanghai Stock Exchange and China Securities Regulatory Commission;</li> <li>The group shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;</li> <li>If shareholders of Times Electric and social public investors suffer losses in securities trading due to the group's failure to fulfill the above undertakings, the group shall compensate shareholders of Times Electric and social public investors for the losses according to law;</li> <li>Other measures available for adoption according to the then prevailing regulations.</li> </ol> </li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-
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# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others		Directors, supervisors and senior management of the Company	<p>The Directors, supervisors and senior management of the Company agree to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings</p> <ol style="list-style-type: none"> <li>Where the relevant undertakings made publicly by me in the prospectus already contain restrictive measures, such restrictive measures specified in the undertakings shall prevail. If I violate such undertakings, I agree to take the restrictive measures already specified in the undertakings.</li> <li>Where the relevant undertakings made publicly by me in the prospectus do not contain restrictive measures and I fail to fully or effectively fulfill such undertakings due to reasons other than force majeure, I agree to adopt the following restrictive measures:                     <ol style="list-style-type: none"> <li>I shall publicly explain the specific reasons for failure to fulfill its undertakings and apologise to shareholders and social public investors on newspapers designated by the general meeting, the Shanghai Stock Exchange and China Securities Regulatory Commission;</li> <li>I shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;</li> <li>If shareholders and social public investors suffer losses in securities trading due to my failure to fulfill the above undertakings, I shall compensate shareholders and social public investors for the losses according to law;</li> <li>If I receive the salary from Times Electric, I agree that Times Electric can stop paying the salary to me and use it directly to perform my unfulfilled undertakings or to compensate for the loss caused to Times Electric and its shareholders by my unfulfilled undertakings;</li> <li>Other measures available for adoption according to the then prevailing regulations.</li> </ol> </li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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Others		CRRIC ZEIRI	<p>CRRIC ZEIRI has given the following undertakings in respect of avoiding appropriation of funds:</p> <ol style="list-style-type: none"> <li>As of the date of the letter of undertakings, the company and the companies under its control (excluding Times Electric and companies under the control of Times Electric) have not appropriated the funds of Times Electric and companies under its control for non-operating purposes.</li> <li>The company undertakes that from the date of the undertakings, the company and companies under its control will not appropriate the funds of Times Electric and companies under the control of Times Electric through borrowing, debt repayment (on their behalf), advance payment or any other means, and will strictly abide by the relevant provisions of laws and regulations on the corporate governance of listed companies to avoid capital transactions with Times Electric and companies under its control that are not related to normal production and operation. Times Electric shall not be required to provide any form of guarantee in violation of regulations to the company and companies under its control.</li> <li>The company undertakes that if the company violates the above undertakings which prejudice the interests of Times Electric or other shareholders of Times Electric, the company is willing to assume all the responsibilities arising therefrom, and fully indemnify or compensate Times Electric or other shareholders of Times Electric for actual losses caused to them.</li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-
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# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
Others	Others	CRRCC Group	<p>CRRCC Group has given the following undertakings in respect of avoiding appropriation of funds:</p> <ol style="list-style-type: none"> <li>As of the date of the letter of undertakings, the group and the companies under its control (excluding Times Electric and companies under the control of Times Electric) have not appropriated the funds of Times Electric and companies under its control for non-operating purposes.</li> <li>The group undertakes that from the date of the undertakings, the group and companies under its control will not appropriate the funds of Times Electric and companies under the control of Times Electric through borrowing, debt repayment (on their behalf), advance payment or any other means, and will strictly abide by the relevant provisions of laws and regulations on the corporate governance of listed companies to avoid capital transactions with Times Electric and companies under its control that are not related to normal production and operation. Times Electric shall not be required to provide any form of guarantee in violation of regulations to the group and companies under its control.</li> <li>The group undertakes that if the group violates the above undertakings which prejudice the interests of Times Electric or its shareholders, the group is willing to assume all the responsibilities arising therefrom, and fully indemnify or compensate Times Electric or its shareholders for actual losses caused to them.</li> </ol>	<p>Time of undertakings: 28 December 2020</p> <p>Term: long-term effective</p>	Yes	Yes	-	-

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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Related Party Transactions	CRRCL ZEIRI	CRRCL ZEIRI	<p>CRRCL ZEIRI has given the undertakings in respect of regulating related party transactions, details of which are as follows:</p> <ol style="list-style-type: none"> <li>The company and companies under its control (excluding Times Electric and companies under its control, the same hereinafter) shall try their best to avoid unnecessary related party transactions with Times Electric and companies under its control.</li> <li>For the unavoidable related party transactions related to the business activities of Times Electric and companies under its control, the company and companies under its control will strictly abide by the relevant requirements of laws and regulations and regulatory documents on related party transactions, and will conduct transactions with Times Electric and companies under its control at fair prices based on the principles of equality and mutual benefit, good faith, compensation of equal value, and fairness and reasonableness, so as to ensure that the legitimate rights and interests of Times Electric and other shareholders of Times Electric will not be harmed, and the profits of Times Electric will not be transferred through related party transactions, and that the legitimate rights and interests of Times Electric and other shareholders of Times Electric will not be impaired by exerting influence on the business decisions of Times Electric.</li> <li>The company will not take advantage of its controlling shareholder status to seek any favorable conditions or benefits over independent third parties for the company and companies under its control from Times Electric and companies under its control in terms of business operations and other aspects.</li> <li>The company undertakes to indemnify Times Electric and companies under its control against all actual loss, damage and expenses suffered/occurred for breach by the company and companies under its control of any clause of the undertakings, and to bear the corresponding liabilities in accordance with the law.</li> </ol>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-
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# Section VIII

# Significant Events



Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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Related Party Transactions	CRRCC Group	CRRCC Group	<p>CRRCC Group has given the undertakings in respect of regulating related party transactions, details of which are as follows:</p> <ol style="list-style-type: none"> <li>The group and companies under its control (excluding Times Electric and companies under its control, the same hereinafter) shall try their best to avoid unnecessary related party transactions with Times Electric and companies under its control.</li> <li>For the unavoidable related party transactions related to the business activities of Times Electric and companies under its control, the group and companies under its control will strictly abide by the relevant requirements of laws and regulations and regulatory documents on related party transactions, and will conduct transactions with Times Electric and companies under its control at fair prices based on the principles of equality and mutual benefit, good faith, compensation of equal value, and fairness and reasonableness, so as to ensure that the legitimate rights and interests of Times Electric and its shareholders will not be harmed, and the profits of Times Electric will not be transferred through related party transactions, and that the legitimate rights and interests of Times Electric and its shareholders will not be impaired by exerting influence on the business decisions of Times Electric.</li> <li>The group will not take advantage of its significant influence on Times Electric to seek any favorable conditions or benefits over independent third parties for the group and companies under its control from Times Electric and companies under its control in terms of business operations and other aspects.</li> <li>The group undertakes to indemnify Times Electric and companies under its control against all actual loss, damage and expenses suffered/occurred for breach by the group and companies under its control of any clause of the undertakings, and to bear the corresponding liabilities in accordance with the law.</li> </ol>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-
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# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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	Non-competition undertakings	CRRCC Group	<p>CRRCC Group has given the undertakings in respect of non-competition, details of which are as follows:</p> <p>1. The group is a wholly state-owned company established on the basis of former China Northern Locomotive &amp; Rolling Stock Industry (Group) Corporation (中國北方機車車輛工業集團公司) merging former CSR Group (中國南車集團公司). There is certain business overlapping between the holding company of former China Northern Locomotive &amp; Rolling Stock Industry (Group) Corporation and Times Electric (including its subsidiaries, the same hereinafter). After the completion of the merger, there are certain business overlapping between other enterprises controlled by the group and Times Electric.</p> <p>2. At present, in the fields of traction converter systems, power supply systems, communication signal systems, rail engineering machinery and electronic components, other enterprises controlled by the group have certain businesses competing with Times Electric. There is no unfair competition, transfer of benefits, mutual or unilateral transfer of business opportunities between these enterprises and Times Electric, and nor is there competition that has a significant adverse impact on Times Electric. The group will strengthen the supervision and coordination of the aforesaid businesses competing with Times Electric, so as to avoid such competing businesses from having a material adverse impact on the businesses of Times Electric. In the field of vacuum sanitation systems, other enterprises controlled by the group have certain businesses competing with Times Electric. Times Electric, in combination with its own business development, has decided to stop the production of all vacuum sanitation system products after completing all sales contracts related to vacuum sanitation systems that are currently in effect, and will no longer sign any new sales contracts related to vacuum sanitation systems, nor will it explore new business opportunities in the field of vacuum sanitation systems or carry out this business in the future.</p>	<p>Time of undertakings: 20 December 2020</p> <p>Term: the letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when CRRCC Group is the indirect controlling shareholder of Times Electric and the A Shares of Times Electric continue to be listed and traded on the Sci-Tech Innovation Board.</p>	Yes	Yes	-	-
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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step	
			<p>3. Except for the above circumstances, the group and other enterprises controlled by it are not currently engaged in any business that competes with the principal operating activities of Times Electric.</p> <p>4. In the future, the group will not take advantage of its status as the indirect controlling shareholder of Times Electric to carry out business activities that prejudice the interests of Times Electric and its shareholders, and will take legal and effective measures to prevent the group and other enterprises controlled by the group from creating competition with Times Electric.</p> <p>5. If the group or other enterprises controlled by it violate the above undertakings causing Times Electric to suffer any economic losses, the group undertakes to be liable for compensation of the actual economic losses of Times Electric.</p> <p>6. The letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when the group is the indirect controlling shareholder of Times Electric and the A Shares of Times Electric continue to be listed and traded on the Sci-Tech Innovation Board.</p>						
Non-competition undertakings		CRC ZELRI	<p>CRC ZELRI has given the undertakings in respect of non-competition, details of which are as follows:</p> <p>1. As of the date of the letter of undertakings, the company and companies under its control (excluding Times Electric and companies under its control, the same hereinafter) have not directly or indirectly engaged in any business or activity that competes with the principal activities of Times Electric and companies under its control within or outside China.</p> <p>2. The company and companies under its control will continue not to directly or indirectly engage in any business or activity that competes with the principal activities of Times Electric and companies under its control within and outside China in the future.</p>	<p>Time of undertakings: 20 December 2020</p> <p>Term: the letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when CRC ZELRI is the direct controlling shareholder of Times Electric and the A Shares of Times Electric continue to be listed and traded on the Sci-Tech Innovation Board.</p>	Yes	Yes			

# Section VIII Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	Is there a term for performance	Whether or not timely and strictly performed	If the undertaking fails to be performed timely, please explain the specific reasons for the failure	If the undertaking fails to be performed timely, please state the plan in the next step
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			<p>3. If the company or companies under its control identify any new business opportunity that competes or is likely to compete with the principal activities of Times Electric and companies under its control, it will immediately notify Times Electric in writing and try its best to procure that these business opportunities are first provided to Times Electric and companies under its control on reasonable and fair terms and conditions, so as to ultimately exclude the company and companies under its control from participating in the actual management or obtaining operation right of assets/equity/business involved in these business opportunities, thereby avoiding the competition with the principal activities engaged by Times Electric and companies under its control.</p> <p>4. If the company or companies under its control violate the above undertakings causing Times Electric to suffer any economic losses, the company undertakes to be liable for compensation of the actual economic losses of Times Electric.</p> <p>5. The letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when the company is the direct controlling shareholder of Times Electric and the A Shares of Times Electric continue to be listed and traded on the Sci-Tech Innovation Board.</p>					
Other Undertakings	Non-competition undertakings	CRRC	<p>In respect of the undertaking of non-competition with Zhuzhou CSR Times Electric Co., Ltd., CRRC undertakes that with respect to the operations of CRRC that compete with the operations of the Company: (1) CRRC will grant the Company a call option, pursuant to which the Company will be entitled to elect, at its own discretion, when to request CRRC to sell the competing businesses of CRRC to it; (2) CRRC will further grant the Company a pre-emptive right, pursuant to which if CRRC proposes to sell the competing business to an independent third party, CRRC shall offer to the Company the competing business first on the same terms and conditions, and the sale to an independent third party may only be effected after the Company refuses to purchase the competing business; (3) the decision of the Company to exercise the aforesaid call option and the pre-emptive right shall be made by the independent non-executive Directors of the Company; (4) the exercise of the aforesaid call option and the pre-emptive right as well as other effective methods to resolve this competition matter will be subject to the applicable regulatory and disclosure requirements and shareholders' approval at the general meeting in the places of listing of CRRC and the Company respectively; and (5) the non-competition undertaking will be effective from the date of issuance of the letter of undertaking to the time when the Company is delisted or CRRC ceases to be an indirect controlling shareholder of the Company.</p>	Time of undertakings: 5 August 2015 Term: from the date of issuance of the letter of undertaking to the time when the Company is delisted or CRRC ceases to be an indirect controlling shareholder of the Company	Yes	Yes		



## Section VIII

# Significant Events



**(II) The Company's assets or projects involve profit forecast and were still in the profit forecast period during the reporting period, the Company's explanation on whether the assets or projects have met the original profit forecast and the reasons therefor**

Reached  Not reached  Not applicable

**(III) Completion process of performance commitment and its effect on goodwill impairment test**

Applicable  Not applicable

**II. MISAPPROPRIATION OF FUNDS FOR PURPOSES OTHER THAN FOR BUSINESS BY THE CONTROLLING SHAREHOLDER AND OTHER RELATED PARTIES DURING THE REPORTING PERIOD**

Applicable  Not applicable

**III. ILLEGAL GUARANTEES**

Applicable  Not applicable

**IV. EXPLANATION GIVEN BY THE BOARD OF THE COMPANY ON THE "NON-STANDARD AUDITOR'S REPORT" ISSUED BY THE AUDITORS**

Applicable  Not applicable

**V. EXPLANATION AND ANALYSIS OF THE COMPANY ON THE REASONS FOR AND EFFECTS OF THE CHANGES IN ACCOUNTING POLICIES, ACCOUNTING ESTIMATES OR THE CORRECTION OF MAJOR ACCOUNTING ERRORS**

**(1) Explanation and analysis of the Company on the reasons for and effects of the changes in accounting policies and accounting estimates**

Applicable  Not applicable

**(2) Explanation and analysis of the Company on the reasons for and effects of the correction of major accounting errors**

Applicable  Not applicable

## Section VIII Significant Events

### (3) Communications with former accounting firm

Applicable Not applicable

The Company has conducted prior communications with Deloitte Touche Tohmatsu Hua Yong Certified Public Accountants LLP (德勤華永會計師事務所(特殊普通合夥)) (“Deloitte”) in respect of the change of auditors, who showed understanding and support, and raised no objection in this regard. Deloitte confirmed that there was no matter regarding the change of auditors that needed to be brought to the attention of the shareholders of the Company. The Board confirmed that there were no dissenting opinions or outstanding matters between the Company and Deloitte, nor was there any matter that needed to be brought to the attention of the shareholders of the Company.

The Company had communicated with each of Deloitte and KPMG Huazhen LLP (畢馬威華振會計師事務所(特殊普通合夥)) regarding the change of auditors, and both of them were informed of relevant matter and raised no objection in this regard.

### (4) Others

Applicable Not applicable

## VI. APPOINTMENT, DISMISSAL OR CHANGE IN EMPLOYMENT OF AUDITORS

Unit: Yuan Currency: RMB

	Former auditors	Current auditors
Name of domestic Certified Public Accountants	Deloitte Touche Tohmatsu Hua Yong Certified Public Accountants LLP	KPMG Huazhen LLP
Total remuneration of domestic Certified Public Accountants	5,200,000.00	4,300,000.00
Audit term of domestic Certified Public Accountants	4 years	1 year
Name of overseas Certified Public Accountants	/	/
Name of the certified public accountant of domestic Certified Public Accountants	/	Lin Ying
Auditor term of the certified public accountant of domestic Certified Public Accountants	/	19 years
Total remuneration of overseas Certified Public Accountants	/	/
Audit term of overseas Certified Public Accountants	/	/
Name of the certified public accountant of overseas Certified Public Accountants	/	/
Auditor term of the certified public accountant of overseas Certified Public Accountants	/	/

# Section VIII Significant Events

	Name	Remuneration
Internal control audit Certified Public Accountants	KPMG Huazhen LLP	600,000.00
Financial advisor	/	/
Sponsor	China International Capital Corporation Limited	/

## Explanation on the appointment and dismissal of auditors

Applicable Not applicable

At the 2021 annual general meeting of the Company held on 17 June 2022, the Resolution on Engagement of Auditor for the Company in 2022 was considered and approved, pursuant to which KPMG Huazhen LLP was engaged as the Company's financial reporting auditor and internal control auditor in 2022.

## Explanation on the change in the employment of auditors during the audit period

Applicable Not applicable

Pursuant to the relevant regulations of the Ministry of Finance and the State-owned Assets Supervision and Administration Commission of the State Council, accounting firms that undertake audit of the final financial accounts for a central enterprise shall be under consecutive terms of not less than 2 years and not more than 5 years; the audit period for accounting firms that rank among the top 15 of the National Comprehensive Evaluation Ranking of Accounting Firms (全國會計師事務所綜合評價) with excellent audit quality may be extended as appropriate subject to application by the relevant enterprises and approval by the SASAC, but the consecutive audit period shall not exceed 8 years. As Deloitte has served as the auditor of CRRC ZELRI for 6 consecutive years during 2014 to 2019, during which Deloitte, being the auditor of CRRC ZELRI was involved in the audit services of the financial statements of the Company (which forms an important part of CRRC ZELRI). Deloitte served as the auditor of the Company and provided audit services on the financial statements for four consecutive years during 2018 to 2021. After taking into comprehensive account the business development of the Company and the need for annual audit, the Company changed its auditors. On 17 June 2022, upon consideration at the 2021 annual general meeting of the Company, the Company resolved to engage KPMG Huazhen LLP as its financial reporting auditor and internal control auditor in 2022.

## VII. RISK OF DELISTING

### (1) Reasons leading to the risk warning of delisting

Applicable Not applicable

### (2) The response measures intended to be taken

Applicable Not applicable

### (3) The situation and reasons for facing delisting

Applicable Not applicable



## Section VIII Significant Events

### VIII. MATTERS RELEVANT TO WINDING UP AND SCHEME OF ARRANGEMENT

Applicable  Not applicable

### IX. MATERIAL LITIGATION AND ARBITRATION MATTERS

The Company had involved in material litigation and arbitration during the year  
 The Company had not involved in any material litigation and arbitration during the year

### X. INFORMATION ON BREACH OF LAW AND REGULATIONS, PENALTIES, RECTIFICATION AND REFORM IN RESPECT OF THE LISTED COMPANY, ITS DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, CONTROLLING SHAREHOLDERS OR ACTUAL CONTROLLER

Applicable  Not applicable

### XI. EXPLANATION ON THE HONESTY OF THE COMPANY AND ITS CONTROLLING SHAREHOLDER AND ACTUAL CONTROLLER DURING THE REPORTING PERIOD

Applicable  Not applicable

### XII. CONNECTED TRANSACTIONS AND MATERIAL RELATED PARTY TRANSACTIONS

#### (I) Non-exempt continuing connected transactions (disclosure pursuant to the SEHK Listing Rules)

Set out below are the non-exempted continuing connected transactions of the Group which are therefore subject to the reporting, announcement, annual review and/or independent shareholders' approval (if required) requirements under the SEHK Listing Rules.

##### ***Property Leasing Framework Agreement with CRRC***

On 17 August 2018, the Company entered into the 2018-2027 Property and Ancillary Equipment and Facilities Leasing Framework Agreement (the "2018-2027 Property Leasing Framework Agreement") with CRRC (together with its subsidiaries and each of their respective associates but excluding the Group, the "CRRC Corporation Group"), pursuant to which, the Company and CRRC agreed to lease and procure their group members to lease their lawfully owned properties and/or ancillary equipment and facilities to each other. The agreement shall be valid for a term of ten years commencing from 1 January 2018 and ending on 31 December 2027.

As at the date of the agreement, CRRC is an indirect controlling shareholder of the Company, and is therefore a connected person of the Company under the Hong Kong Listing Rules. Accordingly, the transactions contemplated under the 2018-2027 Property Leasing Framework Agreement constitute continuing connected transactions of the Company under the Hong Kong Listing Rules.

For the year ended 31 December 2022, under the 2018-2027 Property Leasing Framework Agreement, the rental and other expenses paid by CRRC Corporation Group to the Group were RMB10.0 million, and the rental and other expenses paid by the Group to CRRC Corporation Group were RMB25.4 million (and the balance of right-of-use assets recognised pursuant to Accounting Standards for Business Enterprises No. 21 - Lease was RMB15.82 million), neither of which exceeded the aggregate annual caps stipulated for the financial year ended 31 December 2022 under the 2018-2027 Property Leasing Framework Agreement.

For details, please refer to the announcement of the Company dated 17 August 2018.

## Section VIII Significant Events



### ***Mutual Supply Agreement with CRRC Group***

On 26 March 2019, the Company entered into the 2020-2022 Products and Ancillary Services Mutual Supply Agreement (the “2020-2022 CRRC Group Mutual Supply Agreement”) with CRRC Group (together with its subsidiaries and each of their respective associates but excluding the Group, the “CRRC Group of Companies”), pursuant to which, the Company agreed to supply and procure its subsidiaries to supply to the CRRC Group of Companies certain products (including electrical systems and electrical components), parts and components, technical services, after-sales services, management services and other related services, and related facilities for research and development, production and testing purposes; and CRRC Group agreed to supply and procure its subsidiaries and their respective associates (but excluding the Group) to supply to the Group certain products, parts and components, technical services, after-sales services, management services and other related services, and related facilities for research and development, production and testing purposes. The agreement shall be valid for a term of three years commencing from 1 January 2020 and ending on 31 December 2022.

As at the date of the agreement, CRRC Group is an indirect controlling shareholder of the Company, and is therefore a connected person of the Company under the Hong Kong Listing Rules. Accordingly, the transactions contemplated under the 2020-2022 CRRC Group Mutual Supply Agreement constitute continuing connected transactions of the Company under the Hong Kong Listing Rules. Approvals from the independent shareholders have been obtained by the Company at the annual general meeting held on 20 June 2019.

For the year ended 31 December 2022, under the 2020-2022 CRRC Group Mutual Supply Agreement, amount payable by the Group to CRRC Group of Companies for products and/or services provided by CRRC Group of Companies was RMB1,885.7 million, and the amount payable by CRRC Group of Companies to the Group for products and/or services provided by the Group was RMB6,792.0 million, neither of which exceeded the aggregate annual caps for the financial year ended 31 December 2022 as approved by the independent shareholders at the annual general meeting of the Company held on 20 June 2019.

For details, please refer to the announcement of the Company dated 26 March 2019, the circular dated 30 April 2019 and the announcement dated 20 June 2019.

As the 2020-2022 CRRC Group Mutual Supply Agreement would expire on 31 December 2022, on 29 March 2022, the Company and CRRC Group entered into the 2023-2025 Products and Ancillary Services Mutual Supply Framework Agreement (the “2023-2025 CRRC Group Mutual Supply Agreement”) for a term of three years commencing from 1 January 2023 to 31 December 2025. The Company had obtained approval from the independent shareholders at the annual general meeting held on 17 June 2022. For details, please refer to the announcement of the Company dated 29 March 2022, the circular dated 17 May 2022 and the announcement dated 17 June 2022.

### ***Mutual Supply Agreement with Qingdao CRRC Electric Equipment Co., Ltd. (青島中車電氣設備有限公司)***

On 24 April 2020, the Company entered into the 2020-2022 Products and Ancillary Services Mutual Supply Agreement (“2020-2022 Qingdao Electric Mutual Supply Agreement”) with Qingdao CRRC Electric Equipment Co., Ltd. (“Qingdao Electric Company”, together with its subsidiaries and each of their respective associates, the “Qingdao Electric Group”), pursuant to which, the Company agreed to supply and procure its subsidiaries (excluding the Qingdao Electric Group) to supply to the Qingdao Electric Group certain products (including electrical systems and electrical components), parts and components, technical services, after-sale services, management services and other related services, and related facilities for research and development, production and testing purposes; and Qingdao Electric Company agreed to supply and procure its subsidiaries and their respective associates to supply to the Group certain products, parts and components, technical services, after-sale services, management services and other related services, and related facilities for research and development, production and testing purposes. The agreement shall be valid for a term of three years commencing from 1 January 2020 and ending on 31 December 2022.



## Section VIII Significant Events

As at the date of the agreement, CRRC ZELRI is a controlling shareholder of the Company. CRRC directly holds the entire equity interest in CRRC ZELRI and 97.81% equity interest in CRRC Qingdao Sifang Locomotive & Rolling Stock Co., Ltd. (“CRRC Sifang”). CRRC Sifang is thus an associate of CRRC ZELRI and a connected person of the Company under the Hong Kong Listing Rules. Accordingly, Qingdao Electric Company is a connected subsidiary of the Company and the transactions contemplated under the 2020-2022 Qingdao Electric Mutual Supply Agreement constitute continuing connected transactions of the Company under the Hong Kong Listing Rules.

For the year ended 31 December 2022, under the 2020-2022 Qingdao Electric Mutual Supply Agreement, amount payable by the Group to Qingdao Electric Group for products and/or services provided by Qingdao Electric Group was RMB0.4 million, and the amount payable by Qingdao Electric Group to the Group for products and/or services provided by the Group was RMB12.6 million, neither of which exceeded the aggregate annual caps stipulated for the financial year ended 31 December 2022 under the 2020-2022 Qingdao Electric Mutual Supply Agreement.

For details, please refer to the announcements of the Company dated 24 April 2020 and 8 May 2020.

In view of the expiry of the 2020-2022 Qingdao Electric Mutual Supply Agreement on 31 December 2022, on 28 December 2022, the Company entered into the 2023-2025 Products and Ancillary Services Mutual Supply Framework Agreement (the “2023-2025 Qingdao Electric Mutual Supply Agreement”) with Qingdao Electric Company for a term of three years commencing on 1 January 2023 and ending on 31 December 2025. For details (including the historical transaction amounts for the two years ended 31 December 2021 and the nine months ended 30 September 2022, and the annual caps for the three years ending 31 December 2025), please refer to the announcement of the Company dated 28 December 2022.

Pursuant to the aforesaid announcement, although the annual cap for the year ending 31 December 2023 (i.e. not exceeding RMB45 million payable to Qingdao Electric Group and RMB40 million payable to the Group) deviates significantly from the historical transaction amounts for the nine months ended 30 September 2022 (i.e. not exceeding RMB0.4 million payable to Qingdao Electric Group and RMB5.2 million payable to the Group), while determining the annual caps for the three years ending 31 December 2025, the Board, in addition to the historical transaction amounts, also considered such factors and assumptions as set out in the aforesaid announcement, including, among other things, the following progress in external environment, and the Board thus considered that the annual caps under the 2023-2025 Qingdao Electric Mutual Supply Agreement for the three years ending 31 December 2025 are fair and reasonable:

- (1) the COVID-19 had a material negative impact on domestic and international economic landscape, especially at the beginning of 2022, when PRC government imposed control measures, leading to a slow-down in railway construction and maintenance projects and business operations. Therefore, the Company considered that the relatively lower transaction amount in 2022 was due to such specific reasons, and do not constitute a valuable reference for determining the annual caps of transactions between the Group and Qingdao Electric Group in normal business course;
- (2) with the support of multiple favorable policies, the Company expects that following ease of the anti-COVID-19 measures, railway transportation demands and construction and maintenance projects will surge, and business transactions between the Group and Qingdao Electric Group will return to normal, and the Group is well-positioned to capture opportunities and promote potential growth; and
- (3) the Group will continue to leverage the geographical location and customer base of Qingdao Electric Group, which is located in Qingdao, a new first-tier city in China, to earnestly explore new energy market, such as new energy vehicles, photovoltaic power generation and energy storage projects, and it is expected that Qingdao Electric Group will make sustainable positive contributions to the Group’s business operations and results.



## Section VIII Significant Events



### **Financial Services Framework Agreements with CRRC Hongkong Capital Management Co., Limited (中國中車香港資本管理有限公司)**

On 30 September 2020, the Company entered into the 2021-2023 Financial Services Framework Agreements (“2021-2023 CRRC Hongkong Capital Financial Services Framework Agreements”) with CRRC Hongkong Capital Management Co., Limited (“CRRC Hongkong Capital”), pursuant to which, CRRC Hongkong Capital agreed to provide the Group with loan services and other financial services subject to the terms and conditions provided therein. The agreement shall be valid for a term of three years commencing from 1 January 2021 and ending on 31 December 2023.

As at the date of the agreements, CRRC Hongkong Capital is a wholly-owned subsidiary of CRRC, and is hence a connected person of the Company under the Hong Kong Listing Rules. Accordingly, the transactions contemplated under the 2021-2023 CRRC Hongkong Capital Financial Services Framework Agreements constitute continuing connected transactions of the Company under the Hong Kong Listing Rules.

For the year ended 31 December 2022, under the 2021-2023 CRRC Hongkong Capital Financial Services Framework Agreements, the daily maximum loan balance available to the Group from CRRC Hongkong Capital was RMB81.9 million (including interests), which did not exceed the daily maximum amount of the continuing connected transactions for the corresponding period stipulated under the 2021-2023 CRRC Hongkong Capital Financial Services Framework Agreements. For the year ended 31 December 2022, the Group did not accept other financial services that may be provided by CRRC Hongkong Capital under the 2021-2023 CRRC Hongkong Capital Financial Services Framework Agreements.

For details, please refer to the announcements of the Company dated 30 September 2020 and 7 December 2020, and the circular dated 20 November 2020.

### **Mutual Supply Agreement with Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. (太原中車時代軌道工程機械有限公司)**

On 23 December 2021, the Company entered into the 2022-2024 Products and Ancillary Services Mutual Supply Agreement (the “2022-2024 Taiyuan CRRC Times Mutual Supply Agreement”) with Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. (“Taiyuan CRRC Times”, together with its subsidiaries and each of their respective associates, the “Taiyuan CRRC Times Group”), pursuant to which, the Company agreed to supply and procure other members of the Group to supply to Taiyuan CRRC Times Group certain products (including electrical systems and electrical components), parts and components, technical services, after-sales services, management services and other related services, and related facilities for research and development, production and testing purposes; and Taiyuan CRRC Times agreed to supply and procure other members of the Taiyuan CRRC Times Group to supply to the Group certain products, parts and components, technical services, after-sales services, management services and other related services, and related facilities for research and development, production and testing purposes. The agreement shall be valid for a term of three years commencing from 1 January 2022 and ending on 31 December 2024. To satisfy the constant production and operation development, on 25 November 2022, the Company entered into the Supplemental Agreement to the 2022-2024 Taiyuan CRRC Times Mutual Supply Agreement with Taiyuan CRRC Times (the “Supplemental Agreement”), to revise the annual caps of transactions contemplated under the 2022-2024 Taiyuan CRRC Times Mutual Supply Agreement.

As at the date of the agreement, CRRC ZELRI is a controlling shareholder of the Company. CRRC directly holds the entire equity interest in CRRC ZELRI and indirectly holds the entire equity interest in CRRC Taiyuan Co., Ltd. (“CRRC Taiyuan”). Baoji CRRC Times Engineering Machinery Co., Ltd. (“Baoji Times”), a subsidiary of the Company, and CRRC Taiyuan hold Taiyuan CRRC Times as to 55% and 45%, respectively. Taiyuan CRRC Times is a non-wholly owned subsidiary of the Company and therefore, a connected person of the Company under the Hong Kong Listing Rules. Accordingly, the transactions contemplated under the 2022-2024 Taiyuan CRRC Times Mutual Supply Agreement (as amended and supplemented by the supplemental agreement) constitute continuing connected transactions of the Company under the Hong Kong Listing Rules.



## Section VIII Significant Events

For the year ended 31 December 2022, under the 2022-2024 Taiyuan CRRC Times Mutual Supply Agreement (as amended and supplemented by the supplemental agreement), amount payable by the Group to Taiyuan CRRC Times Group for products and/or services provided by Taiyuan CRRC Times Group was RMB177.5 million, and the amount payable by Taiyuan CRRC Times Group to the Group for products and/or services provided by the Group was RMB87.7 million, neither of which exceeded the aggregate annual caps stipulated for the financial year ended 31 December 2022 under the 2022-2024 Taiyuan CRRC Times Mutual Supply Agreement (as amended and supplemented by the Supplemental Agreement).

For details, please refer to the announcements of the Company dated 23 December 2021 and 25 November 2022.

### ***Financial Services Framework Agreement with CRRC Finance Company***

On 26 August 2022, the Company and CRRC Finance Co., Ltd. (“CRRC Finance Company”) entered into the 2022-2023 Financial Services Framework Agreement (the “Financial Services Framework Agreement”), pursuant to which, CRRC Finance Company has agreed to provide the Group with deposit services and other financial services subject to the terms and conditions provided therein. The term is one year commencing from 1 September 2022 to 31 August 2023.

For the year ended 31 December 2022, the daily maximum deposit balance available to the Group from CRRC Finance Company under the Financial Services Framework Agreement was RMB291.6 million, which did not exceed the daily maximum amount of the continuing connected transactions for the corresponding period stipulated under the Financial Services Framework Agreement. For the year ended 31 December 2022, the Group did not accept other financial services that may be provided by CRRC Finance Company under the Financial Services Framework Agreement.

For details, please refer to the announcement of the Company dated 26 August 2022.

### ***Annual Review of Continuing Connected Transactions***

The Board has engaged the auditor of the Company to perform certain procedures in respect of the continuing connected transactions of the Group. The auditor has issued its unqualified letter containing its findings and conclusions in respect of the continuing connected transactions to the Board in accordance with the Rule 14A.56 of the SEHK Listing Rules. The Company provided a copy of the said letter to the Hong Kong Stock Exchange.

The Directors (including independent non-executive Directors) have reviewed and confirmed that the continuing connected transactions of the Group comply with the agreed procedures and principles and the Group’s continuing connected transactions above: were entered into in the ordinary and usual course of business of the Group; were entered into on normal commercial terms or if there were not sufficient comparable transactions to judge whether they were on normal commercial terms, on terms no less favourable to the Group than those available to or from (as the case may be) independent third parties; were conducted in accordance with the agreements governing such transactions, and the terms are fair, reasonable and in the interests of the Company and the Shareholders as a whole; and did not exceed the caps of continuing connected transactions for the financial year ended 31 December 2022 provided for by the continuing connected transactions agreements above.

### ***Related party transactions***

For details of the related party transactions of the Group during the year, please refer to note X of the financial report. The Company has complied with the Hong Kong Listing Rules in respect of applicable requirements of transactions which constitute non-exempted connected transactions/continuing connected transactions. Other related party transactions do not constitute connected transactions/continuing connected transactions, or constitute connected transactions/continuing connected transactions but are exempt from all the disclosure or independent shareholders’ approval requirements under the Hong Kong Listing Rules.



## Section VIII Significant Events

### (II) Non-exempt connected transactions (disclosure pursuant to the SEHK Listing Rules)

Set out below are the non-exempted connected transactions of the Group which are therefore subject to the reporting, announcement, annual review and/or independent shareholders' approval (if required) requirements under the SEHK Listing Rules.

#### ***Provision of loans to Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd.***

On 29 April 2021, the Company (as lender) entered into the Loan Agreement with Taiyuan CRRC Times (as borrower), pursuant to which the Company agreed to provide a loan to Taiyuan CRRC Times in the principal amount of RMB100,000,000 for a term of one year commencing from the date of the loan agreement.

As disclosed above, as at the date of the agreement, Taiyuan CRRC Times is a connected subsidiary of the Company, and is hence a connected person of the Company. Accordingly, the provision of the loan by the Company to Taiyuan CRRC Times constitutes a connected transaction of the Company under the Hong Kong Listing Rules.

For the financial year ended 31 December 2022, the Company did not provide any loans to Taiyuan CRRC Times.

For details, please refer to the announcement of the Company dated 29 April 2021.

### (III) The related party transactions in relation to the ordinary operations (disclosure pursuant to the SSE STAR Market Listing Rules)

#### ***1. Events disclosed in the temporary announcements and with no progress or change in subsequent implementation***

✓Applicable Not applicable

Description	Enquiry index
The Resolution on the Entering into of the 2023-2025 Product and Supporting Service Mutual Supply Agreement between the Company and CRRC Group Co., Ltd. and the Estimated Amount of the Routine Related Party Transactions for 2023-2025 was considered and approved at the 20th meeting of the sixth session of the Board, the 18th meeting of the sixth session of the Supervisory Committee and the 2021 annual general meeting.	For details, please refer to the announcement published by the Company on the website of the SSE ( <a href="http://www.sse.com.cn">www.sse.com.cn</a> ) on 30 March 2022 (Ann No. 2022-015).
The Resolution on the Estimated Amount of the 2022-2024 Routine Related Party Transactions for Leasing Property and Ancillary Facilities Between the Company and CRRC Corporation Limited was considered and approved at the 20th meeting of the sixth session of the Board, the 18th meeting of the sixth session of the Supervisory Committee and the 2021 annual general meeting.	For details, please refer to the announcement published by the Company on the website of the SSE ( <a href="http://www.sse.com.cn">www.sse.com.cn</a> ) on 30 March 2022 (Ann No. 2022-015).
The Resolution on the Entering into of the 2022-2023 Financial Services Framework Agreements between the Company and CRRC Finance Co., Ltd. and the Estimated Amount of Routine Related Party Transactions was considered and approved at the 22nd meeting of the sixth session of the Board and the 20th meeting of the sixth session of the Supervisory Committee.	For details, please refer to the announcement published by the Company on the website of the SSE ( <a href="http://www.sse.com.cn">www.sse.com.cn</a> ) on 27 August 2022 (Ann No. 2022-032).

# Section VIII Significant Events

Property and Ancillary Equipment and Facilities Leasing Framework Agreement with CRR

Unit: Million Currency: RMB

Related party	Relationship	Content	Pricing principles	Amount	Annual cap for 2022	Percentage in similar business
CRR Corporation Group	Indirect controlling shareholder of the Company	Lease property and/or ancillary equipment and facilities out to related parties	Market price	10.0	45	63.82%
CRR Corporation Group	Indirect controlling shareholder of the Company	Lease property and/or ancillary equipment and facilities in from related parties	Market price	25.4	50	24.24%

## 2. Events disclosed in the temporary announcements and with progress or change in subsequent implementation

Applicable Not applicable

## 3. Events not disclosed in the temporary announcements

Applicable Not applicable

## (IV) Related party transactions arising from acquisition and disposal of assets or equity interests

### 1. Events disclosed in the temporary announcements and with no progress or change in subsequent implementation

Applicable Not applicable

### 2. Events disclosed in temporary announcements and with progress or change in subsequent implementation

Applicable Not applicable

### 3. Events not disclosed in the temporary announcements

Applicable Not applicable

### 4. Where an agreement on performance is involved, the performance achievements during the reporting period shall be disclosed

Applicable Not applicable

## Section VIII

# Significant Events



### (V) Significant related party transactions on the joint external investment

**1. Events disclosed in the temporary announcements and with no progress or change in subsequent implementation**

Applicable  Not applicable

**2. Events disclosed in the temporary announcements and with progress or change in subsequent implementation**

Applicable  Not applicable

**3. Events not disclosed in temporary announcements**

Applicable  Not applicable

### (VI) Claims and liabilities between related parties

**1. Events disclosed in the temporary announcements and with no progress or change in subsequent implementation**

Applicable  Not applicable

**2. Events disclosed in the temporary announcements and with progress or change in subsequent implementation**

Applicable  Not applicable

**3. Events not disclosed in temporary announcements**

Applicable  Not applicable

# Section VIII Significant Events

## (VII) Financial business between the Company and related financial companies, holding financial companies and related parties

✓Applicable Not applicable

### 1. Deposit business

✓Applicable Not applicable

Unit: Yuan Currency: RMB

Related party	Relationship	Maximum daily deposit amount	Interest rate range	Opening balance	Total deposit during the current period	Amount incurred during the current period		Closing balance
						Total interest accrued during the current period	Total withdrawal during the current period	
CRRC Finance Co., Ltd. (中車財務有限公司)	A subsidiary of CRRC	300,000,000	1.15%-1.65%	0	290,351,840	1,259,576	0	291,611,416
Total	/	/	/	0	290,351,840	1,259,576	0	291,611,416

### 2. Loan business

✓Applicable Not applicable

Unit: Yuan Currency: RMB

Related party	Relationship	Maximum loan amount	Interest rate range	Opening balance	Amount incurred during the current period		Closing balance
					Total loan amount during the current period	Total repayment amount during the current period	
CRRC Hongkong Capital Management Co., Limited (中國中車香港資本管理有限公司)	A subsidiary of CRRC	600,000,000	0.85%- 2.46%	73,584,000	0	0	81,898,649
Total	/	/	/	73,584,000	0	0	81,898,649

## Section VIII Significant Events



Description of the connected transaction: Set out above are details (which included, the amount of interest in the current period is RMB1,501,649 and the amount of exchange rate change is RMB6,813,000) of the performance of the Financial Services Framework Agreements entered into between the Company and CRRC Hongkong Capital Management Co., Limited on 30 September 2020 during the reporting period. The agreement is valid from 1 January 2021 to 31 December 2023. The transaction and the total transaction amount proposed were approved by the independent shareholders of the Company, and an announcement has been published in this respect. For details, please refer to the Company's announcements dated 30 September 2020 and 7 December 2020, respectively, and the circular dated 20 November 2020.

### 3. Credit facilities or other financial business

Applicable Not applicable

Unit: Yuan Currency: RMB

Related party	Relationship	Business type	Total amount	Actual amount incurred
CRRC Hongkong Capital Management Co., Limited	A subsidiary of CRRC	Comprehensive credit facilities	500,000,000	81,898,649

Description of the related party transaction: At the 20th meeting of the sixth session of the Board held on 29 March 2022 and the 2021 annual general meeting held on 17 June 2022, the Resolution on the 2022 Bank Credit Lines Applications was considered and approved, pursuant to which, the Company proposed to apply for composite credit line of RMB500 million from CRRC Hongkong Capital Management Co., Limited in 2022 for purposes including working capital loans and trade finance.

### 4. Other explanations

Applicable Not applicable

# Section VIII Significant Events

## (VIII) Others

✓Applicable □Not applicable

### 1. The Related Party Transactions in relation to the Ordinary Operations

*Products and Ancillary Services Mutual Supply Framework Agreement between the Company and Zhuzhou Shiling Transportation Equipment Co., Ltd. (株洲時菱交通設備有限公司)*

Unit: RMB0'000 Currency: RMB

Related party	Relationship	Content of related party transaction	Amount of related party transaction	Cap of related party transaction in 2022
Zhuzhou Shiling Transportation Equipment Co., Ltd.	A company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and/or rendering of ancillary services to the related party	0	44,600
Zhuzhou Shiling Transportation Equipment Co., Ltd.	A company in which Directors, Supervisors or senior management members of the Company hold position	Purchase of products and/or acceptance of ancillary services from the related party	223.56	46,300

Description of the related party transaction: the above transaction resulted from the implementation during the reporting period of the framework agreement on mutual supply of products and ancillary services ("2021-2023 Shiling Mutual Supply Framework Agreement") entered into between the Company and Zhuzhou Shiling Transportation Equipment Co., Ltd. ("Shiling Company") on 2 November 2020. The agreement is valid from 1 January 2021 to 31 December 2023. The transaction and the total amount involved were approved by the independent shareholders of the Company, for which an announcement has been issued.

As at the date of the agreement, as Shiling Company was not a connected person of the Company as defined under the Hong Kong Listing Rules, the transactions contemplated under the 2021-2023 Shiling Mutual Supply Framework Agreement thus did not constitute connected transactions or continuing connected transactions of the Company under the Hong Kong Listing Rules. However, pursuant to the requirements of the SSE STAR Market Listing Rules, Shiling Company is a related party of the Company. Therefore, the transactions contemplated under the 2021-2023 Shiling Mutual Supply Framework Agreement constitute related party transactions of the Company under the SSE STAR Market Listing Rules and are subject to consideration at the general meeting of the Company.

For details, please refer to the circular of the Company dated 20 November 2020 and the announcement of the Company dated 7 December 2020.

## Section VIII

## Significant Events

Unit: RMB0'000 Currency: RMB

Related party	Relationship	Content of related party transactions	Amount of related party transactions	Cap of related party transactions in 2022
Zhejiang Times LANP New Energy Co., Ltd. (浙江時代蘭普新能源有限公司) (previously known as LANP Electrical Co., Ltd. (溫州時代蘭普電氣設備有限公司))	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	68.14	2,500
Shanghai S&C Rail Transit Operation Safety Engineering Technology Research Co., Ltd. (上海申中軌道交通運行安全工程技術研究有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	214.55	2,500
Siemens Traction Equipment Ltd., Zhuzhou (株洲西門子牽引設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	0	50
Wuxi CRRC Hofer Powertrain Co., Ltd. (無錫中車浩夫爾動力總成有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	11,905.15	25,000
Zhengzhou Times Transportation Electrical Equipment Co., Ltd. (鄭州時代交通電氣設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	6,123.23	23,750
Wuxi Times Intelligent Transportation Research Institute Co., Ltd. (無錫時代智能交通研究院有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	2,315.18	30,000
Foshan Zhongshi Intelligent Transportation Technology Co., Ltd. (佛山中時智匯交通科技有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	1,444.64	6,300
Fuzhou Jintou Intelligent Rail Transportation Equipment Co., Ltd. (福州市金投智能軌道交通設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Sale of products and rendering of services to related parties	6,486	11,112
Zhejiang Times LANP New Energy Co., Ltd. (浙江時代蘭普新能源有限公司) (previously known as LANP Electrical Co., Ltd. (溫州時代蘭普電氣設備有限公司))	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	163.99	3,000
Shanghai S&C Rail Transit Operation Safety Engineering Technology Research Co., Ltd. (上海申中軌道交通運行安全工程技術研究有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	0	100
Siemens Traction Equipment Ltd., Zhuzhou (株洲西門子牽引設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	0	50
Wuxi CRRC Hofer Powertrain Co., Ltd. (無錫中車浩夫爾動力總成有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	43.40	5,000
Zhengzhou Times Transportation Electrical Equipment Co., Ltd. (鄭州時代交通電氣設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	1,198.80	25,000
Wuxi Times Intelligent Transportation Research Institute Co., Ltd. (無錫時代智能交通研究院有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	1,891.16	30,000
Foshan Zhongshi Intelligent Transportation Technology Co., Ltd. (佛山中時智匯交通科技有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	1,439.70	7,000
Fuzhou Jintou Intelligent Rail Transportation Equipment Co., Ltd. (福州市金投智能軌道交通設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Purchases of goods and acceptance of services from related parties	8,789.16	12,481
Siemens Traction Equipment Ltd., Zhuzhou (株洲西門子牽引設備有限公司)	Company in which Directors, Supervisors or senior management members of the Company hold position	Lease out premises/ equipment to related parties	32.27	60



## Section VIII Significant Events

Description of the related party transaction: The above is the performance of the 2021-2023 related party transactions in routine business operation between the Company and related parties during the reporting period. The transactions and the total amount involved were approved by the independent shareholders of the Company, for which an announcement has been issued. Gong Tong, a deputy general manager of the Company, resigned as a director of Shanghai S&C Rail Transit Operation Safety Engineering Technology Research Co., Ltd. (上海申中軌道交通運行安全工程技術研究有限公司) on 21 January 2021, and Cao Weichen, a deputy general manager of the Company, resigned as the chairman of Zhengzhou Times Transportation Electrical Equipment Co., Ltd. (鄭州時代交通電氣設備有限公司) on 24 May 2021. Pursuant to the STAR Market Listing Rules, after 12 months subsequent to the dates specified above, such two companies ceased to be related parties of the Company for the purpose of the A-share market.

As at the dates of the agreements, Foshan Zhongshi Intelligent Transportation Technology Co., Ltd., Siemens Traction Equipment Ltd., Zhuzhou and Fuzhou Jintou Intelligent Rail Transportation Equipment Co., Ltd. were associates of CRRC and CRRC Group and hence were connected persons of the Company. Therefore, the routine related party transactions between the Company and each of Foshan Zhongshi Intelligent Transportation Technology Co., Ltd., Siemens Traction Equipment Ltd., Zhuzhou and Fuzhou Jintou Intelligent Rail Transportation Equipment Co., Ltd. constitute continuing connected transactions under the Hong Kong Listing Rules. For the year ended 31 December 2022, none of the above transactions exceeded the aggregate annual caps approved for the financial year ended 31 December 2022.

For details, please refer to the Company's general meeting materials dated 20 October 2021 and the announcement dated 10 November 2021.

### 2. Non-exempted Continuing Connected Transactions

*Product and Supporting Service Mutual Supply Framework Agreement between the Company and CRRC Group*

Unit: Million Currency: RMB

Connected person	Relationship	Content of connected transaction	Amount of connected transactions	Cap of connected transactions in 2022
CRRC Group of Companies	An indirect controlling shareholder of the Company	Sale of products and/or rendering of supporting services to connected person	6,792.0	16,250
CRRC Group of Companies	An indirect controlling shareholder of the Company	Purchases of goods and/or acceptance of supporting services from connected person	1,885.7	5,000

Description of the connected transaction: Set out above are details of the performance of the Product and Supporting Service Mutual Supply Framework Agreement entered into between the Company and CRRC Group (together with its subsidiaries and each of their respective associates but excluding the Group, the "CRRC Group of Companies") on 26 March 2019 during the reporting period. The agreement is valid from 1 January 2020 to 31 December 2022. The transaction and the total transaction amount proposed were considered and approved by the independent shareholders of the Company, and an announcement has been published in this respect. For details, please refer to the Company's announcement dated 26 March 2019, the circular dated 30 April 2019 and the announcement dated 20 June 2019. Given that the aforesaid 2020-2022 Mutual Supply Framework Agreement would expire on 31 December 2022, on 29 March 2022, the Company and CRRC Group entered into the 2023-2025 Product and Supporting Service Mutual Supply Framework Agreement. For details, please refer to the announcement of the Company dated 30 March 2022.



## Section VIII Significant Events

*Product and Supporting Service Mutual Supply Framework Agreements between the Company and Qingdao CRRC Electric Equipment Co., Ltd. (青島中車電氣設備有限公司)*

Unit: Million Currency: RMB

Connected person	Relationship	Content of connected transaction	Amount of connected transaction	Cap of connected transactions in 2022
Qingdao Electric Group	Connected subsidiary of the Company	Sale of products and/or rendering of supporting services to connected persons	12.6	40
Qingdao Electric Group	Connected subsidiary of the Company	Purchase of goods and/or acceptance of supporting services from connected persons	0.4	50

Description of the connected transaction: Set out above are details of the performance of the Product and Supporting Service Mutual Supply Framework Agreement entered into between the Company and Qingdao CRRC Electric Equipment Co., Ltd. (together with its subsidiaries and each of their respective associates, the "Qingdao Electric Group") on 24 April 2020 (the "2020-2022 Mutual Supply Framework Agreement") during the reporting period. The agreement was valid from 1 January 2020 to 31 December 2022. The transaction and the total transaction amount proposed were within the decision-making authority of the Board and were considered and approved by the Board, and an announcement has been published in this respect. Meanwhile, the transaction satisfied the partial waiver level under the SEHK Listing Rules and was exempted from independent shareholders' approval requirements. For details, please refer to the Company's announcements dated 24 April 2020 and 8 May 2020, respectively. Given that the 2020-2022 Mutual Supply Framework Agreement would expire on 31 December 2022, on 28 December 2022, the Company and Qingdao CRRC Electric Equipment Co., Ltd. entered into the 2023-2025 Product and Supporting Service Mutual Supply Framework Agreement. For details, please refer to the announcement of the Company dated 28 December 2022.

## Section VIII Significant Events

*Product and Supporting Service Mutual Supply Framework Agreement between the Company and Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. (太原中車時代軌道工程機械有限公司)*

Unit: Million Currency: RMB

Connected person	Relationship	Content of connected transaction	Amount of connected transaction	Cap of connected transaction in 2022
Taiyuan CRRC Times Group	A connected subsidiary of the Company	Sale of products and/or rendering of supporting services to connected persons	87.7	230
Taiyuan CRRC Times Group	A connected subsidiary of the Company	Purchases of goods and/or acceptance of supporting services from connected persons	177.5	300

Description of the connected transaction: Set out above are details of the performance of the Product and Supporting Service Mutual Supply Framework Agreement entered into between the Company and Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. (together with its subsidiaries and each of their respective associates, the "Taiyuan CRRC Times Group") on 23 December 2021 (the "2022-2024 Mutual Supply Framework Agreement") during the reporting period. The agreement is valid from 1 January 2022 to 31 December 2024. The transaction and the total transaction amount proposed were within the decision-making authority of the Board and were considered and approved by the Board, and an announcement has been published in this respect. Meanwhile, the transaction satisfied the partial waiver level under the SEHK Listing Rules and was exempted from independent shareholders' approval requirements. For details, please refer to the Company's announcement dated 23 December 2021. To satisfy constant development in production and operation, the Company entered into a supplemental agreement with Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. on 25 November 2022 to revise the annual caps of transactions contemplated under the 2022-2024 Mutual Supply Framework Agreement. For details, please refer to the announcement of the Company dated 25 November 2022.

# Section VIII Significant Events



## 3. Non-exempted Connected Transactions

Loan Agreement between the Company and Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd.

