



# 2022 INTERIM 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 INTERIM REPORT IS TRUE, ACCURATE, COMPLETE AND WITHOUT ANY FALSE REPRESENTATION, MISLEADING STATEMENT OR MATERIAL OMISSION, AND ASSUME SEVERAL AND JOINT LIABILITIES.
- II. **WARNING OF SIGNIFICANT RISKS**  
For the description of relevant risks, please refer to section III "Management Discussion and Analysis" of this report.
- III. **ALL DIRECTORS OF THE COMPANY ATTENDED THE BOARD MEETING.**
- IV. **THE INTERIM REPORT WAS UNAUDITED.**
- V. **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 THIS INTERIM REPORT.**
- VI. **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**

Nil

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

Yes     No

## VIII. 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 such investment risks.

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

No

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

No

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

No

## XII. OTHERS

Applicable     Not applicable

## XIII. UNLESS OTHERWISE INDICATED, RENMINBI IS THE REPORTING CURRENCY IN THIS REPORT.



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Notes:

1. Financial information in this interim report has been presented based on the PRC Accounting Standards;
2. This interim report is prepared in both Chinese and English. In case of any inconsistencies, the former shall prevail.

# 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 STAR Market 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) (北京懋恒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 (原中國南車股份有限公司)
"CNR"	former China CNR Corporation Limited (原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 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 reporting period"	six months ended 30 June 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 Securities on the STAR Market 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 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	<a href="http://www.tec.crrczic.cc">www.tec.crrczic.cc</a>
E-mail	<a href="mailto:ir@csrzic.com">ir@csrzic.com</a>

## II. CONTACT PERSONS AND CONTACT METHODS

<b>Secretary to the Board (Domestic representative for information disclosure)</b>		<b>Representative of securities affairs</b>
Name	Yan Wu	Xiao Ying
Correspondence address	Times Road, Shifeng District, Zhuzhou	Times Road, Shifeng District, Zhuzhou
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## III. CHANGE OF INFORMATION DISCLOSURE AND PLACE OF INSPECTION

Newspapers designated by the Company for disclosure of A Share interim reports	Shanghai Securities News ( <a href="http://www.cnstock.com">www.cnstock.com</a> ), China Securities Journal ( <a href="http://www.cs.com.cn">www.cs.com.cn</a> ), Securities Times ( <a href="http://www.stcn.com">www.stcn.com</a> ) and Securities Daily ( <a href="http://www.zqrb.cn">www.zqrb.cn</a> )
Website designated by the stock exchange for disclosure of A Share interim reports of the Company	<a href="http://www.sse.com.cn">www.sse.com.cn</a>
Website designated by the stock exchange for disclosure of H Share interim reports of the Company	<a href="http://www.hkexnews.hk">www.hkexnews.hk</a>
Place where the interim reports of the Company are available	Board Office of Zhuzhou CRRC Times Electric Co., Ltd. at Times Road, Shifeng District, Zhuzhou

# Section II Corporate Profile and Key Financial Indicators

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

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

Applicable Not applicable

Class of share	Basic information of shares of the Company		
	Place of listing and market	Stock abbreviation	Stock code before change
A shares	STAR Market of the SSE	Times Electric	688187 Not applicable
H shares	Main Board of the Stock Exchange	Times Electric	3898 CRRC Times Elec

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

Applicable Not applicable

## V. OTHER RELEVANT INFORMATION

Applicable Not applicable

# Section II Corporate Profile and Key Financial Indicators

## VI. KEY ACCOUNTING DATA AND FINANCIAL INDICATORS

### (I) Key Accounting Data

Unit: Yuan Currency: RMB

Key accounting data	Current reporting period (January to June)	Corresponding period of last year	Increase/decrease from the corresponding period of last year (%)
Revenue	<b>6,526,910,740</b>	5,298,119,555	23.19
Net profit attributable to shareholders of the listed company	<b>870,961,499</b>	695,234,768	25.28
Net profit attributable to shareholders of the listed company after deduction of non-recurring profit or loss	<b>617,782,749</b>	492,229,421	25.51
Net cash flow from operating activities	<b>(442,798,854)</b>	(2,133,688,525)	N/A

	As at the end of the current reporting period	As at the end of last year	Increase/decrease from the end of last year (%)
Net assets attributable to shareholders of the listed company	<b>32,899,488,651</b>	32,620,993,765	0.85
Total assets	<b>45,962,083,674</b>	44,150,745,227	4.10