Unit: RMB0'000 Currency: RMB

Connected person	Relationship	Content of connected transaction	Amount of connected transaction	Cap of connected transaction in 2022
Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd.	A connected subsidiary of the Company	Provision of loans to connected person	0	10,000

Description of the connected transaction: Set out above are details of the performance of the Loan Agreement entered into between the Company and Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. on 29 April 2021 during the reporting period. The agreement was valid for a term of one year commencing from the date of the loan agreement. The transaction and the total transaction amount proposed were within the decision-making authority of the Board and were considered and approved by the Board, and an announcement has been published in this respect. Meanwhile, the transaction satisfied the partial waiver level under the SEHK Listing Rules and was exempted from independent shareholders' approval requirements. For details, please refer to the Company's announcement dated 29 April 2021.

## XIII. MAJOR CONTRACTS AND THEIR PERFORMANCE

### (I) Entrustment, contracting and leasing matters

#### 1. Entrustment

Applicable  Not applicable

#### 2. Contracting

Applicable  Not applicable

#### 3. Leasing

Applicable  Not applicable

# Section VIII Significant Events

## (II) Guarantees

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Guarantor	Relationship between the guarantor and the Company	Guaranteed party	Guaranteed amount	Date of guarantee of agreement	Date of commencement date of guarantee	Maturity date of guarantee	Type of guarantee	Guaranty (if any)	Whether guarantee has been fully fulfilled	Whether guarantee is overdue	Overdue amount	Counter-guarantee	Whether related party guarantee	Related party relationship

Total guarantee incurred during the reporting period (excluding those provided to subsidiaries)

0

Total balance of guarantee as at the end of the reporting period (A) (excluding those provided to subsidiaries)

0

# Section VIII

# Significant Events



Guarantees provided by the Company and its subsidiaries to subsidiaries												
Guarantor	Relationship between the guarantor and the Company	Guaranteed party	Relationship between the guaranteed party and the Company	Guaranteed amount	Date of guarantee agreement	Date of commencement of guarantee	Maturity date of guarantee	Type of guarantee	Whether guarantee has been fully fulfilled	Whether guarantee is overdue	Overdue amount	Whether there is any counter-guarantee
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	Dynex Semiconductor Ltd	A wholly-owned subsidiary of the Company	125,661,000.00	2022/10/12	2022/10/12	2023/10/11	Joint obligation guarantee	No	No	0	No
	The Company	Specialist Machine Developments (SMD) Limited	A wholly-owned subsidiary of the Company	251,322,000.00	2022/10/12	2022/10/12	2023/10/11	Joint obligation guarantee	No	No	0	No
	The Company	Specialist Machine Developments (Shanghai) Co., Ltd.	A wholly-owned subsidiary of the Company	10,286,792.20	2021/12/6	2021/12/6	2023/12/31	Joint obligation guarantee	No	No	0	No
	The Company	Specialist Machine Developments (Shanghai) Co., Ltd.	A wholly-owned subsidiary of the Company	65,513,092.60	2021/12/6	2021/12/6	2023/9/30	Joint obligation guarantee	No	No	0	No
	The Company	Specialist Machine Developments (Shanghai) Co., Ltd.	A wholly-owned subsidiary of the Company	13,869,290.35	2022/7/4	2022/7/4	2023/12/31	Joint obligation guarantee	No	No	0	No
	The Company	CRRC TIMES ELECTRIC AUSTRALIA PTY LTD	A wholly-owned subsidiary of the Company	8,022,030.00	2022/1/1	2022/1/1	2023/2/23	Joint obligation guarantee	No	No	0	No
												398,874,320.35
												474,674,205.15
												474,674,205.15
												1.37
												Not applicable
												349,013,205.15
												Not applicable
												349,013,205.15
												Aggregate guarantee of the Company (including those provided to subsidiaries)

The guarantees provided to subsidiaries were considered and approved at the 20th meeting of the Board on 29 March 2022.



## Section VIII Significant Events

### (III) Management of cash assets by entrusting third parties

#### 1. Entrusted wealth management activities

##### (1) Overview of the entrusted wealth management products

Applicable Not applicable

Others

Applicable Not applicable

##### (2) Individual entrusted wealth management products

Applicable Not applicable

Others

Applicable Not applicable

##### (3) Provision for impairment of entrusted wealth management

Applicable Not applicable

#### 2. Entrusted loans

##### (1) Overview of the entrusted loans

Applicable Not applicable

Others

Applicable Not applicable

##### (2) One-off entrusted loans

Applicable Not applicable

Others

Applicable Not applicable

##### (3) Provision for impairment of entrusted loans

Applicable Not applicable

#### 3. Others

Applicable Not applicable

### (IV) Other material contracts

Applicable Not applicable

# Section VIII

# Significant Events



## XIV. EXPLANATION ON PROCESS IN USE OF PROCEEDS

✓Applicable    Not applicable

### (I) Overall utilization of raised proceeds

✓Applicable    Not applicable

Unit: Yuan

Source of proceeds	Total proceeds	Net proceeds after deducting issue expenses	Total promised investment amounts of proceeds	Total promised investment amounts of proceeds after adjustments <sup>(1)</sup>	Total accumulated investment amount of proceeds as of the end of the reporting period <sup>(2)</sup>	Process of accumulated investment as of the end of the reporting period (%) <sup>(3)=(2)/(1)</sup>	Investment amount for the year (4)	Percentage of investment amount for the year (%) <sup>(5)=(4)/(1)</sup>
Initial public issue on the Science and Technology Innovation Board	7,555,057,430	7,443,212,046	7,443,212,046	7,443,212,046	3,602,495,058	48.40	1,726,065,845	23.19

# Section VIII Significant Events

## (II) Particulars of investment projects to be financed with raised proceeds

✓ Applicable    □ Not applicable

Unit: Yuan

Name of project	Change of the project or not	Source of proceeds	Total promised investment proceeds for project	Total promised investment amounts of proceeds after adjustments <sup>(1)</sup>	Total accumulated investment proceeds as of the end of the reporting period <sup>(2)</sup>	Process of accumulated investment as of the end of the reporting period (%) (3)=(2)/(1)	Date of the projects becoming ready for intended use	Whether the project is completed or not	Whether the investment process is in line with planned schedule or not	Specific reason for failure to reach the planned schedule of investment	Efficiency or research results achieved for the project	Whether feasibility of projects changes significantly, if yes, please state specific reason	Expected timetable for using the unutilised proceeds for balance
Application project of rail transit traction and network technology and system	No	Initial public issue on the STAR Market	2,095,500,000	2,095,500,000	1,011,853,833	48.29	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable
The application project on key technologies and system R&D of smart railway bureau and smart urban rail transit	No	Initial public issue on the STAR Market	1,070,830,000	1,070,830,000	178,834,570	16.70	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable
Advanced technology R&D application project of new industry	No	Initial public issue on the STAR Market	869,270,000	869,270,000	333,207,753	38.33	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable
R&D and manufacturing platform construction project of new-type rail engineering machinery	No	Initial public issue on the STAR Market	800,000,000	800,000,000	270,089,284	33.76	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable
Innovative experimental platform construction project	No	Initial public issue on the STAR Market	931,000,000	931,000,000	127,149,032	13.66	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable
Replenishment of working capital	No	Initial public issue on the STAR Market	2,000,000,000	1,676,612,046	1,681,360,586	100.28	Not applicable	No	Not applicable	Not applicable	Not applicable	No	Not applicable
<b>Total</b>			<b>7,765,600,000</b>	<b>7,443,212,046</b>	<b>3,602,495,038</b>	<b>48.40</b>							

At the 25th meeting of the Board and the 22nd meeting of the sixth session of the Supervisory Committee held on 25 November 2022, the Resolution on Construction Delay of Certain Investment Projects, Introducing New Implementation Subjects to Certain Investment Projects and Granting Loans to Such New Implementation Subjects with Raised Proceeds to Implement Investment Projects was considered and approved, pursuant to which, the Company has been approved to make adjustments to the time for bringing certain investment projects to their intended use provided that the use and amount of the proceeds shall remain unchanged. Specifically, the estimated time for bringing the application project of rail transit traction and network technology and system and the application project on key technologies and system R&D of smart railway bureau and smart urban rail transit to their intended use has been postponed to 2026 by the Company as such two projects involve relatively more sub-projects, requires sophisticated technological support, and the implementation plans are subject to constant adjustments and improvements, and the research and development cycle are therefore longer than originally expected. The R&D and manufacturing platform construction project of new-type rail engineering machinery and innovative experimental platform construction project experienced a delay in construction progress due to impact from the external environment, and the Company thus postponed the estimated time for bringing such two projects to their intended use to 2025.



# Section VIII Significant Events

## (III) Explanation on the change of use of proceeds during the reporting period

Applicable Not applicable

## (IV) Other particulars of use of proceeds during the reporting period

### 1. Initial investment and replacement with funds raised

Applicable Not applicable

Before the proceeds were in place, the Company had invested in and implemented certain projects to be financed with the proceeds with self-raised funds. As of 27 September 2021, the Company had previously invested RMB780,193,985.74, and the amount to be swapped with the proceeds was RMB780,193,985.74, and the swap had been completed in the first half of 2022. Details are set out below:

No.	Name of project	Intended investment amount with the proceeds	Previous investment amount with self-raised funds	Amount subject to swap
1	Application project of rail transit traction and network technology and system	2,095,500,000.00	412,273,241.24	412,273,241.24
2	The application project on key technologies and system R&D of smart railway bureau and smart urban rail transit	1,070,830,000.00	87,942,571.28	87,942,571.28
3	Advanced technology R&D application project of new industry	869,270,000.00	137,938,568.17	137,938,568.17
3.1	Application project of new energy vehicle driving system	503,710,000.00	66,925,268.46	66,925,268.46
3.2	New sensor R&D application project	147,960,000.00	39,290,756.34	39,290,756.34
3.3	Industrial transmission device R&D application project	117,600,000.00	28,531,153.43	28,531,153.43
3.4	Deep-sea intelligent equipment R&D application project	100,000,000.00	3,191,389.94	3,191,389.94
4	R&D and manufacturing platform construction project of new-type rail engineering machinery	800,000,000.00	121,363,197.26	121,363,197.26
4.1	New-type rail engineering machinery manufacturing platform construction project	500,000,000.00	73,706,916.66	73,706,916.66
4.2	New-type rail engineering machinery equipment R&D application project	300,000,000.00	47,656,280.60	47,656,280.60
5	Innovative experimental platform construction project	931,000,000.00	20,676,407.79	20,676,407.79
Total		<u>5,766,600,000.00</u>	<u>780,193,985.74</u>	<u>780,193,985.74</u>

## Section VIII Significant Events

The Company incurred issuance expenses (excluding value-added tax) after deduction of sponsor and underwriting commission (excluding value-added tax) amounted to RMB19,189,019.14. As of 27 September 2021, the Company had paid the aforesaid issuance expenses (excluding value-added tax) with its self-raised funds totaling RMB6,632,041.84, and would swap the previously paid issuance expenses with proceeds in an amount of RMB6,632,041.84, which was completed in the first half of 2022. Details are as follows:

No.	Item	Amount (excluding value-added tax)	Amount previously paid with self-raised funds (excluding value-added tax)	Amount subject to swap
1	Auditing, capital verification and appraisal costs	7,584,905.67	4,443,396.23	4,443,396.23
2	Legal costs	4,327,144.06	1,112,450.00	1,112,450.00
3	Information disclosure costs	4,652,896.23	313,390.76	313,390.76
4	Commissions and materials preparation fee and other expenditures for the listing	2,624,073.18	762,804.85	762,804.85
Total		19,189,019.14	6,632,041.84	6,632,041.84

The swap of proceeds as stated above has been verified by Deloitte Touche Tohmatsu Certified Public Accountants LLP, who issued an Audit Report (De Shi Bao (He) Zi (21) No. E00470) thereon.

### 2. Temporarily supplement liquidity with idle proceeds

Applicable  Not applicable

### 3. Cash management against idle proceeds to invest in relevant products

Applicable  Not applicable

At the 22nd meeting of the sixth session of the Board and the 20th meeting of the sixth session of the Supervisory Committee held on 26 August 2022, the Resolution on Utilisation of Certain Temporarily Idle Proceeds for Cash Management was considered and approved, pursuant to which, the Company was approved to conduct cash management regarding certain temporarily idle proceeds with an amount of up to RMB4,400 million (inclusive) with a term of 12 months from the date of approval by the Board provided that the construction progress of the projects to be financed by the proceeds and the Company's normal operation are not prejudiced and capital safety can be assured. Within the aforesaid amount and term of authorisation, the funds can be used on a rolling basis.

## Section VIII

## Significant Events

In order to improve the utilisation efficiency of the proceeds, rationally use idle proceeds, increase income from the cash assets and maximise shareholders' interests, the Company used certain temporarily idle proceeds to purchase cash management products. As of 31 December 2022, the cash management products yet falling due were as follows:

Bank for deposit	Product type	Maturity date	Term of deposit	Balance (RMB)
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/30	276 days	25,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/30	276 days	25,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	2023/2/13	279 days	100,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	2023/1/20	182 days	80,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/1/26	184 days	50,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/1/26	184 days	10,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/30	189 days	40,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/30	189 days	40,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	2023/2/21	182 days	40,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/2/28	182 days	10,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/2/28	182 days	20,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/12	91 days	125,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/12	91 days	120,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	2023/1/20	91 days	50,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	2023/4/24	185 days	100,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	2023/10/23	367 days	400,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/1/24	92 days	270,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	2023/1/20	92 days	150,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/1/24	92 days	30,000,000

## Section VIII Significant Events

Bank for deposit	Product type	Maturity date	Term of deposit	Balance (RMB)
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/19	90 days	24,900,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/19	90 days	25,100,000
China Construction Bank Tianxin Branch	Structured deposit	2023/2/23	92 days	20,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/2/22	90 days	26,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/2/22	90 days	24,000,000
Bank of China Zhuzhou Branch	Structured deposit	2023/3/1	93 days	9,000,000
Bank of China Zhuzhou Branch	Structured deposit	2023/3/2	94 days	11,000,000
China Construction Bank Tianxin Branch	Structured deposit	2023/2/23	92 days	20,000,000
China CITIC Bank Zhuzhou Tiantailu Branch (Note)	Structured deposit	2023/1/3	33 days	100,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Structured deposit	2023/3/1	90 days	500,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Structured deposit	2023/1/3	32 days	20,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Structured deposit	2023/3/1	90 days	20,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/3/30	90 days	50,100,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/3/30	90 days	40,900,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/13	14 days	126,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	2023/1/13	14 days	124,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	2023/3/30	90 days	110,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	2023/3/30	90 days	90,000,000

## Section VIII

## Significant Events



Bank for deposit	Product type	Maturity date	Term of deposit	Balance (RMB)
Agricultural Bank of China Zhuzhou High-tech Development Zone Branch	Certificate of deposit	On demand	1095 days	10,000,000
Agricultural Bank of China Zhuzhou High-tech Development Zone Branch	Certificate of deposit	On demand	1095 days	10,000,000
Agricultural Bank of China Zhuzhou High-tech Development Zone Branch	Certificate of deposit	On demand	1095 days	10,000,000
Agricultural Bank of China Zhuzhou High-tech Development Zone Branch	Certificate of deposit	On demand	1095 days	10,000,000
Agricultural Bank of China Zhuzhou High-tech Development Zone Branch	Certificate of deposit	On demand	1095 days	10,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	50,000,000
China CITIC Bank Zhuzhou Tiantailu Branch	Certificate of deposit	On demand	1095 days	10,000,000
Total				<u>3,486,000,000</u>

Note: the former China CITIC Bank Zhuzhou Jianshe Middle Road Branch has been renamed as China CITIC Bank Zhuzhou Tiantailu Branch.

#### 4. *Permanently supplement liquidity with over-raised proceeds or repay bank loans*

Applicable  Not applicable

#### 5. *Others*

Applicable  Not applicable



## Section VIII Significant Events

### XV. EXPLANATION ON OTHER MAJOR EVENTS THAT HAVE A SIGNIFICANT IMPACT ON INVESTORS' VALUE JUDGMENTS AND INVESTMENT DECISIONS

Applicable Not applicable

# Section IX Changes in Shares and Particulars of Shareholders



## I. CHANGES IN SHARE CAPITAL

### (I) Table of changes in shares

#### 1. Table of changes in shares

Unit: Share

	Before changes		Changes for the period (+, -)					After changes	
	Number	Percentage (%)	New Shares	Bonus Shares	Reserve transferred to Shares	Others	Subtotal	Number	Percentage (%)
<b>I. Shares subject to trading moratorium</b>	703,896,963	49.70	-	-	-	-46,230,544	-46,230,544	657,666,419	46.44
1. State-owned Shares	-	-	-	-	-	-	-	-	-
2. State-owned legal person Shares	640,101,305	45.20	-	-	-	-5,188,600	-5,188,600	634,912,705	44.83
3. Other domestic Shares	63,788,283	4.50	-	-	-	-41,034,569	-41,034,569	22,753,714	1.61
Of which: Domestic non-state-owned legal person Shares	63,788,283	4.50	-	-	-	-41,034,569	-41,034,569	22,753,714	1.61
Domestic natural person Shares	-	-	-	-	-	-	-	-	-
4. Foreign shareholding	7,375	0.00	-	-	-	-7,375	-7,375	-	-
Of which: Overseas legal person Shares	7,375	0.00	-	-	-	-7,375	-7,375	-	-
Overseas natural person Shares	-	-	-	-	-	-	-	-	-
<b>II. Circulating Shares not subject to trading moratorium</b>	712,339,949	50.30	-	-	-	46,230,544	46,230,544	758,570,493	53.56
1. RMB ordinary Shares	165,010,549	11.65	-	-	-	46,230,544	46,230,544	211,241,093	14.91
2. Domestically listed foreign shares	-	-	-	-	-	-	-	-	-
3. Overseas listed foreign shares	547,329,400	38.65	-	-	-	-	-	547,329,400	38.65
4. Others	-	-	-	-	-	-	-	-	-
<b>III. Total number of Shares</b>	1,416,236,912	100.00	-	-	-	-	-	1,416,236,912	100.00

#### 2. Explanation on changes in Shares

✓Applicable Not Applicable

On 7 March 2022, 10,043,644 restricted shares issued through offline placement by the Company in initial public issue were released into the market. For details, please refer to the Announcement on Release of Restricted Shares Issued through Offline Placement by Zhuzhou CRRC Times Electric Co., Ltd. in Initial Public Issue published on the website of the SSE (www.sse.com.cn) on 26 February 2022 (Ann No. 2022-008).

On 7 September 2022, a total of 41,312,300 restricted shares issued by the Company in public issue were released into the market. For details, please refer to the Announcement on Release of Certain Restricted Shares Issued by Zhuzhou CRRC Times Electric Co., Ltd. in Initial Public Issue published on the website of the SSE (www.sse.com.cn) on 31 August 2022 (Ann No. 2022-034).

# Section IX Changes in Shares and Particulars of Shareholders

### 3. The impact of changes in shares on financial indicators such as earnings per share, net asset per share for the latest year and the latest period (if any)

Applicable  Not Applicable

### 4. Other disclosable contents that the Company deemed necessary or were required by securities regulatory authorities

Applicable  Not Applicable

## (II) Changes in Shares Subject to Trading Moratorium

Applicable  Not Applicable

Unit: Share

Name of Shareholders	Number of Shares subject to trading moratorium at the beginning of the year	Number of Shares released from trading moratorium for the year	Number of new Shares subject to trading moratorium for the year	Number of Shares subject to trading moratorium at the end of the year	Reason for the trading moratorium	Date of release from trading moratorium
CRRC Zhuzhou Institute Co., Ltd. (中車株洲電力機車研究所有限公司)	589,585,699	-	-	589,585,699	Trading moratorium on initial public issue	7 September 2024
CRRC Zhuzhou Locomotive Co., Ltd. (中車株洲電力機車有限公司)	10,000,000	-	-	10,000,000	Trading moratorium on initial public issue	7 September 2024
CRCC High-Tech Equipment Corporation Limited (中國鐵建高新裝備股份有限公司)	9,800,000	9,800,000	-	-	Trading moratorium on initial public issue	7 September 2022
CRRC Investment & Leasing Co., Ltd. (中車投資租賃有限公司)	9,380,769	-	-	9,380,769	Trading moratorium on initial public issue	7 September 2024
CRRC Fund Management (Beijing) Co., Ltd. – Beijing Maohuan Rail Transit Industry Investment Management Partnership (Limited Partnership) (中車基金管理(北京)有限公司–北京懋鉅軌道交通 產業投資管理合夥企業(有限合夥))	9,380,769	9,380,769	-	-	Trading moratorium on initial public issue	7 September 2022
China Internet Investment Fund Management Co., Ltd. – China Internet Investment Fund (Limited Partnership) (中國互聯網投資基金管理有限公司– 中國互聯網投資基金(有限合夥))	3,958,888	-	-	3,958,888	Strategic placement on initial public issue	7 September 2023
Guohua Investment Development Asset Management (Beijing) Co., Ltd. (國華投資開發資產管理(北京)有限公司)	3,958,888	-	-	3,958,888	Strategic placement on initial public issue	7 September 2023
CITIC Corporation Limited (中信投資控股有限公司)	3,958,888	-	-	3,958,888	Strategic placement on initial public issue	7 September 2023
Guoxin Investment Development Co., Ltd. (上海國鑫投資發展有限公司)	1,969,547	-	-	1,969,547	Strategic placement on initial public issue	7 September 2023
Shenzhen Metro Group Co., Ltd. (深圳地鐵建設集團有限公司)	1,969,547	-	-	1,969,547	Strategic placement on initial public issue	7 September 2023
Yingda Securities Co., Ltd. (英大證券有限責任公司)	2,375,333	-	-	2,375,333	Strategic placement on initial public issue	7 September 2023
Chengdu Rail Industrial Investment Co., Ltd. (成都軌道產業投資有限公司)	1,979,444	-	-	1,979,444	Strategic placement on initial public issue	7 September 2023



# Section IX Changes in Shares and Particulars of Shareholders



Name of Shareholders	Number of Shares subject to trading moratorium at the beginning of the year	Number of Shares released from trading moratorium for the year	Number of new Shares subject to trading moratorium for the year	Number of Shares subject to trading moratorium at the end of the year	Reason for the trading moratorium	Date of release from trading moratorium
Hunan Rail Transit Holding Group Co., Ltd. (湖南軌道交通控股集團有限公司)	3,958,888	-	-	3,958,888	Strategic placement on initial public issue	7 September 2023
Guangzhou Industrial Control Mixed Reform Equity Investment Fund Partnership Corporation (Limited Partnership) (廣州工控混改股權投資基金合夥企業(有限合夥))	2,969,171	-	-	2,969,171	Strategic placement on initial public issue	7 September 2023
Hunan Hualing Dice Honggang Investment Partnership Corporation (Limited Partnership) (湖南華菱迪策鴻鋼投資合夥企業(有限合夥))	3,958,888	-	-	3,958,888	Strategic placement on initial public issue	7 September 2023
Taicang Assets Management Group Co., Ltd. (太倉市資產經營集團有限公司)	1,979,444	-	-	1,979,444	Strategic placement on initial public issue	7 September 2023
Shenzhen Jingshui Investment Co., Ltd. (深圳市靜水投資有限公司)	3,958,888	-	-	3,958,888	Strategic placement on initial public issue	7 September 2023
Zhuzhou State-owned Assets Investment Holding Group Co., Ltd. (株洲市國有資產投資控股集團有限公司)	8,285,532	-	-	8,285,532	Strategic placement on initial public issue	7 September 2023
CICC – Agricultural Bank of China – CICC Times Electric No. 1 Collective Asset Management Plan for Employees’ Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣1號員工參與科创板戰略配售集合資產管理計劃)	4,598,422	4,598,422	-	-	Strategic placement on initial public issue	7 September 2022
CICC – Agricultural Bank of China – CICC Times Electric No. 2 Collective Asset Management Plan for Employees’ Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣2號員工參與科创板戰略配售集合資產管理計劃)	3,306,856	3,306,856	-	-	Strategic placement on initial public issue	7 September 2022
CICC – Agricultural Bank of China – CICC Times Electric No. 3 Collective Asset Management Plan for Employees’ Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣3號員工參與科创板戰略配售集合資產管理計劃)	4,609,837	4,609,837	-	-	Strategic placement on initial public issue	7 September 2022
CICC – Agricultural Bank of China – CICC Times Electric No. 4 Collective Asset Management Plan for Employees’ Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣4號員工參與科创板戰略配售集合資產管理計劃)	3,199,553	3,199,553	-	-	Strategic placement on initial public issue	7 September 2022

# Section IX Changes in Shares and Particulars of Shareholders

Name of Shareholders	Number of Shares subject to trading moratorium at the beginning of the year	Number of Shares released from trading moratorium for the year	Number of new Shares subject to trading moratorium for the year	Number of Shares subject to trading moratorium at the end of the year	Reason for the trading moratorium	Date of release from trading moratorium
CICC – Agricultural Bank of China – CICC Times Electric No. 6 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司－農業銀行－中金公司時代電氣6號員工參與科创板战略配售集合资产管理计划)	3,294,426	3,294,426	-	-	Strategic placement on initial public issue	7 September 2022
CICC – Agricultural Bank of China – CICC Times Electric No. 8 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司－農業銀行－中金公司時代電氣8號員工參與科创板战略配售集合资产管理计划)	3,122,437	3,122,437	-	-	Strategic placement on initial public issue	7 September 2022
China CICC Wealth Management Securities Company Limited (中國中金財富證券有限公司)	4,815,205	-	-	4,815,205	Strategic placement on initial public issue	7 September 2023
Certain offline target placees	10,043,644	10,043,644	-	-	Offline placement trading moratorium on initial public issue	7 March 2022
<b>Total</b>	<b>710,418,963</b>	<b>51,355,944</b>	<b>-</b>	<b>659,063,019</b>	/	/

Note: Difference between the aggregation of the numbers of Shares subject to trading moratorium in the above table and the number of Shares subject to trading moratorium in the preceding table of changes in shares is attributable to lending of Shares by Zhuzhou State-owned Assets Investment Holding Group Co., Ltd. and China CICC Wealth Management Securities Company Limited pursuant to the Implementation Rules on Refinancing and Lending Shares for Securities Financing Business of the Science and Technology Innovation Board, which complied with the requirements of relevant laws and regulations.

# Section IX Changes in Shares and Particulars of Shareholders



## II. SECURITIES ISSUE AND LISTING

### (I) Issue of Securities During the Reporting Period

Applicable Not Applicable

Explanation on securities issue during the reporting period (for bonds with different interest rates during the duration, please specify separately):

Applicable Not Applicable

### (II) Changes in the Total Number of Shares and Shareholders Structure of the Company and Changes in the Company's Assets and Liabilities Structure

Applicable Not Applicable

## III. SHAREHOLDERS AND ACTUAL CONTROLLER

### (I) Total Number of Shareholders

Total number of ordinary Shareholders as at the end of the reporting period (account)	17,664
Total number of ordinary Shareholders at the end of the previous month before the disclosure date of annual report (account)	19,122
Total number of Shareholders of preference shares with restored voting rights as at the end of the reporting period (account)	Not applicable
Total number of Shareholders of preference shares with restored voting rights as at the end of the previous month before the disclosure date of the annual report (account)	Not applicable
Total number of Shareholders holding Shares with special voting rights as at the end of the reporting period (account)	Not applicable
Total number of Shareholders holding Shares with special voting rights as at the end of the previous month before the disclosure date of the annual report (account)	Not applicable

Note: As at the end of the reporting period, the Company had 16,574 A Shareholders and 1,090 registered H Shareholders; and as at the end of the previous month before the disclosure date of the annual report, the Company had 18,034 A Shareholders and 1,088 registered H Shareholders.

# Section IX Changes in Shares and Particulars of Shareholders

## Numbers of depositary receipt holders

Applicable  Not Applicable

## (II) Particulars of Shareholdings of the Top Ten Shareholders and the Top Ten Shareholders of Circulating Shares (or Shareholders Not Subject to Trading Moratorium) as at the End of the Reporting Period

Unit: Share

Particulars of shareholdings of the top ten Shareholders							
Name of Shareholders (full name)	Change of shareholding during the reporting period	Number of Shares held as at the end of the period	Percentage (%)	Number of Shares held subject to trading moratorium	Number of restricted Shares including lending Shares for securities financing	Shares pledged, marked or frozen	Nature of Shareholders
CRRC Zhuzhou Institute Co., Ltd. (中車株洲電力機車研究所有限公司)	-	589,585,699	41.63	589,585,699	589,585,699	None	- State-owned legal person
HKSCC NOMINEES LIMITED <sup>Note 1</sup>	17,599	545,947,166	38.55	-	-	Unknown	- Overseas legal person
Hong Kong Securities Clearing Company Limited	21,909,861	23,909,393	1.69	-	-	Unknown	- Unknown
China Merchants Bank Co., Ltd. – Galaxy Innovation Growth Hybrid Securities Investment Fund (招商銀行股份有限公司 – 銀河創新成長混合型證券投資基金)	-2,500,000	18,500,000	1.31	-	-	Unknown	- Unknown
China Merchants Bank Co., Ltd. – China AMC SSE STAR 50 Exchange Traded Fund (招商銀行股份有限公司 – 華夏上證科創板50成份交易型開放式指數證券投資基金)	14,695,484	14,695,484	1.04	-	-	Unknown	- Unknown
CRRC Zhuzhou Locomotive Co., Ltd. (中車株洲電力機車有限公司)	-	10,000,000	0.71	10,000,000	10,000,000	None	- State-owned legal person
CRCC High-Tech Equipment Corporation Limited (中國鐵建高新裝備股份有限公司)	-	9,800,000	0.69	-	-	None	- State-owned legal person
CRRC Investment & Leasing Co., Ltd. (中車投資租賃有限公司)	-	9,380,769	0.66	9,380,769	9,380,769	None	- State-owned legal person
CRRC Fund Management (Beijing) Co., Ltd. – Beijing Maohuan Rail Transit Industry Investment Management Partnership (Limited Partnership) (中車基金管理(北京)有限公司 – 北京懋恒軌道交通產業投資管理合夥企業(有限合夥))	-1,120,983	8,259,786	0.58	-	-	None	- Others
Zhuzhou State-owned Assets Investment Holding Group Co., Ltd. (株洲市國有資產投資控股集團有限公司)	2,905,800	7,946,332	0.56	7,946,332	7,946,332	Unknown	- State-owned legal person

# Section IX Changes in Shares and Particulars of Shareholders



## Particulars of shareholdings of the top ten Shareholders not subject to trading moratorium

Name of Shareholders	Number of circulating Shares held not subject to trading moratorium	Type and number of Shares	
		Type	Number
HKSCC NOMINEES LIMITED <sup>Note 1</sup>	545,947,166	Overseas listed foreign shares	545,947,166
Hong Kong Securities Clearing Company Limited	23,909,393	RMB ordinary shares	23,909,393
China Merchants Bank Co., Ltd. – Galaxy Innovation Growth Hybrid Securities Investment Fund (招商銀行股份有限公司—銀河創新成長混合型證券投資基金)	18,500,000	RMB ordinary shares	18,500,000
China Merchants Bank Co., Ltd. – China AMC SSE STAR 50 Exchange Traded Fund (招商銀行股份有限公司—華夏上證科創板50成份交易型開放式指數證券投資基金)	14,695,484	RMB ordinary shares	14,695,484
CRCC High-Tech Equipment Corporation Limited (中國鐵建高新裝備股份有限公司)	9,800,000	RMB ordinary shares	9,800,000
CRRC Fund Management (Beijing) Co., Ltd. – Beijing Maohuan Rail Transit Industry Investment Management Partnership (Limited Partnership) (中車基金管理(北京)有限公司—北京懋恒軌道交通產業投資管理合夥企業(有限合夥))	8,259,786	RMB ordinary shares	8,259,786
Industrial and Commercial Bank of China Limited – eFunds SSE STAR 50 Exchange Traded Fund (中國工商銀行股份有限公司—易方達上證科創板50成份交易型開放式指數證券投資基金)	4,776,810	RMB ordinary shares	4,776,810
China Construction Bank Corporation Limited – eFunds Innovation Driven Flexible Allocation Hybrid Securities Investment Fund (中國建設銀行股份有限公司—易方達創新驅動靈活配置混合型證券投資基金)	3,537,764	RMB ordinary shares	3,537,764
Invesco Great Wall Fund – China Life Insurance Company Limited – Participating Insurance – Invesco Great Wall Fund China Life Growth Stock Portfolio Single Asset Management Plan (available for sale) (景順長城基金—中國人壽保險股份有限公司—分紅險—景順長城基金國壽股份成長股票型組合單一資產管理計畫(可供出售))	2,866,852	RMB ordinary shares	2,866,852
Foresea Life Insurance Company Limited – Participating Insurance Product (前海人壽保險股份有限公司—分紅保險產品)	2,750,000	RMB ordinary shares	2,750,000
Explanation on the repurchase accounts among the top ten Shareholders	Not applicable		
Explanation on the aforesaid Shareholders entrusting voting rights, being entrusted with voting rights, and waiving voting rights	Not applicable		
Explanation on the related party relationship or acting-in-concert arrangement among the above Shareholders	CRRC Zhuzhou Institute Co., Ltd. is a direct controlling Shareholder of the Company. CRRC Corporation Limited, as the shareholder holding 100% equity interests in CRRC Zhuzhou Institute Co., Ltd., CRRC Zhuzhou Locomotive Co., Ltd., CRRC Investment & Leasing Co., Ltd. and CRRC Hong Kong Capital Management Co., Ltd., indirectly held a total of 608,966,468 RMB ordinary Shares through CRRC Zhuzhou Institute Co., Ltd., CRRC Zhuzhou Locomotive Co., Ltd. and CRRC Investment & Leasing Co., Ltd., and indirectly held 41,520,000 overseas listed foreign Shares through CRRC Hong Kong Capital Management Co., Ltd. CRRC Corporation Limited indirectly held a total of 45.93% shareholding in the Company.		
	Save as aforementioned, the Company is not aware whether the other Shareholders have related party relationship or acting-in-concert arrangement.		
Explanation on the preference Shareholders with voting right restored and their shareholdings	Not applicable		

Note 1: HKSCC NOMINEES LIMITED holds the H Shares on behalf of several customers.

# Section IX Changes in Shares and Particulars of Shareholders

## Number of Shares held by the top ten Shareholders subject to trading moratorium and conditions of such trading moratorium

✓Applicable    □Not Applicable

Unit: Share

No.	Name of Shareholders subject to trading moratorium	Number of Shares held subject to trading moratorium	Shares subject to trading moratorium available for listing and trading		Conditions of trading moratorium
			Time available for listing and trading	Number of additional shares available for listing and trading	
1	CRRC Zhuzhou Institute Co., Ltd. (中車株洲電力機車研究所有限公司)	589,585,699	7 September 2024	–	36 months from the date on which the Company's Shares are listed on the SSE
2	CRRC Zhuzhou Locomotive Co., Ltd. (中車株洲電力機車有限公司)	10,000,000	7 September 2024	–	36 months from the date on which the Company's Shares are listed on the SSE
3	CRRC Investment & Leasing Co., Ltd. (中車投資租賃有限公司)	9,380,769	7 September 2024	–	36 months from the date on which the Company's Shares are listed on the SSE
4	Zhuzhou State-owned Assets Investment Holding Group Co., Ltd. (株洲市國有資產投資控股集團有限公司)	7,946,332	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE
5	CITIC Corporation Limited (中信投資控股有限公司)	3,958,888	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE
6	China Internet Investment Fund Management Co., Ltd. – China Internet Investment Fund (Limited Partnership) (中國互聯網投資基金管理有限公司–中國互聯網投資基金(有限合夥))	3,958,888	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE
7	Shenzhen Jingshui Investment Co., Ltd. (深圳市靜水投資有限公司)	3,958,888	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE
8	Hunan Rail Transit Holding Group Co., Ltd. (湖南軌道交通控股集團有限公司)	3,958,888	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE
9	Guohua Investment Development Asset Management (Beijing) Co., Ltd. (國華投資開發資產管理(北京)有限公司)	3,958,888	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE
10	Hunan Dice Runtong Private Equity Fund Management Co., Ltd. – Hunan Hualing Dice Honggang Investment Partnership Corporation (Limited Partnership) (湖南迪策潤通私募基金管理有限公司–湖南華菱迪策鴻鋼投資合夥企業(有限合夥))	3,958,888	7 September 2023	–	24 months from the date on which the Company's Shares are listed on the SSE

Explanation on the related party relationship or acting-in-concert arrangement among the above Shareholders

Note: Shares subject to trading moratorium actually held by Zhuzhou State-owned Assets Investment Holding Group Co., Ltd. were 8,285,532, and the difference from the number set out in the above table was attributable to lending of Shares pursuant to the Implementation Rules on Refinancing and Lending Shares for Securities Financing Business of the Science and Technology Innovation Board.

# Section IX Changes in Shares and Particulars of Shareholders



## Particulars of the top ten domestic depository receipts holders of the Company as at the end of the reporting period

Applicable  Not Applicable

## Number of shareholdings of the top ten holders of depository receipts subject to trading moratorium and conditions of such trading moratorium

Applicable  Not Applicable

## (III) Particulars of Top Ten Shareholders with Voting Rights as at the End of the Reporting Period

Applicable  Not Applicable

## (IV) Top 10 Shareholders from Strategic Investors or General Legal Persons Participating in the Placing of the New Shares/Depository Receipts

Applicable  Not Applicable

Name of strategic investors or general legal persons	Agreed commencement date of shareholding	Agreed termination date of shareholding
Zhuzhou State-owned Assets Investment Holding Group Co., Ltd. (株洲市國有資產投資控股集團有限公司) Explanation on the agreed term of shareholding of strategic investors or general legal persons participating in the placing of the new Shares	7 September 2021	–

# Section IX Changes in Shares and Particulars of Shareholders

## (V) Strategic Placement of Initial Public Issue

### 1. Particulars of shareholding of senior management and core employees by setting up a special asset management plan to participate in the strategic placement of initial public issue

✓Applicable    □Not Applicable

Unit: Share

Name of Shareholder/holder	Number of Shares/depository receipts allocated	Time available for listing and trading	Changes of number during the reporting period	Number of holdings of Shares/depository receipts including lending Shares for securities financing at the end of the period
CICC – Agricultural Bank of China – CICC Times Electric No. 1 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣1號員工參與科创板戰略配售集合資產管理計劃)	4,598,422	7 September 2022	-4,305,400	190,422
CICC – Agricultural Bank of China – CICC Times Electric No. 2 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣2號員工參與科创板戰略配售集合資產管理計劃)	3,306,856	7 September 2022	-2,998,550	231,106
CICC – Agricultural Bank of China – CICC Times Electric No. 3 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣3號員工參與科创板戰略配售集合資產管理計劃)	4,609,837	7 September 2022	-4,283,949	223,288
CICC – Agricultural Bank of China – CICC Times Electric No. 4 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣4號員工參與科创板戰略配售集合資產管理計劃)	3,199,553	7 September 2022	-2,962,860	159,493
CICC – Agricultural Bank of China – CICC Times Electric No. 6 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣6號員工參與科创板戰略配售集合資產管理計劃)	3,294,426	7 September 2022	-3,039,635	177,591
CICC – Agricultural Bank of China – CICC Times Electric No. 8 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the Science and Technology Innovation Board (中金公司–農業銀行–中金公司時代電氣8號員工參與科创板戰略配售集合資產管理計劃)	3,122,437	7 September 2022	-2,844,918	200,319



# Section IX Changes in Shares and Particulars of Shareholders



## 2. Particulars of shareholding of relevant subsidiaries of sponsors participating in the strategic placement of initial public issue

✓Applicable    Not Applicable

Unit: Share

Name of Shareholder	Relationship with the sponsor	Number of Shares/ depositary receipts allocated	Time available for listing and trading	Changes of number during the reporting period	Number of holdings of Shares/ depositary receipts including lending Shares for securities financing at the end of the period
China CICC Wealth Management Securities Company Limited (中國中金財富證券有限公司)	A wholly-owned subsidiary of the sponsor	4,815,205	7 September 2023	1,746,883	4,815,205

Note: "Changes of number during the reporting period" in the above table was attributable to lending of Shares by China CICC Wealth Management Securities Company Limited pursuant to the Implementation Rules on Refinancing and Lending Shares for Securities Financing Business of the Science and Technology Innovation Board.

# Section IX Changes in Shares and Particulars of Shareholders

## (VI) Interests and Short Positions of Substantial Shareholders in Shares and Underlying Shares of the Company

### *Interests and Short Positions of Substantial Shareholders in Shares and Underlying Shares of the Company*

As at 31 December 2022, so far as is known to the Directors, the following persons (other than the Directors, the Supervisors or chief executives of the Company) had interests or short positions in the shares or underlying shares of the Company which would be required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO and which were entered in the register required to be kept by the Company pursuant to section 336 of the SFO:

Name of substantial Shareholders	Class of Shares	Number of Shares held	Capacity	Approximate percentage of A Shares of the Company	Approximate percentage of H Shares of the Company	Approximate percentage of total issued Shares of the Company
CRRCL ZELRI	A Shares	589,585,699 (Long position)	Beneficial owner	67.85%	—	41.63%
CRRCL <sup>(Note 1)</sup>	A Shares	608,966,468 (Long position)	Interest in controlled entity	70.08%	—	43.00%
	H Shares	41,520,000 (Long position)	Interest in controlled entity	—	7.59%	2.93%
CRRCL Group <sup>(Note 2)</sup>	A Shares	608,966,468 (Long position)	Interest in controlled entity	70.08%	—	43.00%
	H Shares	41,520,000 (Long position)	Interest in controlled entity	—	7.59%	2.93%
CRRCL Hong Kong Capital Management Co., Limited	H Shares	41,520,000 (Long position)	Interest in controlled entity	—	7.59%	2.93%
JPMorgan Chase & Co.	H Shares	5,076,665 (Long position)	Interest in controlled entity	—	0.93%	0.36%
		3,913,244 (Short position)	Interest in controlled entity	—	0.71%	0.28%
		41,728,900 (Long position)	Investment manager	—	7.62%	2.95%
		57,400 (Long position)	Secured equity holder	—	0.01%	0.00%
		8,031,795 (Long position)	Approved lending agent	—	1.47%	0.57%
Citigroup Inc	H Shares	7,573,926 (Long position)	Interest in controlled entity	—	1.38%	0.53%
	H Shares	30,862,087 (Lending pool Shares – Long position)	Approved lending agent	—	5.64%	2.18%

# Section IX Changes in Shares and Particulars of Shareholders



Name of substantial Shareholders	Class of Shares	Number of Shares held	Capacity	Approximate percentage of A Shares of the Company	Approximate percentage of H Shares of the Company	Approximate percentage of total issued Shares of the Company
Vontobel Asset Management AG	H Shares	33,112,400	Investment manager	—	6.05%	2.34%
BlackRock, Inc	H Shares	(Long position)	Interest in controlled entity		5.35%	2.07%
		29,293,486				
		2,682,600			0.49%	0.19%
		(Short position)				

Notes: As at 31 December 2022, the number of issued Shares of the Company was 1,416,236,912 Shares, including 547,329,400 H Shares and 868,907,512 A Shares.

1. CRRG is interested in 100% of the registered capital of CRRG ZELRI, CRRG Zhuzhou and CRRG Investment & Leasing Co., Ltd.. Accordingly, CRRG is deemed under the SFO to be interested in the shares held by each of CRRG ZELRI, CRRG Zhuzhou and CRRG Investment & Leasing Co., Ltd.. CRRG is interested in 41,520,000 H shares through CRRG Hong Kong Capital Management Co., Limited, a wholly-owned subsidiary of CRRG.
2. CRRG Group is directly and indirectly interested in 51.35% of the shares of CRRG. Accordingly, CRRG Group is deemed under the SFO to be interested in the shares held by CRRG.

Save as disclosed above, as at 31 December 2022, the Directors were not aware of any persons (other than the Directors, the Supervisors or chief executives of the Company) who had interests and/or short positions in the shares or underlying shares of the Company which would be required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO and which were entered in the register required to be kept by the Company pursuant to section 336 of the SFO.

# Section IX Changes in Shares and Particulars of Shareholders

## IV. CONTROLLING SHAREHOLDER AND ACTUAL CONTROLLER

### (I) Controlling Shareholder

#### 1 Legal person

Applicable Not Applicable

Name	CRRC Zhuzhou Institute Co., Ltd.
Person-in-charge or legal representative	Li Donglin
Date of establishment	9 September 1992
Major business activities	Research and development, production, testing and sales of railway transportation products and equipment, electrical machinery and equipment, ordinary machinery, motors, electronic products, computer products and software for control purpose, rubber and plastic products, electronic components, electronic appliances, and electrical insulating materials; self-operate and as agent in the import and export of various commodities and technologies, except for commodities and technologies which are operated by companies approved by the PRC government or whose export is prohibited by the PRC government; the design, production and sales of large wind power generators as well as spare and accessory parts; the construction, operation and advisory services of wind power stations; general contract of electric power construction; general contract of comprehensive energy service project; and the production, sales and after-sales services of passenger cars and spare and accessory parts. (projects subject to approval according to law can be operated only after being approved by relevant departments)
Equity in other domestic and overseas listed companies controlled and invested during the reporting period	As of 31 December 2022, it held 36.43% equity interests in Zhuzhou Times New Material Technology Co., Ltd. (SH600458).
Other explanations	—

# Section IX Changes in Shares and Particulars of Shareholders



## 2 Natural person

Applicable  Not Applicable

## 3 Special explanation for absence of the Company's controlling shareholder

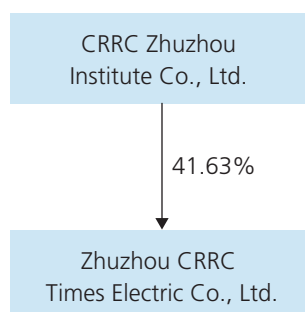
Applicable  Not Applicable

## 4 Explanation on changes in controlling shareholder during the reporting period

Applicable  Not Applicable

## 5 Diagram of the property rights and control relationship between the Company and the controlling shareholder

Applicable  Not Applicable



## (II) Actual Controller

### 1 Legal person

Applicable  Not Applicable

Name SASAC

The actual controller of the Company is SASAC. As of 31 December 2022, SASAC directly held the 100% equity interests of CRRC Group, which is the controlling shareholder of CRRC, which in turn indirectly held a total of 45.93% equity interests in the Company through CRRC ZELRI, CRRC Zhuzhou, CRRC Investment & Leasing and CRRC Hong Kong Capital Management Co., Ltd.

### 2 Natural person

Applicable  Not Applicable

### 3 Special explanation for absence of actual controller

Applicable  Not Applicable

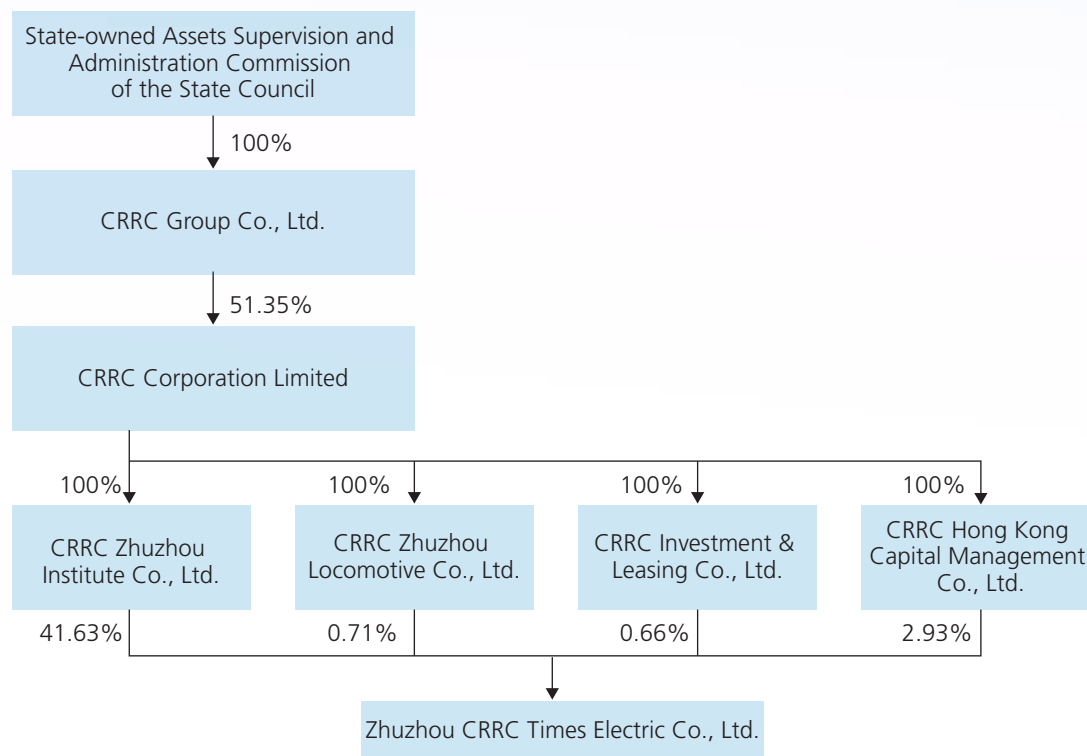
### 4 Explanation on change of control of the Company during the reporting period

Applicable  Not Applicable

# Section IX Changes in Shares and Particulars of Shareholders

## 5 Diagram of the property rights and control relationship between the Company and the actual controller

Applicable  Not Applicable



## 6 Controlling the Company by actual controller through trust or other asset management methods

Applicable  Not Applicable

### (III) Other Information of Controlling Shareholder and Actual Controllers

Applicable  Not Applicable

# Section IX Changes in Shares and Particulars of Shareholders



## V. THE CONTROLLING SHAREHOLDER OR LARGEST SHAREHOLDER OF THE COMPANY AND PARTIES ACTING IN CONCERT WITH THEM ACCUMULATIVELY PLEDGED MORE THAN 80% OF THE EQUITY INTERESTS IN THE COMPANY HELD BY THEM

Applicable Not Applicable

## VI. OTHER LEGAL PERSON HOLDING MORE THAN 10% OF THE SHARES

Applicable Not Applicable

## VII. EXPLANATION OF RESTRICTIONS ON REDUCTION OF HOLDING OF SHARES/ DEPOSITARY RECEIPTS

Applicable Not Applicable

## VIII. IMPLEMENTATION OF SHARE REPURCHASE DURING THE REPORTING PERIOD

Applicable Not Applicable



# Section X Preference Shares

Applicable  Not applicable



# Section XI Corporate Bonds



## I. ENTERPRISE BONDS, CORPORATE BONDS AND DEBT FINANCING INSTRUMENTS OF NON-FINANCIAL ENTERPRISES OF THE COMPANY

Applicable Not applicable

## II. CONVERTIBLE BONDS OF THE COMPANY

Applicable Not applicable



# Auditors' Report



KPMG Huazhen ShenZi No. 2303429

The Shareholders of Zhuzhou CRRC Times Electric Co., Ltd.:

## OPINION

We have audited the accompanying financial statements of Zhuzhou CRRC Times Electric Co., Ltd. ("Zhuzhou CRRC Times Electric"), which comprise the consolidated and company balance sheets as at 31 December 2022, the consolidated and company income statements, the consolidated and company cash flow statements, the consolidated and company statements of changes in shareholders' equity for the year then ended, and notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company financial position of Zhuzhou CRRC Times Electric as at 31 December 2022, and the consolidated and company financial performance and cash flows of Zhuzhou CRRC Times Electric for the year then ended in accordance with Accounting Standards for Business Enterprises issued by the Ministry of Finance of the People's Republic of China.

## BASIS FOR OPINION

We conducted our audit in accordance with China Standards on Auditing for Certified Public Accountants ("CSAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of Zhuzhou CRRC Times Electric in accordance with the China Code of Ethics for Certified Public Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## KEY AUDIT MATTERS

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



# Auditors' Report

## KEY AUDIT MATTERS (continued)

### Measurement of expected credit losses from bills receivable, accounts receivable and contract assets

Please refer to the accounting policy described in Note 10 under "III. Significant accounting policies and accounting estimates", as well as Note 4, 9 and 22 under "V. Notes of consolidated financial statements".

#### The key audit matter

As shown in Notes V.4, V.9 and V.22 to the financial statements, as at 31 December 2022, the Group's carrying amounts of accounts receivable and contract assets (including those under "Other non-current assets") were RMB8,363,780,453 and RMB889,755,722 respectively, and the provisions for credit losses from them were RMB263,563,450 and RMB19,016,732, respectively.

The Group uses the expected credit loss model to recognise the provisions for expected credit loss based on each class of receivables and contract assets classified by credit risk characteristics, and the provisions for losses from accounts receivables and contract assets are always measured at an amount equal to lifetime ECLs.. The expected credit loss rate takes into account the ageing of the receivables, the collection history of the customers of the Group, current market conditions and forward-looking information. This assessment involves significant management judgment and estimates.

Because the determination of the provision for bad and doubtful debts of accounts receivable and contract assets involves significant management judgment and inherent uncertainty, we identified the measurement of expected credit losses on accounts receivable and contract assets as a key audit matter in the consolidated financial statements.

#### How the matter was addressed in our audit

Our audit procedures related to accounts receivable and contract assets include the following:

- Understanding the key internal controls over financial reporting related to credit risk control, recovery of funds and estimate of expected credit loss, and evaluating their design and operating effectiveness;
- Evaluating the Group's accounting policy for estimating the provision for bad and doubtful debts in accordance with the requirements of the relevant accounting standards;
- Selecting testing items from the ageing analysis report on bills receivable, accounts receivable and contract assets and reconciling them to relevant supporting documents to evaluate the accuracy of the ageing interval classification in the ageing analysis report on accounts receivable;
- Understanding the key parameters and assumptions used in management's expected credit loss model, including the basis for management's grouping of receivables based on the client's common credit risk characteristics, and historical credit loss data included in management's expected credit loss ratio;
- Evaluating the appropriateness of management's expected credit loss estimates by examining the information used by management to make accounting estimates, including testing the accuracy of historical credit loss data, evaluating whether historical loss rates are appropriately adjusted based on current economic conditions and forward-looking information;
- Performing recalculation of provisions for bad and doubtful debts as at 31 December 2022 based on the Group's accounting policy on provisions for credit loss.



# Auditors' Report

## KEY AUDIT MATTERS (continued)

### Impairment of goodwill

Please refer to the accounting policy described in Note 18 under "III. Significant accounting policies and accounting estimates", as well as Note 19 under "V. Notes of consolidated financial statements".

#### The key audit matter

As shown in Note V.19 to the financial statements, as at 31 December 2022, the net goodwill value of Zhuzhou CRRC Times Electric was RMB185,853,237, mainly arising from the acquisition of 100% equity interests in Special Machine Developments Limited and its subsidiaries in 2015.

The management performs the impairment test on goodwill at the end of each year by comparing the carrying amount of the asset group containing goodwill with its recoverable amount to determine whether provisions for impairment are required. The recoverable amount is determined based on the higher the fair value of the asset group less costs of disposal and the present value of its expected future cash flows. The determination on the present value of expected future cash flows involves significant management judgements and estimates, particularly with respect to estimates of revenue growth rates and discount rates.

Because of the significant goodwill year-end balances described above and the fact that the goodwill impairment test involves a number of assumptions and judgments, including expected future cash flows from the asset group, and the selection of a discount rate that appropriately reflects the current time value of currency in the market and specific asset risks, we identified goodwill impairment as a key audit matter in the consolidated financial statements.

#### How the matter was addressed in our audit

The audit procedures related to the evaluation of goodwill impairment include the following procedures:

- Understanding and evaluating Zhuzhou CRRC Times Electric's design operating effectiveness of key internal controls over financial reporting related to goodwill impairment test;
- Evaluating whether management's identification of asset groups and allocation of goodwill to asset groups, as well as management's approach to goodwill impairment testing, meet the requirements of Accounting Standards for Business Enterprises;
- Based on our knowledge, experience and knowledge of the industries in which Zhuzhou CRRC Times Electric operate, with reference to the approved operating plan, evaluating the reasonableness of the key assumptions used by management in determining the present value of expected future cash flows, such as future revenue growth rates and gross margins;
- Evaluating the reasonableness of the discount rate used by management in estimating the present value of expected future cash flows, using the work of our valuation experts;
- Performing the sensitivity analysis of key assumptions used by management, such as revenue growth rates and discount rates, so as to evaluate the impact of key assumptions on the conclusion of the impairment test, and thus evaluate whether there is any indication of management bias in the selection of key assumptions;
- Comparing the estimates and assumptions used by management in preparing discounted cash flow forecast in the prior year with actual results for the current year to evaluate whether there are indications of management bias, and enquiring management for the reasons for any significant discrepancies identified, taking into account whether relevant factors have been taken into account in the current year's forecast;
- Evaluating whether the disclosures related to goodwill in the financial statements comply with the requirements of Accounting Standards for Business Enterprises.



# Auditors' Report

## OTHER INFORMATION

Zhuzhou CRRC Times Electric's management is responsible for the other information. The other information comprises all the information included in 2022 annual report of Zhuzhou CRRC Times Electric, other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Accounting Standards for Business Enterprises, and for the design, implementation and maintenance of such internal control necessary to enable that the financial statements are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Zhuzhou CRRC Times Electric's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate Zhuzhou CRRC Times Electric or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing Zhuzhou CRRC Times Electric's financial reporting process.



# Auditors' Report

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

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with CSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with CSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

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

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



# Auditors' Report

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

(continued)

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

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

KPMG Huazhen LLP

Certified Public Accountants Registered in the People's Republic of China

Lin Ying (Engagement Partner)

Lei Jiang

Beijing, China

30 March 2023

# Consolidated Balance Sheet

31 December 2022  
Unit: Yuan Currency: RMB

Item	Note	31 December 2022	31 December 2021
<b>Current assets</b>			
Cash and bank balances	V.1	7,500,378,674	8,219,320,889
Held-for-trading financial assets	V.2	6,700,827,160	7,579,988,489
Bills receivable	V.3	3,404,536,888	2,757,119,757
Accounts receivable	V.4	8,100,217,003	6,549,417,025
Trade receivables financing	V.5	2,918,688,837	2,910,527,667
Prepayments	V.6	715,524,335	344,522,352
Other receivables	V.7	186,845,646	199,941,167
Including: Interest receivable		–	–
Dividends receivable		–	90,000
Inventories	V.8	5,821,582,845	4,921,087,633
Contract assets	V.9	431,453,713	308,318,797
Non-current assets due within one year	V.10	340,751,629	–
Other current assets	V.11	322,397,826	852,738,172
<b>Total current assets</b>		<b>36,443,204,556</b>	<b>34,642,981,948</b>
<b>Non-current assets:</b>			
Long-term receivables		1,716,722	4,027,705
Long-term equity investments	V.12	463,550,882	611,727,358
Other equity instrument investments	V.13	152,673,525	112,400,000
Fixed assets	V.14	4,802,515,644	3,964,429,248
Construction in progress	V.15	453,599,990	921,284,020
Right-of-use assets	V.16	207,002,345	129,873,626
Intangible assets	V.17	632,504,419	713,241,582
Development expenditure	V.18	429,162,131	366,577,298
Goodwill	V.19	185,853,237	191,115,323
Long-term prepaid expenses	V.20	33,086,341	40,688,040
Deferred tax assets	V.21	559,543,555	605,752,717
Other non-current assets	V.22	4,145,141,437	1,846,646,362
<b>Total non-current assets</b>		<b>12,066,350,228</b>	<b>9,507,763,279</b>
<b>Total assets</b>		<b>48,509,554,784</b>	<b>44,150,745,227</b>



# Consolidated Balance Sheet

31 December 2022

Unit: Yuan Currency: RMB

Item	Note	31 December 2022	31 December 2021
<b>Current liabilities:</b>			
Short-term loans	V.23	454,374,494	389,550,036
Bills payable	V.24	2,618,840,644	1,640,341,546
Accounts payable	V.25	6,086,488,039	4,677,716,033
Receipts in advance		–	–
Contract liabilities	V.26	639,885,805	828,709,519
Employee benefits payable	V.27	173,247,266	143,687,549
Taxes payable	V.28	301,155,951	190,170,858
Other payables	V.29	983,217,920	753,174,560
Including: Interest payable		–	–
Dividends payable		1,715,000	–
Non-current liabilities due within one year	V.30	375,909,378	428,664,506
Other current liabilities	V.31	68,792,364	99,227,805
<b>Total current liabilities</b>		<b>11,701,911,861</b>	<b>9,151,242,412</b>
<b>Non-current liabilities:</b>			
Long-term loans	V.32	72,688,000	77,688,000
Lease liabilities	V.33	135,377,795	78,253,791
Long-term payables	V.34	–	525,195
Provisions	V.35	421,859,682	521,713,812
Deferred income	V.36	857,082,488	976,067,861
Deferred tax liabilities	V.21	16,917,974	32,201,270
Other non-current liabilities		7,985,802	20,408,448
<b>Total non-current liabilities</b>		<b>1,511,911,741</b>	<b>1,706,858,377</b>
<b>Total liabilities</b>		<b>13,213,823,602</b>	<b>10,858,100,789</b>

# Consolidated Balance Sheet

31 December 2022  
Unit: Yuan Currency: RMB

Item	Note	31 December 2022	31 December 2021
<b>Owners' (Shareholders') equity</b>			
Paid-in capital (or share capital)	V.37	<b>1,416,236,912</b>	1,416,236,912
Capital reserve	V.38	<b>10,511,448,364</b>	10,519,465,513
Other comprehensive income	V.39	<b>-217,184,032</b>	-208,084,629
Special reserve	V.40	<b>39,091,759</b>	30,785,734
Surplus reserve	V.41	<b>2,921,038,979</b>	2,545,778,284
Retained earnings	V.42	<b>19,860,068,021</b>	18,316,811,951
<b>Total equity attributable to owners (shareholders) of the parent company</b>		<b><u>34,530,700,003</u></b>	<u>32,620,993,765</u>
<b>Non-controlling interests</b>		<b><u>765,031,179</u></b>	<u>671,650,673</u>
<b>Total owners' (shareholders') equity</b>		<b><u>35,295,731,182</u></b>	<u>33,292,644,438</u>
<b>Total liabilities and (owners') shareholders' equity</b>		<b><u>48,509,554,784</u></b>	<u>44,150,745,227</u>

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**



# The Company's Balance Sheet

At 31 December 2022

Unit: Yuan Currency: RMB

Item	Note	31 December 2022	31 December 2021
<b>Current assets</b>			
Cash and bank balances		3,939,270,089	5,514,146,561
Held-for-trading financial assets		6,209,321,228	6,624,150,077
Bills receivable		3,103,502,967	2,450,742,139
Accounts receivable	XV.1	6,523,670,642	4,878,414,970
Trade receivables financing		2,256,797,045	2,301,829,596
Prepayments		363,384,121	176,060,834
Other receivables	XV.2	631,927,051	754,644,349
Including: Interest receivable		–	–
Dividends receivable		266,056,100	242,006,181
Inventories		3,938,642,262	3,516,881,961
Contract assets		253,600,250	78,976,234
Non-current assets due within one year		347,351,629	–
Other current assets		57,185,232	626,036,437
<b>Total current assets</b>		<b>27,624,652,516</b>	<b>26,921,883,158</b>
<b>Non-current assets</b>			
Long-term receivables		1,779,387,316	1,858,637,704
Long-term equity investments	XV.3	8,871,388,057	6,037,237,536
Other equity instrument investments		152,673,525	112,400,000
Fixed assets		1,062,432,627	2,192,500,738
Construction in progress		224,180,279	826,575,159
Right-of-use assets		109,547,550	45,910,923
Intangible assets		205,034,074	270,815,456
Development expenditures		332,993,502	238,978,574
Long-term prepaid expenses		9,950,840	11,520,121
Deferred tax assets		172,410,574	266,660,119
Other non-current assets		3,661,227,108	1,543,741,355
<b>Total non-current assets</b>		<b>16,581,225,452</b>	<b>13,404,977,685</b>
<b>Total assets</b>		<b>44,205,877,968</b>	<b>40,326,860,843</b>

# The Company's Balance Sheet

At 31 December 2022  
Unit: Yuan Currency: RMB

Item	Note	31 December 2022	31 December 2021
<b>Current liabilities</b>			
Short-term loans		—	—
Bills payable		1,844,271,052	1,073,417,447
Trade payables		5,521,125,412	5,189,271,956
Contract liabilities		411,327,742	652,306,273
Employee benefits payable		64,138,637	51,436,647
Taxes payable		86,581,981	41,183,857
Other payables		806,432,422	612,386,268
Including: Interest payable		—	—
Dividends payable		—	—
Non-current liabilities due within one year		235,582,101	316,059,820
Other current liabilities		52,722,792	84,024,375
<b>Total current liabilities</b>		<b>9,022,182,139</b>	<b>8,020,086,643</b>
<b>Non-current liabilities:</b>			
Long-term loans		72,688,000	77,688,000
Lease liabilities		87,271,861	36,820,757
Long-term payables		—	525,195
Provisions		304,908,203	440,887,930
Deferred income		263,109,197	394,318,889
Deferred tax liabilities		—	—
Other non-current liabilities		7,985,802	20,408,448
<b>Total non-current liabilities</b>		<b>735,963,063</b>	<b>970,649,219</b>
<b>Total liabilities</b>		<b>9,758,145,202</b>	<b>8,990,735,862</b>
<b>Owners' (Shareholders') equity:</b>			
Paid-in capital (or share capital)		1,416,236,912	1,416,236,912
Capital reserve		10,579,503,575	10,579,503,575
Other comprehensive income		-56,892,606	-52,647,013
Special reserve		5,174,513	4,621,477
Surplus reserve		2,921,038,979	2,545,778,284
Retained earnings		19,582,671,393	16,842,631,746
<b>Total owners' (shareholders') equity</b>		<b>34,447,732,766</b>	<b>31,336,124,981</b>
<b>Total liabilities and (owners') shareholders' equity</b>		<b>44,205,877,968</b>	<b>40,326,860,843</b>

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Consolidated Income Statement

From January to December 2022  
Unit: Yuan Currency: RMB

Item	Note	2022	2021
I. Total operating income		<b>18,033,778,561</b>	15,121,167,406
Including: Operating income	V.43	<b>18,033,778,561</b>	<u>15,121,167,406</u>
II. Total operating costs		<b>15,814,509,340</b>	13,615,410,439
Including: Operating costs	V.43	<b>12,139,166,025</b>	10,019,418,812
Taxes and surcharges	V.44	<b>116,172,989</b>	116,396,054
Selling expenses	V.45	<b>1,098,172,993</b>	1,050,331,762
Administrative expenses	V.46	<b>889,981,843</b>	813,021,020
Research and development expenses	V.47	<b>1,761,914,969</b>	1,690,047,967
Financial expenses	V.48	<b>-190,899,478</b>	-73,805,176
Including: Interest expenses		<b>20,964,320</b>	21,068,951
Interest income		<b>-204,124,028</b>	-95,501,635
Add: Other income	V.49	<b>572,207,370</b>	533,085,368
Investment income ("-" for losses)	V.50	<b>-41,999,539</b>	33,608,925
Including: Gains from investments in associates and joint ventures		<b>-84,856,551</b>	-18,083,858
Gains from derecognition of financial assets measured at amortised cost		<b>-15,852,222</b>	-9,102,199
Gains from changes in fair value ("-" for losses)	V.51	<b>166,033,744</b>	71,130,766
Credit losses ("-" for losses)	V.52	<b>-61,637,487</b>	121,825,631
Impairment losses ("-" for losses)	V.53	<b>73,345,052</b>	-161,869,899
Gains from asset disposals ("-" for losses)	V.54	<b>4,077,357</b>	<u>-2,072,439</u>
III. Operating profit ("-" for loss)		<b>2,931,295,717</b>	2,101,465,319
Add: Non-operating income	V.55	<b>11,348,934</b>	24,630,560
Less: Non-operating expenses	V.56	<b>1,096,078</b>	<u>3,012,417</u>
IV. Profit before income tax ("-" for losses)		<b>2,941,548,573</b>	2,123,083,462
Less: Income tax expenses	V.57	<b>349,575,746</b>	<u>88,476,513</u>

# Consolidated Income Statement

From January to December 2022  
Unit: Yuan Currency: RMB

Item	Note	2022	2021
V. Net profit for the year ("-" for losses)		<b>2,591,972,827</b>	2,034,606,949
(I) Net profit classified by continuity of operations ("-" for net loss):			
1. Net profit from continuing operations ("-" for net loss)		<b>2,591,972,827</b>	2,034,606,949
2. Net profit from operations ("-" for net loss)		<u>-</u>	<u>-</u>
(II) Net profit classified by ownership ("-" for net loss):			
1. Net profit attributable to shareholders of the Company ("-" for net losses)		<b>2,555,823,375</b>	2,017,694,796
2. Net profit attributable to non-controlling interests ("-" for net losses)		<b>36,149,452</b>	16,912,153
VI. Other comprehensive income, net of tax	V.39	<b>-9,287,781</b>	-56,257,300
(I) Other comprehensive income attributable to shareholders of the Company, net of income tax		<b>-9,099,403</b>	-55,745,898
1. Items that will not reclassified to profit or loss		-	-
2. Items that may be reclassified profit or loss		<b>-9,099,403</b>	-55,745,898
(1) Changes in fair value of other debt investments		<b>-3,016,907</b>	-32,632,221
(2) Translation differences arising from translation of foreign currency financial statements		<b>-6,082,496</b>	-23,113,677
(II) Other comprehensive income (net of tax) attributable to non-controlling interests		<b>-188,378</b>	-511,402
VII. Total comprehensive income		<b>2,582,685,046</b>	1,978,349,649
(I) Total comprehensive income attributable to shareholders of the Company		<b>2,546,723,972</b>	1,961,948,898
(II) Total comprehensive income attributable to non-controlling interests		<b>35,961,074</b>	16,400,751
VIII. Earnings per share:			
(I) Basic earnings per share (RMB/share)	XVI.2	<b>1.80</b>	1.63
(II) Diluted earnings per share (RMB/share)	XVI.2	<b>1.80</b>	1.63

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**



# The Company's Income Statement

From January to December 2022

Unit: Yuan Currency: RMB

Item	Note	2022	2021
I. Operating income	XVII.4	<b>13,892,435,340</b>	11,593,525,372
Less: Operating costs	XVII.4	<b>11,231,208,435</b>	9,069,167,725
Taxes and surcharges		<b>36,232,138</b>	55,773,395
Selling expenses		<b>671,214,429</b>	669,585,054
Administrative expenses		<b>441,258,275</b>	387,697,032
Research and development expenses		<b>782,428,583</b>	758,260,222
Financial expenses		<b>-232,694,793</b>	-70,996,646
Including: Interest expenses		<b>12,286,330</b>	13,841,955
Interest income		<b>-184,201,182</b>	-108,316,884
Add: Other income		<b>162,869,355</b>	105,007,530
Investment income ("-" for losses)	XVII.5	<b>2,343,066,111</b>	1,395,700,747
Including: Gains from investments in associates and joint ventures		<b>14,457,877</b>	4,356,645
Gains from derecognition of financial assets measured at amortised cost		<b>-15,604,257</b>	-8,640,000
Gains from changes in fair value ("-" for losses)		<b>153,103,396</b>	68,292,354
Credit losses ("-" for losses)		<b>-38,435,781</b>	101,489,856
Impairment losses ("-" for losses)		<b>115,583,926</b>	-128,682,441
Gains from disposal of assets ("-" for losses)		<b>248,143,727</b>	-3,591,360
II. Operating profit ("-" for loss)		<b>3,947,119,007</b>	2,262,255,276
Add: Non-operating income		<b>5,018,893</b>	10,823,867
Less: Non-operating expenses		<b>507,458</b>	13,982
III. Profit before income tax ("-" for loss)		<b>3,951,630,442</b>	2,273,065,161
Less: Income tax expenses		<b>199,023,490</b>	71,732,311
IV. Net profit for the year ("-" for net loss)		<b>3,752,606,952</b>	2,201,332,850
(I) Net profit from continuing operations ("-" for net loss)		<b>3,752,606,952</b>	2,201,332,850
(II) Net profit from operations ("-" for net loss)		<b>-</b>	<b>-</b>
V. Other comprehensive income, net of tax		<b>-4,245,593</b>	-26,548,819
(I) Items that will not be reclassified to profit or loss		<b>-</b>	<b>-</b>
(II) Items that may be reclassified to profit or loss		<b>-4,245,593</b>	-26,548,819
1. Changes in fair value of other debt investments		<b>-3,687,646</b>	-25,773,531
2. Translation differences arising from translation of foreign currency financial statements		<b>-557,947</b>	-775,288
VI. Total comprehensive income for the year		<b>3,748,361,359</b>	2,174,784,031

Legal representative:

**Li Donglin**

Chief Financial Officer:

**Liu Zehua**

Head of Accounting Department:

**Sun Shan**

# Consolidated Cash Flow Statement

From January to December 2022  
Unit: Yuan Currency: RMB

Item	Note	2022	2021
<b>I. Cash flows from operating activities:</b>			
Cash receipts from the sale of goods and the rendering of services		17,064,672,452	16,485,788,328
Receipts of tax refunds		1,321,499,212	127,056,987
Other cash receipts relating to operating activities	VII.58	535,863,321	1,037,720,409
<b>Sub-total of cash inflows from operating activities</b>		<b>18,922,034,985</b>	<b>17,650,565,724</b>
Cash payments for goods purchased and services received		11,224,539,032	10,354,203,877
Cash payments to and on behalf of employees		2,516,493,793	2,372,644,345
Payment of various taxes		1,681,664,026	1,193,066,783
Payment for other operating activities	VII.58	1,458,102,675	1,580,396,061
<b>Sub-total of cash outflows from operating activities</b>		<b>16,880,799,526</b>	<b>15,500,311,066</b>
<b>Net cash inflow from operating activities</b>	VII.59	<b>2,041,235,459</b>	<b>2,150,254,658</b>
<b>II. Cash flows from investing activities:</b>			
Cash receipts from recovery of investments		21,450,100,000	15,278,000,000
Cash receipts from investment income		311,737,678	114,986,871
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		22,412,538	2,741,729
<b>Sub-total of cash inflows from investing activities</b>		<b>21,784,250,216</b>	<b>15,395,728,600</b>
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		953,443,703	974,003,215
Other cash payments relating to investing activities		23,093,793,525	20,435,467,700
<b>Sub-total of cash outflows from investing activities</b>		<b>24,047,237,228</b>	<b>21,409,470,915</b>
<b>Net cash outflow from investing activities</b>		<b>-2,262,987,012</b>	<b>-6,013,742,315</b>



# Consolidated Cash Flow Statement

From January to December 2022

Unit: Yuan Currency: RMB

Item	Note	2022	2021
<b>III. Cash flows from financing activities:</b>			
Cash receipts from capital contributions		170,000,000	7,698,862,046
Including: Cash receipts from capital contributions from minority shareholders of subsidiaries		170,000,000	255,650,000
Cash receipts from borrowings		267,858,093	265,136,226
<b>Sub-total of cash inflows from financing activities</b>		<b>437,858,093</b>	<b>7,963,998,272</b>
Cash repayments of borrowings		156,965,431	232,377,298
Cash payments for distribution of dividends or profits or settlement of interest expenses		665,530,374	673,386,564
Including: Payments for distribution of dividends or profits to non-controlling shareholders of subsidiaries		18,613,012	13,390,661
Other cash payments relating to financing activities		206,745,703	83,306,940
<b>Sub-total of cash outflows from financing activities</b>		<b>1,029,241,508</b>	<b>989,070,802</b>
<b>Net cash outflow from financing activities</b>		<b>-591,383,415</b>	<b>6,974,927,470</b>
<b>IV. Effect of foreign exchange rate changes on cash and cash equivalents</b>		<b>4,946,393</b>	<b>-12,269,246</b>
<b>V. Net increase in cash and cash equivalents</b>		<b>-808,188,575</b>	<b>3,099,170,567</b>
Add: Opening balance of cash and cash equivalents		7,883,060,105	4,783,889,538
<b>VI. Closing balance of cash and cash equivalents</b>		<b>7,074,871,530</b>	<b>7,883,060,105</b>

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# The Company's Cash Flow Statement

From January to December 2022  
Unit: Yuan Currency: RMB

Item	Note	2022	2021
<b>I. Cash flows from operating activities:</b>			
Cash receipts from the sale of goods and the rendering of services		10,384,400,255	12,834,054,174
Receipts of tax refunds		832,824,129	21,461,851
Other cash receipts relating to operating activities		187,458,467	450,812,652
<b>Sub-total of cash inflows from operating activities</b>		<b>11,404,682,851</b>	<b>13,306,328,677</b>
Cash payments for goods purchased and services received		8,651,951,967	9,796,728,587
Cash payments to and on behalf of employees		1,201,705,232	1,051,799,896
Payment of various taxes		924,179,084	512,283,679
Payment for other operating activities		951,568,574	1,262,954,824
<b>Sub-total of cash outflows from operating activities</b>		<b>11,729,404,857</b>	<b>12,623,766,986</b>
<b>Net cash outflow from operating activities</b>		<b>-324,722,006</b>	<b>682,561,691</b>
<b>II. Cash flows from investing activities:</b>			
Cash receipts from recovery of investments		18,557,469,166	14,587,000,000
Cash receipts from investment income		2,556,418,112	1,440,773,064
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		2,464,826,066	2,420,628
Net cash received for disposing of subsidiaries and other business units		–	1,663,389
Other cash receipts relating to investing activities		–	38,879,612
<b>Sub-total of cash inflows from investing activities</b>		<b>23,578,713,344</b>	<b>16,070,736,693</b>
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		722,544,646	720,727,890
Cash payments to acquire investments		23,577,184,750	19,100,796,619
Other cash payments relating to investing activities		–	1,479,689,010
<b>Sub-total of cash outflows from investing activities</b>		<b>24,299,729,396</b>	<b>21,301,213,519</b>
<b>Net cash outflow from investing activities</b>		<b>-721,016,052</b>	<b>-5,230,476,826</b>



# The Company's Cash Flow Statement

From January to December 2022

Unit: Yuan Currency: RMB

Item	Note	2022	2021
<b>III. Cash flows from financing activities:</b>			
Cash receipts from capital contributions		–	7,443,212,046
Cash receipts from borrowings		<b>54,393,810</b>	–
<b>Sub-total of cash inflows from financing activities</b>		<b>54,393,810</b>	7,443,212,046
Cash repayments of borrowings		<b>5,000,000</b>	5,000,000
Cash payments for distribution of dividends or profits or settlement of interest expenses		<b>646,171,282</b>	648,962,608
Other cash payments relating to financing activities		<b>48,101,167</b>	38,380,704
<b>Sub-total of cash outflows from financing activities</b>		<b>699,272,449</b>	692,343,312
<b>Net cash outflow from financing activities</b>		<b>-644,878,639</b>	6,750,868,734
<b>IV. Effect of foreign exchange rate changes on cash and cash equivalents</b>			
		<b>221,586</b>	-4,384,645
<b>V. Net increase in cash and cash equivalents</b>			
Add: Opening balance of cash and cash equivalents		<b>-1,690,395,111</b>	2,198,568,954
		<b>5,204,158,056</b>	3,005,589,102
<b>VI. Closing balance of cash and cash equivalents</b>			
		<b>3,513,762,945</b>	5,204,158,056

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Consolidated Statement of Changes in Owners' Equity

From January to December 2022  
Unit: Yuan Currency: RMB

Item	For the year ended 31 December 2022									
	Equity attributable to owners of the Company								Non-controlling interests	Total
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Sub-total			
I. Balance at the end of the previous year	1,416,236,912	10,519,465,513	-208,084,629	30,785,734	2,545,778,284	18,316,811,951	32,620,993,765	671,650,673	33,292,644,438	
II. Opening balance of the current year	1,416,236,912	10,519,465,513	-208,084,629	30,785,734	2,545,778,284	18,316,811,951	32,620,993,765	671,650,673	33,292,644,438	
III. Changes in equity during the period ("-" for decreases)	-	-8,017,149	-9,099,403	8,306,025	375,260,695	1,543,256,070	1,909,706,238	93,380,506	2,003,086,744	
(I) Total comprehensive income	-	-	-9,099,403	-	-	2,555,823,375	2,546,723,972	35,961,074	2,582,685,046	
(II) Owners' contributions and reduction in capital	-	-8,017,149	-	-	-	-	-8,017,149	75,239,148	67,221,999	
1. Capital contribution from owners	-	-	-	-	-	-	-	170,000,000	170,000,000	
2. Others	-	-8,017,149	-	-	-	-	-8,017,149	-94,760,852	-102,778,001	
(III) Appropriation of profits	-	-	-	-	375,260,695	-1,012,567,305	-637,306,610	-20,328,012	-657,634,622	
1. Appropriation for surplus reserve	-	-	-	-	375,260,695	-375,260,695	-	-	-	
2. Distributions to owners (or shareholders)	-	-	-	-	-	-637,306,610	-637,306,610	-20,328,012	-657,634,622	
(IV) Special reserve	-	-	-	8,306,025	-	-	8,306,025	2,508,296	10,814,321	
1. Transfer to special reserve in the period	-	-	-	56,294,032	-	-	56,294,032	4,300,747	60,594,779	
2. Amount utilised in the period	-	-	-	-47,988,007	-	-	-47,988,007	-1,792,451	-49,780,458	
(V) Others	-	-	-	-	-	-	-	-	-	
IV Closing balance of the current period	1,416,236,912	10,511,448,364	-217,184,032	39,091,759	2,921,038,979	19,860,068,021	34,530,700,003	765,031,179	35,295,731,182	

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Consolidated Statement of Changes in Owners' Equity

From January to December 2021

Unit: Yuan Currency: RMB

Item	For the year ended 31 December 2021								
	Equity attributable to owners of the Company							Non-controlling interests	Total
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Sub-total		
I. Balance at the end of the previous year	1,175,476,637	3,321,880,949	-152,338,731	25,247,257	2,325,644,999	17,156,557,050	23,852,468,161	407,122,243	24,259,590,404
II. Opening balance of the current year	1,175,476,637	3,321,880,949	-152,338,731	25,247,257	2,325,644,999	17,156,557,050	23,852,468,161	407,122,243	24,259,590,404
III. Changes in equity during the period ("-" for decreases)	240,760,275	7,197,584,564	-55,745,898	5,538,477	220,133,285	1,160,254,901	8,768,525,604	264,528,430	9,033,054,034
(I) Total comprehensive income	-	-	-55,745,898	-	-	2,017,694,796	1,961,948,898	16,400,751	1,978,349,649
(II) Owners' contributions and reduction in capital	240,760,275	7,202,451,771	-	-	-	-	7,443,212,046	255,650,000	7,698,862,046
1. Capital contribution from owners	240,760,275	7,202,451,771	-	-	-	-	7,443,212,046	255,650,000	7,698,862,046
(III) Appropriation of profits	-	-	-	-	220,133,285	-857,439,895	-637,306,610	-13,390,661	-650,697,271
1. Appropriation for surplus reserve	-	-	-	-	220,133,285	-220,133,285	-	-	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	-637,306,610	-637,306,610	-13,390,661	-650,697,271
(IV) Special reserve	-	-	-	5,538,477	-	-	5,538,477	1,001,133	6,539,610
1. Transfer to special reserve in the period	-	-	-	59,678,310	-	-	59,678,310	3,922,602	63,600,912
2. Amount utilised in the period	-	-	-	-54,139,833	-	-	-54,139,833	-2,921,469	-57,061,302
(V) Others	-	-4,867,207	-	-	-	-	-4,867,207	4,867,207	-
IV. Closing balance of the current period	<u>1,416,236,912</u>	<u>10,519,465,513</u>	<u>-208,084,629</u>	<u>30,785,734</u>	<u>2,545,778,284</u>	<u>18,316,811,951</u>	<u>32,620,993,765</u>	<u>671,650,673</u>	<u>33,292,644,438</u>

# The Company's Statement of Changes in Owners' Equity

From January to December 2022  
Unit: Yuan Currency: RMB

Item	For the year ended 31 December 2022						
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Total
I. Balance at the end of the previous year	1,416,236,912	10,579,503,575	-52,647,013	4,621,477	2,545,778,284	16,842,631,746	31,336,124,981
II. Opening balance of the current year	1,416,236,912	10,579,503,575	-52,647,013	4,621,477	2,545,778,284	16,842,631,746	31,336,124,981
III. Changes in equity during the period ("-" for decreases)	-	-	-4,245,593	553,036	375,260,695	2,740,039,647	3,111,607,785
(I) Total comprehensive income	-	-	-4,245,593	-	-	3,752,606,952	3,748,361,359
(II) Owners' contributions and reduction in capital	-	-	-	-	-	-	-
1. Capital contribution from owners	-	-	-	-	-	-	-
(III) Appropriation of profits	-	-	-	-	375,260,695	-1,012,567,305	-637,306,610
1. Appropriation for surplus reserve	-	-	-	-	375,260,695	-375,260,695	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	-637,306,610	-637,306,610
(IV) Special reserve	-	-	-	553,036	-	-	553,036
1. Transfer to special reserve in the period	-	-	-	22,919,749	-	-	22,919,749
2. Amount utilised in the period	-	-	-	-22,366,713	-	-	-22,366,713
(V) Others	-	-	-	-	-	-	-
IV. Closing balance of the current period	1,416,236,912	10,579,503,575	-56,892,606	5,174,513	2,921,038,979	19,582,671,393	34,447,732,766

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**



# The Company's Statement of Changes in Owners' Equity

From January to December 2021

Unit: Yuan Currency: RMB

Item	For the year ended 31 December 2021						
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Total
I. Balance at the end of the previous year	1,175,476,637	3,371,446,430	-26,098,194	4,296,322	2,325,644,999	15,498,738,791	22,349,504,985
II. Opening balance of the current year	1,175,476,637	3,371,446,430	-26,098,194	4,296,322	2,325,644,999	15,498,738,791	22,349,504,985
III. Changes in equity during the period ("-" for decreases)	240,760,275	7,208,057,145	-26,548,819	325,155	220,133,285	1,343,892,955	8,986,619,996
(I) Total comprehensive income	-	-	-26,548,819	-	-	2,201,332,850	2,174,784,031
(II) Owners' contributions and reduction in capital	240,760,275	7,202,451,771	-	-	-	-	7,443,212,046
1. Capital contribution from owners	240,760,275	7,202,451,771	-	-	-	-	7,443,212,046
(III) Appropriation of profits	-	-	-	-	220,133,285	-857,439,895	-637,306,610
1. Appropriation for surplus reserve	-	-	-	-	220,133,285	-220,133,285	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	-637,306,610	-637,306,610
(IV) Special reserve	-	-	-	325,155	-	-	325,155
1. Transfer to special reserve in the period	-	-	-	22,397,328	-	-	22,397,328
2. Amount utilised in the period	-	-	-	-22,072,173	-	-	-22,072,173
(V) Others	-	5,605,374	-	-	-	-	5,605,374
IV. Closing balance of the current period	1,416,236,912	10,579,503,575	-52,647,013	4,621,477	2,545,778,284	16,842,631,746	31,336,124,981



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## I. BASIC INFORMATION ABOUT THE COMPANY

### 1. General information

✓ Applicable  Not applicable

Zhuzhou CRRC Times Electric Co., Ltd. (the “Company”), is a joint stock limited company registered in Hunan Province, the People’s Republic of China (the “PRC”). It was jointly established by CRRC Zhuzhou Institute Co., Ltd. (hereinafter referred to as “CRRC ZELRI”), CRRC Changzhou Industrial Management Co., Ltd., CRRC Zhuzhou Locomotive Co., Ltd., CRRC Investment & Leasing Co., Ltd. and CRRC High-Tech Equipment Co., Ltd. on 26 September 2005.

In December 2006, the Company issued 414,644,000 H Shares (including H shares issued via the exercise of the over-allotment option) with a nominal value of RMB1 each through the Hong Kong Stock Exchange. The issue price was HKD5.3 per share. The total proceeds before deducting issuing expenses amounted to HKD2,197,613,000 (equivalent to approximately RMB2,209,968,000). These H shares were listed and traded on the Main Board of the Hong Kong Stock Exchange since December 2006. In October 2013, the Company issued 91,221,000 H Shares with a nominal value of RMB1 each through the Hong Kong Stock Exchange. The issue price was HKD25 per share. The total proceeds before deducting issuing expenses amounted to HKD2,280,525,000 (equivalent to approximately RMB1,803,872,470). These H shares were listed and traded on the Main Board of the Hong Kong Stock Exchange since October 2013. In September 2021, the Company issued 240,760,275 A shares with a nominal value of RMB1 each through the STAR Market of Shanghai Stock Exchange (“SSE STAR Market”). The issue price was RMB31.38 per share. The total proceeds before deducting issuing expenses amounted to RMB7,555,057,430. These H shares were listed and traded on SSE STAR Market since September 2021. Consequently upon the issue of the A Shares, the registered capital and share capital of the Company was increased to RMB1,416,236,912.

The Company is headquartered at Times Road, Shifeng District, Zhuzhou City, Hunan Province. The Company and its subsidiaries (together, the “Group”) are principally engaged in the sale and manufacture of railway transportation equipment

### 2. Scope of consolidated financial statements

✓ Applicable  Not applicable

The consolidated and Company’s financial statements have been approved by the Company’s board of directors on 30 March 2023.

Details of the scope of consolidated financial statements for the current period are set out in Note VII “Interests in Other Entities”. Details of the changes in the scope of consolidated financial statements for the current period are set out in Note VI “Changes in scope of consolidation”.





# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## II. BASIS OF PREPARATION OF FINANCIAL STATEMENTS

### 1. Basis of preparation

The financial statements have been prepared on the going concern basis.

The Group implements the Accounting Standards for Business Enterprises and related regulations promulgated by the Ministry of Finance of the People's Republic of China ("the MoF"). In addition, the Group also disclosed relevant financial information in accordance with the Reporting Rules for the Disclosure of Information of Companies Offering Public Securities No. 15 – General Requirements for Financial Reporting (2014 Amendment), the Hong Kong Companies Ordinance and the Listing Rules for Securities of the Stock Exchange of Hong Kong Limited.

### 2. Going concern

Applicable  Not applicable

The Group evaluated its ability to continue as a going concern for the 12 months from 31 December 2022 and did not notice any events or circumstances that may cast significant doubt upon its ability to continue as a going concern. Therefore, the financial statements have been prepared on a going concern basis.

### 3. Basis of accounting and principle of measurement

Applicable  Not applicable

The Group has adopted the accrual basis of accounting. Except for certain financial instruments which are measured at fair value, the Group adopts the historical cost as the principle of measurement. When assets are impaired, impairment provisions for assets are recognised in accordance with relevant requirements.

The historical cost of an asset when it is acquired or created is the value of the costs incurred in acquiring or creating the asset, comprising the fair value of consideration paid to acquire or create the asset. The historical cost of a liability when it is incurred or taken on is the value of the consideration received to incur or take on the liability, or the contractual amount for taken current obligations, or the amount of cash and cash equivalents expected to be paid to settle the liabilities in normal course of business.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using valuation technique. Fair value measurement and disclosure in the financial statements are determined according to the above basis.

The Group considers the ability of market participants to put assets into best use for economic benefits or sell the assets to other market participants who are able to put the assets into best use for economic benefits when measuring non-financial assets at fair value.

For financial assets with transaction prices as the fair value upon initial recognition and the valuation technique of unobservable inputs employed in the subsequent measurement at the fair value, the technique is adjusted during the valuation to match the initial recognition results determined with the transaction prices.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## II. BASIS OF PREPARATION OF FINANCIAL STATEMENTS (continued)

### 3. Basis of accounting and principle of measurement (continued)

Fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety:

- Level 1 inputs: unadjusted quoted prices in active markets that are observable at the measurement date for identical assets or liabilities;
- Level 2 inputs: inputs other than Level 1 inputs that are either directly or indirectly observable for underlying assets or liabilities;
- Level 3 inputs: inputs that are unobservable for underlying assets or liabilities.

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

Specific accounting policies and accounting estimates:

Applicable  Not applicable

### 1. Statement of compliance with the ASBE

The financial statements of the Company have been prepared in accordance with the ASBE, and present truly and completely, the consolidated and Company's financial position as at 31 December 2022, and the consolidated and Company's operating results, the consolidated and the Company's changes in shareholders' equity and cash flows for the period from 1 January to 31 December 2022.

### 2. Accounting period

The accounting period of the Group is from 1 January to 31 December of each calendar year.

### 3. Business cycle

Applicable  Not applicable

Business cycle refers to the period since purchasing assets for production till the realisation of cash or cash equivalents. The Group's business cycle is 12 months in general.

### 4. Reporting currency

Renminbi ("RMB") is the currency of the primary economic environment in which the Company and its domestic subsidiaries operate. Therefore, the Company and its domestic subsidiaries choose RMB as their functional currency. The Company's foreign subsidiaries determine their functional currency on the basis of the primary economic environment in which they operate. The Company adopts RMB to prepare its financial statements.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 5. The accounting treatment of business combinations involving enterprises under common control and business combinations not involving enterprises under common control

Applicable    Not applicable

A transaction or event constitutes a business combination when the Group obtains control of one or more entities (or a group of assets or net assets) which meet the definition of a business. Business combinations are classified as either business combinations involving enterprises under common control or business combinations not involving enterprises under common control.

For a transaction not involving enterprises under common control, the acquirer determines whether an acquired set of assets constitutes a business. The Group may elect to apply the simplified assessment method, the concentration test, to determine whether an acquired set of assets is a business. If the concentration test is met, the set of assets is determined not to be a business, no further assessment is needed. If the concentration test is not met, the Group should perform the assessment according to the guidance on the determination of a business.

When the set of assets the Group acquired does not constitute a business, acquisition costs should be allocated to each identifiable asset and liability on the basis of their relative fair values at the date of acquisition. The accounting treatments for business combinations described below are not applied.

#### **(1) Business combinations involving entities under common control**

A business combination involving entities under common control is a business combination in which all of the combining entities are ultimately controlled by the same party or parties both before and after the business combination, and that control is not transitory. For a business combination involving entities under common control, on the combination date, the party that obtains control of another entity in the combination is the acquirer, while the other entity is the acquiree. The combination date is the date on which the acquirer obtains control of the acquiree.

Assets and liabilities obtained shall be measured at their respective carrying amounts as recorded by the combined 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 (or the aggregate face value of shares issued as consideration) 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.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 5. The accounting treatment of business combinations involving enterprises under common control and business combinations not involving enterprises under common control (continued)

#### **(2) Business combinations not involving enterprises under common control and goodwill**

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

The cost of combination is the aggregate of fair values of the assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer in exchange for control of the acquiree. The intermediary expenses incurred by the acquirer in respect of auditing, legal services, valuation and consultancy services, etc. and other associated administrative expenses attributable to the business combination are recognised in profit or loss when they are incurred.

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 recognised 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 recognises the remaining difference immediately in profit or loss for the current year.

The goodwill arising on a business combination should be separately disclosed in the consolidated financial statement and measured by the amount of costs deducted by the accumulative provision for impairment.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 6. Basis for preparation of consolidated financial statements

✓ Applicable     Not applicable

The scope of consolidation in the consolidated financial statements is determined on the basis of control. Control is achieved when the Company has power over the investee; is exposed or has rights to variable returns from its involvement with the investee, and has the ability to use its power to affect its returns. The investor shall make a judgment on whether to control the investee on the basis of comprehensive consideration of all relevant facts and circumstances. If changes of related facts and situations lead to changes of related elements of control, the Group will conduct reassessment.

The combination of subsidiaries begins with the Group's control over the subsidiary, and ceases with the Group's losing control of the subsidiary.

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

No matter when the business combination occurs in the reporting period, subsidiaries acquired through a business combination involving enterprises under common control or the party being absorbed under merger by absorption are included in the Group's scope of consolidation as if they had been included in the scope of consolidation from the date when they first came under the common control of the ultimate controlling party. Their operating results and cash flows from the beginning of the earliest reporting period or from the date when they first came under the common control of the ultimate controlling party are included in the consolidated income statement and consolidated cash flow statements, as appropriate.

The significant accounting policies and accounting periods adopted by the subsidiaries are determined based on the uniform accounting policies and accounting periods set out by the Company. All significant intra-group balances and transactions are eliminated on consolidation.

The portion of subsidiaries' equity that is not attributable to the Company is treated as minority interests and presented as "minority interests" in the consolidated balance sheet within shareholders' equity. The portion of net profits or losses of subsidiaries for the period attributable to minority interests is presented as "Profit or loss attributable to minority interests" in the consolidated income statement below the "net profit" line item.

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

Acquisition of non-controlling interests or disposal of 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 the Company's 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 shareholders' equity. If the capital reserve is not sufficient to absorb the difference, the excess is adjusted against retained earnings.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 6. Basis for preparation of consolidated financial statements (continued)

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 recognised as investment income in the period in which control is lost, and offset goodwill simultaneously. 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 arrangements and accounting methods for joint management

Applicable  Not applicable

The joint arrangement includes joint operations and joint ventures. The classification is determined by considering the structure, legal form and contract terms of the arrangement according to the rights and obligations of the joint party in the joint arrangement. Joint operation refers to whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint venture arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement.

All joint arrangements of the Group are joint ventures using the equity method. Refer to Note V 12. Long-term equity investments accounted for using the equity method" for details.

### 8. Recognition criteria of cash and cash equivalent

Cash comprises cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents are the Group's short-term (generally due within three months from the date of purchase), 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

Applicable  Not applicable

#### (1) Transactions denominated in foreign currencies

A foreign currency transaction is recorded, on initial recognition, by applying the spot exchange rate on the date of the transaction.

At the balance sheet date, foreign currency monetary items are translated into the functional currency 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 recognised in profit or loss for the period, except that (I) exchange differences related to a specific-purpose borrowing denominated in foreign currency that qualify for capitalisation are capitalised as part of the cost of the qualifying asset during the capitalisation period; (II) exchange differences arising from changes in the carrying amounts (other than the amortised cost) of monetary items that classified as measured at FVOCI are recognised as other comprehensive income.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

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

#### (1) Transactions denominated in foreign currencies (continued)

When the consolidated financial statements include foreign operations, if there is foreign currency monetary item constituting a net investment in a foreign operation, exchange difference arising from changes in exchange rates are recognised as “exchange differences arising on translation of financial statements denominated in foreign currencies” in other comprehensive income, and in profit and loss for the period upon disposal of the foreign operation.

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 recognised in profit and loss or as other comprehensive income.

#### (2) Translation of financial statements denominated in foreign currencies

For the purpose of preparing the consolidated financial statements, financial statements of a foreign operation are translated from the foreign currency into RMB using the following method: all the assets and liability items in the balance sheet are translated using the spot exchange rates at the balance sheet date, shareholders' equity items except of “retained earnings” are translated at the spot exchange rates at the date on which such items arose; income and expense items in the income statement are translated at the average exchange rates during the period in which the transaction occurs. Translation differences of financial statements denominated in foreign currencies arising hereby are recognised as other comprehensive income. When a foreign operation is disposed of, other comprehensive income associated with such foreign operation is transferred to profit or loss for the period in which it is disposed of. In case of a disposal or other reason that leads to the reduction of the proportion of foreign operation interests held but does not result in the Group losing control of a foreign operation, the proportionate share of accumulated exchange differences arising on translation of financial statements are re-attributed to non-controlling interests and are not recognised in profit and loss. For partial disposals of equity interests in foreign operations which are associates or joint ventures, the proportionate share of the accumulated exchange differences arising on translation of financial statements of foreign operations is reclassified to profit or loss.

Cash flows arising from a transaction in foreign currency and the cash flows of a foreign subsidiary are translated at the average exchange rate for the period 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 exchange rate changes on cash and cash equivalents”.





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments

Applicable    Not applicable

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

For financial assets purchased or sold in a regular way, the Group recognises assets acquired and liabilities assumed on a trade date basis, or derecognises the assets sold on a trade date basis, confirms the disposal profits or losses and the receivables collected from the buyer.

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 recognised in profit or loss. For other financial assets and financial liabilities, transaction costs are included in their initial recognised amounts. For accounts receivable excluding significant financing components or regardless of financing components of contracts less than one year recognised based on the Accounting Standards for Business Enterprises No. 14 – Revenue (the “Revenue Standards”), accounts receivable initially recognised shall be measured at transaction price defined based on the Revenue Standards on initial recognition.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expense over each 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 (i.e. pre-repayment, extension, call option or other similar options, etc.) without considering future impairment losses under expected credit loss model.

The amortised cost of a financial asset or a financial liability is an accumulatively amortised amount arising from the initially recognised amount of the financial asset or the financial liability deducting repaid principals plus or less amortisation of balances between the initially recognised 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).





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (1) Classification, recognition and measurement of financial assets

Subsequent to initial recognition, the Group's various financial assets are subsequently measured at amortised cost, fair value through other comprehensive income and fair value through profit or loss.

If contractual terms of the financial asset give rights 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 to hold financial assets in order to collect contractual cash flows, such asset is classified into financial asset measured at amortised cost. Such types of financial assets mainly comprise cash and bank balances, bills receivable, accounts receivable, other receivables, debt investments, and long-term receivables, etc.

The contract clauses of financial assets stipulate that cash flows generated on a specified date are only payments of principal and interest based on the amount of outstanding principal 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 financial assets that meet the above conditions are classified as at FVTOCI. Such type of financial assets with a period of over one year since obtaining are presented as other debt investments and financial assets due within one year (inclusive) since the balance sheet date are presented as non-current assets due within one year; accounts receivable and bills receivable at FVTOCI are presented as accounts receivable financing, and other financial assets with a period within one year (inclusive) upon obtaining are presented as other current assets.

Upon initial recognition, the Group irrevocably designates non-held-for-trading equity instrument investments except contingent considerations recognised in the business combination not under the same control as financial assets at FVTOCI based on individual financial assets. Such types of financial assets are presented as other equity instrument investments.

Financial assets meeting one of the following requirements indicate that the financial assets held by the Group are for trading:

- The purpose of obtaining relevant financial assets is mainly for sale or buy-back in the near future.
- Relevant financial assets are part of the identifiable financial instrument combination under centralised management upon initial recognition and there is objective evidence indicating that exists recently a short-term profit model.
- Relevant financial assets are derivatives, except for derivatives meet the definition of financial guaranteed contracts as well as derivatives designated as effective hedging instruments.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (1) Classification, recognition and measurement of financial assets (continued)

Financial assets at fair value through profit and loss ("FVTPL") include financial assets classified at fair value through profit and loss and those designated as at fair value through profit or loss.

- Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI are recognised into FVTPL.
- Upon initial recognition, to eliminate or significantly reduce accounting mismatches, the Group may irrevocably designate financial assets as measured at FVTPL.

Financial assets at fair value through profit and loss are presented under held-for-trading financial assets. Financial assets due over one year since the balance sheet date or without a fixed expiring date are presented under other noncurrent financial assets.

#### (a) Financial assets measured at amortised cost

Financial assets at amortised cost are measured subsequently at amortised cost using the effective interest method. Gains or losses arising from impairment or derecognition are recorded to profit or loss for the period.

The Group recognises interest income for financial assets measured at amortised cost using the effective interest method. The Group determines the interest income by multiplying the gross carrying amount of financial assets by effective rate except the following situations:

- For purchased or originated credit-impaired financial assets, the Group recognises their interest income based on amortised cost and credit-adjusted effective interest rate of such financial assets since initial recognition.
- For purchased or originated financial assets without credit impairment but subsequently becoming credit impaired, the Group subsequently recognises their interest income based on amortised costs and effective interest rate of such financial assets. If there exists no credit impairment due to improvement in credit risk of the financial instruments subsequently and the improvement is relevant to an event incurred subsequent to the application of above provisions, the Group recognises interest income based on applying effective interest rate to carrying amount of the financial assets.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (1) Classification, recognition and measurement of financial assets (continued)

##### (b) Financial assets at FVTOCI

Except that gains or losses on impairment relating to financial assets at fair value through other comprehensive income, interest income calculated using effective interest rate and exchange gains or losses are recognised in profit or loss for the period, changes in fair value in the above financial assets are included in other comprehensive income. The amount of the financial assets included into profit or loss of each period shall be regarded as equal as the amount measured at amortised cost through profit or loss over each period. Upon derecognition of the financial assets, cumulative gains or losses previously recognised in other comprehensive income are transferred and reclassified into profit or loss for the period.

For non-held-for-trading equity investment designated as financial assets at FVTOCI, changes in fair value are recognised in other comprehensive income. Upon derecognition of the financial asset, cumulative gains or losses previously recognised in other comprehensive income are transferred and included in retained earnings. During the period for which the Group holds the investments in the non-held-for-trading equity instruments, dividend income is recognised and included in profit or loss for the period when the Group's right to collect dividend has been established; it is probable that economic benefits associated with dividend will flow to the Group; and the amount of dividend can be reliably measured.

##### (c) Financial assets classified as at FVTPL

Financial assets at FVTPL are measured subsequently at fair value, with gains or losses arising from changes in the fair value and dividend and interest income relevant to the financial assets are recorded to profit or loss for the period.

#### (2) Impairment of financial instruments

The Group recognises impairment losses for expected credit losses on financial instruments measured at amortised cost, categorised into FVTOCI, lease receivables, contract assets, loan commitments and financial guarantee contracts.

The Group measures loss allowance for contract assets and receivables arising from transactions regulated by Revenue Standard, and lease receivables arising from transactions regulated by the Accounting Standards for Business Enterprises No. 21 – Leases based on the amount of lifetime ECL.

For other financial instruments, except for the purchased or originated to be impaired, the Group re-evaluate changes in credit risk of relevant financial instruments since initial recognition at each balance sheet date. If the credit risk of the above financial instruments has increased significantly since initial recognition, the Group measures loss allowance based on the amount of full lifetime; if credit risk of the financial instrument does not increase significantly since initial recognition, the Group recognises loss allowance based on 12-month expected credit loss of the financial instrument. Increase or reversal of credit loss allowance is included in profit or loss as loss/gain on impairment. Except for the financial assets classified as FVTOCI, financial guarantee contract and loan commitment, credit loss allowance offsets the carrying amount of financial assets. For the financial assets classified as FVTOCI, the Group recognises credit loss allowance in other comprehensive income, which does not decrease the carrying amount of such financial assets in the balance sheet.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (2) Impairment of financial instruments (continued)

The Group measured loss allowance at the full lifetime ECL of the financial instruments in the prior accounting period. However, as at the balance sheet date for the current period, for the above financial instruments, due to failure to qualify as significant increase in credit risk since initial recognition, the Group measures loss allowance for the financial instrument at 12-month ECL at the balance sheet date for the current period. Relevant reversal of loss allowance is included in profit or loss as gain on impairment.

#### (a) Significant increases in 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 guaranteed 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 recognition date.