### (II) Key Financial Indicators

Key financial indicators	Current reporting period (January to June)	Corresponding period of last year	Increase/decrease from the corresponding period of last year (%)
Basic earnings per share (RMB/share)	<b>0.61</b>	0.59	3.39
Diluted earnings per share (RMB/share)	<b>0.61</b>	0.59	3.39
Basic earnings per share after deduction of non-recurring profit or loss (RMB/share)	<b>0.44</b>	0.42	4.76
Weighted average rate of return on net assets (%)	<b>2.63</b>	2.87	Decreased by 0.24 percentage points
Weighted average rate of return on net assets after deduction of non-recurring profit or loss (%)	<b>1.87</b>	2.04	Decreased by 0.17 percentage points
R&D investment as a percentage of revenue (%)	<b>11.15</b>	12.45	Decreased by 1.30 percentage points

Explanation of key accounting data and financial indicators of the Company

Applicable Not applicable

# Section II Corporate Profile and Key Financial Indicators

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

Applicable Not applicable

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

Applicable Not applicable

Unit: Yuan Currency: RMB

Non-recurring profit or loss items	Amount	Note (where applicable)
Profit and loss on disposal of non-current assets	314,198	
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)	161,508,045	
Gain or loss on changes in fair value from held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities and 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	131,807,053	
Reversal of the impairment provision for receivables and contract assets which are tested individually for impairment	5,682,561	
Other non-operating income and expenses apart from the aforesaid items	3,055,276	
Less: Effect of income tax	41,821,753	
Effect of non-controlling interests (after tax)	<u>7,366,630</u>	
Total	<u>253,178,750</u>	

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

Applicable Not applicable

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

Applicable Not applicable

# Section III Management Discussion and Analysis

## I. INDUSTRY LANDSCAPE AND THE PRINCIPAL BUSINESS OF THE COMPANY 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 research and development ("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 established 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, electric drive systems for new energy vehicles, sensor devices, marine equipment, etc. After years of R&D efforts and technology introduction and learning, and independent innovation, 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, new energy vehicle 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 model, the Company adopts the model of "unified management, professional centralised management and separation of procurement duties", establishes a unified set of measures, methods and procedures for procurement, performs centralised 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.

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.

# Section III Management Discussion and Analysis

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, the Company extends technology innovation to market research and product planning and to the life cycle management of mass-produced products, thus realising the whole process management of products from strategic planning and scientific research and development to commercialisation.

## (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”; and 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” in Classification of Strategic Emerging Industries (2018).

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. During the reporting period, revenue from emerging equipment business accounted for 28.00% of the Company’s total revenue, which was not high, 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 characterised by high core technology barriers, customers have very high requirements for the safety, reliability and sustainability of products and services, and enterprises are required 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 rail transit, new energy, mining 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.

### 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 terms of domestic market share for ten consecutive years from 2012 to 2021. As of the first half of 2022, the Company continued to rank first in terms of market share in the domestic urban rail traction converter system market.



## Section III Management Discussion and Analysis

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 60 administrative licenses, it can produce more than 50 types 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 has 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.

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 drivers. In the field of new energy vehicle electric drive system, the Company has become a renowned independent third-party supplier in China. In the first half of 2022, its cumulative installed capacity reached 63,000 sets, ranking among the top six in the industry. In the field of industrial converters, the Company occupies a leading position in niche markets such as mining truck electric drive and air conditioner inverters. Meanwhile, the Company proactively ventures into industrial converter business represented by photovoltaic inverter and wind power converter, and achieves rapid growth. In the sensor field, it focuses on leading customers, and ranks at the forefront of the industry in sub-sectors such as rail transit, new energy vehicles and industrial sensors.

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.

# Section III Management Discussion and Analysis

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

Given headwinds such as the increasingly complex international environment, repeated COVID-19 outbreaks, and short-term downward pressure on the macro economy, the rail transit industry was facing development bottlenecks. However, the release and 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 terms of 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, 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 good 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 major decision made based on the international and domestic environment, and of great significance to 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 drive the rapid development of electric drive system for new energy vehicles, photovoltaic inverters, semiconductor devices and sensors.

## II. 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 30 June 2022, the Company had 3,375 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.

## Section III Management Discussion and Analysis

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

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology
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
7	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

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology	
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
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.

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology
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, subway 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
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

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology	
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

# Section III Management Discussion and Analysis

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 will 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 30 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

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology
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 million kilometers
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

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology	
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

# Section III Management Discussion and Analysis

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 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

# Section III Management Discussion and Analysis

No.	Core technologies	Overview, advancedness and characteristics of technology
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 the 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.