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

- Significant changes in internal price indicators as a result of a change in credit risk;
- Other changes in the rates or terms of an existing financial instrument that would be significantly different if the instrument was newly originated or issued at the balance sheet date (such as more stringent covenants, increased amounts of collateral or guarantees, or higher income coverage);
- Significant changes in external market indicators of credit risk for a particular financial instrument or similar financial instruments with the same expected life;
- An actual or expected significant change in the financial instrument's external credit rating;
- Existing or forecast 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 increases in credit risk on other financial instruments of the same debtor;
- An actual or expected 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;
- Significant changes in the expected performance and behaviour of the debtor;
- Changes in the Group's credit management approach related to the financial instrument.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (2) Impairment of financial instruments (continued)

##### (a) Significant increases in credit risk (continued)

At the balance sheet date, if the Group judges that the financial instruments solely are exposed to 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, the borrower's ability to meet its contractual cash flow obligations in the short term is strong, and 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 fulfil its contractual cash flow obligations, the financial instrument is considered to have a lower credit risk.

##### (b) Credit-impaired financial assets

A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following observable data:

- Significant financial difficulties of the issuer or debtor;
- A breach of contract, 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 is probable that the debtor will enter bankruptcy or other financial reorganisation; or
- The disappearance of an active market for the financial asset because of financial difficulties of the issuer or debtor.

##### (c) Recognition of expected credit losses

Except that the Group recognises credit loss for account receivables, contract assets, other receivables, bills receivables, lease receivables, loan commitment and financial guarantee contracts that are individually significant or credit impaired on an individual asset/contract basis, the Group recognises credit loss of relevant financial instruments on a collectively basis using a provision matrix. The Group classifies financial instruments into different groups based on common risk characteristics. Shared credit risk characteristics include type of financial instruments, type of debtors, industry of debtors, initial recognition date, and contract collection term etc.

The Group classifies its accounts receivable and contract assets into different groups that includes central state-owned enterprises, local state-owned enterprises, China Railway and its subsidiaries, and other enterprises based on their credit risk characteristics. For the grouped accounts receivable and contract assets, the Group takes consideration of the ageing analysis, historical loss and other factors, and properly adjusts the lifetime expected credit losses rate in respect of the future economic condition and other factors so as to calculate the expected credit losses by default risk exposures and lifetime expected credit losses rate.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (2) Impairment of financial instruments (continued)

##### (c) Recognition of expected credit losses (continued)

ECL of relevant financial instruments is recognised based on the following methods:

- For a financial asset, credit loss is the present value of 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 lease receivable, credit loss is the present value of 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 undrawn loan commitments, the credit loss is the present value of the difference between the contract cash flow to be received by the Group and the expected cash flow, under the condition that the loan commitment holder withdraws the corresponding loans. The Group's estimate of the expected credit loss on the loan commitment is consistent with the expected withdrawal of the loan commitment.
- For a financial guarantee contract, credit loss is the present value of difference between the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder, the debtor or any other party.
- For credit-impaired financial assets other than the purchased or originated credit-impaired financial assets at the balance sheet date, credit loss is difference between the carrying amount of financial assets and the present value of expected future cash flows discounted at original effective interest rate.

The Group's measurement of ECL of financial instruments reflects factors including unbiased probability weighted average amount recognised by assessing a series of possible results, including time value of money, reasonable and supportable information related to historical events, current condition and forecast of future economic position that is available without undue cost or effort at the balance sheet date.

##### (d) Reduction in financial assets

The Group directly reduce the gross carrying amount of a financial asset when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. Such reduction constitutes a derecognition of relevant financial assets.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (3) Transfer of financial assets

The Group derecognises a financial asset if one of the following conditions is satisfied: (1) the contractual rights to the cash flows from the financial asset expire; or (2) the financial asset has been transferred and substantially all the risks and rewards of ownership of the financial asset is transferred to the transferee; or (3) although the financial asset has been transferred, the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset but 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 recognise the financial asset to the extent of its continuing involvement in the transferred financial asset and recognises an associated liability. Relevant liabilities are measured using the following methods:

- For transferred financial assets carried at amortised cost, the carrying amount of relevant liabilities is the carrying amount of financial assets transferred with continuing involvement less amortised cost of the Group's retained rights (if the Group retains relevant rights upon transfer of financial assets) with addition of amortised cost of obligations assumed by the Group (if the Group assumes relevant obligations upon transfer of financial assets). Relevant liabilities are not designated as financial liabilities at fair value through profit or loss.
- For financial assets carried at fair value, the carrying amount of relevant financial liabilities is the carrying amount of financial assets transferred with continuing involvement less fair value of the Group's retained rights (if the Group retains relevant rights upon transfer of financial assets) with addition of fair value of obligations assumed by the Group (if the Group assumes relevant obligations upon transfer of financial assets). Accordingly, the fair value of relevant rights and obligations shall be measured on an individual basis.

For a transfer of a financial asset in its entirety that satisfies the derecognition criteria, for financial asset categorised into those measured at amortised cost and FVTOCI, the difference between the carrying amount of the financial asset transferred and the sum of the consideration received from the transfer and any cumulative gain or loss that has been recognised in other comprehensive income, is recognised in profit or loss. For non-trading equity instruments designated as financial assets at FVTOCI, cumulative gains or losses previously recognised in other comprehensive income should be removed from other comprehensive income and be recognised in retained earnings.

For a part of transfer of a financial asset that satisfies the derecognition criteria, the carrying amount of the transferred financial asset is allocated between the part that is derecognised 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 derecognised and any cumulative gain or loss allocated to the part derecognised which has been previously recognised in other comprehensive income; and (2) the carrying amount allocated to the part derecognised on derecognition date; is recognised in profit or loss.

For a transfer of a financial asset in its entirety that does not satisfy the derecognition criteria, the Group continues to recognise the transferred financial asset in its entirety. The consideration received should be recognised as a liability.





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (4) Classification of financial liabilities and equity instruments

Financial instruments issued by the Group are classified into financial liabilities or equity instruments on the basis of the substance of the contractual arrangements and the economic nature not only its legal form, together with the definition of financial liability and equity instruments on initial recognition.

##### (a) Classification, recognition and measurement of financial liabilities

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

##### (I) Financial liabilities at FVTPL

Financial liabilities at FVTPL consist of financial liabilities held for trading (including derivative instruments classified as financial liabilities) and those designated as at FVTPL. Financial liabilities at FVTPL are presented as held-for-trading financial liabilities/other non-current liabilities based on its liquidity.

It is indicated that the Group's purpose of undertaking the financial liabilities is for trading if the financial liabilities meet one of the following conditions:

- The purpose for undertaking relevant financial liabilities is mainly for 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 there is a short-term profits presence 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 at FVTPL are subsequently measured at fair value. Any gains or losses arising from changes in the fair value or any dividend or interest expenses paid related to the financial liabilities are recognised in profit or loss.

##### (II) Other financial liabilities

Other financial liabilities, except for financial liabilities due to the transfer of financial assets do not qualify for derecognition or with continuing involvement, guarantee contracts, are classified as financial liabilities measured at amortised cost, which is subsequently measured at amortised cost, any gains or losses arising from derecognition or amortisation are recognised in profit or loss for the year.

If the Group amends or renegotiates a contract with the counterparty which does not result in derecognition of financial liabilities subsequently measured at amortised cost but results in changes in the contractual cash flow, the Group shall recalculate the carrying amount of the financial liabilities and account for the relevant profit or loss as current profit or loss. The Group determines the recalculated carrying amount of the financial liabilities based on the present value of the contractual cash flow to be renegotiated or modified according to the discounted original effective interest rate of financial liabilities. For all the costs or expenses arising from an amended or renegotiated contract, the Group shall adjust the book value of the financial liabilities and amortise them for the remaining life of the financial liabilities.





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### **(4) Classification of financial liabilities and equity instruments (continued)**

##### *(b) Derecognition of financial liabilities*

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

##### *(c) Equity instruments*

An equity instrument is a contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. The Group's issuance (including refinancing), repurchase, sales or cancellation of an equity instrument shall be accounted for as a change to equity. The Group does not recognise changes in the fair value of an equity instrument. Transaction costs of an equity transaction are accounted for as a deduction from equity.

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

#### **(5) Derivatives**

The derivative instruments of the Group include forward exchange contract, etc. The derivative instruments are measured initially at fair value on the relevant contractual signing date, and measured subsequently at fair value. At the end of reporting period, the derivative financial instruments at a positive fair value are presented in derivative financial assets, and those at a negative fair value are presented in derivative financial liabilities.

#### **(6) Offsetting financial assets and financial liabilities**

Where the Group has a legal right that is currently enforceable to set off the recognised financial assets and financial liabilities, and intends either to settle on a net basis, or to realise 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.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 11. Inventories

✓ Applicable     Not applicable

#### **(1) Categories of inventories**

The Group's inventories mainly include raw materials, semi-finished products, work in progress, goods on hand, turnover materials, etc. Inventories are initially measured at cost. Cost of inventories comprises all costs of purchase, costs of conversion and other expenditures incurred in bringing the inventories to their present location and condition.

#### **(2) Valuation method of inventories upon delivery**

The actual cost of inventories upon delivery is calculated using the weighted average method.

#### **(3) Basis for determining net realisable value of inventories**

At the balance sheet date, inventories are measured at the lower of cost and net realisable value. If the net realisable value is below the cost of inventories, a provision for decline in value of inventories is made.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale and relevant taxes. Net realisable value is determined on the basis of clear evidence obtained, and takes into consideration the purposes of holding inventories and effect of post balance sheet events. The provision for decline in values of inventories are made on an individual basis. For items of inventories relating to a product line that are produced and marketed in the same geographical area, have the same or similar end uses or purposes, and cannot be practicably evaluated separately from other items in that product line, provision for decline in value is determined on an aggregate basis. 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 realisable value of inventories is higher than their cost, the original provision for decline in value is reversed and the reversal is included in profit or loss for the period.

#### **(4) Inventory count system**

The perpetual inventory system is maintained for stock system.

#### **(5) Amortisation method for low cost and short-lived consumable items and packaging materials**

Turnover materials include low value consumables and packing materials, which are amortised by using the immediate write-off method.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 12. Assets classified as held-for-sale

✓ Applicable     Not applicable

Non-current assets and disposal groups are classified as held for sale category when the Group recovers the carrying amount through a sale (including an exchange of non-monetary assets that has commercial substance) rather than continuing use.

Non-current assets or disposal groups classified as held for sale are required to satisfy both of the following conditions: (1) the asset or disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset or disposal group; (2) the sale is highly probable, i.e. the Group has made a resolution about selling plan and obtained a confirmed purchase commitment and the sale is expected to be completed within one year.

The Group measures the non-current assets or disposal groups classified as held for sale at the lower of their carrying amount and fair value less costs to sell. Where the carrying amount is higher than the net amount of fair value less costs to sell, the carrying amount should be reduced to the net amount of fair value less costs to sell, and such reduction is recognised in impairment loss of assets and included in profit or loss for the period. Meanwhile, provision for impairment of held-for-sale assets is made. When there is increase in the net amount of fair value of non-current assets held for sale less costs to sell at the balance sheet date, the original deduction should be reversed in impairment loss of assets recognised after the classification of held-for-sale category, and the reverse amount is included in profit or loss for the period.

Non-current assets classified as held-for-sale or disposal groups are not depreciated or amortised, interest and other costs of liabilities of disposal group classified as held for sale continue to be recognised.

All or part of equity investments in an associate or joint venture are classified as held-for-sale assets. For the part that is classified as held-for-sale, it is no longer accounted for using the equity method since the date of the classification.

### 13. Long-term equity investments

#### **(1) Determination criteria of joint control and significant influence**

Control is achieved when the Group has the power over the investee, is exposed or, has the rights to, variable returns from its involvement with the investee; and has the ability to use its power to affect its return. 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, convertible corporate bonds and exercisable warrants) held by the investing enterprises or other parties that are currently exercisable or convertible shall be considered.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 13. Long-term equity investments (continued)

#### **(2) Determination of initial investment cost**

For a long-term equity investment acquired through business combination involving enterprises under common control, shares of carrying amount of shareholders' equity of the acquiree in the consolidated financial statements of the ultimate controlling party is recognised as initial investment cost of long-term equity investment at the date of combination. The difference between initial investment cost of long-term equity investment and the aggregate of cash paid, non-cash assets transferred and carrying amount of liabilities assumed, is adjusted to capital reserve. If the balance of capital reserve is not sufficient to absorb the difference, any excess is adjusted to retained profits. If the consideration of the combination is satisfied by the issue of equity securities, the initial investment cost of the long-term equity investment is determined in accordance with shares of carrying amount of shareholders' equity of the acquiree in the consolidated financial statements of the ultimate controlling party at the date of combination, with the aggregate face value of the shares issued accounted for as share capital, and the difference between the initial investment cost and the aggregate face value of the shares issued adjusted to capital reserve. If the balance of capital reserve is not sufficient to absorb the difference, any excess is adjusted to retained profits.

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 at the date of combination.

The expenses incurred by the acquirer in respect of auditing, legal services, valuation and consultancy services and other associated administrative expenses attributable to the business combination are recognised in profit or loss when they are incurred.

Long-term equity investment acquired otherwise than through a business combination is initially measured at its cost. When the entity is able to exercise significant influence or joint control (but not control) over an investee due to additional investment, the cost of long-term equity investments is the sum of the fair value of previously-held equity investments determined in accordance with Accounting Standard for Business Enterprises No. 22 – Recognition and Measurement of Financial Instruments and the additional investment cost.

#### **(3) Subsequent measurement and recognition of profit or loss**

##### *(a) Long-term equity investment accounted for using the cost method*

The parent company's separate financial statements adopted cost method to account for the long-term equity investments of subsidiaries. A subsidiary is an investee that is controlled by the Group.

Under the cost method, a long-term equity investment is measured at initial investment cost. Except for cash dividends or profits already declared but not yet paid that are included in the price or consideration actually paid upon acquisition of the long-term equity investment, investment income is recognised in the period in accordance with the attributable share of cash dividends or profit distributions declared by the investee.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 13. Long-term equity investments (continued)

#### **(3) Subsequent measurement and recognition of profit or loss (continued)**

##### *(b) Long-term equity investment accounted for using the equity method*

The Group accounts for investment in associates and joint ventures using the equity method. An associate is an entity over which the Group has significant influence and a joint venture is a joint arrangement in which the Group has rights only to the net assets of the arrangement.

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 recognised 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 recognises its share of the net profit or loss and other comprehensive income of the investee for the period as investment income and other comprehensive income for the period. Meanwhile, carrying amount of long-term equity investment is adjusted: the carrying amount of long-term equity investment is decreased in accordance with its share of the investee's declared profit or cash dividends; other changes in owners' equity of the investee other than net profit or loss and other comprehensive income are correspondingly adjusted to the carrying amount of the long-term equity investment, and recognised in the capital reserve. The Group recognises its share of the investee's net profit or loss based on the fair value of the investee's individual identifiable assets, etc. at the acquisition date after making appropriate adjustments. When the investors' accounting policies and accounting period are inconsistent with those of the Company, the Company recognises investment income and other comprehensive income after making appropriate adjustments to conform to the Company's accounting policies and accounting period. However, unrealised gains or losses resulting from the Group's transactions with its associates and joint ventures, which do not constitute a business, are eliminated based on the proportion attributable to the Group and then investment gains or losses or is recognised. However, unrealised losses are not eliminated if they result from the Group's transactions with its investees which represent impairment losses on the transferred assets.

The Group discontinues recognising its share of net losses of the investee after the carrying amount of the long-term equity investment together with any long-term interests that in substance form part of its net investment in the investee is reduced to zero. If the Group has incurred obligations to assume additional losses of the investee, a provision is recognised according to the expected obligation, and recorded as investment loss for the period. Where net profits are subsequently made by the investee, the Group resumes recognising its share of those profits only after its share of the profits exceeds the share of losses previously not recognised.

##### *(c) Disposal of long-term equity investments*

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

*(d) Methods of impairment assessment and provision for impairment are set out in Note III.18.*



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 14. Fixed assets

#### (1) Recognition criteria

Applicable  Not applicable

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.

The initial cost of purchased fixed assets includes purchase cost, relevant taxes and expenses attributable to the asset incurred before it reaches ready-to-use condition. The initial cost of self-constructed fixed assets is recognised in accordance with Note III.15. The components of fixed assets, which have various useful life or contribute economic benefits to the Group in different ways, or at different depreciation rate or via different depreciation methods, will be recognised as individual fixed assets by the Group. The subsequent expenditure of fixed assets (including amount paid for replacing certain component of fixed assets), is recognised into cost of fixed assets if it qualifies recognition criteria. Meanwhile, the carrying amount of replaced component is deducted. The expense relating to routine maintenance of fixed assets is included in profit or loss when it is incurred. Fixed assets are presented on the balance sheet at cost less accumulated depreciation and impairment losses.

#### (2) Depreciation method

Applicable  Not applicable

Category	Depreciation method	Depreciation period (years)	Estimated net residual value rate	Annual depreciation rate
Plant and buildings	Straight-line method	20-45	5%	2.11%-4.75%
Machinery and equipment	Straight-line method	6-10	5%	9.50%-15.83%
Vehicles	Straight-line method	5	5%	19.00%
Office facilities and others	Straight-line method	5	5%	19.00%

Estimated net residual value of a fixed asset is the estimated amount that the Group would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

#### (3) Other information

If a fixed asset is upon disposal or no future economic benefits are expected to be generated from its use or disposal, the fixed asset is derecognised. 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 recognised in profit or loss for the period.

The Group reviews the useful life and estimated net residual value of a fixed asset and the depreciation method applied at least once at each financial year-end, and accounts for any change as a change in accounting estimate.

Methods of impairment assessment and provision for impairment are set out in Note III.18.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 15. Construction in progress

✓ Applicable  Not applicable

Construction in progress is measured at its actual costs. The actual costs include various construction expenditures during the construction period, borrowing costs capitalised before it is ready for intended use and other relevant costs. Construction in progress is not depreciated. Construction in progress is transferred to a fixed asset when it is ready for intended use.

Methods of impairment assessment and provision for impairment are set out in Note III.18.

For sale of products or by-products generated before a fixed asset reaches ready-to-use condition, the relevant income and cost shall be accounted for separately and included in the current profit and loss in accordance with the requirements of the Accounting Standards for Business Enterprises No. 14 – Revenue and the Accounting Standards for Business Enterprises No.1 – Inventories.

### 16. Borrowing costs

✓ Applicable  Not applicable

Borrowing costs are interests and other costs incurred by the Group in connection with the borrowing of funds. Borrowing costs include interests, amortisation of discounts or premiums related to borrowings, ancillary costs incurred in connection with the arrangement of borrowings, and exchange differences arising from foreign currency borrowings. Borrowing costs directly attributable to the acquisition, construction or production of qualifying asset are capitalised 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. Capitalisation of borrowing costs ceases when the qualifying asset being acquired, constructed or produced becomes ready for its intended use or sale. Capitalisation 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. Capitalisation is suspended until the acquisition, construction or production of the asset is resumed. Other borrowing costs are recognised as an expense in the period in which they are incurred. Qualifying assets are assets that necessarily take a substantial period of time for construction or production to get ready for their intended use or sale.

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





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 17. Intangible assets

#### (1) Valuation method, useful life and impairment testing of intangible assets

Applicable  Not applicable

An intangible asset is measured initially at cost. The useful life of an intangible asset is determined according to the period over which it is expected to generate economic benefits for the Group. An intangible asset is regarded as having an indefinite useful life when there is no foreseeable limit period over which the asset is expected to generate economic benefits for the Group. When an intangible asset with a finite useful life is available for use, its original cost less net residual value and any accumulated impairment losses is amortised over its estimated useful life. An intangible asset with an indefinite useful life is not amortised. The amortisation methods, useful lives, and estimated net residual value rates of each class of intangible assets are as follows:

Category	Amortisation method	Useful life (Years)	Residual value rate (%)
Land use rights	Straight-line method	40-50	–
Software licenses	Straight-line method	3-10	–
Patents, licenses and technical know-how	Straight-line method	5-10	–
Trademarks	Straight-line method	20	–
Backlog orders and service contracts	Straight-line method	Period during which the service is rendered	–

For an intangible asset with a finite useful life, the Group reviews the useful life and amortisation method at the end of the period, and makes adjustments when necessary. For the impairment testing of intangible assets, please refer to Note III.18.

#### (2) Research and development expenditure

Applicable  Not applicable

The Group classifies the expenditure on an internal research and development project into expenditure on the research phase and expenditure on the development phase. Expenditure during the research phase is recognised as an expense in the period in which it is incurred.





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 17. Intangible assets (continued)

#### (2) Research and development expenditure (continued)

Expenditure during the development phase that meets all of the following conditions at the same time is recognised as intangible asset. Expenditure during development phase that does not meet the following conditions is recognised in profit or loss for the period.

- 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, including the evidence of the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;
- 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.

If the expenditures cannot be distinguished between the research phase and development phase, the Group recognises all of them in profit or loss for the period.

For sale of products or by-products generated during the research and development process, the relevant income and cost shall be accounted for separately and included in the current profit and loss in accordance with the requirements of the Accounting Standards for Business Enterprises No. 14 – Revenue and the Accounting Standards for Business Enterprises No.1 – Inventories.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 18. Impairment of long-term assets

✓ Applicable     Not applicable

The Group assesses at each balance sheet date whether there is any indication that long-term equity investment, fixed assets and construction in progress, development expenditure, long-term deferred expenses and some other non-current assets under cost method, right-of-use assets and intangible assets with a finite useful life may be impaired. If an impairment indication exists, the recoverable amount is estimated. Intangible assets with indefinite useful life and intangible assets not yet available for use are tested for impairment annually, irrespective of whether there is any indication that the assets may be impaired.

Recoverable amount is estimated on individual basis. If it is not practical to estimate the recoverable amount of an individual asset, the recoverable amount of the asset group to which the asset belongs will be estimated. The recoverable amount of an asset or asset group is the higher of its fair value less costs of disposal and the present value of the future cash flows expected to be derived from the asset.

If the recoverable amount of an asset or an asset group is less than its carrying amount, the deficit is accounted for as an impairment loss and is recognised in profit or loss for the period.

In determining impairment losses on assets related to contract costs, impairment losses are first determined for other assets recognised in accordance with other relevant ASBEs and related to the contract; then, for assets related to contract costs, the Group shall recognise an impairment loss to the extent that the carrying amount of an asset exceeds: (1) the remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates; less (2) the estimated costs that relate to providing those goods or services.

Goodwill is tested for impairment at least at the end of each year. For the purpose of impairment testing, goodwill is considered together with the related assets group(s), i.e., goodwill is reasonably allocated to the related assets group(s) or each of asset group(s) expected to benefit from the synergies of the combination. An impairment loss is recognised if the recoverable amount of the assets group or sets of assets groups (including goodwill) is less than its carrying amount. The impairment loss is firstly allocated to reduce the carrying amount of any goodwill allocated to such assets group or sets of assets groups, and then to the other assets of the group on the pro-rata basis of the carrying amount of each asset (other than goodwill) in the group.

Except for impairment losses related to contract costs, once the impairment losses are recognised for above assets, they will not be reversed in any subsequent period. The Group shall, after the asset impairment related to contract costs has been provided, recognised in profit or loss a reversal of some or all of an impairment loss previously recognised when the impairment conditions no longer exist or have improved. The increased carrying amount of the asset shall not exceed the carrying amount that would have been determined if no impairment loss had been recognised previously.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 19. Long-term prepaid expenses

✓ Applicable  Not applicable

Long-term prepaid expenses represent expenses incurred that should be borne and amortised over the current and subsequent periods (together of more than one year), including leasehold improvement. Long-term prepaid expenses are amortised using the straight-line method over the shorter of the expected useful life of the asset and the lease term.

### 20. Employee benefits

Employee benefits are all forms of considerations given by the Group in exchange for services rendered by employees or for the termination of employment. Employee benefits include short-term benefits, post-employment benefits, termination benefits and other long-term employee benefits. The benefits the Group provided to employees' spouse, children, dependent, and families of deceased employees and other beneficiaries also belong to employee benefits.

#### (1) Accounting treatment of short-term benefits

✓ Applicable  Not applicable

Actually occurred short-term employee benefits are recognised as liabilities, with a corresponding charge to the profit or loss for the period or in the costs of relevant assets in the accounting period in which employees provide services to the Group. Staff welfare expenses incurred by the Group are recognised in profit or loss for the period or the costs of relevant assets based on the actually occurred amounts when it actually occurred. Non-monetary staff welfare expenses are measured at fair value.

Payment made by the Group of social security contributions for employees such as premiums or contributions on medical insurance, work injury insurance and maternity insurance, etc. and payments of housing funds, as well as trade union fund and employee education fund provided in accordance with relevant requirements, are calculated according to prescribed bases and percentages in determining the amount of employee benefits and recognised as relevant liabilities, with a corresponding charge to the profit or loss for the period or the costs of relevant assets in the accounting period in which employees provide services.

#### (2) Accounting treatment of post-employment benefits

✓ Applicable  Not applicable

The Group's benefits after demission are all defined contribution plans, including pension insurance, work injury insurance and enterprise annuity paid by the Group for its employees.

During the accounting period of rendering service to employees of the Group, amount which should be paid according to defined contribution plans is recognised as liabilities, and recognised in profit or loss or related costs of assets.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 20. Employee benefits (continued)

#### **(3) Accounting treatment of termination benefits**

Applicable  Not applicable

When the Group terminates the employment relationship with employees before the end of the employment contracts or provides compensation as an offer to encourage employees to accept voluntary redundancy, a provision shall be recognised for the compensation arising from termination of employment relationship with employees, with a corresponding charge to the profit or loss for the current year, at the earlier of when the Group cannot unilaterally withdraw from the termination plan or the redundancy offer and when the Group recognises any related restructuring costs or expenses.

#### **(4) Accounting treatment of other long-term employee benefits**

Applicable  Not applicable

### 21. Provisions

Applicable  Not applicable

Except for contingent consideration arising and contingent liabilities undertaken in business combinations, the Group recognises an obligation related to a contingency as a provision when all of the following conditions are satisfied: (i) the obligation is a present obligation of the Group; (ii) it is probable that an outflow of economic benefits will be required to settle the obligation; and (iii) the amount of the obligation can be measured reliably. A provision is initially measured at the best estimate of the expenditure required to settle the related present obligation, with comprehensive consideration of factors such as the risks, uncertainty and time value of money relating to a contingency. The carrying amount of a provision is reviewed at each balance sheet date. If there is clear evidence that the carrying amount does not reflect the current best estimate, the carrying amount is adjusted to the best estimate.

Provisions are recognised when the Group has a present obligation related to a contingency such as warranty provisions/onerous contract/outstanding litigations, 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 recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet 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.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 22. Revenue

#### (1) Accounting policy for revenue recognition and measurement

Applicable    Not applicable

The revenue of the Group is mainly generated from business types as follows:

- (I) Revenue from sales of goods and materials;
- (II) Revenue from rendering of maintenance service;
- (III) Revenue from construction contracts.

The Group recognises revenue based on the transaction price allocated to such performance obligation when a performance obligation is satisfied, i.e. when “control” of the goods or services underlying the particular performance obligation is transferred to the customer. A performance obligation represents the commitment that a good and service that is distinct shall be transferred by the Group to the customer. Transaction price refers to the consideration that the Group is expected to charge due to the transfer of goods or services to the customer, but it does not include payments received on behalf of third parties and amounts that the Group expects to return to the customer.

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 single 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. When 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.

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 in progress during the Group’s performance; (iii) goods generated during the Group’s performance have irreplaceable utilisation, and the Group is entitled to collect amounts of cumulative performance part which have been done up to now. Otherwise, the Group will recognise revenue at the point in time when the customer obtains control over relative goods or services.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 22. Revenue (continued)

#### **(1) Accounting policy for revenue recognition and measurement (continued)**

For a performance obligation satisfied over time, the Group recognises revenue over time by measuring the progress towards complete satisfaction of that performance obligation. When the performance progress cannot be identified reasonably, and where the cost having occurred is expected to be compensated, the Group recognises revenue in accordance with the cost having occurred until the performance progress can be identified reasonably.

For a performance obligation satisfied at a point in time, the Group recognises revenue at the point in time at which the customer obtains control of relevant goods or services. To determine whether a customer has obtained control of goods or services, the Group considers the following indicators: (i) the Group has a present right to payment for the goods or services; (ii) the Group has transferred physical possession of the goods to the customer; (iii) the Group has transferred the legal title of the goods or the significant risks and rewards of ownership of the goods to the customer; and (iv) the customer has accepted the goods or services.

For sales with quality assurance terms, if the quality assurance provides a separate service to the customer other than ensuring that the goods or services sold meet the established standards, the quality assurance constitutes a single performance obligation. Otherwise, the Group will account for the quality assurance responsibility in accordance with the Accounting Standards for Business Enterprises No. 13 – Contingencies.

The Group determines whether it is a principal or an agent at the time of the transaction based on whether it owns the control of the goods or services before the transfer of such goods or services to the customer. The Group is a principal if it controls the specified good or service before that good or service is transferred to a customer, and the revenue shall be recognised based on the total consideration received or receivable; otherwise, the Group is an agent, and the revenue shall be recognised based on the amount of commission or handling fee that is expected to be charged, and such amount is determined based on the net amount of the total consideration received or receivable after deducting the prices payable to other related parties.

When the Group collects amounts of sold goods or services in advance from the customer, the Group will firstly recognise the amounts as liabilities and then transfer to revenue until satisfying relevant performance obligations. When the receipts in advance is non-refundable and the customer may give up all or part of contract right, and the Group is expected to be entitled to obtain amounts associated with contract rights given up by the customer, the above amounts shall be proportionally recognised as revenue in accordance with the model of exercising contract rights by the customer; otherwise, the Group will transfer the relevant balance of the above liability to revenue only when the probability is extremely low for the customer to require the Group to satisfy remaining performance obligations.

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). Accounting policies relating to the impairment of contract asset are specified in Note III.10. The Group's unconditional (i.e., depending on the passage of time only) right to receive consideration from the customer is separately presented as receivables. Contract liabilities refer to the Group's obligation to transfer goods or services to a customer for which the Group has received consideration from the customer.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 22. Revenue (continued)

#### (2) Specific revenue recognition criteria for the Group

Applicable  Not applicable

##### (a) Revenue from sales of goods and materials

The Group mainly sells rail transit equipment products, and revenue is usually recognised when the products are received and accepted by customers.

##### (b) Revenue from rendering of maintenance service

The Group mainly provide maintenance service of rail transit equipment products, and revenue is recognised when the services are completed and accepted by customers.

##### (c) Revenue from construction contracts

The Group mainly produces offshore products such as deep-sea robots and engages in PV power station EPC projects, and recognises revenue according to the progress of performance.

#### (3) Differences in revenue recognition accounting policies due to adoption of various operating models for the same type of business

Applicable  Not applicable

### 23. Contract costs

Applicable  Not applicable

Contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer.

#### (1) Costs of obtaining the contract

If the incremental costs (costs that will not occur if no contract obtained) incurred for obtaining the contract are expected to be recovered, the Group recognises it as an asset. The asset mentioned above shall be amortised on a basis that is consistent with the transfer to the customer of the goods or services to which the asset relates and recognised in profit or loss for the period. If the amortisation period of the asset does not exceed one year, it is recognised in profit or loss for the period in which it occurs. Other expenses incurred by the Group for obtaining the contract are recognised in profit or loss for the period in which it occurs, except costs that are explicitly chargeable to the customer.

#### (2) Costs to fulfil a contract

If the costs incurred in fulfilling a contract are not within the scope of other standard other than standards on revenue, the Group shall recognised an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria: (i) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify; (ii) the costs generate or 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.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 23. Contract costs (continued)

#### **(2) Costs to fulfil a contract (continued)**

Assets recognised for the incremental costs of obtaining a contract and assets recognised for the costs to fulfil a contract (the "assets related to contract costs") are amortised on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the assets relate and recognised in profit or loss for the current period.

The Group recognises an impairment loss in profit or loss to the extent that the carrying amount of an asset related to contract costs exceeds: (i) remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates; less (ii) the costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

### 24. Government grants

Applicable  Not applicable

Government grants are transfer of monetary assets and non-monetary assets from the government to the Group at no consideration. A government grant is recognised only when the Group can comply with the conditions attaching to the grant and the Group will receive the grant.

If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable.

#### **(1) Determination basis and accounting treatment of government grants related to assets**

Government grants related to assets refer to those acquired by the Group for the purpose of purchasing or constructing or forming long-term assets by other means. A government grant related to an asset is recognised as deferred income and included in profit or loss over the useful life of the related asset on an average distribution basis. The relevant asset is sold, transferred, scrapped or damaged prior to the end of its useful life, the related undistributed deferred income is transferred to the profit or loss of the disposal period.





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 24. Government grants (continued)

#### (2) Determination basis and accounting treatment of government grants related to income

Government grants received by the Group other than those related to assets are recognised as government grants related to income. The Group classifies government grants whose nature is difficult to distinguish as government grants related to income.

For a government grant related to income, if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognised as deferred income and recognised in profit or loss over the periods in which the related costs or losses are recognised; if the grant is a compensation for related expenses or losses already incurred, the grant is recognised immediately in profit or loss.

Discount interest on preferential loans obtained by the Group is allocated to the lending bank, which will provide loans to the Group at the policy concessionary interest rate. The Group uses the actual amount of borrowings received as the recording value of the borrowings and calculates the relevant borrowing costs based on the principal amount of the borrowings and the policy concessionary interest rate.

A government grant related to the Group's daily activities is recognised in other income based on the nature of economic activities; a government grant not related to the Group's daily activities is recognised in non-operating income.

For the return of a government grant already recognised, if there is any related deferred income, the repayment is offset against the carrying amount of the deferred income, with any excess recognised in profit or loss for the period.

### 25. Deferred tax assets and deferred tax liabilities

Applicable  Not applicable

Income tax expenses comprise current and deferred tax. Current and deferred tax expenses or income are recognised in profit or loss for the period, except when they arise from transactions or events that are directly recognised in other comprehensive income or in shareholders' equity, in which case they are recognised in other comprehensive income or in shareholders' equity; and when they arise from business combinations, in which case they adjust the carrying amount of goodwill.

#### (1) Current income tax

At the balance sheet date, current income tax liabilities (or assets) for the current and prior periods are measured at the amount expected to be paid (or recovered) according to the requirements of tax laws.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 25. Deferred tax assets and deferred tax liabilities (continued)

#### (2) Deferred tax assets and deferred tax liabilities

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

Deferred tax is generally recognised for all temporary differences. Deferred tax assets for deductible temporary differences are recognised to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilised. However, for 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 recognised.

For deductible losses and tax credits that can be carried forward, deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilised.

Deferred tax liabilities are recognised 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 recognised to the extent that it is probable that there will be taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

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 realised or the liability is settled.

On the balance sheet date, the Group will review the carrying value of the deferred income tax asset and write down the carrying value of the deferred income tax asset if it is likely to fail to obtain sufficient taxable income to offset the benefit of the deferred income tax asset in the future. The amount written down is reversed when sufficient taxable income is likely to be obtained.

#### (3) Income tax offsetting

When the Group has a legal right to settle on a net basis and intends either to settle on a net basis or to realise the assets and settle the liabilities simultaneously, current tax assets and current tax liabilities are offset and presented on a net basis. 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 realise the assets and liabilities simultaneously, 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.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases

Lease is a contract that conveys the right to use an asset for a period of time in exchange for consideration.

At inception of the contracts, the Group assesses whether the contract is, or contains, a lease. Unless the terms and conditions of the contract are changed, the Group does not reassess whether a contract is, or contains, a lease.

Recognition and accounting of leases under new lease standard

Applicable  Not applicable

#### (1) The Group as a lessee

##### (a) Separating components of a lease

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

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

Except for short-term leases and leases for which the underlying asset is of low value, at the commencement date of the lease, the Group recognises right-of-use assets. The commencement date of the lease is the date on which a lessor makes an underlying asset available for use by the Group. The Group measures the right-of-use assets at cost. The cost of the right-of-use assets comprises:

- the amount of the initial measurement of the lease liabilities;
- any lease payments made at or before the commencement date, if there is a lease incentive, less any lease incentives;
- any initial direct costs incurred by the Group;
- 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, exclusive of the cost incurred for production of inventories.

Right-of-use assets are depreciated based on depreciation provisions in the Accounting Standards for Business Enterprises No. 4 – Fixed Assets. If the Group is reasonably certain, that the lease will transfer ownership of the underlying asset to the Group by the end of the lease term, the right-of-use assets is depreciated from the commencement date to the end of the useful life of the underlying asset. Otherwise, the right-of-use assets is depreciated from the commencement date to the earlier of the end of the useful life of the right-of-use assets or the end of the lease term.

For the method of testing the impairment of the right-of-use asset and the method of determining impairment provision, please refer to Note III.18 for details.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases (continued)

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

##### (c) Lease liabilities

Except for short-term leases and leases for which the underlying asset is of low value, at the commencement date of the lease, the Group measures the lease liabilities at the present value of the lease payments that are not paid at that date. The Group determines the present value of the lease payments using the interest rate implicit in the lease as the discount rate. If the interest rate implicit in the lease cannot be readily determined, the lessee shall use the lessee's incremental borrowing rate.

The lease payments comprise the following payments by the Group for the right to use the underlying asset during the lease term, including:

- fixed payments (including in-substance fixed payments), if there is a lease incentive, less any lease incentives;
- 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 the lease;
- amounts expected to be paid under residual value guarantees provided by the Group.

The variable lease payments, depending on the index or ratio, are determined at the initial measurement based on the index or proportion at the beginning of the lease term. The variable lease payments that are not included in the measurement of the lease liability are recognised in profit or loss or related asset costs when incurred.

After the commencement date of the lease, interest on the lease liabilities in each period during the lease term is calculated by a constant periodic rate of interest on the remaining balance of the lease liabilities, and recognised in profit or loss or the cost of relevant assets.

Subsequent to the commencement date of a lease, in case of any of the following circumstances, the Group remeasures lease liabilities and makes a corresponding adjustment to the related right-of-use assets. Where the lease liabilities need to be further reduced even the carrying amount of right-of-use assets has been reduced to zero, the Group recognises the difference in profit or loss for the current period.

- there is a change in the lease term, or in the assessment of an option to purchase the underlying asset, the Group re-measures the lease liabilities, on the basis of the revised lease term and the revised discount rate;
- there is a change in the amounts expected to be payable under a residual value guarantee, or in future lease payments resulting from a change in an index or a rate used to determine those payments, the Group re-measures the lease liabilities, on the basis of the revised lease payments and the unchanged discount rate. If the change of lease payment arises from the change of variable interest rate, the revised discount rate shall be used to calculate the present value.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases (continued)

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

##### (d) Short-term leases and leases for which the underlying asset is of low value

The Group elects not to recognise right-of-use assets or lease liabilities for short-term leases and leases for which the underlying asset is of low value, including leasing of plant and buildings, machinery and equipment, vehicles, office facilities and others. A short-term lease is a lease that, at the commencement date, has a lease term of 12 months or less and has no options to purchase. A lease for which the underlying asset is of low value is that, the value of the underlying asset is low when it is new. For short-term leases and leases for which the underlying asset is of low value, the Group recognises the lease payments associated with those leases as an expense or cost of relevant asset on a straight-line basis over the lease term.

##### (e) Lease modifications

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

- the modification increases the scope of the lease by adding the right to use one or more underlying assets;
- 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 reallocates the consideration in the contract, and re-measures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

If a lease modification reduces the scope of the lease or shortens the lease term, the Group shall reduce the carrying amount of right-of-use assets accordingly, and recognise the gains or losses on part or complete derecognition of lease in profit or loss of the period. For other lease modifications that result in re-measurement of lease liabilities, the Group shall adjust the carrying amount of right-of-use assets accordingly.

#### (2) The Group as a lessor

##### (a) Separating components of a lease

Where the contract includes both the lease and non-lease components, the Group apportions the contract consideration according to the provisions of Note III.22 on the transaction price sharing. The basis of the apportionment is the individual selling price of the leased part and the non-lease part.

##### (b) Classification of leases

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



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases (continued)

#### (2) The Group as a lessor (continued)

##### (c) The Group as a lessor under operating leases

Receipts of lease under operating leases are recognised as rental income on a straight-line basis over the term of the relevant lease. Initial direct costs related to operating leases incurred by the Group are capitalised when incurred, and are recognised in profit or loss for the current period on the same basis as recognition of rental income over the lease term. The variable receipts of lease received by the Group that are related to operating leases and not included in receipts of lease are recognised in profit or loss for the period when they are incurred.

##### (d) Subleases

As the lessor of a sublease, the Group accounts for the original lease contract and the sublease contract on a separate basis. The Group classifies the subleases based on the right-of-use assets generating from the original lease rather than the underlying assets of the original lease.

##### (e) Lease modifications

For an operating lease modification, the Group accounts for it as a separate lease since the effective date of the modification. The amount received in advance or lease receivable related to the lease before the modification shall be treated as the receivable of the new lease.

### 27. Other significant accounting policies and accounting estimates

✓ Applicable     Not applicable

#### (1) Profit distribution

The proposed dividend distribution after balance sheet date will not be included in liabilities on balance sheet date, and will be disclosed individually in notes.

#### (2) Production safety expenses

Production safety expenses accrued based on the relevant regulations shall be recorded in the costs of related products or expenses in profit or loss for the current period, and provided as a fund in the special reserve. When the expenditures are utilised as expenses, they should be recognised in the statement of profit or loss and offset against the special reserve; when the expenditures incurred relate to fixed assets, they shall be recognised in the cost of fixed assets, which will be recognised when it is ready for use. The same amount as the expenditure will be offset against the special reserve and recorded as accumulated depreciation equivalent at the same time.

#### (3) Related parties

If a party has the power to control, jointly control or exercise significant influence over another party, or vice versa, or where two or more parties are subject to common control or joint control from another party, they are considered to be related parties. Related parties may be individuals or enterprises. Enterprises with which the Company is under common control only from the state and that have no other related party relationships are not regarded as related parties.

In addition to the related parties stated above, the Company determines related parties based on the disclosure requirements of Administrative Procedures on the Information Disclosures of Listed Companies issued by the CSRC.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 28. Critical judgement in applying accounting policies and key assumptions and uncertainties in accounting estimates

As operating activities have inherent uncertainties, the Group need to make judgements, estimates and assumptions upon reporting items that cannot be accurately calculated in applying the above accounting policies set out in Note III. These judgements, 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 reviews the above judgements, estimates and assumptions periodically based on going concern. If the changes of accounting estimates only affect the current period, the influence amount is recognized in the current period. If the changes of accounting estimates affect both of the current period and the future period, the influence amount is recognised in the current period and the future period.

Before the balance sheet date, the key assumptions and uncertainties, which may lead to significant adjustment to carrying amount of assets and liabilities in the future at the end of each period, are set out as follows:

#### **(a) Expected credit loss allowance for receivables and contract assets**

Except for that the Group recognises credit loss for receivables and contract assets that are individually significant or have credit impaired on an individually basis, the Group determines the expected credit loss of receivables and contract assets on a collectively basis using a provision matrix. For receivables and contract assets whose credit loss are determined individually, the Group determines the credit loss by estimating the expected cash flows based on reasonable and evidenced information available on the balance sheet date with forward-looking information taken into consideration. For receivables and contract assets other than the above, the Group, based on the historical collection condition, determines the proportion of corresponding loss provision for each type of receivables and contract assets with similar credit risk characteristics on a portfolio basis. The provision matrix is based on the Group's historical credit loss experience and is based on reasonable and evidence-based forward-looking information that is available without undue cost or effort. As at 31 December 2022, the Group has reassessed the historical actual credit loss rate and considered changes in forward-looking information.

#### **(b) Provision for decline in value of inventories**

The Group determines the write-down for obsolescence and slow movement of inventories. These estimates are made with reference to aged inventory analyses, projections of expected future salability of goods and management experience and judgement. Based on this review, write-down of inventories will be made when the carrying amounts of inventories decline below their estimated net realisable values. Due to changes in market conditions, actual salability of goods may be different from estimation and profit or loss could be affected by differences in this estimation.





# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 28. Critical judgement in applying accounting policies and key assumptions and uncertainties in accounting estimates (continued)

#### **(c) Impairment of goodwill**

For goodwill arising from business combination, the Group tests it for impairment at the year end. Impairment test requires an estimate of the recoverable amount of the relevant asset group containing goodwill, that is, the higher of its fair value less costs of disposal and the present value of the future cash flows expected to be derived from the asset. In determining the present value of the future cash flows of the relevant asset group or the fair value of such asset group under equity method, the Group needs to properly determine the expected growth rate of future cash flow prediction of related asset group, the gross profit margin, the investment income proportion of long-term assets, average growth rate and reasonable discount rate, etc. When the market conditions change, the recoverable amount of the relevant asset group may differ from the existing estimates, which will affect the profit and loss for the period. Relevant details of impairment of goodwill are set out in Note V.19.

#### **(d) Impairment of non-current assets other than financial assets (other than goodwill)**

The Group assesses whether there are any indicators of impairment for all non-current assets other than financial assets and goodwill at each balance sheet date. Other non-current assets other than financial assets and goodwill are tested for impairment when there are indicators that the carrying amounts may not be recoverable. When 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. When calculating the present value of expected future cash flows, management shall estimate the expected future cash flows from the asset or asset group and choose an appropriate discount rate in order to calculate the present value of those cash flows.

#### **(e) Deferred tax assets**

Deferred tax assets are recognised for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, such as the expected actual profitability condition of the enterprise running under deficit and the actual tax rate in the expected reversed years based upon the likely timing and level of future taxable profit.

#### **(f) Warranties for product quality**

Based on the recent experience in product maintenance, the Group will estimate the provisions for after-sales quality maintenance commitment provided to customers for the sale, maintenance and transformation of locomotives, vehicles and spare parts. As the recent maintenance experience may not reflect the maintenance situation of the sold products in the future, the management's judgements are required to estimate the provisions. Any increase or decrease in the provision would affect profit or loss in future years.





# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 29. Changes in significant accounting policies and accounting estimates

#### (1) Changes in significant accounting policies

✓ Applicable     Not applicable

#### Other information

In 2022, the Group has adopted the relevant provisions and guidelines of the accounting standards issued by the MOF recently, which mainly include:

- Provisions of CAS Bulletin No.15 (Caikuai [2021] No.35) (“Bulletin No. 15”) relating to the accounting treatment of sale of products or by-products generated before a fixed asset reaches ready-to-use condition or during the research and development process (“Accounting Treatment of Trial Sale”);
- Provisions of Bulletin No. 15 relating to the determination of onerous contract; and
- Notice on Issues Regarding the Scope of Application of the Provisions on the Accounting Treatment of Rent Concession Relating to the COVID-19 Epidemic (Caikuai [2022] No.13).
- Provisions of CAS Bulletin No.16 (Caikuai [2022] No.31) (“Bulletin No. 16”) relating to the accounting treatment of the income tax consequences of dividends on financial instruments classified as equity instruments by the issuer”; and
- Provisions of Bulletin No. 16 relating to the accounting treatment of the modification of a share-based payment transaction that changes the classification of the transaction from cash-settled to equity-settled”.

#### (a) Provisions of Bulletin No. 15 Relating to the Accounting Treatment of Trial Sale

According to these provisions, for sale of products or by-products generated before a fixed asset reaches ready-to-use condition or during the research and development process (hereinafter referred to as “Trial Sale”), the relevant income and cost, instead of being offset against fixed asset costs or R&D expenditure after deducting relevant costs, shall be accounted for separately and included in the current profit and loss in accordance with the requirements of the Accounting Standards for Business Enterprises No. 14 – Revenue and the Accounting Standards for Business Enterprises No.1 – Inventories.

The adoption of Bulletin No. 15 does not have significant effect on the financial position and financial performance of the Group and the Company.

#### (b) Provisions of Bulletin No. 15 relating to the determination of onerous contract

Under these provisions, in determining an onerous contract, the estimated costs to fulfil a contract shall include the incremental costs to fulfil the contract and the allocated amount of other costs relate directly to the fulfilment of the contract.

The adoption of Bulletin No. 15 does not have significant effect on the financial position and financial performance of the Group and the Company.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 29. Changes in significant accounting policies and accounting estimates (continued)

#### **(1) Changes in significant accounting policies (continued)**

##### *(c) Caikuai [2022] No.13*

The Accounting Treatment of COVID-19 Related Rent Concessions (Caikuai [2020] No.10) provides practical expedient under certain conditions for rent concessions occurring as a direct consequence of the COVID-19 pandemic. Under the provisions of Caikuai [2022] No.13, the practical expedient specified in Caikuai [2020] No.10 can be continued to apply for concessions of lease payment payable after 30 June 2022.

The adoption of Caikuai [2022] No.13 does not have significant effect on the financial position and financial performance of the Group.

##### *(d) Accounting treatment of the income tax consequences of dividends on financial instruments classified as equity instruments by the issuer*

In accordance with Bulletin No.16, for financial instruments classified as equity instruments (such as perpetual bonds classified as equity instruments, etc.) in accordance with the CAS No. 37 – Presentation and Disclosure of Financial Instruments and other requirements, if the relevant dividend payments are deductible for income tax purposes according to the relevant provisions of tax policies, the Group (as the issuer) shall recognise the income tax consequences of dividends when it recognises a liability to pay a dividend. The Group shall recognise the income tax consequences of dividends in (1) profit or loss, if those payments are distributions of profits generated from transactions or events previously recognised in profits or loss; or (2) the items of owner's equity, if those payments are distributions of profits generated from the transactions or events previously recognised in the items of owner's equity.

The adoption of Bulletin No.16 does not have a significant effect on the financial position and financial performance of the Group.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 29. Changes in significant accounting policies and accounting estimates (continued)

#### (1) Changes in significant accounting policies (continued)

(e) Accounting treatment of the modification of a share-based payment transaction that changes the classification of the transaction from cash-settled to equity-settled

In accordance with Bulletin No.16, if the terms and conditions of a cash-settled share-based payment transaction are modified such that it becomes an equity-settled share-based payment transaction, the Group shall, at the modification date:

- measure the equity-settled share-based payment at its fair value as at the modification date and recognise in equity that fair value to the extent that the services have been rendered up to that date;
- derecognise the liability for the cash-settled share-based payment as at the modification date; and
- immediately recognise in profit or loss the difference between the carrying amount of the liability and the amount recognised in equity. If the modification extends or shortens the vesting period, the Group applies the modified vesting period to the above accounting treatment.

The adoption of Bulletin No.16 does not have a significant effect on the financial position and financial performance of the Group.

#### (2) Changes in significant accounting estimates

Applicable  Not applicable

#### (3) Financial statements for which adjustments were made to the opening balances in the initial year of application of new accounting standards or interpretation since 2022

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## IV. TAXATION

### 1. Major categories of taxes and respective tax rates

Major categories of taxes and respective tax rates

Applicable  Not applicable

Tax category	Tax basis	Tax rate
Value-added tax ("VAT")	The output VAT calculate based on taxable income. VAT payable is the net difference between output VAT and deductible input VAT	6-13%
City maintenance and construction tax	VAT Payable	5%, 7%
Education surcharges	VAT actually paid	3%
Local education surcharges	VAT actually paid	2%
Enterprise income tax	Taxable income	25%

Tax payers with different income tax rates, the disclosure description

Applicable  Not applicable

### 2. Tax incentive

Applicable  Not applicable

#### (1) Value-added tax ("VAT")

In accordance with the Notice of the Ministry of Finance and the State Administration of Taxation on Value-added Tax Policies for Software Products (Cai Shui [2011] No. 100), for the sales of self-developed and produced software products by the Company and its subsidiaries, Zhuzhou Times Electronics Technology Co., Ltd. ("CRRC Times Electronics"), Ningbo CRRC Times Transducer Technology Co., Ltd. ("Ningbo CRRC Times"), Zhuzhou CRRC Times Software Technology Co., Ltd. ("CRRC Times Software"), Hunan CRRC Signal Co., Ltd. ("Hunan CRRC Signal"), Zhuzhou National Engineering Research Centre of Converters Co., Ltd. ("CRRC National Centre of Converters"), Ningbo CRRC Times Electric Equipment Co., Ltd. ("Ningbo CRRC Electric"), the refund-upon-collection policy shall be applied to the part of actual VAT burden in excess of 3%.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## IV. TAXATION (continued)

### 2. Tax incentive (continued)

#### (2) Enterprise income tax

The main tax incentives for enterprise income tax of the Group are as follows:

In accordance with the provisions of Article 28 under the Enterprise Income Tax Law of the People's Republic of China, high-tech enterprises that require government support are subject to a reduced enterprise income tax rate of 15%. The Company and its subsidiaries CRRC Times Software, CRRC Times Electronics, Ningbo CRRC Electric, Ningbo CRRC Times, CRRC National Centre of Converters, Hunan CRRC Signal, Baoji CRRC Times Engineering Machinery Co., Ltd. ("Baoji CRRC Times"), Taiyuan CRRC Times Rail Engineering Machinery Co., Ltd. ("Taiyuan CRRC Times"), Qingdao CRRC Electric, and Specialist Machine Developments (Shanghai) Co., Ltd. ("Shanghai CRRC SMD"), obtained the high-tech enterprise certificates approved by the corresponding tax authorities from 2019 to 2021, and were subject to a reduced enterprise income tax rate of 15% in 2021 and 2022. Shenyang CRRC Times Transportation Technology Co., Ltd. ("Shenyang CRRC Times") obtained the high-tech enterprise certificate in 2019, which was expired in July 2022. Shenyang CRRC Times was subject to the enterprise income tax rate of 25% in 2022.