## 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 Serialized 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

# Section III Management Discussion and Analysis

## 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

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

During the reporting period, the Company completed the installation and on-board debugging of the core traction converter, power battery and other components of the electric traction system of 3000 HP heavy-haul hybrid locomotive of State Railway Group; optimised and upgraded the electrical system of plateau dual source driving force concentrated EMU for Fuxing bullet train; successfully launched the standard 6MW energy dispatching 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; passed the third-party safety evaluation and verification of mine truck unmanned system; completed review on the comprehensive overhaul train based on the scheme of State Railway Group, which finished the trial production of integrated maintenance operation vehicle for public works, power supply and electric service; developed and verified the electric control and flat wire motor prototype of double-sided water-cooling module for vehicles; finished the development and empirical test of the world's first high-power IGBT hydrogen production power; the crimp IGBT device with CRRC's fourth-generation large-size DMOS+ chip was officially put into operation in China Southern Power Grid project; completed the 3D and construction design of ROV ontology system based on controllable supply chain; developed the open-loop Hall programmable chip and sensor based on self-compensation, self-calibration and ripple suppression technology; completed the trial production of on-board cabinet of train autonomous operation control system; and finished the prototype design of wind power full power converter. The Company was granted 161 new patents for its core technologies and main products, bringing the total number of valid patents granted to the Company to 3,375, 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 28 national and industry standards.

# Section III Management Discussion and Analysis

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

	Increase in the period Number of applications	Increase in the period Number of approvals	Cumulative number Number of applications	Cumulative number Number of approvals
Invention patent	154	161	4,125	1,904
Utility model patent	32	65	1,719	1,309
Appearance design patent	5	4	241	162
Software copyright	1	1	355	355
Others	—	—	—	—
Total	<u>192</u>	<u>231</u>	<u>6,440</u>	<u>3,730</u>

### 3. R&D investment

Unit: Yuan Currency: RMB

	Current period	Corresponding period of last year	Change (%)
Expensed R&D expenditure	<b>696,057,533</b>	640,930,972	8.60
Capitalised R&D expenditure	<b>31,473,561</b>	18,692,540	68.37
Total R&D expenditure	<b>727,531,094</b>	659,623,512	10.29
Percentage of total R&D expenditure in revenue (%)	<b>11.15</b>	12.45	Decreased by 1.30 percentage points
Percentage of capitalised R&D expenditure (%)	<b>4.33</b>	2.83	Increased by 1.50 percentage points

#### Reason for significant changes in total R&D investment 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

# Section III Management Discussion and Analysis

## 4. Projects under development

Applicable  Not Applicable

Unit: RMBO'000 Currency: RMB

No.	Item	Estimated Total Investment	Investment in the Current Period		Progress or Phased Results	Goal to be Achieved	Technical Level	Application Prospect
			Cumulative Investment	Investment in the Current Period				
1	Development and Application of Intelligent Train Inspection System	2,336	165	1,796	Launched patrol robot demonstration application in Wuxi Metro Line 2, and 360 image detection system was under installation and debugging in Xuzhou Metro Line 2.	To develop a full-automatic inspection robot suitable for the first-level maintenance of vehicle bottom equipment of EMU, which enables the full-automatic detection of the status of key components such as visual components at the bottom of EMU and visual components of bogie, and where the detection data will be transmitted to the central server for analysis and diagnosis in real time through wireless technology, and the fault release, confirmation and processing results will be returned via a hand-held terminal; To gain experience in the application of industrial robotic arms, develop methods for high-precision positioning control of industrial robotic arms, master non-contact image recognition technology, and conduct research on machine deep learning technology.	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 realize 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 III Management Discussion and Analysis

No.	Item	Investment				Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results		
2	Integrated Maintenance Vehicle Development	2,820	164	2,523	Completed scheme assessment by the State Railway Group, launched trial manufacturing of inspection and maintenance vehicles integrating public works, electric service and power supply, and static strength test of vehicle body.	To develop a medium-sized road maintenance vehicle suitable for integrated catenary, tunnels and electrical signal maintenance and 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. There are now such products in China. The successful development of the product will provide equipment support for the reform of integrating public works, electric service and power supply.
3	Development of the Second Generation Metro Grinding Vehicle	1,141	19	1,079	Completed prototype assembly and static and dynamic debugging tasks; and launched turnout grinding test.	To develop a new type of dual-power subway 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 subway grinding vehicles have 16 grinding heads, and their operation efficiency is low. The dual-power subway grinding vehicle independently developed by this project, which has axis control function and is compatible with 16 and 20 grinding heads, will revolutionize subway grading vehicles from the power source point of view.

# Section III Management Discussion and Analysis

No.	Item	Investment				Goal to be Achieved	Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
4	Key Technology Research and Product Development of Next-generation 400 km/h EMU	1,432	198	1,024	Completed the prototype trial production of traction converter; and launched relevant tests, and prepared routine test reports.	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 400km/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
5	Development of Electric Traction System for State Railway Group's 3,000 HP Heavy-haul Hybrid Locomotive	825	56	667	Completed the ground debugging of electric traction system and power battery; installed core traction converter, power battery, microcomputer network control system and other components; and completed on-board debugging.	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	102	1,280	Commenced main line operation according to the scheduled railway line, and carried out optimisation and upgrading based on the on-site operation.	To develop an electric traction system for power centralised EMUs on the 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 loading products, and the loading and on-board commissioning, so as to meet the loading 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

# Section III Management Discussion and Analysis

No.	Item	Investment				Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results		
7	Development of Full Power Wind Power Converter Platform	361	32	267	Completed platform planning, prototype technical design and construction and finished software requirement analysis.	To complete the development of a low-voltage full power wind power converter platform, and independently 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.
8	Development of Railway Traction Power Supply Scheduling System Platform	1,220	259	1,121	The standard 6MW energy dispatching system based on renewable energy utilisation and energy storage has been successfully put into operation in the owner's sectioning post. Completed the third-party type test of the system and the engineering design specification of railway power supply products.	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 such as water-cooled converter of traction power supply energy scheduling device for electrified railway, develop energy scheduling technology based on energy storage and utilisation, enrich the product series, build a standardised, serialised and general traction power supply scheduling product platform, develop a complete set of technologies, equipment and standards for electrified railway energy scheduling, and build a proven track record for energy-saving and cost-effective products for electrified railway through the demonstration application in the heavy-haul railway of State Railway Group.

# Section III Management Discussion and Analysis

No.	Item	Investment				Technical Level	Application Prospect	
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
9	Research and Application of Mining Truck Unmanned System	2,987	227	2,021	Completed the third-party safety evaluation and verification of mining truck unmanned system; and carried out the transformation of on-site mining trucks and auxiliary vehicles.	To develop a mining dump truck driverless 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 the mine production and operation requirements to achieve industrialisation.	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 the comprehensive capabilities of its team; meanwhile, the Company will leverage its existing 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.	Rail transit electrical equipment

# Section III Management Discussion and Analysis

No.	Item	Investment				Goal to be Achieved	Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
10	Development of Train Autonomous Operation Control System	1,829	161	1,409	Completed the design and trial production of vehicle-mounted cabinet; and completed the design of TACS system optimisation function scheme.	To develop a set of train autonomous operation control system based on vehicle-to-vehicle communication according to the technical development trend, application of 5G, big data, active identification, track environment awareness and other technologies, and based on the functional requirements of full-automatic unmanned driving, which can realise the new CBTC train control system of autonomous trackside resource management, autonomous train interval protection and autonomous operation adjustment 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 the safety, intelligence, automation and networking of trains.	Communication signal systems

# Section III Management Discussion and Analysis

No.	Item	Investment				Goal to be Achieved	Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
11	Development of Electric Control and Flat Wire Motors Based on Double-sided Water Cooling Modules	738	72	649	Completed the development and verification of motor and electronic control prototype.	To master and patent the winding structure design suitable for mass production, master key manufacturing processes such as wire forming, twisting, welding and coating, enable the domestic mass production of key equipment, 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	202	202	Completed the overall scheme design of inverter and launched technical design.	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 are 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

# Section III Management Discussion and Analysis

No.	Item	Investment				Goal to be Achieved	Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
13	Product Development of High Power Density 3,300V IGBT Module	517	116	116	Completed product scheme and technical design; and finished the trial production of the first sample and the comparison of dynamic and static parameters.	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	138	138	Completed the trial production and evaluation of the first sample, basically achieved the target of electrical parameters, and carried out special verification of IGBT/FRD chips.	To develop U-series IGBT module for photovoltaics with reliability verified by relevant special standard tests.	Enriching the product spectrum of the Company, and facilitating the development of new energy 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	93	93	Completed the product scheme and technical design, and launched the construction design.	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 1,500 V 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 of 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	93	93	Completed the design of single-ended power supply traction calculation model; and completed the overall scheme design.	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 the train running according to the schedule in the fully automatic driving operation scenario, and verifying the control logic and performance of the control unit.	Rail transit electrical equipment