In accordance with the Notice of the Ministry of Finance, the General Administration of Customs and the State Taxation Administration on Tax Policy Issues concerning Further Implementing the Western China Development Strategy (Cai Shui [2011] No. 58), and the Announcement of the Ministry of Finance, the State Taxation Administration and the National Development and Reform Commission on Continuing the Enterprise Income Tax Policies for the Large-Scale Development of Western China (Cai Shui [2020] No. 23), Chongqing CRRC Times Electric Technology Co., Ltd. ("Chongqing CRRC Electric"), Kunming CRRC Times Electric Equipment Co., Ltd. ("Kunming Electric") and Chengdu CRRC Times Electric Technology Co., Ltd. ("Chengdu CRRC Electric") meet the relevant provisions of the preferential enterprise income tax policy for the Western China Development, and therefore Chongqing CRRC Electric and Kunming Electric were subject to a reduced enterprise income tax rate of 15% in 2021 and 2022. Chengdu CRRC Electric was subject to a reduced enterprise income tax rate of 15% since 2022.

In accordance with the Circular on Printing and Issuing the List of the Integrated Circuit Enterprises or Projects and Software Enterprises Entitled to Enjoy the Preferential Taxation Policies (Fa Gai Gao Ji [2021] No. 756) issued by the National Development and Reform Commission ("NDRC"), the Ministry of Industry and Information Technology ("MIIT"), the MoF, the General Administration of Customs and the State Taxation Administration ("STA") and the Circular of the State Council on Printing and Issuing Certain Policies for Promoting High-quality Development of Integrated Circuit Industry and Software Industry in the New Times (Guo Fa [2020] No. 8) issued by the State Council, the manufacturers for integrated circuit with line width less than 130 nanometres (inclusive) have been entitled to the preferential policy of "two-year exemption and three-year half payment" for enterprise income tax, Zhuzhou CRRC times Semiconductor Co., Ltd. ("CRRC Times Semiconductor"), a subsidiary of the Company, has been entitled to the preferential tax policy of "two-year exemption and three-year half payment" since 2019, and was subject to a preferential enterprise income tax rate of 12.5% in 2021 and 2022.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## IV. TAXATION (continued)

### 2. Tax incentive (continued)

#### (2) Enterprise income tax (continued)

In accordance with the Enterprise Income Tax Law of the People's Republic of China, the Notice of the Ministry of Finance, the State Taxation Administration and the Ministry of Science and Technology on Improving the Policies for the Weighted Pre-tax Deduction of Research and Development Expenses (Cai Shui [2015] No. 119), and the Announcement of the Ministry of Finance and the State Taxation Administration on Further Improvement of the Policies for Weighted Deduction of Research and Development Expenses Before Tax (Announcement of the MoF and the STA [2021] No. 13), regarding the R&D expenses actually incurred in the course of R&D activities in the manufacturing industry by the Company and its subsidiaries, including CRRC Times Electronics, Baoji CRRC Times, Ningbo CRRC Times, Ningbo CRRC Electric, Shenyang CRRC Times, Qingdao CRRC Electric, Hunan CRRC Signal, CRRC National Centre of Converters, Shanghai CRRC SMD, CRRC Times Semiconductor, Chongqing CRRC Electric and Taiyuan CRRC Times, an extra 100% of the amount of R&D actually incurred in 2021 and 2022 is deductible before tax payment, in addition to the deduction of actual expenses as prescribed, provided that the said expenses are not recognised as intangible asset and included in the current profits and losses; if the said expenses have been recognised as an intangible asset, such expenses may be amortised at the rate of 200% of the costs of the intangible assets before tax payment in 2021 and 2022. For CRRC Times Software, an extra 75% of the amount of R&D actually incurred in 2021 and the first three quarters of 2022 is deductible before tax payment, in addition to the deduction of actual expenses as prescribed, provided that the said expenses are not recognised as intangible asset and included in the current profits and losses; if the said expenses have been recognised as an intangible asset, such expenses may be amortised at the rate of 175% of the costs of the intangible assets before tax payment in 2021 and the first three quarters of 2022.

In accordance with the Announcement of the Ministry of Finance, the State Taxation Administration, and the Ministry of Science and Technology on Increasing Pre-tax Deductions in Support of Scientific and Technological Innovation (Announcement No.28 [2022] of the Ministry of Finance, the State Taxation Administration, and the Ministry of Science and Technology), the pre-tax deduction ratio enjoyed by CRRC Times Software for its R&D expenses actually incurred between 1 October 2022 and 31 December 2022 has been raised from 75% to 100%.

In accordance with the Notice of the Ministry of Finance and the State Administration of Taxation on Implementing the Inclusive Tax Deduction and Exemption Policies for Micro and Small Enterprises (Cai Shui [2019] No. 13), Chengdu CRRC Times Electric Technology Co., Ltd. ("Chengdu CRRC Electric"), a subsidiary of the Company, is qualified to be recognised as a small low-profit enterprise in 2021. Therefore, for annual taxable income not exceeding RMB1 million, the annual taxable income amount is computed at a reduced rate of 25% and is subject to enterprise income tax at 20% tax rate. For annual taxable income exceeding RMB1 million but no more than RMB3 million, the annual taxable income is computed at a reduced rate of 50% and is subject to a tax rate of 20% for the enterprise income tax. In addition, Chengdu CRRC Electric meets the relevant provisions of the preferential enterprise income tax policy for the Western China Development, and therefore was subject to a preferential tax rate of 15% for enterprise income tax in 2022.

In accordance with the Announcement No.28 [2022] of the Ministry of Finance, the State Taxation Administration, and the Ministry of Science and Technology, equipment and instruments purchased by the Company and its subsidiaries CRRC Times Electronics, CRRC Times Software, Hunan CRRC Signal and CRRC Times Semiconductor between 1 October 2022 and 31 December 2022 are qualified for a full deduction in a lump sum for the year in the calculation of taxable income and for a 100% pre-tax additional deduction.

### 3. Others

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

### 1. Cash and bank balances

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Closing balance	Opening balance
Cash on hand	31,466	29,256
Bank deposits	7,500,347,208	8,193,019,354
Other monetary funds	—	26,272,279
Total	<u>7,500,378,674</u>	<u>8,219,320,889</u>
Including: Total funds deposited overseas	<u>254,853,751</u>	<u>199,717,650</u>
Cash deposited in the finance company	<u>—</u>	<u>—</u>

The Group's other monetary funds are as follows:

Unit: Yuan    Currency: RMB

Item	Closing balance	Opening balance
Security deposits of the letter of guarantee	—	14,272,279
Security deposits of the bank acceptances	—	12,000,000
Total	<u>—</u>	<u>26,272,279</u>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 1. Cash and bank balances (continued)

The Group's time deposits at the bank with more than three months that are not pledged are as follows:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Time deposits with more than three months	<u>425,507,144</u>	<u>309,988,505</u>

Other information:

Interest income earned on current deposits is calculated by using the current deposit interest rate. The deposit periods for short-term time deposits vary from 1 day to 3 months depending on the cash demand of the Group, with interest income earned at the respective interest rates of the banks' time deposits.

### 2. Held-for-trading financial assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Financial assets at FVTPL	<u>6,700,827,160</u>	7,579,988,489
Including:		
Structured deposits	<u>6,700,827,160</u>	<u>7,579,988,489</u>
Total	<u>6,700,827,160</u>	<u>7,579,988,489</u>

Other information:

Applicable  Not applicable

As at 31 December 2022, the yield rate per annum of structured deposits held by the Group ranges from 1.43% to 6.18% (31 December 2021: 1.49% to 4.51%).



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. Bills receivable

#### (1) Category of bills receivable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Bank acceptances	238,121,922	282,239,607
Commercial acceptances	3,171,786,124	2,478,720,481
Less: Provision for credit loss	5,371,158	3,840,331
Total	3,404,536,888	2,757,119,757

#### (2) Pledged bills receivable at the end of the period

Applicable  Not applicable

#### (3) Bills receivable endorsed or discounted by the Group at the end of the period and not yet due on the balance sheet date

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Amount not derecognised at the end of the period
Bank acceptances	40,865,501
Commercial acceptances	8,836,500
Total	49,702,001

The Group believes that it retains substantially all risk and rewards of the ownership of such endorsed or disclosed bills receivable (including relevant risk of default), therefore continues to recognise such endorsed or disclosed bills receivables as well as the carrying amount of relevant accounts payable that have been repaid.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. Bills receivable (continued)

#### (4) Bills receivable of the Group that transferred to accounts receivable at the end of the period due to the default of the drawer

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Amount transferred to accounts receivable at the end of the period
Commercial acceptances	600,000
Total	600,000

#### (5) Bills receivable for which provision for credit loss is assessed on a portfolio basis

Applicable  Not applicable

##### Bank acceptances

As at 31 December 2022, the Group considered that the credit rating of the acceptance bank was relatively high and there was no significant credit risk. Therefore, no provision for credit losses was made.

##### Commercial acceptances

Provision for credit loss of commercial acceptances is assessed on a portfolio basis of four categories of customers, each of which involves a large number of customers with the same risk characteristics.

Bills receivable for which provision for credit loss is assessed individually:

Applicable  Not applicable

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. Bills receivable (continued)

#### (5) Bills receivable for which provision for credit loss is assessed on a portfolio basis (continued)

##### Commercial acceptances (continued)

Analysis of bills receivable for which provision for credit loss is assessed on a portfolio basis of four categories of customers is as follows:

Portfolio accrual items:

2022

Unit: Yuan Currency: RMB

Item	Gross carrying amount	Closing balance Provision for credit loss	Expected average loss rate (%)
Receivables from central state-owned enterprise except State Railway Group	998,842,531	998,843	0.10
Receivables from local government or local state-owned enterprise	39,920,000	399,200	1.00
Receivables from State Railway Group (Note)	2,070,106,128	2,070,106	0.10
Receivables from other customers	62,917,465	1,903,009	3.02
Total	3,171,786,124	5,371,158	

2021

Unit: Yuan Currency: RMB

Item	Gross carrying amount	Opening balance Provision for credit loss	Expected average loss rate (%)
Receivables from central state-owned enterprise except State Railway Group	616,295,163	616,295	0.1
Receivables from local government or local state-owned enterprise	34,494,690	344,947	1
Receivables from State Railway Group	1,776,237,068	1,776,237	0.1
Receivables from other customers	51,693,560	1,102,852	2.13
Total	2,478,720,481	3,840,331	

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. Bills receivable (continued)

#### (5) Bills receivable for which provision for credit loss is assessed on a portfolio basis (continued)

Commercial acceptances (continued)

Recognition criteria and description of accrual provision for credit loss

Applicable  Not applicable

If the provision for credit loss is accrued according to the general model, please refer to the Note of Other Receivable.

Applicable  Not applicable

#### (6) Provision for credit loss of bills receivable:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Change amount in the current period			Closing balance
		Provision	Recoveries or reversals	Transfers out or written-off	
Expected credit loss in the next 12 months (Not credit impaired)	3,840,331	2,553,541	-1,022,714	-	5,371,158
Total	3,840,331	2,553,541	-1,022,714	-	5,371,158

Significant recoveries or reversals during the period:

Applicable  Not applicable

Other information:

None

#### (7) Bills receivable actually written off in the current period

Applicable  Not applicable

Other information

Applicable  Not applicable

As at 31 December 2022, bills receivable due from related parties of the Group are set out in Note X.6.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable

#### (1) Disclosed by ageing

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Ageing	Closing balance	Opening balance
Within 1 year		
Among them: Sub-items within 1 year		
Within 6 months	6,395,696,592	5,160,346,451
6 months to 1 year	859,941,127	638,971,921
Subtotal within 1 year	7,255,637,719	5,799,318,372
1 to 2 years	818,797,612	865,797,373
2 to 3 years	254,268,940	77,767,356
Over 3 years	35,076,182	31,486,417
Total	8,363,780,453	6,774,369,518
Less: Provision for credit loss	263,563,450	224,952,493
Book Value	8,100,217,003	6,549,417,025

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Category	Closing balance					Opening balance				
	Gross carrying amount		Credit loss allowance			Gross carrying amount		Credit loss allowance		
	Amount	Percentage (%)	Amount	Proportion of provision (%)	Book value	Amount	Percentage (%)	Amount	Proportion of provision (%)	Book value
Provision on individual basis	13,681,028	0.16	13,681,028	100	-	42,782,876	0.63	42,782,876	100.00	-
Provision on portfolio basis	8,350,099,425	99.84	249,882,422	2.99	8,100,217,003	6,731,586,642	99.37	182,169,617	2.71	6,549,417,025
Including:										
Receivables from central state-owned enterprise except State Railway Group	3,369,158,073	40.28	84,715,061	2.51	3,284,443,012	1,753,334,085	25.88	22,679,393	1.29	1,730,654,692
Receivables from local government or local state-owned enterprise	1,671,692,946	19.99	87,356,832	5.23	1,584,336,114	2,305,951,133	34.04	92,677,551	4.02	2,213,273,582
Receivables from State Railway Group	1,380,003,206	16.50	4,339,739	0.31	1,375,663,467	1,484,839,673	21.92	10,856,703	0.73	1,473,982,970
Receivables from other customers	1,929,245,200	23.07	73,470,790	3.81	1,855,774,410	1,187,461,751	17.53	55,955,970	4.71	1,131,505,781
Total	8,363,780,453	100	263,563,450	/	8,100,217,003	6,774,369,518	100	224,952,493	/	6,549,417,025

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Accounts receivable for which provision for credit loss is assessed individually:

✓ Applicable     Not applicable

2022

Unit: Yuan    Currency: RMB

Entity	Gross carrying amount	Closing balance		
		Provision for credit loss	Proportion of provision (%)	Reason for provision
Qingdao New Energy Solutions Inc.	6,635,973	6,635,973	100	Low probability of recovery
China Railway Bridge Engineering Group Electrification Engineering Co., Ltd.	2,481,367	2,481,367	100	Low probability of recovery
Shengnuo Chuangke (Beijing) Electric Co., Ltd.	1,400,000	1,400,000	100	Low probability of recovery
China Railway Materials Shanghai Co., Ltd.	1,038,000	1,038,000	100	Low probability of recovery
Others	2,125,688	2,125,688	100	Low probability of recovery
Total	<u>13,681,028</u>	<u>13,681,028</u>	100	/

2021

Unit: Yuan    Currency: RMB

Entity	Gross carrying amount	Opening balance		
		Provision for credit loss	Proportion of provision (%)	Reason for provision
Qingdao New Energy Solutions Inc.	30,178,462	30,178,462	100	Low probability of recovery
Huasheng Green Energy (Changxing) Agricultural Technology Co., Ltd.	2,680,000	2,680,000	100	Low probability of recovery
Jiutai Energy (Zhungeer) Co., Ltd.	2,034,155	2,034,155	100	Low probability of recovery
Shengnuo Chuangke (Beijing) Electric Co., Ltd.	1,400,000	1,400,000	100	Low probability of recovery
Tibet Julong Copper Co., Ltd.	1,200,000	1,200,000	100	Low probability of recovery
Others	5,290,259	5,290,259	100	Low probability of recovery
Total	<u>42,782,876</u>	<u>42,782,876</u>	100	/

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Description of accounts receivable for which credit loss allowance is provided on an individual basis:

Applicable  Not applicable

Analysis of accounts receivable for which credit loss allowance is provided on a portfolio basis:

Applicable  Not applicable

Items for which the credit loss is assessed collectively: Receivables from central state-owned enterprise except State Railway Group

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance Provision for credit loss	Proportion of provision (%)
Within 6 months	2,809,704,379	51,607,295	1.84
6 months to 1 year	306,221,707	6,243,969	2.04
1 to 2 years	194,659,544	11,544,925	5.93
2 to 3 years	44,043,845	10,754,202	24.42
Over 3 years	14,528,598	4,564,670	31.42
Total	<u>3,369,158,073</u>	<u>84,715,061</u>	

2021

Unit: Yuan Currency: RMB

Item	Accounts receivable	Opening balance Provision for credit loss	Proportion of provision (%)
Within 6 months	1,396,012,881	8,772,120	0.63
6 months to 1 year	244,618,443	3,444,642	1.41
1 to 2 years	72,869,823	2,418,993	3.32
2 to 3 years	33,093,198	5,649,314	17.07
Over 3 years	6,739,740	2,394,324	35.53
Total	<u>1,753,334,085</u>	<u>22,679,393</u>	



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Recognition criteria and description of accrual provision for credit loss:

Applicable  Not applicable

Items for which the credit loss is assessed collectively:

Receivables from local government or local state-owned enterprise

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance Provision for credit loss	Proportion of provision (%)
Within 6 months	844,245,825	27,490,490	3.26
6 months to 1 year	199,689,951	7,422,451	3.72
1 to 2 years	436,053,545	28,526,197	6.54
2 to 3 years	191,456,413	23,840,801	12.45
Over 3 years	247,212	76,893	31.10
Total	<u>1,671,692,946</u>	<u>87,356,832</u>	

2021

Unit: Yuan Currency: RMB

Item	Accounts receivable	Opening balance Provision for credit loss	Proportion of provision (%)
Within 6 months	1,437,734,968	31,832,753	2.21
6 months to 1 year	209,803,164	7,410,442	3.53
1 to 2 years	638,360,820	47,281,558	7.41
2 to 3 years	14,300,471	2,812,293	19.67
Over 3 years	5,751,710	3,340,505	58.08
Total	<u>2,305,951,133</u>	<u>92,677,551</u>	

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Recognition criteria and description of accrual provision for credit loss:

Applicable  Not applicable

Items for which the credit loss is assessed collectively: Receivables from State Railway Group

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance Provision for credit loss	Proportion of provision (%)
Within 6 months	1,196,909,785	2,774,631	0.23
6 months to 1 year	126,079,766	385,865	0.31
1 to 2 years	52,343,187	573,865	1.10
2 to 3 years	4,256,043	367,084	8.63
Over 3 years	414,425	238,294	57.50
Total	<u>1,380,003,206</u>	<u>4,339,739</u>	

2021

Unit: Yuan Currency: RMB

Item	Accounts receivable	Opening balance Provision for credit loss	Proportion of provision (%)
Within 6 months	1,286,742,369	3,213,043	0.25
6 months to 1 year	101,571,449	1,675,302	1.65
1 to 2 years	91,794,499	4,861,902	5.30
2 to 3 years	4,731,356	1,106,456	23.39
Over 3 years	—	—	—
Total	<u>1,484,839,673</u>	<u>10,856,703</u>	

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Recognition criteria and description of accrual provision for credit loss:

Applicable  Not applicable

Items for which the credit loss is assessed collectively: Receivables from other customers

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance Provision for credit loss	Proportion of provision (%)
Within 6 months	1,544,836,603	46,229,264	2.99
6 months to 1 year	227,949,703	8,031,697	3.52
1 to 2 years	135,552,536	12,705,690	9.37
2 to 3 years	14,512,640	2,499,588	17.22
Over 3 years	6,393,718	4,004,551	62.63
Total	<u>1,929,245,200</u>	<u>73,470,790</u>	

2021

Unit: Yuan Currency: RMB

Item	Accounts receivable	Opening balance Provision for credit loss	Proportion of provision (%)
Within 6 months	1,039,856,235	28,911,392	2.78
6 months to 1 year	82,978,864	6,638,309	8.00
1 to 2 years	48,222,380	9,442,945	19.58
2 to 3 years	9,817,594	5,323,062	54.22
Over 3 years	6,586,678	5,640,262	85.63
Total	<u>1,187,461,751</u>	<u>55,955,970</u>	

Recognition criteria and description of accrual provision for credit loss:

Applicable  Not applicable

If the provision for credit loss is accrued according to the general model, please refer to the Note of Other Receivable.

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (3) Provision for credit loss of accounts receivable

Applicable  Not applicable

2022

Unit: Yuan Currency: RMB

Item	Opening balance	Transferred to credit-impaired losses	Change amount in the current period			Differences resulting from the translation of foreign currency financial statements	Closing balance
			Provision	Recoveries or reversals	Transfers out or written-off		
Lifetime ECL (Not credit – impaired)	91,898,003	-16,311,983	74,604,104	-	-	-4,461	150,185,663
Lifetime ECL (Credit – impaired)	133,054,490	16,311,983	-	-14,032,815	-21,955,871	-	113,377,787
Total	224,952,493	-	74,604,104	-14,032,815	-21,955,871	-4,461	263,563,450

2021

Unit: Yuan Currency: RMB

Item	Opening balance	Transferred to credit-impaired losses	Change amount in the prior period			Differences resulting from the translation of foreign currency financial statements	Closing balance
			Provision	Recoveries or reversals	Transfers out or written-off		
Lifetime ECL (Not credit – impaired)	208,574,000	-38,558,339	-	-78,139,216	-	21,558	91,898,003
Lifetime ECL (Credit – impaired)	134,603,260	38,558,339	-	-29,522,990	-10,551,013	-33,106	133,054,490
Total	343,177,260	-	-	-107,662,206	-10,551,013	-11,548	224,952,493

Significant recoveries or reversals during the current period:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (4) Accounts receivable that are actually written-off are as follows

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Written-off amount
Accounts receivable written off	<u>26,099,600</u>

Significant accounts receivable written off during the year

Applicable  Not applicable

Description on written-off of accounts receivable:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (5) Top five accounts receivable categorised by debtors

✓ Applicable     Not applicable

2022

Unit: Yuan    Currency: RMB

Name of the entity	Closing gross carrying amount	Proportion to total accounts receivable (%)	Closing provision for credit loss
Customer 6	774,702,791	9.26	18,643,862
Customer 7	399,262,361	4.77	18,075,435
Customer 8	353,873,849	4.23	1,092,335
Customer 9	280,993,714	3.36	579,305
Customer 3	257,451,743	3.08	10,359,440
Total	<u>2,066,284,458</u>	<u>24.70</u>	<u>48,750,377</u>

2021

Unit: Yuan    Currency: RMB

Name of the entity	Closing gross carrying amount	Proportion to total accounts receivable (%)	Closing provision for credit loss
Customer 7	372,455,720	5.50	13,711,166
Customer 3	342,859,666	5.06	12,399,198
Customer 8	336,292,869	4.96	516,695
Customer 6	294,359,666	4.35	2,857,981
Customer 10	109,735,047	1.62	7,449,875
Total	<u>1,455,702,968</u>	<u>21.49</u>	<u>36,934,915</u>

Other information:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. Accounts receivable (continued)

#### (6) Accounts receivable derecognised due to transfer of financial assets:

Applicable  Not applicable

For the year ended 2022, the Group derecognised accounts receivable of RMB652,541,289 due to factoring of accounts receivable (2021: RMB413,518,544)

The Group believes that it has transferred substantially all risk and rewards of the ownership of such accounts receivable, therefore derecognised such accounts receivable.

#### (7) Amount of assets and liabilities formed by transferring accounts receivable but continuing involvement

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 5. Trade receivables financing

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Bills receivable measured at fair value	1,117,071,219	1,172,878,926
Trade receivable measured at fair value	1,801,617,618	1,737,648,741
Total	2,918,688,837	2,910,527,667

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 5. Trade receivables financing (continued)

Increase/decrease changes and fair value changes of trade receivables financing in the current period:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Cost	2,995,931,294	2,984,400,555
Carrying amount	<u>2,918,688,837</u>	<u>2,910,527,667</u>
Accumulated changes in fair value	<u>-77,242,457</u>	<u>-73,872,888</u>

Increase/decrease changes and fair value changes of trade receivables financing in the current period:

Applicable  Not applicable

If the provision for credit loss is accrued according to the general model, please refer to the Note of Other Receivable.

Applicable  Not applicable

Other information:

Applicable  Not applicable

The Group discounted and endorsed a part of bank acceptances while transferred a part of accounts receivable according to its daily fund management needs, which qualified for derecognition. Therefore, such part of notes receivable and accounts receivable were classified by the Group as financial assets at fair value through other comprehensive income.

#### (1) Bills receivable pledged at the end of the period

Unit: Yuan Currency: RMB

Item	Pledged amount at 31 December 2022
Bank acceptances	-
Total	<u>-</u>



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 5. Trade receivables financing (continued)

#### (2) Notes receivable endorsed or discounted by the Group at the end of the period and not yet due on the balance sheet date

Unit: Yuan Currency: RMB

Item	Amount derecognised at the end of the period
Bank acceptances	537,598,952
Total	537,598,952

The Group believes that it has transferred substantially all risk and rewards of the ownership of such endorsed or disclosed bills receivable to its suppliers or bank, therefore derecognised such endorsed or disclosed bills receivables.

### 6. Prepayments

#### (1) Ageing analysis of prepayments is as follows:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Ageing	Closing balance		Opening balance	
	Carrying amount	Proportion (%)	Carrying amount	Proportion (%)
Within 1 year	676,779,463	94.59	330,781,189	96.01
1 to 2 years	32,947,159	4.60	6,388,352	1.85
2 to 3 years	3,305,416	0.46	1,882,872	0.55
Over 3 years	2,492,297	0.35	5,469,939	1.59
Total	715,524,335	100.00	344,522,352	100.00

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 6. Prepayments (continued)

#### (1) Ageing analysis of prepayments is as follows: (continued)

At the balance sheet date, significant prepayments aged over one year are as follows:

2022

Unit: Yuan Currency: RMB

Name of the entity	Gross carrying amount	Ageing
Supplier 6	8,100,300	1 to 2 years
Supplier 7	6,180,000	1 to 2 years
Supplier 8	3,137,807	1 to 2 years
Total	<u>17,418,107</u>	

2021

Unit: Yuan Currency: RMB

Name of the entity	Gross carrying amount	Ageing
Supplier 9	2,000,000	1 to 2 years
Supplier 10	977,913	1 to 2 years
Supplier 11	669,141	1 to 2 years
Supplier 12	626,697	1 to 2 years and 2 to 3 years
Supplier 13	494,695	4 to 5 years
Total	<u>4,768,446</u>	

Description of the reasons why the prepayments with an ageing of more than 1 year and significant amount are not settled in time:

Significant prepayments aged over one year are not settled in a timely manner mainly because the relevant projects are not yet completed, or materials or equipment are not yet received.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 6. Prepayments (continued)

#### (2) Top five balances of prepayments categorised by receivers

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the entity	Closing balance	Proportion to total closing balance of prepayments (%)
Supplier 2	75,079,821	10.49
Supplier 14	70,057,563	9.79
Supplier 15	28,548,000	3.99
Supplier 16	27,755,519	3.88
Supplier 17	27,190,087	3.80
Total	<u>228,630,990</u>	<u>31.95</u>

Other information

None

Other information

Applicable  Not applicable

As at 31 December 2022, prepayments made to related parties of the Group are set out in Note X.6.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables

#### Details of items

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Interest receivable	–	–
Dividends receivable	–	90,000
Other receivables	<b>186,845,646</b>	199,851,167
Total	<b>186,845,646</b>	199,941,167

Other information:

Applicable  Not applicable

As at 31 December 2022, other receivables due from related parties of the Group are set out in Note X.6.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### Interest receivable

##### (1) Classification of interest receivable

Applicable  Not applicable

##### (2) Significant overdue interest

Applicable  Not applicable

##### (3) Provision for bad debts

Applicable  Not applicable

Other information:

Applicable  Not applicable

#### Dividends receivable

##### (1) Dividends receivable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item (or investee)	Closing balance	Opening balance
Shanghai Shenzhong Rail Transit Operation Safety Engineering Technology Research Co., Ltd.	-	90,000
Total	-	90,000

##### (2) Significant dividends receivable with ageing over 1 year

Applicable  Not applicable

##### (3) Provision for bad debts

Applicable  Not applicable

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### Other receivables

(1) Other receivables disclosed by ageing

Applicable  Not applicable

Unit: Yuan Currency: RMB

Ageing	Closing balance	Opening balance
Within 1 year	126,162,814	127,148,931
1 to 2 years	16,939,261	39,867,349
2 to 3 years	11,552,407	1,874,046
Over 3 years	35,983,555	35,197,861
Total	190,638,037	204,088,187
Less: Credit loss allowance for other receivables	3,792,392	4,237,020
Book Value	186,845,646	199,851,167

(2) Other receivables categorised by nature

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Deposits and guarantees	122,423,364	127,956,931
Tax refunds receivable	27,267,847	27,012,094
Others	40,946,826	49,119,162
Total	190,638,037	204,088,187



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### Other receivables (Continued)

(3) Details of provision for credit loss allowance

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Credit loss allowance	Phase 1 12-month ECL	Phase 2 Lifetime ECL– Not credit impaired	Phase 3 Lifetime ECL – Credit impaired	Total
Balance at 1 January 2022	4,237,020	–	–	4,237,020
– Transfer to Phase 2	–	–	–	–
– Transfer to Phase 3	–	–	–	–
– Transfer back to Phase 2	–	–	–	–
– Transfer back to Phase 1	–	–	–	–
Provision	541,046	–	–	541,046
Reversal	-1,005,675	–	–	-1,005,675
Transfer out	–	–	–	–
Written-off	–	–	–	–
Other changes	20,000	–	–	20,000
Balance at 31 December 2022	3,792,391	–	–	3,792,391

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### Other receivables (continued)

#### (3) Details of provision for credit loss allowance (continued)

2021

Unit: Yuan Currency: RMB

Credit loss allowance	Phase 1 12-month ECL	Phase 2 Lifetime ECL– Not credit impaired	Phase 3 Lifetime ECL – Credit impaired	Total
Balance at 1 January 2021	1,670,293	–	–	1,670,293
– Transfer to Phase 2	–	–	–	–
– Transfer to Phase 3	–	–	–	–
– Transfer back to Phase 2	–	–	–	–
– Transfer back to Phase 1	–	–	–	–
Provision	3,905,769	–	–	3,905,769
Reversal	-948,638	–	–	-948,638
Transfer out	–	–	–	–
Written-off	-390,404	–	–	-390,404
Other changes	–	–	–	–
Balance at 31 December 2021	<u>4,237,020</u>	<u>–</u>	<u>–</u>	<u>4,237,020</u>

Please disclose significant changes in the balance of other receivables of which the loss allowance has changed in the current period:

Applicable  Not applicable

Please disclose the basis of the provision of credit loss and the assessment regarding whether there is a significant increase in the credit risk of financial instruments:

Applicable  Not applicable

#### (4) Provision for bad debts

Applicable  Not applicable

#### (5) Other receivables actually written off in the current period

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### Other receivables (continued)

(6). Top five other receivables categorised by debtors

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Name of the entity	Nature	Closing gross carrying value	Ageing	Proportion to total closing balance of other receivables (%)	Closing balance of provision for credit loss
Customer 7	Deposits and guarantees	33,894,620	4 to 5 years and over 5 years	17.78	1,026,340
Customer 15	Tax refunds receivable	20,237,572	Within 1 year and 1 to 2 years	10.62	–
Customer 16	Deposits and guarantees	15,000,000	2 to 3 years	7.87	1,156,752
Customer 17	Tax refunds receivable	7,030,275	Within 1 year	3.69	–
Customer 18	Deposits and guarantees	3,845,000	1 to 2 years	2.02	33,565
Total	/	<u>80,007,467</u>	/	<u>41.98</u>	<u>2,216,657</u>

2021

Unit: Yuan    Currency: RMB

Name of the entity	Nature	Closing gross carrying value	Ageing	Proportion to total closing balance of other receivables (%)	Closing balance of provision for credit loss
Customer 7	Deposits and guarantees	33,894,620	3 to 4 years and 4 to 5 years	16.61	1,168,456
Customer 16	Deposits and guarantees	30,000,000	1 to 2 years	14.70	–
Customer 15	Tax refunds receivable	27,012,094	Within 1 year	13.24	–
Customer 19	Deposits and guarantees	14,200,000	Within 1 year	6.96	357,270
Customer 18	Deposits and guarantees	3,845,000	Within 1 year	1.88	192,807
Total	/	<u>108,951,714</u>	/	<u>53.39</u>	<u>1,718,533</u>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### Other receivables (continued)

(7) Receivables involving government grants

Applicable  Not applicable

2022

Unit: Yuan Currency: RMB

Name of the entity	Name of government grants project	Closing gross carrying value	Ageing	Expected time and amount of receipt and its basis
Customer 15	Grants for R&D expenditure	20,237,572	Within 1 year and 1 to 2 years	According to the R&D expense credit policy, it is expected to receive a tax refund of GBP 2,410,928 (equivalent to RMB20,237,572) in 2023.

2021

Unit: Yuan Currency: RMB

Name of the entity	Name of government grants project	Closing gross carrying value	Ageing	Expected time and amount of receipt and its basis
Customer 15	Grants for R&D expenditure	27,012,094	Within 1 year	According to the R&D expense credit policy, a tax refund of GBP 2,855,426 (equivalent to RMB24,271,831) was received in 2022.

Other information

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. Other receivables (continued)

#### **Other receivables** (continued)

(8) Other receivables derecognized due to transfer of financial assets

Applicable  Not applicable

(9) Amount of assets and liabilities formed by transferring other receivable but continuing involvement

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 8. Inventories

#### (1) Category of inventories

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for decline in value	Book Value	Gross carrying amount	Provision for decline in value	Book Value
Raw materials	801,707,979	126,571,570	675,136,409	1,150,161,573	230,241,517	919,920,056
Work in progress	1,622,888,217	54,352,682	1,568,535,535	1,368,695,562	30,063,896	1,338,631,666
Finished goods	3,545,760,340	9,905,360	3,535,854,980	2,676,873,047	47,597,760	2,629,275,287
Turnover materials	51,939,975	9,884,054	42,055,921	37,854,383	4,593,759	33,260,624
<b>Total</b>	<b>6,022,296,511</b>	<b>200,713,666</b>	<b>5,821,582,845</b>	<b>5,233,584,565</b>	<b>312,496,932</b>	<b>4,921,087,633</b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 8. Inventories (continued)

#### (2) Provision for decline in value of inventories and impairment of costs to fulfil a contract with a customer:

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase in current period	Decrease in current period		Closing balance
		Increase Provision	Recovery or transfer-out	Translation differences of financial statements denominated in foreign currencies	
Raw materials	230,241,517	19,411,257	125,040,229	-1,959,025	126,571,570
Work in progress	30,063,896	37,241,485	12,789,942	162,757	54,352,682
Finished goods	47,597,760	1,656,070	39,244,154	104,316	9,905,360
Turnover materials	4,593,759	5,310,285	19,990	-	9,884,054
<b>Total</b>	<b>312,496,932</b>	<b>63,619,097</b>	<b>177,094,315</b>	<b>-1,691,952</b>	<b>200,713,666</b>

2021

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase in current period	Decrease in current period		Closing balance
		Increase Provision	Recovery or transfer-out	Translation differences of financial statements denominated in foreign currencies	
Raw materials	160,893,693	90,959,968	20,775,541	836,603	230,241,517
Work in progress	36,643,368	20,082,859	25,674,131	988,200	30,063,896
Finished goods	20,823,233	44,803,294	17,440,576	588,191	47,597,760
Turnover materials	1,441,187	3,189,693	37,121	-	4,593,759
<b>Total</b>	<b>219,801,481</b>	<b>159,035,814</b>	<b>63,927,369</b>	<b>2,412,994</b>	<b>312,496,932</b>



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 8. Inventories (continued)

#### **(3) Description of ending balance of inventory including capitalisation of borrowing costs**

Applicable  Not applicable

#### **(4) Description of amortisation amount of contract performance cost in the current period**

Applicable  Not applicable

Other information

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 9. Contract assets

#### (1) Details of contract assets:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for asset loss	Book value	Gross carrying amount	Provision for asset loss	Book value
Quality guarantee funds receivable	857,436,570	19,016,732	838,419,838	692,022,984	16,996,520	675,026,464
Construction service contract assets	32,319,152	-	32,319,152	76,422,445	-	76,422,445
Less: Contract assets included in other non-current assets (Note V. 22)	448,932,589	9,647,312	439,285,277	455,282,087	12,151,975	443,130,112
Total	440,823,133	9,369,420	431,453,713	313,163,342	4,844,545	308,318,797

The quality guarantee funds receivable mentioned above mainly include quality guarantee funds related to sales contracts, construction contracts and maintenance service contracts. The Group's construction contracts related to the construction of some offshore products such as deep-sea robots are recognised based on the performance progress. Any difference between the revenue recognised based on the performance progress and the contract consideration collected after the customer completes the acceptance check and work settlement shall be recognised as contract assets, because the contractual terms and conditions for receiving the consideration are not yet satisfied. When the Group is unconditionally entitled to consideration upon provision of corresponding services to the customer, the contract assets would be recognised as accounts receivable.

#### (2) Amount and reasons for significant changes in book value during the reporting period

Applicable  Not applicable

#### (3) Provision for asset loss of contract assets is as follows

Applicable  Not applicable

Unit: Yuan Currency: RMB

Items	Provision during the period	Reversals during the period	Transfer out/ written-off	
			Reason	
Lifetime ECL – Not credit impaired	7,394,629	-2,869,754	-	
Lifetime ECL – Credit impaired	-	-	-	
Total	7,394,629	-2,869,754	-	/



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 9. Contract assets (continued)

#### (3) Provision for asset loss of contract assets is as follows (continued)

If the provision for credit loss is accrued according to the general model, please refer to the Note of Other Receivable.

Applicable  Not applicable

Other information:

Applicable  Not applicable

As at 31 December 2022, book value of contract assets of related parties of the Group are set out in Note X. 6.

### 10. Non-current assets due within one year

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Certificate of deposits due within one year	338,600,452	—
Long-term receivables due within one year	2,151,177	—
Total	340,751,629	—

Significant debt investment and other debt investment at the end of the period:

Applicable  Not applicable

Other information

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 11. Other current assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
VAT retained for deduction	218,392,719	729,803,139
Other taxes prepaid	53,847,913	72,935,033
Certificate of deposits ("CDs")	50,157,194	50,000,000
Total	322,397,826	852,738,172

Other information

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. Long-term equity investments

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Name of investees	Balance at 1 January 2022	Changes for the period			Translation differences of financial statements denominated in foreign currencies	Balance at 31 December 2022
		Increasing investment	Investment income or loss recognised under equity method	Profits declared to be distributed		
<b>I. Joint ventures</b>						
Zhuzhou Shiling Transportation Equipment Co., Ltd. ("Shiling")	170,989,491	-	6,387,629	71,000,000		106,377,120
Zhejiang Times LANP New Energy Co., Ltd. ("Zhejiang Times LANP" note 1)	16,029,889	-	-2,247,550	-		13,782,339
Shanghai Shentong CRRC Rail Transit Operation Safety Engineering Technology Research Co., Ltd. ("Shanghai shenzhong")	6,220,214	-	2,794,033	-		9,014,247
Zhengzhou Times Transportation Electrical Equipment Co., Ltd. ("Zhengzhou Times")	5,795,314	-	2,987,286	-		8,782,600
Guangzhou Qinglan Semiconductor Co., Ltd. ("Qinglan Semiconductor")	73,500,000	-	-1,129,426	-		72,370,574
<b>Sub-total</b>	<b>272,534,908</b>	<b>-</b>	<b>8,791,972</b>	<b>71,000,000</b>		<b>210,326,880</b>
<b>II. Associates</b>						
Wuxi CRRC Hofer Powertrain Co., Ltd. ("CRRC Hofer")	96,606,179	-	-101,084,830	-	4,478,651	-
Siemens Traction Equipment Ltd., Zhuzhou ("Zhuzhou Siemens")	46,325,738	-	394,127	-		46,719,865
Hunan Guoxin Semiconductor Technology Co., Ltd. ("CRRC Guoxin Technology")	50,059,852	-	105,829	-		50,165,681
Hunan Times Wabtec Transit Transport & Equipment Co., Ltd. ("Times Wabtec")	13,852,984	-	2,185,772	218,576		15,820,180
Zhixin Semiconductor Co., Ltd. ("Zhixin Semiconductor")	90,303,798	-	2,829,294	-		93,133,092
CRRC India Private Limited ("CRRC India")	15,243,267	-	21,103	-		15,264,370
Wuxi Times Smart Transportation Institute Co., Ltd. ("Wuxi Times")	20,480,632	-	1,374,619	-		21,855,251
Foshan Zhongshi Zihui Transportation Technology Co., Ltd. ("Foshan Zhongshi")	6,320,000	-	455,029	-		6,775,029
Guangzhou High-speed Rail Technology Co., Ltd. ("Guangzhou High-speed" note 2)	-	3,420,000	70,534	-		3,490,534
<b>Sub-total</b>	<b>339,192,450</b>	<b>3,420,000</b>	<b>-93,648,523</b>	<b>218,576</b>	<b>4,478,651</b>	<b>253,224,002</b>
<b>Total</b>	<b>611,727,358</b>	<b>3,420,000</b>	<b>-84,856,551</b>	<b>71,218,576</b>	<b>4,478,651</b>	<b>463,550,882</b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. Long-term equity investments (continued)

2021

Unit: Yuan Currency: RMB

Name of investees	Balance at 1 January 2021	Increasing investment	Changes for the period		Translation differences of financial statements denominated in foreign currencies	Balance at 31 December 2021
			Investment income or loss recognised under equity method	Profits declared to be distributed		
I. Joint ventures						
Shiling	186,163,918	–	4,825,573	-20,000,000	–	170,989,491
LANP Electrical	16,620,801	–	-140,912	-450,000	–	16,029,889
Shanghai shenzhong	6,506,016	–	-195,802	-90,000	–	6,220,214
Zhengzhou Times	8,146,591	–	-2,351,277	–	–	5,795,314
Qinglan Semiconductor	–	73,500,000	–	–	–	73,500,000
Sub-total	217,437,326	73,500,000	2,137,582	-20,540,000	–	272,534,908
II. Associates						
CRRC Hofer	117,952,387	–	-18,264,165	–	-3,082,043	96,606,179
Zhuzhou Siemens	46,010,196	–	315,542	–	–	46,325,738
CRRC Guoxin Technology	50,068,270	–	263,888	-272,306	–	50,059,852
Times Wabtec	9,672,000	–	4,180,984	–	–	13,852,984
Zhixin Semiconductor	94,480,136	–	-4,176,338	–	–	90,303,798
CRRC India	15,185,250	–	58,017	–	–	15,243,267
Wuxi Times	–	23,000,000	-2,519,368	–	–	20,480,632
Foshan Zhongshi	–	6,400,000	-80,000	–	–	6,320,000
Sub-total	333,368,239	29,400,000	-20,221,440	-272,306	-3,082,043	339,192,450
Total	550,805,565	102,900,000	-18,083,858	-20,812,306	-3,082,043	611,727,358

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. Long-term equity investments (continued)

Other information:

Note 1: In October 2022, LANP Electrical Co., Ltd. was renamed as "Zhejiang Times LANP New Energy Co., Ltd."

Note 2: In August 2022, the Group established Guangzhou High-speed Rail Technology Co., Ltd. ("Guangzhou High-speed") jointly with Guangzhou Railway Track Equipment Co., Ltd., CRRC Shenyang Co., Ltd. and Beijing CARS New Material Technology Co., Ltd. The Group contributes RMB3,420,000 and holds 19% equity interest of Guangzhou High-speed. The Board of Directors of Guangzhou High-speed is composed of seven directors, and the Group has the right to appoint one director, which means the Group has significant influence over Guangzhou High-speed. Therefore, the Group treat Guangzhou High-speed as its associate and accounts for its investment in the latter accordingly.

### 13. Other equity instrument investments

#### (1) Other equity instrument investments

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Xicheng CRRC (Wuxi) Urban Transit Transport Engineering Co., Ltd. (Note 1)	109,673,525	80,000,000
CRRC Environmental & Technology Co., Ltd.	30,000,000	30,000,000
Guochuang Energy Internet Innovation Center (Guangdong) Co., Ltd. (Note 2)	8,000,000	2,400,000
Jinhua CRRC Rail Vehicle Co., Ltd. (Note 3)	5,000,000	—
Total	152,673,525	112,400,000

Note 1: In 2022, the Group contributed RMB29,673,525 to Xicheng CRRC (Wuxi) Urban Transit Transport Engineering Co., Ltd.

Note 2: In 2022, the Group contributed RMB5,600,000 to Guochuang Energy Internet Innovation Centre (Guangdong) Co., Ltd.

Note 3: In January 2022, the Group contributed RMB5,000,000 to Jinhua CRRC Railway Vehicle Co., Ltd., with a shareholding ratio of 10%.

Note: The unlisted equity instrument investments of the Group are investments planned to be held for the long term for the strategic purpose of the Group, but are not intended to sell in the near term for short-term gain. Therefore, the above investments are designated as financial assets at FVTOCI by the Group.

#### (2) Details of non-tradable equity instrument investments

Applicable  Not applicable

Other information:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. Fixed assets

#### *Presented by item*

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Fixed assets	4,802,515,644	3,964,429,248
Disposal of fixed assets	—	—
Total	<u>4,802,515,644</u>	<u>3,964,429,248</u>

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. Fixed assets (continued)

#### (1) Details of fixed assets

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Item	Plants and buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
I. Cost					
1. Opening balance	1,946,683,630	4,324,571,232	43,893,883	590,504,214	6,905,652,959
2. Increases	127,758,549	1,215,210,062	1,027,925	77,626,589	1,421,623,125
(1) Additions	386,971	195,291,838	1,027,925	55,245,269	251,952,003
(2) Transfer from construction in progress	127,371,578	1,019,513,529	-	22,381,320	1,169,266,427
(3) Translation differences arising from translation of foreign currency financial statements	-	404,695	-	-	404,695
3. Decreases	1,211,944	21,491,745	1,592,302	10,043,456	34,339,447
(1) Disposal or retirement	684,691	21,491,745	1,587,583	9,833,595	33,597,614
(2) Translation differences arising from translation of foreign currency financial statements	527,253	-	4,719	209,861	741,833
4. Closing balance	2,073,230,235	5,518,289,549	43,329,506	658,087,347	8,292,936,637

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. Fixed assets (continued)

#### (1) Details of fixed assets (continued)

Item	Plants and buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
II. Accumulated depreciation					
1. Opening balance	601,168,592	1,903,861,440	39,654,515	343,788,580	2,888,473,127
2. Increases	63,441,766	433,849,824	1,913,967	79,397,328	578,602,885
(1) Provision	63,441,766	433,552,629	1,913,967	79,397,328	578,305,690
(2) Translation differences arising from translation of foreign currency financial statements	–	297,195	–	–	297,195
3. Decreases	777,996	18,510,667	1,477,384	8,483,294	29,249,341
(1) Disposal or retirement	592,328	18,510,667	1,472,665	8,250,067	28,825,727
(2) Translation differences arising from translation of foreign currency financial statements	185,668	–	4,719	233,227	423,614
4. Closing balance	663,832,362	2,319,200,597	40,091,098	414,702,614	3,437,826,671
III. Provision for impairment					
1. Opening balance	10,513,264	42,237,320	–	–	52,750,584
2. Increases	–	–	–	–	–
3. Decreases	–	156,262	–	–	156,262
(1) Disposal or retirement	–	156,262	–	–	156,262
4. Closing balance	10,513,264	42,081,058	–	–	52,594,322
IV. Carrying amount					
1. Carrying amount at the end of the period	1,398,884,609	3,157,007,894	3,238,408	243,384,733	4,802,515,644
2. Carrying amount at the beginning of the period	1,335,001,774	2,378,472,472	4,239,368	246,715,634	3,964,429,248

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. Fixed assets (continued)

#### (1) Details of fixed assets (continued)

2021

Unit: Yuan Currency: RMB

Item	Plants and buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
I. Cost					
1. Opening balance	1,919,672,606	2,887,529,369	44,017,434	496,588,216	5,347,807,625
2. Increases	29,938,114	1,476,326,203	2,490,342	110,530,231	1,619,284,890
(1) Additions	1,865,222	105,281,632	2,490,342	100,686,723	210,323,919
(2) Transfer from construction in progress	28,072,892	1,371,044,571	–	9,843,508	1,408,960,971
3. Decreases	2,927,090	39,284,340	2,613,893	16,614,233	61,439,556
(1) Disposal or retirement	593,271	33,045,675	1,997,909	15,571,987	51,208,842
(2) Translation differences arising from translation of foreign currency financial statements	2,333,819	6,238,665	615,984	1,042,246	10,230,714
4. Closing balance	1,946,683,630	4,324,571,232	43,893,883	590,504,214	6,905,652,959
II. Accumulated depreciation					
1. Opening balance	540,735,848	1,674,930,318	38,307,274	287,506,165	2,541,479,605
2. Increases	61,890,233	260,314,592	3,809,343	71,350,088	397,364,256
(1) Provision	61,890,233	260,314,592	3,809,343	71,350,088	397,364,256
3. Decreases	1,457,489	31,383,470	2,462,102	15,067,673	50,370,734
(1) Disposal or retirement	553,851	28,636,943	1,906,939	14,458,660	45,556,393
(2) Translation differences arising from translation of foreign currency financial statements	903,638	2,746,527	555,163	609,013	4,814,341
4. Closing balance	601,168,592	1,903,861,440	39,654,515	343,788,580	2,888,473,127

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. Fixed assets (continued)

#### (1) Details of fixed assets (continued)

Item	Plants and buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
III. Provision for impairment					
1. Opening balance	10,513,264	44,665,742	–	6,579	55,185,585
2. Decreases	–	2,428,422	–	6,579	2,435,001
(1) Disposal or retirement	–	2,428,422	–	6,579	2,435,001
3. Closing balance	10,513,264	42,237,320	–	–	52,750,584
IV. Carrying amount					
1. Carrying amount at the end of the period	<u>1,335,001,774</u>	<u>2,378,472,472</u>	<u>4,239,368</u>	<u>246,715,634</u>	<u>3,964,429,248</u>
2. Carrying amount at the beginning of the period	<u>1,368,423,494</u>	<u>1,167,933,309</u>	<u>5,710,160</u>	<u>209,075,472</u>	<u>2,751,142,435</u>





# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. Fixed assets (continued)

#### (2) Fixed assets temporary idle

Applicable  Not applicable

#### (3) Fixed assets leased in under financing leases

Applicable  Not applicable

#### (4) Fixed assets leased out under operating leases

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Total	<u>56,065,573</u>	<u>52,496,879</u>
Plants and buildings	<u>56,065,573</u>	<u>52,496,879</u>

#### (5) Details of fixed assets of which property right certificates had not been obtained yet

Applicable  Not applicable

Other information:

Applicable  Not applicable

Disposal of fixed assets

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 15. Construction in progress

#### Presented by item

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Construction in progress	453,599,990	921,284,020
Construction materials	—	—
Total	<u>453,599,990</u>	<u>921,284,020</u>

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 15. Construction in progress (continued)

#### Construction in progress

(1) Details of construction in progress:

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for impairment	Book value	Gross carrying amount	Provision for impairment	Book value
Chencang base project	137,104,731	-	137,104,731	72,831,031	-	72,831,031
Innovation experiment platform construction project	120,508,107	-	120,508,107	48,491,380	-	48,491,380
Automobile components supporting construction project	112,277,112	-	112,277,112	623,253,029	-	623,253,029
The revamping and expansion of high voltage IGBT chip module production line	26,107,074	-	26,107,074	124,031,946	-	124,031,946
PLM Phase II Project	4,729,246	-	4,729,246	4,180,189	-	4,180,189
Semiconductor intelligent manufacturing project	-	-	-	15,278,779	-	15,278,779
Coating thickness tester/step profiler (TEG-GZ1916BHKS)	-	-	-	1,185,923	-	1,185,923
Investments in manufacturing equipment of IGBT manufacturing centre in 2017	-	-	-	8,998,114	-	8,998,114
Substation and distribution system project of PCB plant renovation project	-	-	-	2,648,309	-	2,648,309
Others	52,873,720	-	52,873,720	20,385,320	-	20,385,320
<b>Total</b>	<b>453,599,990</b>	<b>-</b>	<b>453,599,990</b>	<b>921,284,020</b>	<b>-</b>	<b>921,284,020</b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 15. Construction in progress (continued)

#### Construction in progress (continued)

#### (2) Movements of significant construction in progress for the period

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Name of item	Budget	Opening balance	Increase	Transferred to fixed assets	Transferred to intangible assets	Other decrease	Translation differences of financial statements denominated in foreign currencies	Closing balance	Proportion of amount injected to the budget (%)	Source of funding
Chencang base project	600,000,000	72,831,031	64,273,700	-	-	-	-	137,104,731	23	Raised funds and self-raised
Innovation experiment platform construction project	991,600,000	48,491,380	90,578,802	-18,473,809	-	-88,266	-	120,508,107	25	Raised funds and self-raised
Automobile components supporting construction project	3,337,700,000	623,253,029	446,905,909	-943,373,808	-14,508,018	-	-	112,277,112	90	Self-raised
The revamping and expansion of high voltage IGBT chip module production line	505,000,000	124,031,946	52,495,802	-150,420,674	-	-	-	26,107,074	98	Government grants and self-raised
PLM Phase II Project	5,570,000	4,180,189	549,057	-	-	-	-	4,729,246	90	Self-raised
Semiconductor intelligent manufacturing project	60,846,400	15,278,779	-	-10,009,224	-5,269,555	-	-	-	100	Self-raised
Coating thickness tester/step profiler (TEG-GZ1916BHKS)	5,440,800	1,185,923	107,380	-1,293,303	-	-	-	-	100	Self-raised
Investments in manufacturing equipment of IGBT manufacturing centre in 2017	66,990,000	8,998,114	2,549,427	-11,547,541	-	-	-	-	100	Self-raised
Substation and distribution system project of PCB plant renovation project	4,600,000	2,648,309	1,479,159	-4,127,468	-	-	-	-	100	Self-raised
Others		20,385,320	70,420,205	-30,020,600	-7,547,170	-255,874	-108,161	52,873,720		
<b>Total</b>	<b>5,577,747,200</b>	<b>921,284,020</b>	<b>729,359,441</b>	<b>-1,169,266,427</b>	<b>-27,324,743</b>	<b>-344,140</b>	<b>-108,161</b>	<b>453,599,990</b>	/	/

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 15. Construction in progress (continued)

#### Construction in progress (continued)

#### (2) Movements of significant construction in progress for the period (continued)

2021

Unit: Yuan Currency: RMB

Name of item	Budget	Opening balance	Increase	Transferred to fixed assets	Other decrease	Translation differences of financial statements denominated in foreign currencies	Closing balance	Proportion of amount injected to the budget (%)	Source of funding
Automobile components supporting construction project	3,337,700,000	1,294,885,697	523,446,071	-1,190,380,398	-4,698,341	-	623,253,029	55	Self-raised
The revamping and expansion of high voltage IGBT chip module production line	505,000,000	256,858,382	16,430,793	-149,257,229	-	-	124,031,946	72	Government grants and self-raised
Chencang base project	600,000,000	-	72,831,031	-	-	-	72,831,031	12	Raised funds
Innovation experiment platform construction project	991,600,000	32,760,630	15,730,750	-	-	-	48,491,380	5	Raised funds
Semiconductor intelligent manufacturing project	60,846,400	5,067,395	10,211,384	-	-	-	15,278,779	61	Self-raised
Investments in manufacturing equipment of IGBT manufacturing centre in 2017	66,990,000	-	8,998,114	-	-	-	8,998,114	13	Self-raised
PLM Phase II Project	5,570,000	3,905,661	274,528	-	-	-	4,180,189	75	Self-raised
Substation and distribution system project of PCB plant renovation project	4,600,000	-	2,648,309	-	-	-	2,648,309	58	Self-raised
Coating thickness tester/step profiler (TEG-GZ1916BHKS)	1,300,000	1,185,923	-	-	-	-	1,185,923	91	Self-raised
High-power AC drive system	14,998,654	13,273,145	-	-13,273,145	-	-	-	100	Self-raised
Verification and screening platform for key materials of rail transit products	21,571,000	12,507,308	2,796,933	-15,304,241	-	-	-	100	Self-raised
Laboratory of urban rail transit driverless signal system	2,370,000	1,821,649	-	-1,821,649	-	-	-	100	Self-raised
IGBT park janitor reconstruction project	1,500,000	1,112,046	301,226	-1,413,272	-	-	-	100	Self-raised
Full cabinet manufacturing technical upgrading project Item (intelligent manufacturing 2020)	5,720,000	-	3,365,876	-3,365,876	-	-	-	100	Self-raised
Others		20,634,908	34,643,347	-34,145,161	-329,562	-418,212	20,385,320		
<b>Total</b>	<b>5,619,766,054</b>	<b>1,644,012,744</b>	<b>691,678,362</b>	<b>-1,408,960,971</b>	<b>-5,027,903</b>	<b>-418,212</b>	<b>921,284,020</b>		

#### (3) Provision for impairment of construction in progress in the current period

Applicable  Not applicable

Other information

Applicable  Not applicable

#### Construction materials

#### (4) Details of construction materials

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 16. Right-of-use assets

✓ Applicable    □ Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Land use rights (Note 1)	Plants and buildings	Machinery and equipment	Motor vehicles	Office facilities and others	Total
I. Cost						
1. Opening balance	23,535,849	171,187,666	22,614,231	11,747,442	1,348,105	230,433,293
2. Increases	-	80,103,712	89,571,459	994,571	-	170,669,742
(1) Newly added lease	-	80,103,712	89,571,459	994,571	-	170,669,742
3. Decreases	-	36,078,408	24,923,319	933,771	-	61,935,498
(1) Translation differences of financial statements denominated in foreign currencies	-	1,603,053	545,580	-	-	2,148,633
(2) Expired lease contracts	-	34,475,355	24,377,739	933,771	-	59,786,865
4. Closing balance	23,535,849	215,212,970	87,262,371	11,808,242	1,348,105	339,167,537
II. Accumulated depreciation						
1. Opening balance	4,037,325	82,999,825	8,346,014	3,937,242	1,239,261	100,559,667
2. Increases	1,420,910	64,767,842	21,513,910	3,162,307	-	90,864,969
(1) Provision for the year	1,420,910	64,767,842	21,513,910	3,162,307	-	90,864,969
3. Decreases	-	35,512,256	22,813,417	933,771	-	59,259,444
(1) Expiration of the lease contract	-	34,459,577	22,496,655	933,771	-	57,890,003
(2) Translation differences of financial statements denominated in foreign currencies	-	1,052,679	316,762	-	-	1,369,441
4. Closing balance	5,458,235	112,255,411	7,046,507	6,165,778	1,239,261	132,165,192
III. Provision for impairment						
1. Opening balance	-	-	-	-	-	-
2. Increases	-	-	-	-	-	-
(1) Provision for impairment	-	-	-	-	-	-
3. Decreases	-	-	-	-	-	-
4. Closing balance	-	-	-	-	-	-
IV. Carrying amount						
1. Balance at 31 December 2022	18,077,614	102,957,559	80,215,864	5,642,464	108,844	207,002,345
2. Balance at 1 January 2022	19,498,524	88,187,841	14,268,217	7,810,200	108,844	129,873,626

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 16. Right-of-use assets (continued)

2021:

Unit: Yuan Currency: RMB

Item	Land use rights (Note 1)	Plants and buildings	Machinery and equipment	Motor vehicles	Office facilities and others	Total
I. Cost						
1. Opening balance	14,458,883	128,415,751	12,173,521	11,430,565	1,718,283	168,197,003
2. Increases	9,709,396	85,315,024	11,626,920	4,883,041	–	111,534,381
(1) Newly added lease	9,709,396	85,315,024	11,626,920	4,883,041	–	111,534,381
3. Decreases	632,430	42,543,109	1,186,210	4,566,164	370,178	49,298,091
(1) Translation differences of financial statements denominated in foreign currencies	632,430	1,405,642	660,527	96,267	75,362	2,870,228
(2) Expired lease contracts	–	41,137,467	525,683	4,469,897	294,816	46,427,863
4. Closing balance	23,535,849	171,187,666	22,614,231	11,747,442	1,348,105	230,433,293
II. Accumulated depreciation						
1. Opening balance	2,724,814	75,404,449	3,186,629	5,244,408	1,305,620	87,865,920
2. Increases	1,417,276	49,692,140	5,937,717	3,208,333	291,183	60,546,649
(1) Provision for the year	1,417,276	49,692,140	5,937,717	3,208,333	291,183	60,546,649
3. Decreases	104,765	42,096,764	778,332	4,515,499	357,542	47,852,902
(1) Expired lease contracts	–	41,137,467	525,683	4,469,897	294,816	46,427,863
(2) Translation differences of financial statements denominated in foreign currencies	104,765	959,297	252,649	45,602	62,726	1,425,039
4. Closing balance	4,037,325	82,999,825	8,346,014	3,937,242	1,239,261	100,559,667
III. Carrying amount						
1. Balance at 31 December 2021	19,498,524	88,187,841	14,268,217	7,810,200	108,844	129,873,626
2. Balance at 1 January 2021	11,734,069	53,011,302	8,986,892	6,186,157	412,663	80,331,083



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 16. Right-of-use assets (continued)

Other information:

Note 1: The land use right is the industrial land use right leased by Specialist Machine Developments Limited (“SMD”) (one of the Group’s subsidiary) from non-related parties in 2019. The original lease period is from June 10, 2019 to June 9, 2029, but on 24 August 2021, the lease period was extended to 9 June 2034, and the total undiscounted rent is equivalent to RMB24,782,027. The Group leases a number of assets, including land use rights, houses and buildings, machinery and equipment, transportation tools, office equipment and others, with a lease term of 1-15 years.

In 2022 and 2021, the Group’s simplified short-term lease expenses included in the current profit or loss were RMB27,741,412 and RMB16,256,345 respectively.

In 2022 and 2021, the Group’s cash outflows incurred related to lease were RMB131,709,114 and RMB99,563,285 respectively.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 17. Intangible assets

#### (1) Details of intangible assets

✓ Applicable    □ Not applicable

2022

Unit: Yuan    Currency: RMB

Item	Land use rights	Software licences	Industrial property rights and know-how	Trademarks	Backlog orders and service contracts	Total
i. Cost						
1. Opening balance	228,912,310	196,666,972	923,884,839	120,331,249	51,231,637	1,521,027,007
2. Increases	473,976	56,007,983	22,168,985	-	-	78,650,944
(1) Additions	-	23,643,710	5,447,736	-	-	29,091,446
(2) Transfer from development expenditure	-	5,447,735	16,721,249	-	-	22,168,984
(3) Transfer from construction in progress	462,198	26,862,545	-	-	-	27,324,743
(4) Translation differences arising from translation of foreign currency financial statements	11,778	53,993	-	-	-	65,771
3. Decreases	530,953	17,460,532	27,117,971	2,968,294	51,231,637	99,309,387
(1) Disposals or written-offs during the period	-	16,146,547	19,875,812	-	51,231,637	87,253,996
(2) Translation differences arising from translation of foreign currency financial statements	530,953	1,313,985	7,242,159	2,968,294	-	12,055,391
4. Closing balance	228,855,333	235,214,423	918,935,853	117,362,955	-	1,500,368,564

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 17. Intangible assets (continued)

#### (1) Details of intangible assets (continued)

Item	Land use rights	Software licences	Industrial property rights and know-how	Trademarks	Backlog orders and service contracts	Total
II. Accumulated amortisation						
1. Opening balance	54,522,097	154,101,982	474,629,744	58,382,921	51,231,637	792,868,381
2. Increases	4,341,853	19,896,022	100,184,022	13,397,550	-	137,819,447
(1) Provision for the year	4,341,853	19,896,022	100,184,022	13,397,550	-	137,819,447
3. Decreases	120,986	1,181,099	14,936,651	1,873,303	51,231,637	69,343,676
(1) Disposals or written-offs during the period	-	182,433	11,478,761	-	51,231,637	62,892,831
(2) Translation differences arising from translation of foreign currency financial statements	120,986	998,666	3,457,890	1,873,303	-	6,450,845
4. Closing balance	58,742,964	172,816,905	559,877,115	69,907,168	-	861,344,152
III. Provision for impairment						
1. Opening balance	-	506,859	14,410,185	-	-	14,917,044
2. Increases	-	-	-	-	-	-
3. Decreases	-	-	8,397,051	-	-	8,397,051
(1) Disposal	-	-	8,397,051	-	-	8,397,051
4. Closing balance	-	506,859	6,013,134	-	-	6,519,993
IV. Carrying amount						
1. Balance at the end of the period	170,112,369	61,890,659	353,045,604	47,455,787	-	632,504,419
2. Balance at the beginning of the period	174,390,213	42,058,131	434,844,910	61,948,328	-	713,241,582

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 17. Intangible assets (continued)

#### (1) Details of intangible assets (continued)

2021:

Unit: Yuan Currency: RMB

Item	Land use rights	Software licences	Industrial property rights and know-how	Trademarks	Backlog orders and service contracts	Total
I. Cost						
1. Opening balance	229,257,489	184,132,474	1,026,147,751	124,333,611	52,935,664	1,616,806,989
2. Increases	-	14,947,908	37,349,278	-	-	52,297,186
(1) Additions	-	9,920,005	227,518	-	-	10,147,523
(2) Transfer from development expenditure	-	-	37,121,760	-	-	37,121,760
(3) Transfer from construction in progress	-	5,027,903	-	-	-	5,027,903
3. Decreases	345,179	2,413,410	139,612,190	4,002,362	1,704,027	148,077,168
(1) Disposals	-	-	131,627,620	-	-	131,627,620
(2) Translation differences arising from translation of foreign currency financial statements	345,179	2,413,410	7,984,570	4,002,362	1,704,027	16,449,548
4. Closing balance	228,912,310	196,666,972	923,884,839	120,331,249	51,231,637	1,521,027,007
II. Accumulated amortisation						
1. Opening balance	50,392,339	135,515,037	381,349,799	46,296,481	52,935,664	666,489,320
2. Increases	4,266,207	20,247,122	97,046,192	13,329,807	-	134,889,328
(1) Provision for the year	4,266,207	20,247,122	97,046,192	13,329,807	-	134,889,328
3. Decreases	136,449	1,660,177	3,766,247	1,243,367	1,704,027	8,510,267
(1) Translation differences arising from translation of foreign currency financial statements	136,449	1,660,177	3,766,247	1,243,367	1,704,027	8,510,267
4. Closing balance	54,522,097	154,101,982	474,629,744	58,382,921	51,231,637	792,868,381
III. Provision for impairment						
1. Opening balance	-	506,859	146,037,805	-	-	146,544,664
2. Decreases	-	-	131,627,620	-	-	131,627,620
(1) Disposals	-	-	131,627,620	-	-	131,627,620
3. Closing balance	-	506,859	14,410,185	-	-	14,917,044
IV. Carrying amount						
1. Balance at the end of the period	174,390,213	42,058,131	434,844,910	61,948,328	-	713,241,582
2. Balance at the beginning of the period	178,865,150	48,110,578	498,760,147	78,037,130	-	803,773,005

Proportions of the Group's intangible assets formed through internal research and development to the cost of intangible assets are 27.96% and 26.12% as at 31 December 2022 and 31 December 2021 respectively.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 17. Intangible assets (continued)

#### (2) Details of land use rights of which property right certificates had not been obtained

Applicable  Not applicable

Other information:

Applicable  Not applicable

As at 31 December 2022, the Group had no land use rights pledged for obtaining bank loans. The land used by the Group is mainly located in Chinese Mainland, with a holding period of 40-50 years.

### 18. Development expenditure

Applicable  Not applicable

2022:

Unit: Yuan Currency: RMB

Item	Opening balance	Increases		Decreases		Closing balance
		Internal R&D expenses	Recognised as intangible assets	Transferred to profit or loss		
Research expenses	-	1,761,914,969	-	1,761,914,969	-	-
Development expenditure	366,577,298	84,753,817	22,168,984	-	429,162,131	
Total	366,577,298	1,846,668,786	22,168,984	1,761,914,969	429,162,131	

2021:

Unit: Yuan Currency: RMB

Item	Opening balance	Increases		Decreases		Closing balance
		Internal R&D expenses	Recognised as intangible assets	Transferred to profit or loss		
Research expenses	-	1,690,047,967	-	1,690,047,967	-	-
Development expenditure	308,376,123	95,322,935	37,121,760	-	366,577,298	
Total	308,376,123	1,785,370,902	37,121,760	1,690,047,967	366,577,298	

Other information:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 19. Goodwill

#### (1) Cost of goodwill

✓ Applicable     Not applicable

2022

Unit: Yuan    Currency: RMB

Name of investee or events forming goodwill	Opening balance	Decreases	Closing balance
		translation differences of financial statements denominated in foreign currencies	
Dynex Power Inc. (“Canada Dynex”)	46,517,958	–	46,517,958
Ningbo CRRC Times	437,432	–	437,432
CRRC Times Electronics	13,333,101	–	13,333,101
SMD	553,612,467	-61,447,270	492,165,197
Total	<u>613,900,958</u>	<u>-61,447,270</u>	<u>552,453,688</u>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 19. Goodwill (Continued)

#### 2) Provision for impairment of goodwill

2022

Unit: Yuan Currency: RMB

Name of investee or events forming goodwill	Opening balance	Increasing in current period	Decreases Translation differences of financial statements denominated in foreign currencies	Closing balance
Dynex Power Inc. ("Canada Dynex")	46,517,958	—	—	46,517,958
Ningbo CRRC Times	—	—	—	—
CRRC Times Electronics	—	—	—	—
SMD	376,267,677	—	-56,185,184	320,082,493
Total	422,785,635	—	-56,185,184	366,600,451

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 19. Goodwill (continued)

#### (3) Relevant information of assets group or group of assets groups to which goodwill is allocated

Applicable  Not applicable

Considering the management method of the operation activities of the asset group, and whether the cash flow generated by the asset group through operation is independent of other assets of the Company, the Group determines that SMD, Canada Dynex, CRRC Times Electronics, Ningbo CRRC Times is an asset group including goodwill respectively.

#### (4) Please disclose for the calculation, key index (for instance, revenue growth rate of the estimation period and the stabilization period, profit margin, discount rate, length of estimation period) and accounting approach for goodwill impairment testing

Applicable  Not applicable

The Group performs impairment tests on goodwill arising from the acquisitions of Ningbo CRRC Times, CRRC Times Electronics and SMD. The recoverable amount of the goodwill is determined based on present value of the expected future cash flows of each subsidiary. The management prepares the cash flow prediction for the next five years (the "budget period") based on the latest financial budgets, and deduces the cash flow of the subsequent years. The discount rates used to calculate the recoverable amount are as follows:

Item	31 December 2022	31 December 2021
Ningbo CRRC Times	12.00	12.00
CRRC Times Electronics	12.00	12.00
SMD	13.50	13.50

A key assumption in predicting future cash flows of SMD is the revenue growth rate for the budget period, and the expected revenue growth rate at the end of each year is as follows:

Item	31 December 2022	31 December 2021
Expected revenue growth rate	2%	2%

#### (5) Results of impairment test on goodwill

Applicable  Not applicable

As at 31 December 2022, the Group has performed impairment test on goodwill arising from the acquisitions of SMD and no impairment of goodwill was recognised (31 December 2021: Impairment of goodwill of RMB49,878,550 was recognised).

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 20. Long-term prepaid expenses

✓ Applicable     Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase for the year	Amortised for the year	Closing balance
Leasehold improvement	40,688,040	1,308,534	8,910,233	33,086,341
Total	40,688,040	1,308,534	8,910,233	33,086,341

2021:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase for the year	Amortised for the year	Closing balance
Leasehold improvement	46,038,198	4,380,863	9,731,021	40,688,040
Total	46,038,198	4,380,863	9,731,021	40,688,040

Other information:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 21. Deferred tax assets/liabilities

#### (1) Deferred tax assets that are not offset

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Closing balance		Opening balance	
	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets
Provision for product quality warranties	720,867,325	111,135,908	898,295,955	138,244,492
Provision for credit loss	265,497,015	39,631,671	233,029,844	34,789,972
Provision for impairment of assets	249,255,636	36,054,035	359,143,985	54,955,060
Government grants	857,082,489	116,490,011	976,067,861	132,158,343
Unrealised profit from internal transactions	1,063,871,692	159,592,979	683,254,376	102,488,156
Differences of depreciation/amortisation years due to tax laws and accounting treatment differences	55,306,320	8,382,991	77,878,229	11,887,111
Deductible losses	2,466,224,053	381,960,158	622,956,262	93,644,938
Accrued expenses	109,628,612	15,799,466	59,635,710	8,459,190
Accrued employee benefits that have not been paid yet	83,161,322	12,574,959	2,424,793	363,719
Changes in fair value of financial assets at fair value through other comprehensive income	71,050,255	11,061,139	73,872,888	10,896,855
Items of costs and expenses without invoices obtained	118,007,215	17,701,082	107,867,588	16,495,157
Others	615,272	163,048	8,029,783	1,369,724
<b>Total</b>	<b>6,060,567,206</b>	<b>910,547,447</b>	<b>4,102,457,274</b>	<b>605,752,717</b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 21. Deferred tax assets/liabilities (continued)

#### (2) Deferred tax liabilities that are not offset

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Closing balance		Opening balance	
	Taxable temporary differences	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Adjustment on fair value of acquisition of subsidiaries	123,503,085	23,465,586	144,372,227	27,430,723
Depreciation difference due to inconsistency of depreciation period between tax law and accounting	2,247,342,235	339,232,206	17,997,465	4,770,547
Gains on changes in fair value during the holding period of the financial assets at fair value through profit or loss	34,827,160	5,224,074	—	—
Total	<u>2,405,672,480</u>	<u>367,921,866</u>	<u>162,369,692</u>	<u>32,201,270</u>

#### (3) Deferred tax assets and deferred tax liabilities that are presented at the net amount after offset

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Amount of offsetting of deferred tax assets and liabilities at the end of the period	Balances of deferred tax assets or liabilities after offsetting at the end of the period	Amount of offsetting of deferred tax assets and liabilities at the beginning of the period	Balances of deferred tax assets or liabilities after offsetting at the beginning of the period
	Deferred tax assets	351,003,892	559,543,555	—
Deferred tax liabilities	<u>351,003,892</u>	<u>16,917,974</u>	<u>—</u>	<u>32,201,270</u>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 21. Deferred tax assets/liabilities (continued)

#### (4) Details of unrecognised deferred tax assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Deductible temporary differences	42,520,236	194,193,270
Deductible losses	2,326,862,255	144,440,930
Total	2,369,382,491	338,634,200

#### (5) Deductible tax losses, for which no deferred tax assets were recognised, will expire in the following years

Applicable  Not applicable

Unit: Yuan Currency: RMB

Year	Closing balance	Opening balance	Note
At the end of 2031	11,401,471	–	
At the end of 2032	2,059,679,671	–	
Without fixed term (Note)	255,781,113	194,193,270	
Total	2,326,862,255	194,193,270	/

Other information:

Applicable  Not applicable

Note: There is no fixed term for carry-forward of deductible losses generated by Canada Dynex, a subsidiary of the Group, CRRC Times Electric (Hong Kong) Co., Ltd. (hereinafter referred to as "HK CRRC Times Electric") and SMD.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 22. Other non-current assets

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for impairment	Book value	Gross carrying amount	Provision for impairment	Book value
Large-denomination of certificates of deposit	3,305,380,382	-	3,305,380,382	1,190,080,714	-	1,190,080,714
Prepayments for purchase of machinery and equipment	209,563,302	-	209,563,302	128,052,104	-	128,052,104
Prepayments for construction of projects	28,914,614	-	28,914,614	42,551,832	-	42,551,832
Prepayments for acquisition of land use rights	42,408,602	-	42,408,602	42,831,600	-	42,831,600
Contract assets	448,932,589	9,647,312	439,285,277	455,282,087	12,151,975	443,130,112
Deposits from suppliers	122,760,089	3,170,829	119,589,260	-	-	-
Total	<u>4,157,959,578</u>	<u>12,818,141</u>	<u>4,145,141,437</u>	<u>1,858,798,337</u>	<u>12,151,975</u>	<u>1,846,646,362</u>

Other information:

As at 31 December 2022, other non-current assets from related parties of the Group are set out in Note X.6.

### 23. Short-term borrowings

#### (1) Category of short-term borrowings

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Credit borrowings	<u>454,374,494</u>	<u>389,550,036</u>
Total	<u>454,374,494</u>	<u>389,550,036</u>

Description of classification of short-term borrowings:

As at 31 December 2022, the annual interest rate of short-term loans ranged from 0.86% to 3.47% (31 December 2021: 0.95% to 3.47%).

As at 31 December 2022, the balance of short-term loans borrowed from the Group's related parties is set out in Note X.6.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 23. Short-term borrowings (continued)

#### (2) Past due and outstanding short-term loans

Applicable  Not applicable

Details of significant past due short-term loans are as follows:

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 24. Bills payable

#### (1) Details of bills payable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Commercial acceptances	87,333,769	48,730,000
Bank acceptances	2,531,506,875	1,591,611,546
Total	2,618,840,644	1,640,341,546

There are no bills payable due and unpaid at the end of the period.

As at 31 December 2022, bills payable due to related parties of the Group are set out in Note X.6.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 25. Accounts payable

#### (1) Accounts payable are set out as follows

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Related parties	1,086,861,491	555,535,398
Third parties	4,999,626,548	4,122,180,635
Total	6,086,488,039	4,677,716,033

Accounts payable bear no interest and are usually repayable within 3 months.

#### (2) Accounts payable are disclosed by ageing as follows

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Within 6 months	5,052,677,124	3,726,371,766
6 months to 1 year	494,025,967	464,249,145
1 to 2 years	257,384,295	204,394,491
2 to 3 years	60,285,324	90,476,157
Over 3 years	222,115,329	192,224,474
Total	6,086,488,039	4,677,716,033

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 25. Accounts payable (continued)

#### (3) Significant accounts payable aged over one year

Applicable  Not applicable

2022:

Unit: Yuan Currency: RMB

Item	Closing balance	Reasons for not being repaid or carried forward
Supplier 18	78,863,230	Material payment, unsettled
Supplier 19	28,406,467	Material payment, unsettled
Supplier 20	25,995,053	Material payment, unsettled
Supplier 21	18,636,745	Material payment, unsettled
Supplier 22	17,321,453	Material payment, unsettled
Total	<u>169,222,948</u>	/

2021:

Unit: Yuan Currency: RMB

Item	Closing balance	Reasons for not being repaid or carried forward
Supplier 18	71,130,548	Material payment, unsettled
Supplier 23	25,304,012	Material payment, unsettled
Supplier 20	25,211,652	Material payment, unsettled
Supplier 24	18,492,019	Material payment, unsettled
Supplier 25	15,321,132	Material payment, unsettled
Total	<u>155,459,363</u>	/

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 26. Contract liabilities

#### (1) Details of contract liabilities

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Related to sales contract	639,885,805	828,709,519
Total	639,885,805	828,709,519

Other information:

Applicable  Not applicable

For part of the Group's sales contracts, the time point at which goods are transferred and accepted is later than the time point at which customers make payments, which results in contractual liabilities related to the sales contracts. Related revenue will be recognised upon the completion of the transfer of the Group's relevant goods/performance obligations.

As at 31 December 2022, contract liabilities from related parties of the Group are set out in Note X.6.

#### (2) Account and reason for significant changes in the contract liabilities in the current period

Applicable  Not applicable

Other information:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 27. Employee benefits payable

#### (1) Details of employee benefits payable

✓ Applicable    □ Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Translation differences of financial statements denominated in foreign currencies	Closing balance
I. Short-term employee benefits	129,755,980	2,224,308,400	2,195,573,715	391,791	158,882,456
II. Post-employment benefits – Defined contribution plan	13,931,569	263,079,437	262,100,159	-546,037	14,364,810
III. Termination benefits	–	3,009,837	3,009,837	–	–
IV. Labour expenditures	–	29,842,456	29,842,456	–	–
Total	<u>143,687,549</u>	<u>2,520,240,130</u>	<u>2,490,526,167</u>	<u>-154,246</u>	<u>173,247,266</u>

2021:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Translation differences of financial statements denominated in foreign currencies	Closing balance
I. Short-term employee benefits	111,544,064	2,123,305,959	2,105,009,922	-84,121	129,755,980
II. Post-employment benefits – Defined contribution plan	6,118,944	270,704,358	261,907,305	-984,428	13,931,569
III. Termination benefits	–	6,074,430	6,074,430	–	–
IV. Labour expenditures	–	33,379,215	33,379,215	–	–
Total	<u>117,663,008</u>	<u>2,433,463,962</u>	<u>2,406,370,872</u>	<u>-1,068,549</u>	<u>143,687,549</u>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 27. Employee benefits payable (continued)

#### (2) Details of short-term benefits

✓ Applicable     Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Translation differences of financial statements denominated in foreign currencies	Closing balance
I. Salaries, bonuses, allowances and subsidies	2,085,718	1,790,651,262	1,789,841,988	387,517	3,282,509
II. Welfare benefits	–	82,497,022	82,497,022	–	–
III. Social insurances	8,348,987	145,852,063	144,896,694	–	9,304,356
Including: Basic medical insurance	2,753,670	95,060,369	95,280,758	–	2,533,281
Supplementary medical insurance	5,225,163	38,649,303	37,787,578	–	6,086,888
Work injury insurance	370,154	12,142,391	11,828,358	–	684,187
Maternity insurance	–	–	–	–	–
IV. Housing funds	1,039,858	141,353,914	140,995,698	–	1,398,074
V. Employee union funds and staff education funds	117,388,499	61,948,903	35,615,451	–	143,721,951
VI. Others	892,918	2,005,236	1,726,862	4,274	1,175,566
<b>Total</b>	<b>129,755,980</b>	<b>2,224,308,400</b>	<b>2,195,573,715</b>	<b>391,791</b>	<b>158,882,456</b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 27. Employee benefits payable (continued)

#### (2) Details of short-term benefits (continued)

2021:

Unit: Yuan Currency: RMB

Item	Opening balance	Increases	Decreases	Translation differences of financial statements denominated in foreign currencies	Closing balance
I. Salaries, bonuses, allowances and subsidies	21,841,375	1,677,611,875	1,697,319,468	-48,064	2,085,718
II. Welfare benefits	-	68,880,827	68,880,827	-	-
III. Social insurances	1,107,309	147,106,605	139,864,927	-	8,348,987
Including: Basic medical insurance	621,482	87,331,377	85,199,189	-	2,753,670
Supplementary medical insurance	-	49,542,115	44,316,952	-	5,225,163
Work injury insurance	461,826	10,230,016	10,321,688	-	370,154
Maternity insurance	24,001	3,097	27,098	-	-
IV. Housing funds	279,290	126,419,779	125,659,211	-	1,039,858
V. Employee union funds and staff education funds	87,940,652	62,178,801	32,730,954	-	117,388,499
VI. Others	375,438	1,654,427	1,100,890	-36,057	892,918
Total	<u>111,544,064</u>	<u>2,083,852,314</u>	<u>2,065,556,277</u>	<u>-84,121</u>	<u>129,755,980</u>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 27. Employee benefits payable (continued)

#### (3) Details of defined contribution plan

✓ Applicable     Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Translation differences of financial statements denominated in foreign currencies	Closing balance
1. Basic pension insurance	13,325,940	197,487,730	196,424,381	-546,037	13,843,252
2. Unemployment insurance	37,049	7,793,217	7,777,212	–	53,054
3. Enterprise annuity	568,580	57,798,490	57,898,566	–	468,504
Total	<u>13,931,569</u>	<u>263,079,437</u>	<u>262,100,159</u>	<u>-546,037</u>	<u>14,364,810</u>

2021:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Translation differences of financial statements denominated in foreign currencies	Closing balance
1. Basic pension insurance	6,019,304	202,569,162	194,278,098	-984,428	13,325,940
2. Unemployment insurance	99,640	6,867,921	6,930,512	–	37,049
3. Enterprise annuity	–	61,267,275	60,698,695	–	568,580
Total	<u>6,118,944</u>	<u>270,704,358</u>	<u>261,907,305</u>	<u>-984,428</u>	<u>13,931,569</u>

Other information

✓ Applicable     Not applicable

The Group's employees participate in a defined contribution plan in the social insurance system managed and operated by local government organisations. The Group makes contributions to the plan based on the applicable benchmarks and rates stipulated by the government. The Group's contributions to the defined contribution plan are recognised in profit or loss when incurred. As at 31 December 2022 and 2021, the Group had no forfeited contributions that can be utilised to reduce the level of existing contributions (as at 31 December 2022 and 2021: Nil).



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 28. Taxes payable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Enterprise income tax	55,712,832	18,820,345
VAT	178,996,364	104,318,658
City maintenance and construction tax and education surcharges	14,857,162	8,523,696
Individual income tax	38,346,121	51,891,101
Others	13,243,472	6,617,058
Total	301,155,951	190,170,858

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 29. Other payables

#### Presented by item

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Interest payable	–	–
Dividends payable	1,715,000	–
Other payables	981,502,920	753,174,560
Total	983,217,920	753,174,560

Other information:

Applicable  Not applicable

#### Interest payable

(1) Presented by category

Applicable  Not applicable

#### Dividends payable

(1) Presented by category

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Dividends payable-China Railway Lanzhou Bureau Group Co., Ltd.	196,000	–
Dividends payable-China Railway Shanghai Bureau Group Co., Ltd.	1,519,000	–
Total	1,715,000	–

Other information: Disclose the reason for significant dividends not paid in one year.

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 29. Other payables (continued)

#### Other payables

(1) Other payables are presented by nature

Applicable    Not applicable

Unit: Yuan   Currency: RMB

Item	Closing balance	Opening balance
Amounts due to related parties	419,110,319	404,537,638
Deposits and guarantees	197,364,028	254,896,173
Projects and equipment	160,352,360	30,895,126
Recovery of factoring payable	19,007,710	8,640,000
Withholding social security contributions	2,900,230	17,230,973
Others	182,768,273	36,974,650
Total	981,502,920	753,174,560

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 29. Other payables (continued)

**Other payables** (continued)

(2) Significant other payables aged over one year

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the entity	Closing balance	Reasons for not being repaid or carried forward
Supplier 26	379,623,000	Not due
Supplier 27	7,125,984	Not due
Supplier 28	6,038,593	Not due
Supplier 29	5,700,000	Not due
Supplier 30	4,793,411	Not due
Total	<u>403,280,988</u>	/

Other information:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 30. Non-current liabilities due within 1 year

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Lease liabilities due within 1 year	58,331,087	41,963,370
Provisions due within 1 year	312,552,654	381,673,849
Long-term borrowings due within 1 year	5,025,637	5,027,287
Total	375,909,378	428,664,506

Other information:

None

### 31. Other current liabilities

#### Details of other current liabilities:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
VAT for sales of goods collected in advance	68,792,364	99,227,805
Total	68,792,364	99,227,805

The movements of short-term debentures payable:

Applicable  Not applicable

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 32. Long-term borrowings

#### (1) Classification of long-term borrowings

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Credit borrowings	77,713,637	82,715,287
Less: Long-term borrowings due within 1 year	5,025,637	5,027,287
Total	72,688,000	77,688,000

Description of classification of long-term borrowings:

As at 31 December 2022, the balance of long-term loans borrowed from the Group's related parties is set out in Note X.6.

Other information, including interest rate range:

Applicable  Not applicable

(1) Interest rate of the above borrowings is as follows:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Fixed interest rate per annum	1.08%	1.08%

(2) Maturity analysis:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Due within 1 year	5,025,637	5,027,287
Due within 1 to 2 years	5,000,000	5,000,000
Due within 2 to 5 years	30,500,000	24,000,000
Due over 5 years	37,188,000	48,688,000
Total	77,713,637	82,715,287

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 33. Lease liabilities

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Closing balance	Opening balance
Long-term lease liabilities	193,708,882	120,217,161
Less: Lease liabilities classified as non-current liabilities due within 1 year (Note V.30)	58,331,087	41,963,370
Total	135,377,795	78,253,791

Other information:

Maturity analysis:

Unit: Yuan    Currency: RMB

Item	Closing balance	Opening balance
Due within 1 to 2 years	50,150,527	37,797,585
Due within 2 to 5 years	69,457,864	36,544,755
Due over 5 years	35,854,374	20,335,564
Total	155,462,765	94,677,904
Less: Unrecognised financing expenses Lease liabilities	20,084,970 135,377,795	16,424,113 78,253,791

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 34. Long-term payables

Long-term payables

Applicable  Not applicable

Other information:

Applicable  Not applicable

Long-term payables

**(1) Details of long-term payables by nature are as follows:**

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Quality guarantee	-	525,195
Total	-	525,195

Other information:

None

Special payables

**(2) Details of special payables by nature are as follows**

Applicable  Not applicable

### 35. Provisions

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Closing balance	Cause
Provision for product quality warranties	898,295,955	734,412,336	After sales service agreed in the agreement
Provision for repair of equipment under custody	5,091,706	-	Expected compensation loss
Less: Provisions due within 1 year (Note V.30)	381,673,849	312,552,654	
Total	521,713,812	421,859,682	

Other information, including key assumptions and estimations related to significant provisions:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 36. Deferred income

#### Details of deferred income

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Closing balance
Government grants				
Government grants related to assets	244,653,579	4,250,000	44,763,887	<b>204,139,692</b>
Government grants related to income	<u>731,414,282</u>	<u>294,020,176</u>	<u>372,491,662</u>	<b><u>652,942,796</u></b>
Total	<u>976,067,861</u>	<u>298,270,176</u>	<u>417,255,549</u>	<b><u>857,082,488</u></b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 36. Deferred income (continued)

#### Details of deferred income (continued)

Items relating to government grants:

2022:

Unit: Yuan Currency: RMB

Liability	Opening balance	Additional subsidies in the period	Amounts recognised in other income during the period	Other changes	Closing balance	Related to assets/income
Automobile component project	294,271,296	250,000,000	-241,094,683	-	303,176,613	Income
8-inch IGBT intelligent manufacturing and digital factory construction project	69,935,149	-	-18,963,035	-	50,972,114	Assets
Construction of R&D and trial-manufacturing centre of IGBT for electric vehicles	50,000,000	-	-5,416,667	-	44,583,333	Assets
Fiscal allotment for IGBT Phase II information industry technological upgrading (the revamping of high voltage and low voltage IGBT chip module production line)	44,117,647	-	-11,764,706	-	32,352,941	Assets
Research on key technologies of high-speed maglev transportation	41,870,000	6,530,000	-48,400,000	-	-	Income
Industrialization of silicon carbide (SiC) MOSFET chips for new energy vehicles project	32,300,000	-	-	-	32,300,000	Income
Industrial foundation fortification project-production of IGBT module for alternative fuel automobile	22,280,271	-	-6,358,376	-	15,921,895	Assets
Maotangao public rental housing construction project	17,248,966	-	-454,918	-	16,794,048	Assets
SiC single crystal material R & D and industrialization project	9,858,273	-	-	-	9,858,273	Assets
Electric drive system of electric wheel mine car (national allocation)	8,200,000	-	-8,200,000	-	-	Income
SiC base industrial construction project fund	7,858,418	-	-	-	7,858,418	Assets
Refund of land subsidy	7,759,200	-	-206,912	-	7,552,288	Assets
Hunan governmental earmark on the development of the second batch of mobile internet industry in 2016	5,000,000	-	-	-	5,000,000	Assets
Semiconductor three-line construction infrastructure subsidies	3,200,000	-	-400,000	-	2,800,000	Assets
Industrial support funds	3,137,600	-	-78,440	-	3,059,160	Assets
Construction of intelligent manufacturing works for core components of rolling stock (Manufacturing centre)	2,430,556	-	-833,333	-	1,597,223	Assets
Others	356,600,485	41,740,176	-41,267,232	-33,817,247	323,256,182	Income/Assets
<b>Total</b>	<b>976,067,861</b>	<b>298,270,176</b>	<b>-383,438,302</b>	<b>-33,817,247</b>	<b>857,082,488</b>	

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 36. Deferred income (continued)

#### Details of deferred income (continued)

2021:

Unit: Yuan Currency: RMB

Liability	Opening balance	Additional subsidies in the period	Amounts recognised in other income during the period	Other changes	Closing balance	Related to assets/income
Automobile component project	334,729,591	200,000,000	-240,458,295	-	294,271,296	Income
8-inch IGBT intelligent manufacturing and digital factory construction project	37,916,667	45,000,000	-12,981,517	-	69,935,150	Assets
Construction of R&D and trial-manufacturing centre of IGBT for electric vehicles	50,000,000	-	-	-	50,000,000	Assets
Fiscal allotment for IGBT Phase II information industry technological upgrading (the revamping of high voltage and low voltage IGBT chip module production line)	50,000,000	-	-5,882,353	-	44,117,647	Assets
Research on key technologies of high-speed maglev transportation	41,870,000	-	-	-	41,870,000	Income
Industrialization of silicon carbide (SiC) MOSFET chips for new energy vehicles project	-	32,300,000	-	-	32,300,000	Income
Industrial foundation fortification project-production of IGBT module for alternative fuel automobile	23,340,000	-	-1,059,729	-	22,280,271	Assets
Maotangao public rental housing construction project	17,703,883	-	-454,918	-	17,248,965	Assets
SiC single crystal material R & D and industrialization project	13,984,454	-	-4,126,181	-	9,858,273	Assets
Electric drive system of electric wheel mine car (national allocation)	6,830,000	1,370,000	-	-	8,200,000	Income
SiC base industrial construction project fund	10,649,213	-	-2,790,795	-	7,858,418	Assets
Refund of land subsidy	7,966,112	-	-206,912	-	7,759,200	Assets
Hunan governmental earmark on the development of the second batch of mobile internet industry in 2016	5,000,000	-	-	-	5,000,000	Assets
Semiconductor three-line construction infrastructure subsidies	3,600,000	-	-400,000	-	3,200,000	Assets
Industrial support funds	3,216,040	-	-78,440	-	3,137,600	Assets
Construction of intelligent manufacturing works for core components of rolling stock (Manufacturing centre)	3,263,889	-	-833,333	-	2,430,556	Assets
High-speed railway system security technology	7,457,300	890,000	-8,347,300	-	-	Income
Virtual co-phase flexible power supply technology	4,890,000	-	-4,890,000	-	-	Income
Others	341,299,654	63,000,776	-47,699,945	-	356,600,485	Assets/Income
<b>Total</b>	<b>963,716,803</b>	<b>342,560,776</b>	<b>-330,209,718</b>	<b>-</b>	<b>976,067,861</b>	

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 37. Share capital

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

	Opening balance	Changes during the period (+/-)				Sub-total	Closing balance
		Share issued	Bonus shares	Transfer from reserves	Others		
Restricted shares:	1,416,236,912	-	-	-	-	-	1,416,236,912
Shares held by state-owned legal person	640,101,305	-	-	-	-5,188,600	-5,188,600	634,912,705
Shares held by other domestic investors	63,788,283	-	-	-	-41,034,569	-41,034,569	22,753,714
Shares held by foreign investor	7,375	-	-	-	-7,375	-7,375	-
Unrestricted shares:	-	-	-	-	-	-	-
H Shares listed abroad	547,329,400	-	-	-	-	-	547,329,400
A Shares listed domestically	165,010,549	-	-	-	46,230,544	46,230,544	211,241,093
Total	1,416,236,912	-	-	-	-	-	1,416,236,912

Other information:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 38. Capital reserve

✓ Applicable     Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Closing balance
Share premium	10,524,332,720	-	8,017,149	10,516,315,571
Other capital reserves	-4,867,207	-	-	-4,867,207
Total	<u>10,519,465,513</u>	<u>-</u>	<u>8,017,149</u>	<u>10,511,448,364</u>

2021:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increases	Decreases	Closing balance
Share premium	3,321,880,949	7,202,451,771	-	10,524,332,720
Other capital reserves	-	-	4,867,207	-4,867,207
Total	<u>3,321,880,949</u>	<u>7,202,451,771</u>	<u>4,867,207</u>	<u>10,519,465,513</u>

Other information, including descriptions about movements during the period and reasons:

The change in capital reserves in the current period is mainly due to the Group's capital increase to CRRC Times Semiconductor and acquisition of minority shareholders' equity in Baoji CRRC Times. For details, please refer to Note VII,2.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 39. Other comprehensive income

✓ Applicable    □ Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Movement for the period						Closing balance
	Opening balance	Amount incurred for current period before tax	Less: Transferred from other comprehensive income to profit or loss	Less: Income tax expenses	Attributable to owners of the Parent Company after tax	Attributable to non-controlling shareholders after tax	
Other comprehensive income that will be reclassified to profit or loss	-208,084,629	-83,324,952	-73,872,888	-164,284	-9,099,403	-188,378	-217,184,032
Changes in fair value of other debt investments	-62,313,730	-77,242,457	-73,872,888	-164,284	-3,016,907	-188,378	-65,330,637
Translation differences of financial statements denominated in foreign currencies	-145,770,899	-6,082,496	-	-	-6,082,496	-	-151,853,395
Total other comprehensive income	<u>-208,084,629</u>	<u>-83,324,953</u>	<u>-73,872,888</u>	<u>-164,284</u>	<u>-9,099,403</u>	<u>-188,378</u>	<u>-217,184,032</u>

2021:

Unit: Yuan    Currency: RMB

Item	Movement for the period						Closing balance
	Opening balance	Amount incurred for current period before tax	Less: Transferred from other comprehensive income to profit or loss	Less: Income tax expenses	Attributable to owners of the Parent Company after tax	Attributable to non-controlling shareholders after tax	
Other comprehensive income that will be reclassified to profit or loss	-152,338,731	-96,986,565	-35,042,161	-5,687,104	-55,745,898	-511,402	-208,084,629
Changes in fair value of other debt investments	-29,681,509	-73,872,888	-35,042,161	-5,687,104	-32,632,221	-511,402	-62,313,730
Translation differences of financial statements denominated in foreign currencies	-122,657,222	-23,113,677	-	-	-23,113,677	-	-145,770,899
Total other comprehensive income	<u>-152,338,731</u>	<u>-96,986,565</u>	<u>-35,042,161</u>	<u>-5,687,104</u>	<u>-55,745,898</u>	<u>-511,402</u>	<u>-208,084,629</u>

Other information, including adjustment to the amount removed from the effective portion of the gain or loss on cash flow hedge reserve to the initial cost of the hedged item:

Changes in fair value of other debt investments arise from receivables financing.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 40. Special reserve

✓ Applicable     Not applicable

2022

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Safety production fee	<u>30,785,734</u>	<u>56,294,032</u>	<u>47,988,007</u>	<u>39,091,759</u>
Total	<u>30,785,734</u>	<u>56,294,032</u>	<u>47,988,007</u>	<u>39,091,759</u>

2021

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Safety production fee	<u>25,247,257</u>	<u>59,678,310</u>	<u>54,139,833</u>	<u>30,785,734</u>
Total	<u>25,247,257</u>	<u>59,678,310</u>	<u>54,139,833</u>	<u>30,785,734</u>

Other descriptions, including descriptions about movements during the period and causes:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 41. Surplus reserve

✓ Applicable     Not applicable

2022:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Statutory surplus reserve	<u>2,545,778,284</u>	<u>375,260,695</u>	<u>–</u>	<u>2,921,038,979</u>
Total	<u>2,545,778,284</u>	<u>375,260,695</u>	<u>–</u>	<u>2,921,038,979</u>

2021:

Unit: Yuan    Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Statutory surplus reserve	<u>2,325,644,999</u>	<u>220,133,285</u>	<u>–</u>	<u>2,545,778,284</u>
Total	<u>2,325,644,999</u>	<u>220,133,285</u>	<u>–</u>	<u>2,545,778,284</u>

Descriptions of surplus reserves, including descriptions about movements during the period and causes:

According to the Company Law and the Company's articles of association, the Company is required to transfer 10% of its net profit to the statutory surplus reserve. After statutory surplus reserve is accrued, discretionary surplus reserve can be accrued accordingly, which can be used to make up for the losses of previous years or increase capital upon approval.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 42. Retained earnings

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Current period	Prior period
Retained earnings at the end of the period (before adjustment)	18,316,811,951	17,156,557,050
Total adjustments for opening retained earnings ("+" for increase; "-" for decrease)	—	—
Retained earnings at the beginning of the period (after adjustment)	18,316,811,951	17,156,557,050
Add: Net profit attributable to shareholders of the Parent Company	2,555,823,375	2,017,694,796
Less: Appropriation to statutory surplus reserve	375,260,695	220,133,285
Common stock dividends payable	637,306,610	637,306,610
	<u>19,860,068,021</u>	<u>18,316,811,951</u>
Retained earnings at the end of the period	19,860,068,021	18,316,811,951

#### (1) Cash dividends approved at the annual general meeting of shareholders for the year

The 2021 profit distribution proposal of the Company has been reviewed and approved in the 2021 annual general meeting of shareholders for 2021 held on 17 June 2022, pursuant to which a final dividend of RMB0.45 (including tax) for the year of 2021 was paid on each of the 1,416,236,912 shares in issue, amounting to a total cash dividend of RMB637,306,610.

#### (2) Profit distribution determined after balance sheet date

According to the resolution of the 27th meeting of the sixth session of the board of directors of the Company, the Company plans to distribute profits based on the total share capital of 1,416,236,912 shares, and distribute 2022 cash dividends to all shareholders, with a cash dividend of RMB0.55 per share (tax included), a total of RMB778,930,301.60, the proposal still needs to be submitted to the general meeting for consideration and approval.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 43. Revenue and cost of sales

#### (1) Details of revenue and cost of sales

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period		Prior period	
	Revenue	Cost of sales	Revenue	Cost of sales
Principal operating activities	17,803,758,231	11,952,268,972	14,824,024,477	9,776,568,579
Other operating activities	230,020,330	186,897,053	297,142,929	242,850,233
Total	18,033,778,561	12,139,166,025	15,121,167,406	10,019,418,812

#### (2) Presentation of revenue and cost of sales by business type is as follows:

Unit: Yuan Currency: RMB

Item	Current period		Prior period	
	Revenue	Cost of sales	Revenue	Cost of sales
Rail transit equipment business	12,656,446,123	8,128,334,673	12,251,551,183	7,719,876,181
Emerging equipment business	5,147,312,108	3,823,934,299	2,572,473,294	2,056,692,398
Others	230,020,330	186,897,053	297,142,929	242,850,233
Total	18,033,778,561	12,139,166,025	15,121,167,406	10,019,418,812

#### Details of revenue from contracts

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Type of contract	Current period	Prior period
By geographical areas of sales		
Chinese Mainland	17,228,783,533	14,438,485,804
Other countries and regions	804,995,028	682,681,602
Total	18,033,778,561	15,121,167,406



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 43. Revenue and cost of sales (continued)

#### (2) Presentation of revenue and cost of sales by business type is as follows: (continued)

Details of revenue from contracts (continued)

Other information of revenue from contracts:

Applicable  Not applicable

#### (3) Description of performance obligations

Applicable  Not applicable

##### Sales of goods and materials

The Group mainly sells rail transit equipment and components, which are mainly delivered using land transportation. The Group recognises revenue upon receipts and acceptance of the goods by the customer.

Advances from customer before delivery of rail transit equipment and components are recognised as contract liabilities in the financial statements. There is no significant financing component and right of return during the course of sales of rail transit equipment and components.

##### Revenue from maintenance service

The Group mainly provides maintenance service of rail transit equipment product, and revenue is recognised when the services are completed.

##### Revenue from construction contracts

The Group's revenue from construction contracts mainly arises from marine engineering products such as deep-sea robot as well as photovoltaic power station EPC projects.

For the production and sales of marine engineering products, As the products of the Group have irreplaceable uses, and the Group has the right to ask for payment for the cumulative part that has been completed so far during the entire contract period, the Group recognises revenue from construction contracts according to the progress of performance as a performance obligation to be performed in a certain period of time. The Group uses the input method to determine the progress of performance.

For the as photovoltaic power station EPC projects, as the customer of the Group can control the asset created or enhanced during the Group's performance, the Group recognises revenue from construction contracts according to the progress of performance as a performance obligation to be performed in a certain period of time. The Group uses the output method to determine the progress of performance.

Both the sales course of marine engineering products and the course of photovoltaic power station EPC projects have no significant financing component and right of return.

#### (4) Descriptions of allocated remaining performance obligations

Applicable  Not applicable

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 44. Taxes and surcharges

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
City maintenance and construction tax	37,958,847	43,425,148
Education surcharges	27,629,944	31,471,018
Others	50,584,198	41,499,888
Total	116,172,989	116,396,054

Other information:

None

### 45. Selling expenses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Provision for product quality warranties	682,859,444	596,637,483
Employee benefits	253,147,696	234,250,686
Transportation and handling charges	4,406,598	28,145,961
Office and travel expenses	60,840,704	63,904,394
Business entertainment expenses	34,339,112	32,233,376
Bidding and tendering fee	18,220,912	15,963,787
Advertising and publicity cost	5,203,234	4,239,404
Others	39,155,293	74,956,671
Total	1,098,172,993	1,050,331,762

Other information:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 46. Administrative expenses

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Current period	Prior period
Employee benefits (excluding employee compensation under the defined benefit plan)	469,130,694	451,376,501
Depreciation and amortisation expenses	104,981,299	88,262,042
Facility maintenance cost	59,350,809	45,134,953
Office and travel expenses and conference fee	56,015,104	46,142,777
Property management fee	25,458,497	27,192,674
Service fees for intermediaries and professional institutions	27,850,758	26,774,176
Utilities expenses	14,275,413	19,717,237
Insurance expenses	18,993,291	10,549,636
Rental expenses	11,534,986	15,970,409
Business entertainment expenses	12,755,572	10,987,888
Others	89,635,420	70,912,727
Total	889,981,843	813,021,020

Other information:

Note: The administrative expenses in 2022 include the auditor's fee of RMB4,900,000 (2021: RMB5,800,000).

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 47. Research and development expenses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Employee benefits	845,440,159	789,377,405
Cost of materials consumed	247,451,102	253,880,705
Depreciation and amortisation expenses	210,759,000	197,682,366
Technical service fee	246,331,727	186,006,342
Office and travel expenses	58,723,028	68,644,799
Experiment and inspection cost	32,074,544	34,171,147
Others	121,135,409	160,285,203
Total	<u>1,761,914,969</u>	<u>1,690,047,967</u>

Other information:

None

### 48. Finance expense

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Interest expenses	12,614,050	15,469,215
Interest expenses of lease liabilities	8,350,270	5,963,478
Less: Capitalised interest expenses	–	363,742
Interest income	-204,124,028	-95,501,635
Net exchange gains	-11,060,943	-5,410,475
Financial institution charges	10,340,575	9,624,569
Others	-7,019,402	-3,586,586
Total	<u>-190,899,478</u>	<u>-73,805,176</u>

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 49. Other income

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Refunds of VAT	148,072,475	127,056,987
Technology project fund	388,544,490	336,443,607
Government rewards	35,590,405	69,584,774
Total	572,207,370	533,085,368

Other information:

None

### 50. Investment income

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Gains from long-term equity investments under the equity method	-84,856,551	-18,083,858
Gains on disposal of held-for-trading financial assets	55,467,902	60,557,582
Gains on disposal of held-for-trading financial liabilities	5,568,914	-
Gains (losses) on de-recognition of financial assets measured at amortised cost	-15,852,222	-9,102,199
Dividend income from other equity instrument investments during the holding period	315,100	237,400
Others	-2,642,682	-
Total	-41,999,539	33,608,925

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 51. Gains on changes in fair value

Applicable  Not applicable

Unit: Yuan Currency: RMB

Source of gains on changes in fair value	Current period	Prior period
Held-for-trading financial assets	174,283,210	71,130,766
Held-for-trading financial liabilities	-8,249,466	—
Total	<u>166,033,744</u>	<u>71,130,766</u>

Other information:

None

### 52. Credit losses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Losses on credit impairment of bills receivable	-1,530,827	17,120,556
Losses on credit impairment of accounts receivable	-60,571,289	107,662,206
Losses on credit impairment of other receivables	464,629	-2,957,131
Total	<u>-61,637,487</u>	<u>121,825,631</u>

Other information:

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 53. Impairment losses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Losses on impairment of inventories	78,536,093	-104,317,090
Losses on impairment of contract assets	-2,020,212	-7,674,259
Losses on impairment of other non-current assets	-3,170,829	–
Impairment losses of goodwill	–	-49,878,550
Total	<u>73,345,052</u>	<u>-161,869,899</u>

Other information:

None

### 54. Gains on disposal of assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Gains/(losses) on disposal of fixed assets	4,077,357	-2,072,439
Total	<u>4,077,357</u>	<u>-2,072,439</u>

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 55. Non-operating income

Details of non-operating income

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	2022		2021	
	Current period	Amount included in non-recurring gain or loss for the current period	Prior period	Amount included in non-recurring gain or loss for the prior period
Penalty income and default compensation income	4,121,959	4,121,959	3,626,935	3,626,935
Unsettled payment	1,615,059	1,615,059	1,882,745	1,882,745
Income from insurance claims	–	–	2,672,352	2,672,352
Government grants	1,000,000	1,000,000	7,000,000	7,000,000
Others	4,611,916	4,611,916	9,448,528	9,448,528
<b>Total</b>	<b>11,348,934</b>	<b>11,348,934</b>	<b>24,630,560</b>	<b>24,630,560</b>

Government grants recognized in profit or loss:

Unit: Yuan Currency: RMB

Item	Amount incurred in the current period	Amount incurred in the prior period	Relate to assets/ income
Listing subsidies	1,000,000	7,000,000	Income

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 56. Non-operating expenses

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	2022		2021	
	Current period	Amount included in non-recurring gain or loss for the current period	Prior period	Amount included in non-recurring gain or loss for the prior period
Expenses on penalties and default compensation	389,209	389,209	470,075	470,075
Losses on retirement of assets	–	–	895	895
Others	706,869	706,869	2,541,447	2,541,447
Total	1,096,078	1,096,078	3,012,417	3,012,417

Other information:

None

### 57. Income tax expenses

#### (1) Table of income tax expenses

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Current income tax expenses	326,005,205	211,621,573
– Chinese Mainland	324,371,861	202,209,698
– Other countries and regions	1,633,344	9,411,875
Deferred income tax expenses	23,570,541	-123,145,060
Total	349,575,746	88,476,513

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 57. Income tax expenses (continued)

#### (2) Reconciliation of accounting profits and income tax expenses

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Current period	Prior period
Total profit	<u>2,941,548,573</u>	<u>2,123,083,462</u>
Income tax expenses calculated at statutory tax rate of 25% (Note 1)	735,387,143	530,770,866
Effect of different tax rates applied by overseas companies	10,210,433	16,548,229
Effect of preferential tax rate applicable to the Company and its certain subsidiaries	-308,162,939	-224,723,087
Effect of tax-free income	-6,864	-3,555,632
Effect of joint ventures and associates	14,287,180	2,882,133
Effect of expenses that are not deductible for tax purposes	17,889,084	17,544,931
Effect of using deductible losses for which no deferred tax assets were recognised for the prior period	-2,500,267	-11,537,624
Reversal of deferred tax assets recognised for deductible temporary differences in previous years	—	—
Effect of deductible temporary differences or deductible losses for which no deferred tax assets were recognised in the current period	335,369,966	12,664,527
Effect of additional deduction of R&D expenses	-197,434,564	-186,366,104
Effect of the 100% pre-tax additional deduction for the full amount of equipment purchased by high-tech enterprises (Note 2)	-315,402,633	
Tax filing differences	60,732,011	-14,893,022
Effect of changes in the beginning balance of deferred income tax assets due to changes in tax rates	-792,804	-50,858,704
Income tax expenses	<u>349,575,746</u>	<u>88,476,513</u>





# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 57. Income tax expenses (continued)

#### (2) Reconciliation of accounting profits and income tax expenses (continued)

Other information:

Applicable  Not applicable

Note 1: Income tax expenses of the Group include income tax of the Group's subsidiaries in PRC calculated based on the taxable income at the applicable tax rate and income tax of the Group's subsidiaries not located in PRC calculated based on the taxable income at the applicable tax rate under the local tax laws and regulations.

Note 2: As described in Note IV, in accordance with the *Announcement of the Ministry of Finance, the State Taxation Administration and the Ministry of Science and Technology on Increasing Efforts for Pre-tax Deduction to Support Scientific and Technological Innovation* (2022 No.28), equipment and appliances purchased by the Company and its subsidiaries CRRC Times Electronics, CRRC Times Software and CRRC Times Semiconductor between 1 October 2022 and 31 December 2022 are qualified for a full deduction in a lump sum for the year in the calculation of taxable income and for a 100% pre-tax additional deduction.

### 58. Items in the cash flow statement

#### (1) Other cash receipts relating to operating activities

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Government grants	338,966,768	397,675,544
Interest income	118,705,324	95,501,636
Income from insurance claims	–	2,672,352
Recovery of deposits	26,272,279	–
Receipt from account current	16,514,000	187,246,202
Others	35,404,950	354,624,675
Total	535,863,321	1,037,720,409

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 58. Items in the cash flow statement (continued)

#### (2) Other cash payments relating to operating activities

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Payments for selling expenses, administrative expenses and R&D expenses	1,330,128,111	1,129,096,642
Bank charges	10,299,591	9,624,569
Payment for account current	—	117,444,959
Others	117,674,973	324,229,891
Total	1,458,102,675	1,580,396,061

#### (3) Other cash receipts relating to investing activities

Applicable  Not applicable

#### (4) Other cash payments relating to investing activities

Applicable  Not applicable

#### (5) Other cash receipts relating to financing activities

Applicable  Not applicable

#### (6) Other cash payments relating to financing activities

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Payment of lease liabilities	103,967,702	83,306,940
Effect of the acquisition of non-controlling interests	102,778,001	—
Total	206,745,703	83,306,940

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 59. Supplementary information to the cash flow statement

#### (1) Supplementary information to the cash flow statement

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
<b>1. Reconciliation of net profit to cash flows from operating activities:</b>		
Net profit	2,591,972,827	2,034,606,949
Add: Losses on impairment of assets	-73,345,052	161,869,899
Credit losses	61,637,487	-121,825,631
Depreciation of fixed assets	578,305,690	397,364,256
Depreciation of right-of-use assets	90,864,969	60,546,649
Amortisation of intangible assets	137,819,447	134,889,328
Amortisation of long-term prepaid expenses	8,910,233	9,731,021
Losses on disposal of fixed assets, intangible assets and other non-current assets ("- " for gains)	-4,077,357	2,072,439
Losses on changes in fair value ("- " for gains)	-166,033,744	-71,130,766
Finance costs ("- " for incomes)	-82,493,746	21,068,951
Investment losses ("- " for gains)	23,504,635	-42,711,124
Decrease in deferred tax assets ("- " for increases)	46,373,446	-116,182,312
Increase in deferred tax liabilities ("- " for decrease)	-15,283,296	-7,667,985
Decrease in inventories ("- " for increase)	-788,711,946	-755,292,884
Decrease in operating receivables ("- " for increase)	-2,893,222,150	-783,123,848
Increase in operating payables ("- " for decrease)	2,514,199,695	1,219,500,106
Increase in special reserve	10,814,321	6,539,610
Net cash flow from operating activities	<u>2,041,235,459</u>	<u>2,150,254,658</u>
<b>2. Net movement in cash and cash equivalents</b>		
Closing balance of cash	7,074,871,530	7,883,060,105
Less: Opening balance of cash	7,883,060,105	4,783,889,538
Net increase in cash and cash equivalents	<u>-808,188,575</u>	<u>3,099,170,567</u>

#### (2) Net cash paid for acquisition of subsidiaries in the current period

Applicable  Not applicable

#### (3) Net cash received from disposal of subsidiaries in the current period

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 59. Supplementary information to the cash flow statement (continued)

#### (4) Composition of cash and cash equivalents

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
I. Cash	7,074,871,530	7,883,060,105
Including: Cash on hand	31,466	29,256
Bank deposits on demand	7,074,840,064	7,883,030,849
III. Closing balance of cash and cash equivalents	7,074,871,530	7,883,060,105

Other information:

Applicable  Not applicable

### 60. Notes to items in statement of changes in owner's equity

Explain the name and adjustment amount of "other" items that adjusted the balance at the end of the previous year:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 61. Assets with restrictive ownership title or right of use

✓ Applicable     Not applicable

2022

Unit: Yuan    Currency: RMB

Item	Carrying amount at the end of the period	Reason for restriction
Bills receivable	49,702,001	Endorsed or discounted but not yet due at the balance sheet date
Total	<u>49,702,001</u>	/

2021

Unit: Yuan    Currency: RMB

Item	Carrying amount at the end of the period	Reason for restriction
Cash and bank balances	26,272,279	Guaranteed
Bills receivable	294,639,370	Endorsed or discounted but not yet due at the balance sheet date
Bills receivable	<u>22,607,000</u>	Pledged
Total	<u>343,518,649</u>	/

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 62. Foreign currency monetary items

#### (1) Foreign currency monetary items

✓ Applicable     Not applicable

2022

Unit: Yuan

Item	Foreign currency balance at 31 December 2022	Exchange rate	Equivalent to RMB Yuan at 31 December 2022
Cash and bank balances			111,890,514
Including: EUR	8,266,836	7.4229	61,363,897
GBP	5,126,737	8.3941	43,034,343
USD	1,065,303	6.9646	7,419,409
Others	/	/	72,865
Accounts receivable			32,822,713
Including: USD	4,579,418	6.9646	31,893,815
Others	/	/	928,899
Accounts payable			147,786,223
Including: EUR	16,517,361	7.4229	122,606,719
CHF	2,079,290	7.5432	15,684,500
USD	875,428	6.9646	6,097,006
JPY	64,894,709	0.0524	3,397,757
Others	/	/	241
Other payables			114,984,012
Including: USD	7,609,587	6.9646	52,997,730
CHF	2,720,584	7.5432	20,521,909
EUR	5,582,915	7.4229	41,441,420
Others	/	/	22,953

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 62. Foreign currency monetary items (continued)

#### (1) Foreign currency monetary items (continued)

2021

Unit: Yuan

Item	Foreign currency balance at 31 December 2021	Exchange rate	Equivalent to RMB Yuan at 31 December 2021
Cash and bank balances			104,427,620
Including: EUR	2,340,101	7.2197	16,894,827
GBP	7,980,431	8.6064	68,682,780
USD	2,281,628	6.3757	14,546,976
Others	/	/	4,303,037
Accounts receivable	–	–	70,147,191
Including: USD	5,225,145	6.3757	33,313,957
Others	/	/	36,833,234
Accounts payable	–	–	137,225,400
Including: EUR	4,971,372	7.2197	35,891,814
CHF	62,160	6.9776	433,728
USD	1,154,580	6.3757	7,361,256
JPY	1,653,235,167	0.0554	91,589,228
Others	/	/	1,949,374
Other payables	–	–	34,601,076
Including: USD	486,482	6.3757	3,101,663
CHF	–	–	–
EUR	2,165,093	7.2197	15,631,322
Others	/	/	15,868,091

Other information:

None

**(2) Description of overseas operating entities, including for significant overseas operating entities, it should disclose its main overseas business location, recording currency and selection basis. If the recording currency changes, it should also disclose the reasons.**

Applicable  Not applicable

Name of overseas business entity	significant principal place of business	Functional currency
Specialist Machine Developments	UK	GBP

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 63. Government grants

#### (1) Government grants

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Amount	Presenting item	Amount included in profit or loss for the current period
Refunds of VAT	148,072,475	Other income	148,072,475
Technology project fund	21,349,173	Other income	21,349,173
Grants for IPO	1,000,000	Non-operating income	1,000,000
Government rewards	19,347,420	Other income	19,347,420
Government rewards	48,270,176	Deferred income	16,242,985
Technology project fund	250,000,000	Deferred income	367,195,317
Total	<u>488,039,244</u>		<u>573,207,370</u>

#### (2) Return of government grants

Applicable  Not applicable

Other information:

None

### 64. Others

Applicable  Not applicable





# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VI. CHANGE IN CONSOLIDATION SCOPE

### 1. Business combinations involving entities not under common control

Applicable  Not applicable

### 2. Business combination involving entities under common control

Applicable  Not applicable

### 3. Reverse acquisition

Applicable  Not applicable

### 4. Disposal of subsidiaries

Whether there are circumstances in which the disposal of investments in subsidiaries through a single transaction resulted in loss of control

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 5. Other reasons for change of consolidation scope

Description of the other reasons causing the changes of consolidation scope (e.g. new subsidiaries, the liquidation of subsidiaries etc.) and related changes:

Applicable  Not applicable

The subsidiaries newly established in the period:

In September 2022, the Company and FAW Equity Investment (Tianjin) Co., Ltd. ("**FAW Equity**") jointly established FAW CRRC Electric Drive System Co., Ltd., with a registered capital of RMB500 million. The capital contribution subscribed by the Company accounted for 50% of the registered capital of the joint venture. As at 31 December 2022, the Company has actually made a capital contribution of RMB150 million.

In October 2022, a subsidiary (Zhuzhou CRRC Times Semiconductor Co., Ltd.) of the Company established a wholly-owned subsidiary, Yixing CRRC Times Semiconductor Co., Ltd., with a registered capital of RMB3.6 billion. As at 31 December 2022, the wholly-owned subsidiary has not commenced operations and its capital contributions have not been made in full.

### 6. Others

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES

### 1. Interests in subsidiaries

#### (1) Composition of the Group

✓ Applicable    □ Not applicable

Name of the Subsidiary	Principal place of business	Place of registration	Registered capital	Nature of business	Proportion of shareholding (%)		Acquisition method
					Direct	Indirect	
Ningbo CRRC Times	Ningbo, Zhejiang	Ningbo, Zhejiang <sup>2#</sup>	RMB148,826,200	Manufacturing	100	-	Incorporation
CRRC Times Electronics	Zhuzhou, Hunan	Zhuzhou, Hunan <sup>2#</sup>	RMB80,000,000	Manufacturing	100	-	Incorporation
Shenyang CRRC Times	Shenyang, Liaoning	Shenyang, Liaoning <sup>2#</sup>	RMB56,000,000	Manufacturing	100	-	Incorporation
CRRC Times Semiconductor	Zhuzhou, Hunan	Zhuzhou, Hunan <sup>2#</sup>	RMB4,567,600,670	Manufacturing	96.17	-	Incorporation
Baoji CRRC Times	Baoji, Shaanxi	Baoji, Shaanxi <sup>2#</sup>	RMB589,258,590	Manufacturing	100	-	Incorporation
Taiyuan CRRC Times	Taiyuan, Shanxi	Taiyuan, Shanxi <sup>2#</sup>	RMB307,620,400	Manufacturing	-	55	Incorporation
Kunming CRRC Times Electric Equipment Co., Ltd. ("Kunming Electric")	Kunming, Yunnan	Kunming, Yunnan <sup>2#</sup>	RMB55,000,000	Manufacturing	100	-	Incorporation
Hangzhou CRRC Times Electric Equipment Co., Ltd. ("Hangzhou Electric")	Hangzhou, Zhejiang	Hangzhou, Zhejiang <sup>2#</sup>	RMB75,000,000	Manufacturing	60	-	Incorporation
Guangzhou CRRC Times Electric Technology Co., Ltd. ("Guangzhou Electric")	Guangzhou, Guangdong	Guangzhou, Guangdong <sup>2#</sup>	RMB30,000,000	Manufacturing	60	-	Incorporation
HK CRRC Times Electric	Hong Kong	Hong Kong	HKD856,952,000	Investment holding	100	-	Incorporation
Ningbo CRRC Electric	Ningbo, Zhejiang	Ningbo, Zhejiang <sup>2#</sup>	RMB110,000,000	Manufacturing	100	-	Incorporation
Chengdu CRRC Electric	Chengdu, Sichuan	Chengdu, Sichuan <sup>2#</sup>	RMB30,000,000	Manufacturing	100	-	Incorporation
Qingdao CRRC Electric (Note 1)	Qingdao, Shandong	Qingdao, Shandong <sup>2#</sup>	RMB100,000,000	Manufacturing	45	-	Incorporation
Shanghai CRRC Rail Transit Technology Co., Ltd. ("Shanghai CRRC Rail Transit")	Shanghai	Shanghai <sup>2#</sup>	RMB50,000,000	Manufacturing	51	-	Incorporation
CRRC Times Software	Zhuzhou, Hunan	Zhuzhou, Hunan <sup>2#</sup>	RMB100,000,000	Software service	100	-	Incorporation
Hunan CRRC Signal	Changsha, Hunan	Changsha, Hunan <sup>2#</sup>	RMB229,000,000	Manufacturing	100	-	Incorporation
Lanzhou CRRC Times Rail Transit Technology Co., Ltd. ("Lanzhou Times")	Lanzhou, Gansu	Lanzhou, Gansu <sup>2#</sup>	RMB50,000,000	Manufacturing	51	-	Incorporation
Shanghai CRRC SMD	Shanghai	Shanghai <sup>2#</sup>	RMB70,000,000	Manufacturing	100	-	Incorporation
CRRC Times Electric Australia Pty. Ltd. ("Times Australia")	Australia	Australia	AUD290,000	Trading	100	-	Incorporation
CRRC Times Electric USA, LLC ("Times USA")	USA	USA	USD430,000	Trading	100	-	Incorporation
CRRC Times Electric Brasil Ltda. ("Times Brasil")	Brazil	Brazil	BRL1,320,000	Trading	99	1	Incorporation
Chongqing CRRC Electric	Chongqing	Chongqing <sup>2#</sup>	RMB150,000,000	Manufacturing	60	-	Incorporation
FAW CRRC Electric Drive System Co., Ltd.	Changchun, Jilin	Changchun, Jilin <sup>2#</sup>	RMB500,000,000	Manufacturing	50	-	Incorporation
Yixing CRRC Times Semiconductor Co., Ltd.	Wuxi, Jiangsu	Wuxi, Jiangsu <sup>2#</sup>	RMB3,600,000,000	Manufacturing	-	100	Incorporation
Canada Dynex	Canada	Canada	CAD37,096,192	Investment holding	100	-	By business combination not involving enterprises under common control
Dynex Semiconductor Limited	UK	UK	GBP15,000,000	Manufacturing	-	100	By business combination not involving enterprises under common control
SMD	UK	UK	GBP44,049,014	Investment holding	-	100	By business combination not involving enterprises under common control

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES (continued)

### 1. Interests in subsidiaries (continued)

#### (1) Composition of the Group (continued)

Name of the Subsidiary	Principal place of business	Place of registration	Registered capital	Nature of business	Proportion of shareholding (%)		Acquisition method
					Direct	Indirect	
Soil Machine Dynamics Limited	UK	UK	GBP938,950	Manufacturing	-	100	By business combination not involving enterprises under common control
SMD Offshore Support Limited	UK	UK	GBP2	Trading	-	100	By business combination not involving enterprises under common control
SMD Robotics Limited	UK	UK	GBP1	Trading	-	100	By business combination not involving enterprises under common control
Soil Machine Dynamics Singapore Pte. Ltd.	Singapore	Singapore	SGD1	Manufacturing	-	100	By business combination not involving enterprises under common control
SMD do Brasil Ltd.	Brazil	Brazil	BRL100	Trading	-	100	By business combination not involving enterprises under common control
CRRC National Centre of Converters	Zhuzhou, Hunan	Zhuzhou, Hunan <sup>2F</sup>	RMB273,000,000	Manufacturing	100	-	By business combination involving enterprises under common control

Descriptions of the difference between the proportion of shareholding and the proportion of voting rights:

Please refer to note 1 and note 2.

The basis for holding half or less of the voting rights but still controlling the investee and holding more than half of the voting rights but not controlling the investee:

Note 1: The Company considers that it controls Qingdao CRRC Electric Equipment Co., Ltd. ("**Qingdao CRRC Electric**") even though it owns less than 50% of the voting rights. This is because the Group is the single largest shareholder of Qingdao CRRC Electric with a 45% equity interest. Pursuant to the Articles of Association of Qingdao CRRC Electric, for resolutions of the shareholders' meeting affecting relative operating activities of Qingdao CRRC Electric, CRRC Qingdao Sifang Co., Ltd., a related party of the Company, which owns Qingdao CRRC Electric 38% equity interest, commits to comply with the Company in the exercise of the proposal rights and voting rights. The Company recommends four of the seven directors in Board of Qingdao CRRC Electric and the resolutions of Board are deemed as valid when more than half of all directors approve.

Note 2: The Company considers that it also controls FAW CRRC Electric Drive System Co., Ltd. ("**FAW CRRC**") even though its shareholding proportion is only 50%. The main reasons are as follows. According to the Articles of Association of FAW CRRC, shareholders exercise their voting rights during the shareholders' meeting according to the ratios of their contributions to registered capital. Resolutions of shareholders' meeting shall be adopted when all shareholders unanimously consent. The Company appoints three of the five directors in the Board of Directors of FAW CRRC, and FAW Equity appoints the other two directors. The resolutions of the Board of Directors can be divided into ordinary resolutions and special resolutions. Ordinary resolutions shall be adopted when more than one half of all directors approve. Special resolutions involving important decisions on the operations of FAW CRRC shall be adopted when more than two thirds of all directors approve. For matters about FAW CRRC that were not approved at the shareholders' meeting or by the Board of Directors, if no agreement can be reached after negotiation through the procedures agreed by both parties, the opinions of the Company shall be adopted. Therefore, the Company believes that it has the right to control FAW CRRC.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES (continued)

### 1. Interests in subsidiaries (continued)

#### (1) Composition of the Group (continued)

Basis for consolidating significant structured entities based on control:

Not applicable

Rationale for determining whether the Company is an agent or principal:

Not applicable

Other information:

#1 company limited by shares

#2 limited liability company

#### (2) Significant non-wholly owned subsidiaries

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the Subsidiaries	Proportion of shareholding of non-controlling shareholders (%)	Profit (Loss) attributable to non-controlling shareholders	Dividends paid to non-controlling shareholders	Closing balance of non-controlling interests
CRRC Times Semiconductor	<u>3.83%</u>	<u>20,896,712</u>	<u>1,089,144</u>	<u>226,734,967</u>

Description of the circumstances in which the proportion of shareholdings of the non-controlling interests in a subsidiary is different from that of voting rights:

Applicable  Not applicable

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VII. INTERESTS IN OTHER ENTITIES (continued)

### 1. Interests in subsidiaries (continued)

#### (3) Key financial information of significant non-wholly owned subsidiaries

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the Subsidiaries	Balance at the end of the period						Balance at the beginning of the year					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
CRRC Times Semiconductor	3,275,587,922	3,940,495,540	7,216,083,462	886,318,308	532,184,787	1,418,503,095	2,622,844,678	1,487,572,578	4,110,417,256	546,713,286	518,365,181	1,065,078,467

Name of the Subsidiaries	2022				2021			
	Operating income	Net profit	Total comprehensive income	Cash flows from operating activities	Operating income	Net profit	Total comprehensive income	Cash flows from operating activities
CRRC Times Semiconductor	2,275,334,379	412,839,246	414,010,165	583,592,855	1,310,437,610	124,591,429	119,226,732	167,223,449

Other information:

None

#### (4) Material restriction on the use of the Group's assets and the settlement of the Group's liabilities

Applicable  Not applicable

#### (5) Financial support and other assistance provided to structured entities included in the consolidated financial statements:

Applicable  Not applicable

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VII. INTERESTS IN OTHER ENTITIES (continued)

### 2. Transactions that cause changes in the Group's interests in subsidiaries that do not result in loss of control

✓ Applicable  Not applicable

#### (1) Changes in the Group's interests in subsidiaries:

✓ Applicable  Not applicable

In December 2022, the Company paid RMB98,727,100 for the purchase of 6.79% equity interest in Baoji CRRC Times held by China Railway Baoji Machinery Co., Ltd. Then, Baoji CRRC Times became a wholly-owned subsidiary of the Group. The excess of the consideration paid for this equity transaction is deducted from capital reserve according to the Group's share of net assets in Baoji CRRC Times amounting to RMB15,470,299 based on the shares acquired.

From September to December 2022, the Company paid RMB4,659,900 to Zhuzhou Xinlianjie No. 0 Enterprise Management Partnership for the purchase of 0.12% equity interest in its subsidiary, CRRC Times Semiconductor. The Company made additional capital contribution of RMB2,459,573,220 to the subsidiary CRRC Times Semiconductor, with its shareholding proportion increased by 2.25% accordingly. After the completion of the above equity transfer and capital increase, the registered capital of CRRC Times Semiconductor increased to RMB4,567,600,670, and the Group's shareholding proportion in CRRC Times Semiconductor increased from 93.80% to 96.17%.

#### (2) Impact of transactions on non-controlling interests and equity attributable to the owners of the parent company

✓ Applicable  Not applicable

Unit: Yuan Currency: RMB

	Zhuzhou CRRC Times Semiconductor Co., Ltd.
Acquisition cost/disposal consideration	
– Cash	2,464,224,120
– Fair value of non-cash assets	–
Total acquisition cost/disposal consideration	2,464,224,120
Less: Share of net assets in subsidiaries based on the shares acquired/disposed	2,471,677,270
Difference	<u><u>-7,453,150</u></u>
Including: Adjustment to capital reserve	7,453,150
Adjustment to surplus reserve	–
Adjustment to retained earnings	<u><u>–</u></u>



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VII. INTERESTS IN OTHER ENTITIES (continued)

### 2. Transactions that cause changes in the Group's interests in subsidiaries that do not result in loss of control (continued)

#### (2) Impact of transactions on non-controlling interests and equity attributable to the owners of the parent company (continued)

	Baoji CRRC Times Engineering Machinery Co., Ltd.
Acquisition cost/disposal consideration	–
– Cash	98,727,100
– Fair value of non-cash assets	–
	<hr/>
Total acquisition cost/disposal consideration	98,727,100
Less: Share of net assets in subsidiaries based on the shares acquired/disposed	83,256,801
	<hr/>
Difference	15,470,299
	<hr/> <hr/>
Including: Adjustment to capital reserve	-15,470,299
Adjustment to surplus reserve	
Adjustment to retained earnings	
	<hr/> <hr/>
Other information	
<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> Not applicable	
<b>3. Equity in associates or joint ventures</b>	
<input checked="" type="checkbox"/> Applicable <input type="checkbox"/> Not applicable	

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES (continued)

### 3. Equity in associates or joint ventures (continued)

#### (1) Significant joint ventures or associates

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Name of companies	Main business place	Nature of business	Shareholding proportion (%)		Accounting methods for investments in joint ventures or associates
			Direct	Indirect	
<b>Joint ventures</b>					
Shiling	Zhuzhou, Hunan	Manufacturing	50%	–	Equity method
Zhejiang Times LANP	Wenzhou, Zhejiang	Manufacturing	50%	–	Equity method
Shanghai Shenzhong	Shanghai	R&D and technical service industry	50%	–	Equity method
Zhengzhou Times	Zhengzhou, Henan	Manufacturing	50%	–	Equity method
Qinglan Semiconductor	Guangzhou, Guangdong	R&D and technical service industry	–	49%	Equity method
<b>Associates</b>					
CRRC Hofer	Wuxi, Jiangsu	Manufacturing	–	49%	Equity method
Zhuzhou Siemens	Zhuzhou, Hunan	Manufacturing	30%	–	Equity method
Guoxin Technology	Zhuzhou, Hunan	Manufacturing	25%	–	Equity method
Times Wabtec	Changsha, Hunan	Manufacturing	50%	–	Equity method
Zhixin Semiconductor	Wuhan, Hubei	Manufacturing	–	47%	Equity method
CRRC India	India	Manufacturing	15%	–	Equity method
Wuxi Times	Wuxi, Jiangsu	Software and information technology services	46%	–	Equity method
Foshan Zhongshi	Foshan, Guangdong	Software and information technology services	40%	–	Equity method
Guangzhou High-Speed Rail Technology Co., Ltd.	Guangzhou, Guangdong	Construction	–	19%	Equity method



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES (continued)

### 3. Equity in associates or joint ventures (continued)

#### (2) Main financial information of significant joint ventures

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

	Balance at the end of the period/ Amount for the current period Shiling	Balance at the beginning of the period/ Amount for the prior period Shiling
Current assets	212,373,038	339,796,725
Including: Cash and cash equivalents	170,802,724	315,855,158
Non-current assets	<u>27,774,124</u>	<u>36,983,070</u>
Total assets	<u>240,147,162</u>	<u>376,779,795</u>
Current liabilities	24,202,922	29,569,172
Non-current liabilities	<u>3,190,000</u>	—
Total liabilities	<u>27,392,922</u>	<u>29,569,172</u>
Net assets	<u>212,754,240</u>	<u>347,210,623</u>
Share of net assets calculated based on the proportion of shareholding	106,377,120	170,989,491
Adjustments	—	—
– Unrealised profits of downstream transactions	—	—
Carrying amount of investments	<u>106,377,120</u>	<u>170,989,491</u>
Fair value of equity investments in joint ventures which have quoted market prices		
Operating income	38,102,570	54,009,903
Income tax expenses	—	—
Net profit	12,775,258	9,651,146
Total comprehensive income	12,775,258	9,651,146
Dividends received from joint ventures	<u>71,000,000</u>	<u>20,000,000</u>
Other information		
None		

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES (continued)

### 3. Equity in associates or joint ventures (continued)

#### (3) Main financial information of significant associates

Applicable  Not applicable

#### (4) Financial information of insignificant joint ventures and associates

Applicable  Not applicable

Unit: Yuan Currency: RMB

	Balance at the end of the period/ Amount for the current period	Balance at the beginning of the period/ Amount for the prior period
Joint ventures:		
Aggregate carrying amount of investments	103,949,760	101,545,417
Aggregate amount calculated based on the shareholding proportion		
– Net profit/(loss)	2,404,343	-2,687,991
– Total comprehensive income	<u>2,404,343</u>	<u>-2,687,991</u>
Associates:		
Aggregate carrying amount of investments	253,224,002	339,192,450
Aggregate amount calculated based on the shareholding proportion		
– Net profit (loss)	-93,648,523	-20,221,440
– Total comprehensive income	<u>-89,175,934</u>	<u>-20,221,440</u>
Other information		
None		



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## VII. INTERESTS IN OTHER ENTITIES (continued)

### 3. Equity in associates or joint ventures (continued)

#### (5) Description of material restrictions on transfers of funds from joint ventures or associates to the Company

Applicable  Not applicable

#### (6) Excess loss from joint ventures or associates

Applicable  Not applicable

#### (7) Unrecognised commitments related to the investments in joint ventures

Applicable  Not applicable

#### (8) Contingent liabilities related to investments in joint ventures or associates

Applicable  Not applicable

### 4. Significant joint operations

Applicable  Not applicable

### 5. Interests in structured entities not included in the consolidated financial statements

Other information about the structured entities that are not included in consolidated financial statements:

Applicable  Not applicable

### 6. Others

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VIII. RISK RELATED TO FINANCIAL INSTRUMENTS

### 1. Category of financial instruments

✓ Applicable     Not applicable

The Group's main financial instruments include cash and bank balances, held-for-trading financial assets, bills receivable, accounts receivable, trade receivables financing, other receivables, other equity instrument investments, other current assets, non-current assets due within one year, long-term receivables, other non-current assets, bills payable, trade payables, other payables, borrowings, long-term payables and lease liabilities. As at 31 December 2022, the Group's holdings of financial instruments are as follows, detailed in Note V. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. Management manages and monitors these exposures to ensure the risks are monitored at a certain level.

Unit: Yuan    Currency: RMB

Item	Closing balance	Opening balance
<b>Financial assets</b>		
<i>At FVTPL</i>		
Held-for-trading financial assets	6,700,827,160	7,579,988,489
<i>At FVTOCI</i>		
Receivables financing	2,918,688,837	2,910,527,667
Other equity instrument investments	152,673,525	112,400,000
<i>At amortised cost</i>		
Cash and bank balances	7,500,378,674	8,219,320,889
Bills receivable	3,404,536,888	2,757,119,757
Accounts receivable	8,100,217,003	6,549,417,025
Other receivables	159,577,799	177,166,093
Other current assets	50,157,194	50,000,000
Non-current assets due within one year	340,751,629	–
Long-term receivables	1,716,722	4,027,705
Other non-current assets	3,305,380,382	1,190,080,714
<b>Financial liabilities</b>		
<i>At amortised cost</i>		
Short-term borrowings	454,374,494	389,550,036
Bills payable	2,618,840,644	1,640,341,546
Accounts payable	6,086,488,039	4,677,716,033
Other payables	983,217,920	753,174,560
Long-term borrowings (including long-term borrowings due within one year)	77,713,637	82,715,287
Lease liabilities (including lease liabilities due within one year)	193,708,882	120,217,161
Long-term payables	–	525,195



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VIII. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 2. Risks of financial instruments

The main risks arising from the Group's financial instruments are credit risk, liquidity risk, and market risk. The Group's risk management policies are outlined below.

#### (1) Credit risk

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis to ensure that the Group's exposure to bad debts is not significant.

The credit risk of the Group's other financial assets, which mainly comprise cash and bank balances, bills receivable and other receivables, arises from default of the counterparty, with a maximum exposure equal to the carrying amounts of these instruments.

The credit risk on cash and bank balances is limited because they are deposited with banks with high credit ratings.

The major customers of the Group are subsidiaries of CRRC Corporation Limited as well as other state-owned enterprises and institutions in the railway transportation industry. Since the Group trades only with recognised and creditworthy third parties, there is no requirement for collateral. As at 31 December 2022 and 31 December 2021, the Group had certain concentrations of credit risk as 1.55% and 5.06% of the Group's accounts receivable were due from the Group's largest customer. As at 31 December 2022 and 31 December 2021, 20.18% and 16.16% of the Group's accounts receivable were due from the five largest customers.

Principles for assessing whether the credit risk has increased significantly since the initial recognition, basis for determining the credit impairment of financial assets, the method to assessing expected credit risk on a portfolio basis and the direct write down policy are listed in Note III. 10. (2).

As part of the Group's credit risk management, the Group uses the ageing of accounts receivable to assess the credit impairment losses of receivables arising from various kinds of business. This type of business involves a large number of small customers, which with the same risk characteristics, and the ageing information can reflect the solvency of them when the accounts receivable expire.

The above-mentioned expected average loss rate is based on historically actual bad debt rate and takes current conditions and forecasts of future economic conditions into consideration.

The Group reviews the recoverable amount of the financial assets at each balance sheet date to ensure that adequate credit loss allowance is made for irrecoverable amounts. In this regard, the management of the Group considers that the Group's credit risk assumed is significantly reduced.

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VIII. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 2. Risks of financial instruments (continued)

#### (2) Liquidity risk

The Group monitors its risk of shortage of funds using a continuous liquidity planning tool. This tool considers both the maturity of its financial instruments and expected cash flows from the Group's operations.

The Group's objective is to maintain a balance between the continuity of funding and flexibility through the use of various financing means, such as note settlement and bank borrowings. The Group has obtained banking facilities from several commercial banks to meet working capital requirements and capital expenditures.

The Group's management monitors the liquidity position of the Group on an ongoing basis to ensure the availability of sufficient liquid funds to meet all obligations as they fall due and to make the most efficient use of the Group's financial resources.

The maturity analysis of the Group's financial liabilities based on the undiscounted contractual cash flows is as follows:

As at 31 December 2022

Unit: Yuan Currency: RMB

Item	Closing balance			Total	Carrying amount
	Within 1 year	1-2 years	Over 2 years		
Short-term borrowings	457,665,966	—	—	457,665,966	454,374,494
Bills payable	2,618,840,644	—	—	2,618,840,644	2,618,840,644
Accounts payable	6,086,488,039	—	—	6,086,488,039	6,086,488,039
Other payables (excluding dividends payable)	981,502,920	—	—	981,502,920	981,502,920
Long-term borrowings (including long-term borrowings due within one year)	5,811,956	5,757,956	70,032,376	81,602,288	77,713,637
Lease liabilities (including lease liabilities due within one year)	66,040,208	50,150,527	105,312,237	221,502,972	193,708,882
Total	10,216,349,733	55,908,483	175,344,613	10,447,602,829	10,412,628,616

As at 31 December 2021

Item	Opening balance			Total	Carrying amount
	Within 1 year	1-2 years	Over 2 years		
Short-term borrowings	389,820,483	—	—	389,820,483	389,550,036
Bills payable	1,640,341,546	—	—	1,640,341,546	1,640,341,546
Accounts payable	4,677,716,033	—	—	4,677,716,033	4,677,716,033
Other payables (excluding dividends payable)	753,174,560	—	—	753,174,560	753,174,560
Long-term borrowings (including long-term borrowings due within one year)	5,920,317	5,839,030	76,179,814	87,939,161	82,715,287
Lease liabilities (including lease liabilities due within one year)	46,916,907	31,695,945	50,950,748	129,563,600	120,217,161
Long-term payables	—	234,060	291,135	525,195	525,195
Total	7,513,889,846	37,769,035	127,421,697	7,679,080,578	7,664,239,818



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VIII. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 2. Risks of financial instruments (continued)

#### (3) Market risk

##### Foreign currency risk

Currency risk is the risk that the fair value or future cash flows of financial instruments will fluctuate because of changes in foreign exchange rates. The Group's exposure to the currency risk is primarily associated with its operating activities (settled in foreign currency other than the functional currency).

The Group's operating activities are mainly located in China and most of the transactions are denominated in RMB, except for certain sales, purchases and borrowings which are settled in foreign currency. Currency risk arising from the assets and liabilities denominated in foreign currencies may have impact on the Group's performance.

The balances of the Group's assets and liabilities of main foreign currency are as follows:

Unit: Yuan Currency: RMB

Item	Closing balance of total assets	Closing balance of total liabilities	Opening balance of total assets	Opening balance of total liabilities
AUD	155,305,098	—	—	—
USD	149,141,591	61,108,690	47,860,933	10,462,919
GBP	148,979,197	18,967,049	68,682,780	13,273,917
EUR	147,769,940	164,048,140	29,336,348	51,523,136
CHF	—	36,206,414	—	1,587,805
Total	<u>601,195,826</u>	<u>280,330,293</u>	<u>145,880,061</u>	<u>76,847,777</u>

# Notes to the Financial Statements

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## VIII. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 2. Risks of financial instruments (continued)

#### (3) Market risk (continued)

##### Foreign currency risk (continued)

The following table demonstrates the sensitivity analysis on currency risk, which reflects the impact of reasonably possible changes in the exchange rates of GBP, USD, EUR, CHF and AUD on the Group's net profit, with all other variables held constant.

Unit: Yuan Currency: RMB

Item	Base point at the end of the period Increase/ (decrease)	Effect on profit of current period Increase/ (decrease)	Base point at the beginning of the period Increase/ (decrease)	Effect on profit of prior period Increase/ (decrease)
GBP				
If RMB strengthens against GBP	10%	-11,051,033	10%	-4,709,753
If RMB weakens against GBP	-10%	11,051,033	-10%	4,709,753
USD				
If RMB strengthens against USD	10%	-7,482,797	10%	-3,178,831
If RMB weakens against USD	-10%	7,482,797	-10%	3,178,831
EUR				
If RMB strengthens against EUR	10%	1,383,647	10%	1,885,877
If RMB weakens against EUR	-10%	-1,383,647	-10%	-1,885,877
CHF				
If RMB strengthens against CHF	10%	3,077,545	10%	134,963
If RMB weakens against CHF	-10%	-3,077,545	-10%	-134,963
AUD				
If RMB strengthens against AUD	10%	-13,200,932	10%	-
If RMB weakens against AUD	-10%	13,200,932	-10%	-





# Notes to the Financial Statements

For the year ended 31 December 2022  
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## VIII. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 2. Risks of financial instruments (continued)

#### (3) Market risk (continued)

##### Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios in order to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustment to it in light of changes in economic conditions and the risk characteristics of underlying assets. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. The Group is not subject to any externally imposed capital requirements. No changes were made in the objectives, policies or processes for managing capital for the years ended 31 December 2022 and 31 December 2021.

The Group monitors capital using a gearing ratio, which is net debt divided by the adjusted capital plus net debt. The Group's policy is to maintain the gearing ratio no more than 30%. Net debt includes all borrowings, financial liabilities held for trading, bills payable, accounts payable, employee benefits payable, other taxes payable excluding enterprise income tax payable, other payables, lease liabilities and long-term payables less cash and cash equivalents. Capital includes equity attributable to shareholders of the parent company.

The gearing ratios as at the balance sheet date are as follows:

Unit: Yuan Currency: RMB

Item	Closing balance
Short-term borrowings	454,374,494
Held-for-trading financial liabilities	–
Bills payable	2,618,840,644
Accounts payable	6,086,488,039
Employee benefits payable	173,247,266
Taxes payable (excluding enterprise income tax payable)	245,443,119
Other payables	983,217,920
Long-term borrowings (including long-term borrowings due within 1 year)	77,713,637
Lease liabilities (including lease liabilities due within 1 year)	193,708,883
Long-term payables	–
Less: Cash and cash equivalents	7,074,871,530
Net liabilities	3,758,162,472
Equity attributable to shareholders of the Parent Company	34,530,700,004
Capital and net liabilities	38,288,862,476
Gearing ratio	9.82%

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## IX. DISCLOSURE OF FAIR VALUE

### 1. Closing fair value of assets and liabilities measured at fair value

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing fair value			Total
	Level 1 Fair value measurement	Level 2 Fair value measurement	Level 3 Fair value measurement	
I. Continuous fair value measurement				
(I) Held-for-trading financial assets	-	6,700,827,160	-	6,700,827,160
1. held-for-trading financial assets measured at fair value through profit and loss.	-	6,700,827,160	-	6,700,827,160
(II) Receivables financing	-	2,918,688,837	-	2,918,688,837
(III) Other equity instrument investment	-	-	152,673,525	152,673,525
Total assets measured at fair value on a recurring basis	-	9,619,515,997	152,673,525	9,772,189,522

### 2. Basis of determining the market price for recurring and non-recurring fair value measurements categorised within Level 1

Applicable  Not applicable

### 3. Valuation techniques used and the qualitative and quantitative information of key parameters for recurring and non-recurring fair value measurements categorised within Level 2

Applicable  Not applicable

Fair value measurement of held-for-trading financial assets and receivables financing is determined based on the method of discounted cash flow analysis. The future cash flows are estimated based on the projected returns and discounted at the discount rate reflecting the counterparty's credit risk. Fair value measurement of held-for-trading financial liabilities is determined based on the method of discounted cash flow analysis.

### 4. Valuation techniques used and the qualitative and quantitative information of key parameters for recurring and non-recurring fair value measurements categorised within Level 3

Applicable  Not applicable

Fair value measurement of other equity instrument investments is determined based on the method of discounted cash flow analysis. Unobservable inputs include weighted average cost of capital and long-term income growth rate.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## IX. DISCLOSURE OF FAIR VALUE (continued)

### 5. Reconciliation from the opening balances to the closing balances, and sensitivity analysis on unobservable inputs for items measured at recurring Level 3 fair value measurements

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Other equity instrument investments (unlisted equity instrument investments)
1 January 2022	112,400,000
Additions	40,273,525
30 June 2022	<u>152,673,525</u>

### 6. Reasons for transfers between different levels, and the policy about the timing of those transfers for recurring fair value measurements

Applicable  Not applicable

### 7. Current changes in valuation techniques and the reasons

Applicable  Not applicable

### 8. Fair value of financial assets and financial liabilities that are not measured at fair value

Applicable  Not applicable

The Group's financial assets and financial liabilities at amortized cost are detailed in Note V. 32 Long-term borrowings and 34 Long-term payables. As at 31 December 2022 and 31 December 2021, the fair values of long-term borrowings and long-term payables are determined using the method of discounted cash flow analysis, with market yields on other financial instruments with similar contractual terms, credit risk and remaining maturity as the discount rate. Except for the above items, the carrying amounts of financial assets and financial liabilities at amortized cost in the financial statements approximate their fair values.

### 9. Others

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS

### 1. Parent of the Company

Applicable  Not applicable

Unit: '0000 Currency: RMB

Company name	Place of registration	Nature of business	Registered capital	Proportion of shareholding	Proportion of voting rights
CRRC ZELRI	Zhuzhou, Hunan	R&D, manufacturing and sales of rail transportation products and equipment	844,684	41.63%	41.63%

#### *Description of the parent company of the Company*

CRRC ZELRI and the companies it holds are collectively referred to as "CRRC ZELRI Group".

*The ultimate holding party of the Company is CRRC Corporation Limited.*

Other information:

The ultimate holding party of the Company is CRRC Group, which is an enterprise directly under the central government and directly administered by the State-owned Assets Supervision and Administration Commission of the State Council. The ultimate holding party and the companies it holds are collectively referred to as "the ultimate holding party group".

### 2. Particulars of subsidiaries of the Company

***For details of the subsidiaries of the Company, please refer to Note.***

Applicable  Not applicable

For details of the subsidiaries of the Company, please refer to Note VII. 1.



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 3. Particulars of joint ventures and associates of the Company

**Important joint ventures and associates of the Company, please refer to Note**

Applicable  Not applicable

For details of the joint ventures and associates of the Company, please refer to Note VII. 3.

Other joint ventures or associated enterprises that have related party transactions with the company in the current period, or that have balance formed from related party transactions with the company in the previous period are as follows:

Applicable  Not applicable

Other descriptions:

Applicable  Not applicable

### 4. Particulars of other related parties

Applicable  Not applicable

Name of other related parties	Relationship between other related parties and the Company
Hunan Lixing Power Technology Co., Ltd.	Company controlled by CRRC ZELRI
Qingdao CRRC Huaxuan Water Co., Ltd.	Company controlled by CRRC ZELRI
CRRC Zhuzhou Traction Electrical Equipment Test & Certification Co., Ltd.	Company controlled by CRRC ZELRI
CRRC Beijing Heavy Industry and Mechanics Co., Ltd.	Company controlled by CRRC ZELRI
Boge Rubber & Plastics (Zhuzhou) Co., Ltd.	Company controlled by CRRC ZELRI
Hunan CRRC Zhixing Technology Co., Ltd.	Company controlled by CRRC ZELRI
Shanghai CRRC Hange Marine & Offshore Engineering Co., Ltd.	Company controlled by CRRC ZELRI
Xiangyang CRRC Electric Machinery Co., Ltd.	Company controlled by CRRC ZELRI
Zhuzhou Times Ruiwei Vibration Reduction Equipment Co., Ltd.	Company controlled by CRRC ZELRI
Zhuzhou Times Rubber & Plastic Component Development Co., Ltd.	Company controlled by CRRC ZELRI
Zhuzhou Times New Material Technology Co., Ltd.	Company controlled by CRRC ZELRI
CRRC Zhuzhou Mechanical and Electrical Technology Co., Ltd.	Company controlled by CRRC ZELRI
CRRC-AVC Thermal Technologies (Zhuzhou) Co., Ltd.	Company controlled by CRRC ZELRI
Tianjin CRRC Wind Power Equipment Technology Co., Ltd.	Company controlled by CRRC ZELRI
Xiangyang China Railway Hongji Engineering Technology Co., Ltd.	Company controlled by CRRC ZELRI
Wuxi CRRC Times Intelligent Equipment Research Institute Co., Ltd.	Company controlled by CRRC ZELRI

# Notes to the Financial Statements

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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
Qingdao CRRCTimes New Energy Materials Technology Co., Ltd.	Company controlled by CRRC ZELRI
Qingdao Sifang Faiveley Railway Brake Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shanghai Shentong Changke Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shanghai CRRC Shentong rail transit vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shenzhen CRRC Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shenyang CRRC Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changzhou Langrui Dongyang Drive Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shenyang Westinghouse Brake Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Dalian Toshiba Locomotive Electric Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changchun Changke Alstom Railway Vehicle Company Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Beijing North Gofront Rail Transit Technology Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Shanghai Alstom Transport Electrical Equipment Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Shanghai Nanji Railway Equipment Technology Development Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Tianjin Electric Locomotive Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Beijing Nankou SKF Railway Bearing Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
ABB Datong Traction Transformers Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Guangzhou Electric Locomotive Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Guangzhou Junfa Electric Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Taiyuan Locomotive Lukai Logistics Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Taiyuan Tieliang Trading Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group



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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
Taiyuan Yingfeng Locomotive Casting Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
Zhuzhou Gofront Foundry Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
Jinan-Qingdao High-speed Railway Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
CRRZ Ziyang Transmission Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
Beijing Er'qi Changtie Transportation Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
Taiyuan Shenghao Construction & Installation Project Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
Xinyang Amsted Tonghe Wheels Co., Ltd.	Associate of the ultimate holding group other than CRRZ ZELRI Group
Australia CRRZ Changchun Railway Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Beijing CRRZ Erqi Railway Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Cangzhou CRRZ ZELC Railway Equipment Services Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Dalian Locomotive and Rolling Stock Distribution Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Guangzhou CRRZ Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Hangzhou Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Hunan Zhirong Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Jiangsu CRRZ Urban Development Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Kunming CRRZ Urban Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ MA Corporation	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Nanjing CRRZ Puzhen Urban Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Nanjing Puzhen Haitai Brake Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Nanning CRRZ Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
Bombardier Sifang (Qingdao) Transportation Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Qingdao CRRZ Sifang Rolling Stock Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Shanghai Alstom Traffic Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Shenyang CRRZ Yongdian Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Tianjin CRRZ Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Tianjin CRRZ Sifang Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Wenzhou CRRZ Sifang Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Urumqi CRRZ Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Wuhan CRRZ Sifang Wuhan Rail Transit Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Wuhan Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Xi'an Yongdian Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Changchun CRRZ Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Zhejiang CRRZ Electric Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
Zhengzhou CRRZ Sifang Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Chengdu Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Academy Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Guangdong Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Environmental & Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Lanzhou Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group
CRRZ Nanjing Puzhen Co., Ltd.	Company controlled by the ultimate holding party other than CRRZ ZELRI Group



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For the year ended 31 December 2022  
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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
CRRC Qiqihar Rolling Stock Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Xi'an Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC New Infrastructure Investment and Development Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Changchun Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Yangtze Group Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Ziyang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Chongqing Sifang Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Chongqing Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Beijing CRRC CED Railway Electric Tech. Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Changzhou Ruitai Equipment Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changzhou CRRC Wabtec Diesel Engine Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Chengdu CRRC Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Dalian Zelong Machinery Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Foshan CRRC Sifang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Hunan CRRC Shangqu Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Jiangsu Mechanical and Electrical Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Meishan CRRC Fastening System Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Meishan CRRC Brake Science & Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Nanjing CRRC Logistics Service Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Ningbo Jiangbei Gofront Herong Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Notes to the Financial Statements

For the year ended 31 December 2022  
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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
Ningbo CRRC Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Ningbo CRRC New Energy Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Qingdao CRRC Sifang Rail Transit Equipment Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Quanzhou CRRC Tangshan Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shandong CRRC Huateng Environment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shijiazhuang King Transportation Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Tianjin CRRC Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Xi'an Yongejietong Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Erqi Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Dalian R&D Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Dalian Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Dalian Institute Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Datong Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Luoyang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Qishuyan Locomotive & Rolling Stock Technology Research Institute Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Qishuyan Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Qingdao Sifang Rolling Stock Research Institute Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Qingdao Sifang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Shandong Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Electric Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group



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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
CRRC Taiyuan Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Tangshan Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Logistics Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Yongji Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Yangtze Tongling Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Qingdao SRI Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Zhuzhou Rolling Stock Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Zhuzhou Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Zhuzhou Locomotive Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Zhuzhou CRRC Logistics Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Ziyang CRRC Electric Locomotive Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Ziyang CRRC Electrical Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Information Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shanghai CRRC Ro-Intelligent System Co., Ltd (formerly namely as Shanghai Ro-intelligent System.Co., Ltd.)	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Zhuzhou Electric Locomotive Industrial Management Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
China Nanche Group Investment Management Company	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Hong Kong Capital Management Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changzhou CRRC Diesel Engine Components and Parts Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Qingdao SRI Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Sifang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Notes to the Financial Statements

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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
Zhuzhou CRRC Special Equipment Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Shenyang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Taiyuan CRRC Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changde CRRC New Energy Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Bombardier Sifang (Qingdao) Transportation Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Yongji CRRC Motor and Electric Appliance Repair Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Qingdao CRRC Light Materials Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CHY Environment Engineering Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Wuhan CRRC ZELC Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shijiazhuang CRRC Railway Transportation Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Chengdu CRRC Sifang Rail Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Yangtze Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Jiangsu CRRC Electromechanical Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Jiangxi Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Suzhou CRRC Construction Engineering Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Tianjin CRRC Tangshan Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Wuhan CRRC Sifang Maintenance Centre Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Changzhou Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Chongqing CRRC Construction Engineering Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC (Hong Kong) Co. Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Notes to the Financial Statements

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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 4. Particulars of other related parties (continued)

Name of other related parties	Relationship between other related parties and the Company
Australia CRRC Ziyang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC ZELC Europe Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Suzhou CRRC Rail Transport Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Finance Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Harbin Rolling Stock Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Commercial Factoring Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Chongqing CRRC Sifang Intelligent Equipment Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Zhuzhou Tianli Forging Industry Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Fuzhou Jintou Intelligent Rail Transit Equipment Co., Ltd.	Joint venture of CRRC ZELRI
Qijing Yihui New Energy Co., Ltd.	Companies controlled by the joint venture of CRRC ZELRI
China Railway Baoji Machinery Co., Ltd.	Investor which has significant influence over Baoji CRRC Times (Note: The enterprise was divested in December 2022, and since then, it's no longer a related party of the Company.)
Zhuzhou CRRC Times Investment Co., Ltd.	Joint venture of CRRC ZELRI
Zhuzhou National Innovation Railway Technology Co., Ltd.	Associate of CRRC ZELRI
Zhuzhou Times Electric Insulation Co., Ltd.	Associate of CRRC ZELRI
Hunan Automotive Testing Technology CO. Ltd.	Associate of CRRC ZELRI
Other information:	
None	

# Notes to the Financial Statements

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Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties

#### (1) Purchases and sales of goods, rendering and receipt of services

Purchase of goods/receipt of service

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Related parties	Related party transactions	Current period	Prior period
Joint ventures controlled by the ultimate holding party other than CRRZ ZELRI Group	Purchase of goods	2,062,146	9,211,472
Joint ventures controlled by the ultimate holding party other than CRRZ ZELRI Group	Receipt of services	–	6,126,366
Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	Purchase of goods	6,658,741	21,751,140
Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	Receipt of services	4,189,658	7,587,925
Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	Purchase of goods	979,955,627	1,243,092,192
Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	Receipt of services	50,318,593	121,633,677
Joint ventures of the Company	Purchase of goods	15,782,764	55,398,135
Joint ventures of the Company	Receipt of services	80,659	89,885
Associates of the Company	Purchase of goods	177,013,893	88,630,952
Associates of the Company	Receipt of services	390,660	12,708,775
Company controlled by CRRZ ZELRI	Purchase of goods	595,165,696	798,651,961
Company controlled by CRRZ ZELRI	Receipt of services	18,157,874	18,986,249
CRRZ ZELRI	Purchase of goods	127,795	4,537,736
CRRZ ZELRI	Receipt of services	125,275,190	122,594,476
Joint ventures of CRRZ ZELRI	Purchase of goods	87,891,600	33,083,600
Joint ventures of CRRZ ZELRI	Receipt of services	–	430,283
Investors which have significant influence over Baoji CRRZ Times	Purchase of goods	3,671,151	1,098,770
Investors which have significant influence over Baoji CRRZ Times	Receipt of services	–	3,021,437
Associates of CRRZ ZELRI	Receipt of services	768,189	–
Total		2,067,510,236	2,548,635,031

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (1) Purchases and sales of goods, rendering and receipt of services (continued)

Sale of goods/rendering of service

Applicable  Not applicable

Unit: Yuan Currency: RMB

Related parties	Related party transactions	Current period	Prior period
Joint ventures controlled by the ultimate holding party other than CRRZ ZELRI Group	Sales of goods	50,072,578	80,639,494
Joint ventures controlled by the ultimate holding party other than CRRZ ZELRI Group	Rendering of services	4,229,035	5,824,179
Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	Sales of goods	5,387,334	2,623,788
Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	Rendering of services	13,402,485	17,951,443
Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	Sales of goods	5,564,357,497	4,792,610,959
Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	Rendering of services	835,779,805	1,107,741,758
Joint ventures of the Company	Sales of goods	64,053,155	45,237,435
Joint ventures of the Company	Rendering of services	900,000	594,275
Associates of the Company	Sales of goods	231,065,186	39,610,487
Associates of the Company	Rendering of services	751,350	14,571,698
Controlling shareholders of CRRZ ZELRI	Sales of goods	943,396	–
Controlling shareholders of CRRZ ZELRI	Rendering of services	943,396	2,203,473
Company controlled by CRRZ ZELRI	Sales of goods	90,192,486	116,543,139
Company controlled by CRRZ ZELRI	Rendering of services	1,779,567	4,281,806
CRRZ ZELRI	Sales of goods	118,295,534	66,463,588
CRRZ ZELRI	Rendering of services	1,155,524	1,126,670
Joint ventures of CRRZ ZELRI	Sales of goods	64,860,000	25,300,000
Joint ventures of CRRZ ZELRI	Rendering of services	–	8,968
Associates of CRRZ ZELRI	Sales of goods	7,079,646	–
Companies controlled by Joint ventures of CRRZ ZELRI	Sales of goods	20,797,260	–
Investors which have significant influence over Baoji CRRZ Times	Sales of goods	920,355	6,605,354
Total		<b>7,076,965,589</b>	<b>6,329,938,514</b>

Descriptions on purchases and sales of goods, rendering and receipt of services

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (2) Related party trusteeship/contracting/outsourcing arrangement

Trusteeship/contracting of the Company

Applicable  Not applicable

Related party trusteeship/contracting

Applicable  Not applicable

Entrusted management/outsourcing of the Company

Applicable  Not applicable

Related party management/outsourcing

Applicable  Not applicable

#### (3) Leases with related parties

The Company as the lessor:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of lessee	Lease income recognised in the current period	Lease income recognised in the prior period
Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	72,930	300,222
Joint ventures of the Company	6,169	-
Associates of the Company	313,409	852,190
Companies controlled by CRRZ ZELRI	5,480,851	5,777,767
CRRZ ZELRI	3,226,545	3,108,312
Companies controlled by the joint venture of CRRZ ZELRI	901,194	-
Total	10,001,098	10,038,491



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (3) Leases with related parties (continued)

The Company as the lessee:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of lessor	Rent costs for simplified short-term leases and low-value asset leases (if applicable)		Variable lease payments not included in the measurement of lease liabilities (if applicable)		Rent paid		Interest expenses of lease liabilities		Right-of-use assets increased	
	Type of assets leased									
	Current period	Prior period	Current period	Prior period	Current period	Prior period	Current period	Prior period	Current period	Prior period
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	3,065,439	3,826,393	1,670,664	3,826,393	11,698,497	11,139,190	1,462,883	618,390	13,844,889	-
CRRC ZELRI	-	1,104,050	-	1,104,050	2,535,341	1,427,365	171,236	84,364	2,399,420	2,094,962
Companies controlled by CRRC ZELRI	11,191,570	850,041	11,191,570	850,041	-	850,041	38,397	-	808,363	-
Investors which have significant influence over Baoji CRRC Times	-	-	-	-	1,544,621	2,942,135	-	-	-	-
Joint ventures of the Company	-	-	-	-	546,936	-	6,309	6,107	540,627	786,553
Total	14,257,009	5,780,484	12,862,234	5,780,484	16,325,395	16,358,731	1,678,825	708,861	17,593,299	2,881,515

#### Information on related party leases

Applicable  Not applicable

#### (4) Guarantee

The Company as the guarantor

Applicable  Not applicable

The Company as the guarantee holder

Applicable  Not applicable

Description of related party guarantee

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (5) Funding from related party

Applicable  Not applicable

Unit: Yuan Currency: RMB

Related parties	Amount	Start date	Expiry date	Note
<b>Funds received</b>				
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	81,898,649	20/10/2022	20/10/2023	Annual interest rate 0.85%-2.46%
Controlling shareholders of CRRC ZELRI	77,713,637	29/09/2015	28/09/2030	Annual interest rate 1.08%
Total	<u>159,612,286</u>			

#### (6) Transfer of assets and debt restructuring

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (7) Remuneration of key management personnel

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Current period	Prior period
Remuneration of key management personnel	<b>16,150,210</b>	17,373,439

#### 1) Remuneration of directors, supervisors and chief executive

Unit: Yuan    Currency: RMB

Name of the entity	2022	2021
Fees	<b>1,070,233</b>	1,042,821
Other emoluments:		
Salaries, allowances and benefits in kind	<b>2,742,748</b>	2,365,860
Performance related bonuses	<b>1,424,965</b>	2,105,139
Social insurance charges and housing provident fund	<b>209,764</b>	180,437
Pension scheme contributions	<b>300,801</b>	283,562
Sub-total	<b>4,678,278</b>	4,934,998
Total	<b>5,748,511</b>	5,977,819

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (7) Remuneration of key management personnel (Continued)

##### 1) Remuneration of directors, supervisors and chief executive (Continued)

Details of remuneration of directors, supervisors and chief executives in 2022 are listed as below:

Unit: Yuan Currency: RMB

	Fees	Basic salaries	Performance-related bonuses	Total remuneration before tax	Social security contributions and housing fund	Pension scheme contributions	Total remuneration
<b>Executive Directors</b>							
Li Donglin	-	-	-	-	-	-	-
Liu Kean	-	-	-	-	-	-	-
Shang Jing	-	680,000	924,925	1,604,925	52,441	84,427	1,741,793
Yan Wu	-	701,000	230,419	931,419	52,441	75,390	1,059,250
Sub-total	-	1,381,000	1,155,344	2,536,344	104,882	159,817	2,801,043
<b>Independent Non-Executive Directors</b>							
Zhang Xinning	-	-	-	-	-	-	-
<b>Independent Non-Executive Directors</b>							
Chen Jinrong	270,329	-	-	270,329	-	-	270,329
Pu Bingrong	270,329	-	-	270,329	-	-	270,329
Liu Chunru	119,043	-	-	119,043	-	-	119,043
Chen Xiaoming	119,043	-	-	119,043	-	-	119,043
Gao Feng	119,043	-	-	119,043	-	-	119,043
Li Kaiguo	13,416	-	-	13,416	-	-	13,416
Sub-total	911,203	-	-	911,203	-	-	911,203
<b>Supervisors</b>							
Li Lue	-	-	-	-	-	-	-
Pang Yiming	-	416,557	-	416,557	52,441	59,368	528,366
Zhou Guifa	39,987	945,191	269,621	1,254,799	52,441	81,616	1,388,856
Geng Jianxin	119,043	-	-	119,043	-	-	119,043
Sub-total	159,030	1,361,748	269,621	1,790,399	104,882	140,984	2,036,265
Total	1,070,233	2,742,748	1,424,965	5,237,946	209,764	300,801	5,748,511

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (7) Remuneration of key management personnel (Continued)

##### 1) Remuneration of directors, supervisors and chief executive (Continued)

Details of remuneration of directors, supervisors and chief executives in 2021 are listed as below:

	Fees	Basic salaries	Performance-related bonuses	Total remuneration before tax	Social security contributions and housing fund	Pension scheme contributions	Total remuneration
<b>Executive Directors</b>							
Li Donglin	-	-	-	-	-	-	-
Liu Kean	-	-	-	-	-	-	-
Shang Jing	-	882,500	616,247	1,498,747	45,029	80,862	1,624,638
Yan Wu	-	730,122	266,628	996,750	45,136	68,674	1,110,560
Sub-total	-	1,612,622	882,875	2,495,497	90,165	149,536	2,735,198
<b>Independent Non-Executive Directors</b>							
Zhang Xinning	-	-	-	-	-	-	-
<b>Independent Non-Executive Supervisors</b>							
Chen Jinrong	270,329	-	-	270,329	-	-	270,329
Pu Bingrong	270,329	-	-	270,329	-	-	270,329
Liu Chunru	119,043	-	-	119,043	-	-	119,043
Chen Xiaoming	119,043	-	-	119,043	-	-	119,043
Gao Feng	119,043	-	-	119,043	-	-	119,043
Sub-total	897,787	-	-	897,787	-	-	897,787
<b>Supervisors</b>							
Li Lue	-	-	-	-	-	-	-
Pang Yiming	-	287,302	280,286	567,588	45,136	55,774	668,498
Zhou Guifa	25,991	465,936	941,978	1,433,905	45,136	78,252	1,557,293
Geng Jianxin	119,043	-	-	119,043	-	-	119,043
Sub-total	145,034	753,238	1,222,264	2,120,536	90,272	134,026	2,344,834
Total	1,042,821	2,365,860	2,105,139	5,513,820	180,437	283,562	5,977,819

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (7) Remuneration of key management personnel (Continued)

##### 2) Five highest paid employees of the Group

	2022	2021
Directors, supervisors and chief executives	2	2
Non-directors and non-supervisors	3	3
Total	5	5

The remuneration paid to the above non-directors, non-supervisors and non-chief executives with the highest remuneration is as follows:

Unit: Yuan Currency: RMB

	2022	2021
Salaries, allowances and benefits in kind	2,335,415	2,250,156
Performance related bonuses	777,302	1,327,500
Social insurance charges and housing provident fund	157,323	135,409
Pension scheme contributions	226,864	213,166
Total	3,496,904	3,926,231

The number of the employees (who are neither directors, supervisors nor the chief executive officer) whose remuneration fell within the following band is as follows:

	2022	2021
HKD1,000,001 to HKD1,500,000	2	8
HKD1,500,001 to HKD2,000,000	1	2

In 2022, Li Donglin, Liu Kean, Shang Jing, Yan Wu, Zhang Xinning, Li Lue and Pang Yiming waived after-tax allowance amounting to RMB104,000, RMB78,000, RMB65,000, RMB65,000, RMB78,000, RMB52,000 and RMB26,000. Other than that, none of the directors, supervisors, chief executives or any non-directors, non-supervisors, non-chief executives with the highest remuneration have waived or agreed to waive any emoluments. In 2022 and 2021, no emoluments were paid by the Group to any director, supervisor, chief executive and any non-director and non-supervisor with the highest remuneration as an inducement to join or upon joining the Group, or as compensation for loss of office.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (8) Other related party transactions

✓ Applicable     Not applicable

#### Interest income

unit: yuan    currency: RMB

Name of the related party	Incurred in the current period	Incurred in the prior period
Companies controlled by the ultimate controlling party other than the CRRC ZELRI group	1,259,576	—

#### Loan interest expense

Unit: Yuan    Currency: RMB

Related parties	1 January 2022 to 31 December 2022	1 January 2021 to 31 December 2021
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,501,649	—
Controlling shareholders of CRRC ZELRI	877,159	1,029,717
Total	2,378,808	1,029,717

#### Purchases of energy from related parties

Unit: Yuan    Currency: RMB

Name of the entity	Current period	Prior period
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,960,087	1,873,739
Companies controlled by CRRC ZELRI	—	258,960
Total	1,960,087	2,132,699

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (8) Other related party transactions (continued)

Sales of energy to related parties

Unit: Yuan Currency: RMB

Name of the entity	Current period	Prior period
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	—	1,678
Companies controlled by CRRC ZELRI	<b>2,336,051</b>	2,998,367
CRRC ZELRI	<b>253,653</b>	269,670
Associates of the Company	<b>9,274</b>	331,957
Associates of CRRC ZELRI	—	215,084
Total	<b><u>2,598,978</u></b>	<u>3,816,756</u>



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 6. Amounts due from/to related parties

#### (1) Receivables

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Item	Related party	Closing balance	Opening balance
Bills receivable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	743,169,068	631,633,549
Bills receivable	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	213,408,774	28,400,000
Accounts receivable (including long-term receivables)	Joint ventures controlled by the ultimate holding party other than CRRC ZELRI Group	76,802,972	79,875,781
Accounts receivable (including long-term receivables)	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	9,739,064	12,519,437
Accounts receivable (including long-term receivables)	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	2,322,795,091	1,096,526,655
Accounts receivable (including long-term receivables)	Joint ventures of the Company	69,767,682	712,076
Accounts receivable (including long-term receivables)	Associates of the Company	159,578,497	19,357,110
Accounts receivable	Companies controlled by CRRC ZELRI	37,995,780	54,570,057
Accounts receivable (including long-term receivables)	CRRC ZELRI	59,011,572	30,330,228
Accounts receivable (including long-term receivables)	Joint ventures of CRRC ZELRI	10,685,280	–
Accounts receivable (including long-term receivables)	Associate of CRRC ZELRI	800,000	–
Prepayments	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,864,861	6,365,396
Prepayments	CRRC ZELRI	108,220	108,220
Prepayments	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	–	367,581
Contract assets	Joint ventures controlled by the ultimate holding party other than CRRC ZELRI Group	–	35,101
Contract assets	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	–	1,078,974
Contract assets	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	21,569,632	20,813,911
Contract assets	Companies controlled by CRRC ZELRI	239,637	1,036,132

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 6. Amounts due from/to related parties (continued)

#### (1) Receivables (continued)

Item	Related party	Closing balance	Opening balance
Contract assets	CRRZ ZELRI	–	543,498
Other receivables	Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	50,000	20,000
Other receivables	Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	278,872	3,109,779
Other receivables	Associates of the Company	12	1,317,390
Other receivables	CRRZ ZELRI	813,077	1,204,710
Other receivables	Associate of CRRZ ZELRI	263,045	243,045
Other receivables	Companies controlled by CRRZ ZELRI	–	226,590
Other receivables	Companies controlled by the joint venture of CRRZ ZELRI	1,000,000	
Dividends receivable	Joint ventures of the Company	–	90,000
Receivables under financing	Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	345,921,082	1,405,897
Receivables under financing	Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	1,300,119,339	1,644,990,849
Receivables under financing	Companies controlled by CRRZ ZELRI	52,007,181	22,912,466
Receivables under financing	CRRZ ZELRI	100,476,768	42,355,544
Receivables under financing	Joint ventures controlled by the ultimate holding party other than CRRZ ZELRI Group	2,000,000	–
Other non-current assets	Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	32,052,955	45,568,071
Other non-current assets	Companies controlled by CRRZ ZELRI	4,134,843	841,297
Other non-current assets	CRRZ ZELRI	16,795,964	14,157,291
Other non-current assets	Joint ventures controlled by the ultimate holding party other than CRRZ ZELRI Group	46,327,992	36,367
Other non-current assets	Associates controlled by the ultimate holding party other than CRRZ ZELRI Group	1,830,449	92,783

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 6. Amounts due from/to related parties (continued)

#### (2) Payables

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Item	Related party	Closing balance	Opening balance
Bills payable	Joint ventures controlled by the ultimate holding party other than CRRC ZELRI Group	3,520,000	4,620,000
Bills payable	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	360,000	–
Bills payable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	14,410,000	2,140,000
Bills payable	Companies controlled by CRRC ZELRI	10,273,731	120,000
Bills payable	Joint ventures of the company	210,000	–
Accounts payable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	665,880,821	431,042,400
Accounts payable	Associates of the Company	107,362,430	4,974,941
Accounts payable	Companies controlled by CRRC ZELRI	251,309,131	91,769,154
Accounts payable	Joint ventures controlled by the ultimate holding party other than CRRC ZELRI Group	1,998,677	5,245,029
Accounts payable	Joint ventures of the Company	22,175,026	10,586,035
Accounts payable	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	5,642,241	1,769,551
Accounts payable	Joint ventures of CRRC ZELRI	32,487,600	8,795,468
Accounts payable	CRRC ZELRI	5,565	235,547
Accounts payable	Investors which have significant influence over Baoji CRRC Times	–	1,117,273
Other payables	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	19,096,959	11,393,150
Other payables	CRRC ZELRI	396,230,130	389,868,357
Other payables	Companies controlled by CRRC ZELRI	3,469,784	2,994,610
Other payables	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	313,000	1,000
Other payables	Joint ventures controlled by the ultimate holding party other than CRRC ZELRI Group	446	–
Other payables	Investors which have significant influence over Baoji CRRC Times	–	280,521
Contract liabilities	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	39,539,556	34,292,833
Contract liabilities	Associates controlled by the ultimate holding party other than CRRC ZELRI Group	–	2,400,000
Contract liabilities	Associates of the Company	–	22,630,030
Short-term borrowings	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	81,898,649	73,584,000

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 6. Amounts due from/to related parties (continued)

#### (2) Payables (continued)

Item	Related party	Closing balance	Opening balance
Non-current liabilities due within one year	Controlling shareholders of CRRZ ZELRI	5,025,637	5,000,000
Non-current liabilities due within one year	Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	5,352,059	3,573,640
Non-current liabilities due within one year	CRRZ ZELRI	1,250,500	185,143
Non-current liabilities due within one year	Companies controlled by CRRZ ZELRI	846,760	–
Long-term borrowings	Controlling shareholders of CRRZ ZELRI	72,688,000	77,688,000
Lease liabilities	Companies controlled by the ultimate holding party other than CRRZ ZELRI Group	8,997,704	9,709,950
Lease liabilities	CRRZ ZELRI	–	1,073,954

In 2022, the Group provided products and services to CRRZ ZELRI Group, the ultimate holding party group other than CRRZ ZELRI Group, joint ventures of the ultimate holding party group other than CRRZ ZELRI Group, and associates of the ultimate holding party group other than CRRZ ZELRI Group holding more than 30% of the equity stake, which amounted to RMB6,791,996,905 (2021: RMB6,226,612,669), and the Group also purchased goods and services from the above-mentioned related parties, which amounted to RMB1,885,748,323 (2021: RMB2,389,189,486). They constituted the related party transaction or continuing related party transaction as stipulated in Chapter 14A of the Hong Kong Listing Rules. The relevant agreement refers to the framework agreement on the mutual supply of products and supporting services entered into between the Company and CRRZ Group (together with its subsidiaries, but excluding the Group) on 26 March 2019.

In 2022, the Group (excluding Qingdao CRRZ Electric) provided products and services to Qingdao CRRZ Electric, which amounted to RMB12,622,649 (2021: RMB18,162,664), and purchased products and services from Qingdao CRRZ Electric, which amounted to RMB370,247 (2021: RMB37,283,601). They constituted the related party transaction or continuing related party transaction as stipulated in Chapter 14A of the Hong Kong Listing Rules. The relevant agreement refers to the framework agreement on the mutual supply of products and supporting services entered into between the Company and Qingdao CRRZ Electric (together with its subsidiaries) on 24 April 2020.

Related party transactions between the Group (excluding Taiyuan CRRZ Times) and Taiyuan CRRZ Times also constituted the related party transaction or continuing related party transaction as stipulated in Chapter 14A of the Hong Kong Listing Rules. The relevant agreement refers to the framework agreement on the mutual supply of products and supporting services entered into between the Company and Taiyuan CRRZ Times (together with its subsidiaries) on 28 December 2018. In 2022, the Group (excluding Taiyuan CRRZ Times) provided products and services to Taiyuan CRRZ Times, which amounted to RMB87,741,116 (2021: RMB98,482,807), and purchased products and services from Taiyuan CRRZ Times, which amounted to RMB177,544,435 (2021: RMB11,676,330).



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 6. Amounts due from/to related parties (continued)

#### (2) Payables (continued)

The Group's bills receivable from and payable to related parties are interest free, unsecured, and have fixed repayment terms; cash and bank balances are interest-bearing, unsecured, and have no fixed repayment terms; long-term borrowings are interest-bearing, unsecured, and have fixed repayment terms; other receivables from and payables to related parties are interest-free and unsecured, among which, the repayment terms of trade transactions are subject to those terms of trade, and non-trade transactions have no fixed repayment terms.

### 7. Related party commitments

Applicable  Not applicable

### 8. Others

Applicable  Not applicable

## XI. SHARE-BASED PAYMENT

### 1. General introduction of share-based payment

Applicable  Not applicable

### 2. Information about equity-settled share-based payment

Applicable  Not applicable

### 3. Information about cash-settled share-based payment

Applicable  Not applicable

### 4. Modification and cancellation of share-based payment

Applicable  Not applicable

### 5. Others

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XII. COMMITMENTS AND CONTINGENCIES

### 1. Significant commitments

Applicable  Not applicable

Important external commitments, nature and amount existing on the balance sheet date

Item	Closing balance	Opening balance
Contracted but not recognised in the financial statements		
– Capital commitments	1,653,695,248	712,960,706
– Investments in associates/joint ventures	264,608,700	177,600,000
– Investments in subsidiaries	3,750,000,000	50,000,000
Total	5,668,303,948	940,560,706

### 2. Contingencies

#### (1) Significant contingencies existing as of balance sheet date

Applicable  Not applicable

#### (2) Please make a statement if the Company has no significant contingencies to disclose

Applicable  Not applicable

### 3. Other information

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XIII. EVENTS AFTER THE BALANCE SHEET DATE

### 1. Material non-adjusting events

Applicable  Not applicable

### 2. Profit distribution

Applicable  Not applicable

Unit: Yuan Currency: RMB

Profit or dividend to be distributed	778,930,301.60
Profits or dividends declared to be distributed after review and approval	778,930,301.60

According to the resolution of the 27th meeting of the sixth session of the board of directors of the Company, the Company plans to distribute profits based on the total share capital of 1,416,236,912 shares, and distribute 2022 cash dividends to all shareholders, with a cash dividend of RMB0.55 per share (tax included), a total of RMB778,930,301.60, the proposal still needs to be submitted to the general meeting for consideration and approval.

### 3. Sales returns

Applicable  Not applicable

### 4. Description of other events after the balance sheet date

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
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## XIV. OTHER SIGNIFICANT EVENTS

### 1. Corrections of prior period accounting errors

#### *(1) Retrospective restatement method*

Applicable  Not applicable

#### *(2) Prospective application method*

Applicable  Not applicable

### 2. Debt Restructuring

Applicable  Not applicable

### 3. Exchange of assets

#### *(1) Exchange of non-monetary assets*

Applicable  Not applicable

#### *(2) Exchange of other assets*

Applicable  Not applicable

### 4. Annuity plan

Applicable  Not applicable

### 5. Discontinued operations

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XIV. OTHER SIGNIFICANT EVENTS (continued)

### 6. Segment reporting

#### (1) Basis and accounting policies for determination of reporting segments

✓ Applicable     Not applicable

The Group mainly supplies the market with rail transit equipment and extended products and service, and the Group operates as a whole with the consistent structure of internal organisation, management and evaluation system and internal reporting system, and management regularly reviews financial information of the Company to allocate resources and assess performance. The Group has no operating segment that is subject to separate management during the reporting period. Therefore, there is only one operating segment in the Group.

#### (2) Financial information of reporting segments

✓ Applicable     Not applicable

#### Revenue from external customers

2022

Unit: Yuan    Currency: RMB

Item	2022	Elimination of inter-segment	Total
Chinese Mainland	17,228,783,533	–	17,228,783,533
Other countries and regions	804,995,028	–	804,995,028
Total	18,033,778,561	–	18,033,778,561

#### Total non-current assets

Countries or regions	31 December 2022	31 December 2021
Chinese Mainland	10,772,484,347	8,075,999,210
Other countries and regions	579,932,079	709,583,647
Total	11,352,416,426	8,785,582,857

Non-current assets are analysed by geographic locations where the assets are located, excluding financial assets and deferred tax assets.

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XIV. OTHER SIGNIFICANT EVENTS (continued)

### 6. Segment reporting (continued)

#### (2) Financial information of reporting segments (continued)

##### Information of major customers

The Group's revenue from its major customer, CRRC Group (including subordinates and subsidiaries of CRRC Group, hereinafter referred to as "CRRC Group"), which accounted for a significant proportion of the Group's total revenue, is set out as follows:

Unit: Yuan Currency: RMB

Customer	Current period		Prior period	
	Amount	Proportion to total revenue (%)	Amount	Proportion to total revenue (%)
CRRC Group	<u>6,624,817,235</u>	<u>36.74</u>	<u>6,103,427,409</u>	<u>40.36</u>

(3) If there is no reporting segment, or if the total assets and total liabilities of each reportable segment cannot be disclosed, the reasons should be stated.

Applicable  Not applicable

#### (4) Other information

Applicable  Not applicable

### 7. Other significant events that have impacts on investors' decisions

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XIV. OTHER SIGNIFICANT EVENTS (continued)

### 8. Other information

✓ Applicable     Not applicable

#### Operating lease

As a lessor

Unit: Yuan    Currency: RMB

	2022	2021
Within 1 year (inclusive)	14,449,572	14,356,702
1 to 2 years (inclusive)	802,625	4,102,640
2 to 3 years (inclusive)	–	608,640
3 to 4 years (inclusive)	–	378,000
4 to 5 years (inclusive)	–	378,000
Total	15,252,197	19,823,982

#### Other financial information

(1) Net current assets and total assets less current liabilities

Unit: Yuan    Currency: RMB

Item	31 December 2022		31 December 2021	
	The Group	The Company	The Group	The Company
Net current assets	24,741,292,695	18,602,470,377	25,491,739,536	18,901,796,515
Total assets less current liabilities	36,807,642,923	35,183,695,836	34,999,502,815	32,306,774,200

(2) Payment of pension plan

Unit: Yuan    Currency: RMB

Item	2022	2021
Payment of pension plan (Note)	255,286,220	263,836,437

As at 31 December 2022 and 31 December 2021, the Group had no contributions that are forced to give up to reduce contributions to pension plans in future years.

Note: Employees of the Company and its subsidiaries operating in China must participate in the fixed contribution central pension plan managed by the local government, and employees of overseas subsidiaries must participate in similar pension plans recognised by relevant jurisdictions. The Group shall calculate and pay contributions to the central pension plan (in the case of the Company and its subsidiaries operating in China) and similar pension plans recognised in relevant jurisdictions (in the case of its subsidiaries operating outside China) according to certain percentage of its costs of employee benefits. Contributions are deducted from the consolidated income statement when they become payable according to the rules of such plans.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XIV. OTHER SIGNIFICANT EVENTS (continued)

### 8. Other information (continued)

#### *The calculation of the basic earnings per share and the diluted earnings per share*

##### *(1) Basic earnings per share*

The basic earnings per share is calculated by dividing the net profit attributable to the company's common shareholders for the period by the weighted average number of common shares outstanding.

Item	2022	2021
Net income attributed to the common shareholders	2,555,823,375	2,017,694,796
Number of common shares outstanding during the period	1,416,236,912	1,416,236,912
Basic earnings per share (YUAN per share)	1.80	1.63

##### *(2) Diluted earnings per share*

The company has no potential common stock or diluted securities during the reporting period, so diluted earnings per share equals basic earnings per share.



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS

### 1. Accounts receivable

#### (1) Disclosed by ageing

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Ageing	Closing balance	Opening balance
Within 1 year		
Including: sub items within 1 year		
Within 6 months	<b>4,914,726,686</b>	3,661,958,218
6 months to 1 year	<b>737,723,042</b>	517,646,621
Sub-total within 1 year	<b>5,652,449,728</b>	4,179,604,839
1 to 2 years	<b>690,436,837</b>	757,992,087
2 to 3 years	<b>304,343,820</b>	38,643,699
Over 3 years	<b>38,766,999</b>	26,274,426
Total	<b><u>6,685,997,384</u></b>	<b><u>5,002,515,051</u></b>
Less: Provision for credit loss	<b>162,326,742</b>	124,100,081
Book value	<b><u>6,523,670,642</u></b>	<b><u>4,878,414,970</u></b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Category	Closing balance					Opening balance				
	Gross carrying amount		Credit loss allowance		Carrying amount	Gross carrying amount		Credit loss allowance		Carrying amount
	Amount	Proportion (%)	Amount	Proportion of provision (%)		Amount	Proportion (%)	Amount	Proportion of provision (%)	
Provision on individual basis	2,481,367	0.04	2,481,367	100	-	-	-	-	-	-
Provision on portfolio basis	6,683,516,017	99.96	159,845,375	2.39	6,523,670,642	5,002,515,051	100.00	124,100,081	2.48	4,878,414,970
Including:										
Receivables from central state-owned enterprises other than China Railway Corporation	4,508,508,750	67.43	69,007,269	1.53	4,439,501,481	2,408,355,180	48.14	16,275,197	0.68	2,392,079,983
Accounts receivable from local government or local state-owned enterprise	1,390,413,321	20.80	68,205,759	4.91	1,322,207,562	1,980,086,966	39.58	70,090,184	3.54	1,909,996,782
Receivables from China Railway Corporation	142,418,834	2.13	166,526	0.12	142,252,308	251,597,680	5.03	3,256,237	1.29	248,341,443
Receivables from other customers	642,175,112	9.60	22,465,821	3.50	619,709,291	362,475,225	7.25	34,478,463	9.51	327,996,762
Total	6,685,997,384	100	162,326,742	/	6,523,670,642	5,002,515,051	100	124,100,081	/	4,878,414,970

Provision on individual basis

✓ Applicable     Not applicable

Unit: Yuan    Currency: RMB

Item	Closing balance			
	Gross carrying amount	Credit loss allowance	Proportion of provision (%)	Reason for provision
China Railway Bridge Engineering Bureau Group Electrification Engineering Co., Ltd.	2,481,367	2,481,367	100.00	Low probability of recovery
Total	2,481,367	2,481,367	100.00	/

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Description of provision on individual basis:

Applicable  Not applicable

Provision on portfolio basis:

Applicable  Not applicable

Item: Receivables from central state-owned enterprises other than China Railway Corporation

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance	
		Credit loss allowance	Proportion of provision (%)
Within 6 months	3,688,427,604	45,120,648	1.22
6 months to 1 year	436,368,798	5,607,225	1.28
1 to 2 years	234,948,563	10,458,463	4.45
2 to 3 years	113,205,523	4,975,343	4.39
Over 3 years	35,558,262	2,845,590	8
Total	4,508,508,750	69,007,269	

2021

Item	Accounts receivable	Opening balance	
		Credit loss allowance	Proportion of provision (%)
Within 6 months	1,965,865,245	7,400,197	0.38
6 months to 1 year	227,151,435	1,727,157	0.76
1-2 years	171,734,254	1,971,898	1.15
2-3 years	32,597,550	2,811,223	8.62
Over 3 years	11,006,696	2,364,722	21.48
Total	2,408,355,180	16,275,197	

Analysis of accounts receivable for which credit loss allowance is provided on portfolio basis:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Item: Accounts receivable from local government or local state-owned enterprise

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance	
		Credit loss allowance	Proportion of provision (%)
Within 6 months	696,641,391	20,935,166	3.01
6 months to 1 year	133,905,255	3,164,088	2.36
1 to 2 years	374,677,724	21,420,858	5.72
2 to 3 years	185,188,951	22,685,647	12.25
Over 3 years	—	—	—
Total	<u>1,390,413,321</u>	<u>68,205,759</u>	

2021

Item	Accounts receivable	Opening balance	
		Credit loss allowance	Proportion of provision (%)
Within 6 months	1,223,605,072	19,352,582	1.58
6 months to 1 year	185,409,057	4,867,071	2.63
1-2 years	560,679,471	42,246,220	7.53
2-3 years	5,030,936	1,415,520	28.14
Over 3 years	5,362,430	2,208,791	41.19
Total	<u>1,980,086,966</u>	<u>70,090,184</u>	

Analysis of accounts receivable for which credit loss allowance is provided on portfolio basis:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Item: Receivables from China Railway Corporation

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance Credit loss allowance	Proportion of provision (%)
Within 6 months	111,190,705	85,596	0.08
6 months to 1 year	24,896,598	55,381	0.22
1 to 2 years	6,331,531	25,549	0.40
2 to 3 years	—	—	—
Over 3 years	—	—	—
Total	<u>142,418,834</u>	<u>166,526</u>	

2021

Item	Accounts receivable	Opening balance Credit loss allowance	Proportion of provision (%)
Within 6 months	214,078,946	750,115	0.35
6 months to 1 year	31,534,472	1,655,302	5.25
1-2 years	5,923,393	822,450	13.88
2-3 years	60,869	28,370	46.61
Over 3 years	—	—	—
Total	<u>251,597,680</u>	<u>3,256,237</u>	

Analysis of accounts receivable for which credit loss allowance is provided on portfolio basis:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of credit loss (continued)

Item: Receivables from other customers

2022

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance	
		Credit loss allowance	Proportion of provision (%)
Within 6 months	418,511,407	11,100,535	2.65
6 months to 1 year	142,552,391	3,930,074	2.76
1 to 2 years	74,479,019	6,113,398	8.21
2 to 3 years	5,949,345	967,428	16.26
Over 3 years	682,950	354,386	51.89
Total	642,175,112	22,465,821	

2021

Item	Accounts receivable	Opening balance	
		Credit loss allowance	Proportion of provision (%)
Within 6 months	258,408,955	14,900,137	5.77
6 months to 1 year	73,551,657	6,618,309	9.00
1-2 years	19,654,969	6,835,042	34.78
2-3 years	954,344	484,713	50.79
Over 3 years	9,905,300	5,640,262	56.94
Total	362,475,225	34,478,463	

Analysis of accounts receivable for which credit loss allowance is provided on portfolio basis:

Applicable  Not applicable

For provision allowance based on general model of expected credit losses, please refer to other receivables disclosure:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (3) Credit loss allowance of accounts receivable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Category	Opening balance	Transferred to credit-impaired losses	Changes for the period			Closing balance
			Provision	Recoveries or reversal	Other changes	
Lifetime ECL (not credit-impaired)	57,270,870	-12,308,131	45,035,974	-	-	89,998,713
Lifetime ECL (credit-impaired)	66,829,211	12,308,131	-	-6,809,313	-	72,328,029
Total	124,100,081	-	45,035,974	-6,809,313	-	162,326,742

Significant recoveries or reversals during the current period:

Applicable  Not applicable

#### (4) Accounts receivable that are actually written-off are as follows

Applicable  Not applicable

Significant accounts receivable written-off

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (5) Top five accounts receivable at the end of the year categorised by debtor:

✓ Applicable     Not applicable

2022

Unit: Yuan    Currency: RMB

Entity name	Closing balance	Proportion to total accounts receivable (%)	Closing balance of provision for credit loss
Customer 6	769,269,075	11.51	18,620,936
Customer 12	633,000,640	9.47	—
Customer 7	399,262,361	5.97	18,075,435
Customer 13	330,229,764	4.94	—
Customer 14	263,854,412	3.95	—
Total	<u>2,395,616,252</u>	<u>35.84</u>	<u>36,696,371</u>

2021

Unit: Yuan    Currency: RMB

Entity name	Closing balance	Proportion to total accounts receivable (%)	Closing balance of provision for credit loss
Customer 7	372,455,720	7.45	13,711,166
Customer 3	272,391,188	5.45	9,390,194
Customer 11	272,776,016	5.45	—
Customer 12	269,982,388	5.40	—
Customer 6	264,783,156	5.29	2,844,148
Total	<u>1,452,388,468</u>	<u>29.04</u>	<u>25,945,508</u>

Other information

None



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (6) Accounts receivable derecognised due to transfer of financial assets

Applicable  Not applicable

In 2022, the Company derecognised accounts receivable of RMB645,206,289 (2021: RMB413,518,544) due to the accounts receivable factoring.

#### (7) Amount of assets and liabilities formed by transferring accounts receivable but continuing involvement

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 2. Other receivables

Details of items

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Dividends receivable	266,056,100	242,006,181
Other receivables	365,870,951	512,638,168
Total	631,927,051	754,644,349

Other information:

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### Interest receivable

##### (1) Classification of interest receivable

Applicable  Not applicable

##### (2) Significant overdue interest

Applicable  Not applicable

##### (3) Provision for bad debts

Applicable  Not applicable

Other information:

Applicable  Not applicable

#### Dividends receivable

##### (1) Dividends receivable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item (or investee)	Closing balance	Opening balance
Baoji CRRC Times	178,271,100	169,316,181
Ningbo CRRC Transducer	86,000,000	72,600,000
Shanghai CRRC Rail Transit	1,581,000	–
Lanzhou CRRC Times	204,000	–
Shanghai Shenzhong	–	90,000
Total	266,056,100	242,006,181

##### (2) Significant dividends receivable with ageing over 1 year

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### Dividends receivable (continued)

##### (3) Provision for bad debts

Applicable  Not applicable

Other information:

Applicable  Not applicable

#### Other receivables

##### (1) Other receivables disclosed by ageing

Applicable  Not applicable

Unit: Yuan Currency: RMB

Ageing	Closing balance	Opening balance
Within 1 year		
Including: sub items within 1 year		
Within 6 months	135,216,545	64,543,728
6 months to 1 year	79,068,544	284,147,963
Subtotal within 1 year	214,285,089	348,691,691
1-2 years	37,234,329	52,592,997
2-3 years	2,423,114	61,926,369
Over 3 years	113,497,489	51,571,120
Less: Provision for credit loss	-1,569,070	-2,144,009
Total	365,870,951	512,638,168

##### (2) Classification of other receivables by nature

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Amounts due from subsidiaries	249,103,758	385,752,860
Deposits and guarantees	52,569,540	73,397,600
Subscribed capital receivable	50,000,000	50,000,000
Others	15,766,723	5,631,717
Total	367,440,021	514,782,177

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### **Other receivables** (continued)

(3) Provision for credit loss of other receivables is as follows:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Credit loss allowance	Phase 1 12-month ECL	Phase 2 Lifetime ECL (not credit- impaired)	Phase 3 Lifetime ECL (not credit- impaired)	Total
Balance at 1 January 2022	2,144,009	–	–	2,144,009
Balance at 1 January 2022 during this period	–	–	–	–
Additions during the period	–	–	–	–
Reversals during the period	-574,939	–	–	-574,939
Transfer out during the period	–	–	–	–
Written-off during the period	–	–	–	–
Other changes	–	–	–	–
Balance at 31 December 2022	<u>1,569,070</u>	<u>–</u>	<u>–</u>	<u>1,569,070</u>

Disclose significant movements in the gross carrying amounts of other receivables which have seen changes in provisions during the year:

Applicable  Not applicable

Disclose the amount of the provision for the period and the basis for determining whether financial instruments credit risk has significantly increased

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### Other receivables (continued)

##### (4) Provision for bad debts

Applicable  Not applicable

##### (5) Other receivables actually written off in the current period

Applicable  Not applicable

##### (6) Top five other receivables categorised by debtors

Applicable  Not applicable

##### (7) Receivables involving government grants

Applicable  Not applicable

##### (8) Other receivables derecognised due to transfer of financial assets

Applicable  Not applicable

##### (9) Amount of assets and liabilities formed by transferring other receivable but continuing involvement

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 3. Long-term equity investments

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance			Opening balance		
	Gross carrying amount	Provision for impairment	Book value	Gross carrying amount	Provision for impairment	Book value
Investments in subsidiaries	9,027,602,926	450,771,551	8,576,831,375	6,136,691,706	450,771,551	5,685,920,155
Investments in joint ventures and associates	294,556,682	-	294,556,682	351,317,381	-	351,317,381
Total	9,322,159,608	450,771,551	8,871,388,057	6,488,009,087	450,771,551	6,037,237,536

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 3. Long-term equity investments (continued)

#### (1) Investments in subsidiaries

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Investee	Opening balance	Increase	Closing balance	Provision for impairment for the period	Closing balance of impairment provision
CRRC Times Electronics	182,977,618	–	182,977,618	–	–
Ningbo CRRC Times	133,507,255	147,960,000	281,467,255	–	–
Times USA	3,187,516	–	3,187,516	–	–
Shenyang CRRC Times	56,000,000	–	56,000,000	–	–
Baoji CRRC Times	1,010,000,000	98,727,100	1,108,727,100	–	–
Kunming CRRC Electric	55,000,000	–	55,000,000	–	–
Hangzhou CRRC Electric	33,000,000	–	33,000,000	–	–
Guangzhou CRRC Electric	18,000,000	–	18,000,000	–	–
HK CRRC Times Electric	731,009,400	–	731,009,400	–	-450,771,551
Times Australia	1,814,037	–	1,814,037	–	–
Ningbo CRRC Electric	110,000,000	–	110,000,000	–	–
Times Brasil	4,062,679	–	4,062,679	–	–
Qingdao CRRC Electric	45,000,000	–	45,000,000	–	–
CRRC Times Software	50,000,000	–	50,000,000	–	–
Shanghai CRRC Rail Transit	25,500,000	–	25,500,000	–	–
Hunan CRRC Signal	229,000,000	–	229,000,000	–	–
Lanzhou CRRC Times	25,500,000	–	25,500,000	–	–
CRRC National Centre of Converters	280,654,981	–	280,654,981	–	–
Shanghai CRRC SMD	70,000,000	–	70,000,000	–	–
Shanghai Yongdian	–	–	–	–	–
Chengdu CRRC Electric	30,000,000	–	30,000,000	–	–
CRRC Times Semiconductor	2,700,000,000	2,464,224,120	5,164,224,120	–	–
Canada Dynex	282,478,220	–	282,478,220	–	–
Chongqing CRRC Electric	60,000,000	30,000,000	90,000,000	–	–
FAW CRRC Electric Drive System Co., Ltd.	–	150,000,000	150,000,000	–	–
<b>Total</b>	<b>6,136,691,706</b>	<b>2,890,911,220</b>	<b>9,027,602,926</b>	<b>–</b>	<b>-450,771,551</b>

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 3. Long-term equity investments (continued)

#### (2) Investments in joint ventures and associates

✓ Applicable    □ Not applicable

Unit: Yuan    Currency: RMB

Name of investee	Opening balance	Changes for the period				Closing balance	Closing balance of impairment provision
		Investment income or loss recognised under equity method	Other equity changes	Cash dividend or profits declared	Provision for impairment		
I. Joint ventures							
Shiling	170,989,491	6,387,629	-	71,000,000	-	106,377,120	-
Zhejiang Times LANP	16,029,889	-2,247,550	-	-	-	13,782,339	-
Shanghai shenzhong	6,220,214	2,794,033	-	-	-	9,014,247	-
Zhengzhou Times	5,795,314	2,987,286	-	-	-	8,782,600	-
Sub-total	199,034,908	9,921,398	-	71,000,000	-	137,956,306	-
II. Associates							
Zhuzhou Siemens	46,325,738	394,127	-	-	-	46,719,865	-
Guoxin Technology	50,059,852	105,829	-	-	-	50,165,681	-
Times Wabtec	13,852,984	2,185,772	-	218,576	-	15,820,180	-
CRRC India	15,243,267	21,103	-	-	-	15,264,370	-
Wuxi Times	20,480,632	1,374,619	-	-	-	21,855,251	-
Foshan Zhongshi	6,320,000	455,029	-	-	-	6,775,029	-
Sub-total	152,282,473	4,536,479	-	218,576	-	156,600,376	-
Total	351,317,381	14,457,877	-	71,218,576	-	294,556,682	-

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 4. Revenue and cost of sales

#### (1) Details of revenue and cost of sales:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period		Prior period	
	Revenue	Cost of sales	Income	Cost of sales
Principal operating activities	12,955,534,004	10,393,118,403	10,877,985,077	8,381,381,470
Other operating activities	936,901,336	838,090,032	715,540,295	687,786,255
Total	13,892,435,340	11,231,208,435	11,593,525,372	9,069,167,725

#### (2) Revenue from contracts

Applicable  Not applicable

Unit: Yuan Currency: CNY

Contract classification	Current period	Prior period
By geographic areas of sales		
Chinese Mainland	13,832,284,505	11,477,109,724
Other countries and regions	60,150,835	116,415,648
Total	13,892,435,340	11,593,525,372

Other information of revenue from contracts:

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 4. Revenue and cost of sales (continued)

#### (3) Description of performance obligations

Applicable  Not applicable

#### *Sales of goods and materials*

The Company mainly sells rail transit equipment and components, which are mainly delivered using land transportation. The Company recognises revenue upon receipts and acceptance of the goods by the customer.

Advances from customer before delivery of rail transit equipment and components are recognised as contract liabilities in the financial statements. There is no significant financing component and right of return during the course of sales of rail transit equipment and components.

#### *Revenue from maintenance service*

The Group mainly provides maintenance service of rail transit equipment products, and revenue is recognised when the services are completed.

#### (4) Descriptions of allocated remaining performance obligations

Applicable  Not applicable

Other information:

None

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XV. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 5. Investment income

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Gains from long-term equity investments under the equity method	14,457,877	4,356,645
Gains on disposal of held-for-trading financial assets	46,175,160	59,125,770
Gain (loss) arising from derecognition of financial assets measured at amortised cost	-15,604,257	-8,640,000
Dividend income from other equity instrument investments during the holding period	315,100	237,400
Gains from long-term equity investments under cost method	2,294,410,735	1,348,752,353
Gains (losses) from disposal of subsidiaries	-	-8,131,421
Investment income from disposal of held-for-trading financial liabilities	5,568,914	-
Others	-2,257,418	-
Total	<u>2,343,066,111</u>	<u>1,395,700,747</u>

Other information:

None

### 6. Others

Applicable  Not applicable



# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XVI. SUPPLEMENTARY INFORMATION

### 1. Breakdown of non-recurring profit or loss for the current period

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Amount	Note
Profit or loss on disposal of non-current assets	4,077,357	/
Government grants recognized in profit or loss (other than grants which are closely related to the Company's business and are either in fixed amounts or determined under quantitative methods in accordance with the national standard)	424,349,163	/
Profit or loss on changes in the fair value of held-for-trading financial assets, held-for-trading financial liabilities and derivative financial liabilities, and investment income on disposal of held-for-trading financial assets, held-for-trading financial liabilities and derivative financial instruments, other than those used in the effective hedging activities relating to normal operating business	227,070,561	/
Reversal of provision for accounts receivable that are tested for impairment losses individually	4,143,729	/
Other non-operating income or expenses other than the above	9,252,856	/
Less: Tax effect of non-recurring profit or loss	100,279,247	/
Effects of non-recurring profit or loss attributable to minority interests	10,909,943	/
Total	<u>557,704,476</u>	/

Reason for defining items as non-recurring gain or loss items according to Information Disclosure and Presentation Rules for Companies Making Public Offering of Securities No.1 – Non-recurring Gain or Loss, and reasons for defining non-recurring gain or loss items illustrated in Information Disclosure and Presentation Rules for Companies Making Public Offering of Securities No. 1 – Non-recurring Gain or Loss as recurring gain or loss items should be specified.

Applicable  Not applicable

# Notes to the Financial Statements

For the year ended 31 December 2022  
Renminbi Yuan

## XVI. SUPPLEMENTARY INFORMATION (continued)

### 2. Return on net assets and earnings per share

Applicable  Not applicable

2022

Profit for the reporting period	Weighted average return on net assets (%)	EPS	
		Basic EPS	Diluted EPS
Net profit attributable to ordinary shareholders of the Company	7.61	1.80	1.80
Net profit after deduction of non-recurring profit or loss attributable to ordinary shareholders of the Company	5.95	1.41	1.41

2021

Profit for the reporting period	Weighted average return on net assets (%)	EPS	
		Basic EPS	Diluted EPS
Net profit attributable to ordinary shareholders of the Company	7.56	1.63	1.63
Net profit after deduction of non-recurring profit or loss attributable to ordinary shareholders of the Company	5.71	1.23	1.23

### 3. Differences between accounting information expressed under domestic and overseas accounting policies

Applicable  Not applicable

### 4. Others

Applicable  Not applicable

Chairman of the Board: Li Donglin  
Reporting date approved by the Board of Directors: 30 March 2022

### Modification Information

Applicable  Not applicable



# Section XIII Five-year Financial Summary

## CONSOLIDATED STATEMENT OF PROFIT AND LOSS AND OTHER COMPREHENSIVE INCOME

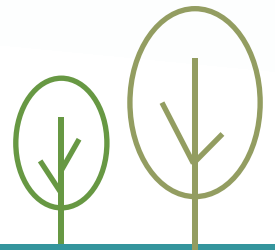
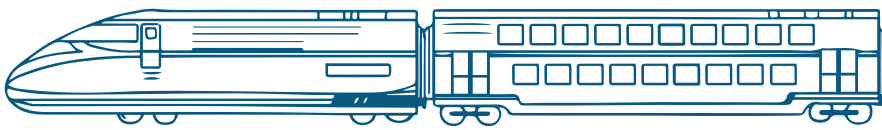
Unit: Yuan Currency: RMB

Item	2022	2021	2020	2019	2018
Revenue	18,033,778,561	15,121,167,406	16,033,898,624	16,304,206,791	15,657,900,734
Cost of sales	12,139,166,025	10,019,418,812	10,053,446,232	9,965,727,450	9,790,246,866
Tax and surcharges	116,172,989	116,396,054	112,010,083	150,692,177	131,432,864
Selling expenses	1,098,172,993	1,050,331,762	1,120,965,514	1,121,102,310	1,152,534,673
Administrative expenses	889,981,843	813,021,020	760,727,754	849,892,120	780,580,804
Research and development expenses	1,761,914,969	1,690,047,967	1,686,836,761	1,606,529,489	1,442,970,390
Finance costs	-190,899,478	-73,805,176	2,993,873	4,435,925	-24,595,640
Asset impairment gain (loss)	73,345,052	-161,869,899	-234,409,991	-85,706,513	104,020,818
Credit impairment gain (loss)	-61,637,487	121,825,631	85,645,821	-169,814,348	-5,210,008
Investment income	-41,999,539	33,608,925	43,181,140	94,980,320	79,646,243
Profit (loss) on fair value changes	166,033,744	71,130,766	2,327,307	5,776,761	0
Profit (loss) on disposal of assets	4,077,357	-2,072,439	6,440,830	-272,649	1,412,378
Other income	572,207,370	533,085,368	577,466,089	450,494,528	378,292,979
Operating profit	2,931,295,717	2,101,465,319	2,777,569,603	2,901,285,419	2,942,893,187
Non-operating income	11,348,934	24,630,560	65,923,604	33,452,306	26,314,703
Non-operating expenses	1,096,078	3,012,417	6,554,910	2,124,938	2,076,961
Total profit	2,941,548,573	2,123,083,462	2,836,938,297	2,932,612,787	2,967,130,929
Income tax expense	349,575,746	88,476,513	340,381,369	275,053,426	316,595,714
Net profit	2,591,972,827	2,034,606,949	2,496,556,928	2,657,559,361	2,650,535,215
Net profit attributable to shareholders of the Parent	2,555,823,375	2,017,694,796	2,475,454,606	2,659,163,867	2,612,487,749
Profit or loss attributable to non-controlling interests	36,149,452	16,912,153	21,102,322	-1,604,506	38,047,466
Basic earnings per share	1.80	1.63	2.11	2.26	2.22
Diluted earnings per share	1.80	1.63	2.11	2.26	2.22

## TOTAL CONSOLIDATED ASSETS AND LIABILITIES

Unit: Yuan Currency: RMB

Item	2022	2021	2020	2019	2018
Total assets	48,509,554,784	44,150,745,227	33,865,721,258	32,985,615,356	29,034,522,576
Total liabilities	13,213,823,602	10,858,100,789	9,606,130,854	10,789,336,199	8,911,008,412
Total equity	35,295,731,182	33,292,644,438	24,259,590,404	22,196,279,157	20,123,514,164



**株洲中车时代电气股份有限公司**  
ZHUSHOU CRRC TIMES ELECTRIC CO., LTD.