# Section III Management Discussion and Analysis

No.	Item	Investment				Goal to be Achieved	Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
17	Development of Gauge-grade Sensitive Chip and Sensor	1,208	234	234	Completed the investigation report, product analysis and technical specification of wheel speed, tire pressure and temperature sensor; and completed the chip layout design.	To complete the car gauge level programmable linear Hall ASIC chip which can meet the technical requirements specified by the system, develop the speed, temperature and pressure sensor modules and promote car gauge level chip to reach the application state.	Solving the problem of "bottleneck" of Hall chip of car gauge grade, developing performance index that reach the international advanced level, passing the reliability verification and reaching the state of wide application. Benchmarking the wheel speed, tire pressure, and temperature sensors with mainstream brands, developing competitive products, and laying the foundation for the subsequent market breakthrough of various kinds of automobile sensors.	Automobile sensing device
18	Research on Engineering Application of Intelligent Driving Technology of Shenhua AC Drive Locomotive	660	153	153	Completed the confirmation of technical conditions with the project owner, cooperated with the owner to complete the preparation of technical scheme, designed technical scheme and introduced new scenario functions.	To ensure the continuous, reliable, safe and automatic operation of heavy-duty 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 defense adjustment products for the first time, laying a foundation for subsequent standardisation and mass promotion of locomotive automatic driving products.	Rail transit electrical equipment

# Section III Management Discussion and Analysis

No.	Item	Investment				Goal to be Achieved	Technical Level	Application Prospect
		Estimated Total Investment	Investment in the Current Period	Cumulative Investment	Progress or Phased Results			
19	Development of TAH3-SiC High Frequency Auxiliary Transformer Product Platform	216	63	63	Completed the scheme, technology and construction design of SiC auxiliary transformer.	To research into the miniaturised and lightweight auxiliary converter suitable for rail transit vehicles, master the design, manufacture and test technologies of complete set of "SiC device-module-converter", and complete the development of auxiliary converter based on SiC semiconductor power device.	Developing a pedigree auxiliary converter with a capacity of 75kVA – 250kVA; conducting research on the platform of SiC auxiliary transformer products with low cost and high index (high integration, small size, light weight and high efficiency), and promoting performance indexes to reach the international leading level.	Rail transit electrical equipment
20	High-power Silicon Carbide Oil-cooled Electric Drive Assembly	854	214	214	Completed the scheme design of assembly, electric control and motor.	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	/	23,672	2,761	15,142	/	/	/	/

# Section III Management Discussion and Analysis

## 5. R&D personnel

Unit: RMB'000 Currency: RMB

	Basic information	
	Amount for the current period	Amount for the corresponding period of previous year
Number of R&D personnel of the Company (persons)	2,688	2704
Percentage of R&D personnel in the workforce of the Company (%)	35.21	35.24
Total remuneration of R&D personnel	31,995	30,141
Average remuneration of R&D personnel	11.9	11.15

Education level	Educational backgrounds	
	Number (persons)	Proportion (%)
Doctorate degree	103	3.83
Master degree	920	34.23
Bachelor degree	1,563	58.15
Junior college degree and below	102	3.79
 Total	 <b>2,688</b>	 100.00

Age group	Age structure	
	Number (persons)	Proportion (%)
Aged below 30 (exclusive of 30)	573	21.32
Aged 30-40 (inclusive of 30 and exclusive of 40)	1,564	58.18
Aged 40-50 (inclusive of 40 and exclusive of 50)	429	15.96
Aged 50-60 (inclusive of 50 and exclusive of 60)	122	4.54
Aged 60 and above	0	0
 Total	 <b>2,688</b>	 100.00

Note: The above statistics were collected based on domestic entities included in the consolidated statements of the Company and exclude overseas subsidiaries and branches.

## 6. Other explanations

Applicable  Not applicable

# Section III Management Discussion and Analysis

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

### (I) Analysis of Core Competitiveness

Applicable  Not Applicable

#### 1. *Sustained 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 the domestic substitution of the core train system, and leads the domestic market. As of the first half of 2022, its high-speed railway and locomotive traction converter system products have been leading the domestic market for many years. In the field of urban rail transit, according to RT Rail Transit, the Company has occupied the largest market share in the domestic market for ten consecutive years from 2012 to 2021 and continued to outperform peers in the domestic market in the first half of 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 60 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.

#### 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. 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.

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.

The Company has 6 national technological innovation platforms, 7 provincial technology innovation platforms, and 2 postdoctoral workstations.

The Company has been granted a total of 3,375 patents at home and abroad, including 1,904 invention patents; and presided over and participated in the formulation and publish of 41 international standards and 107 domestic standards (including national standards, industry standards and group standards). The Company proactively contemplates and organises the pre-declaration of the 2022 national key R&D plans. It received a number of important awards including National Science and Technology Award, 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 shows that its comprehensive scientific and technological innovation strength is industry-leading.



## Section III Management Discussion and Analysis

### 3. Highly reliable quality and service advantages

The Company always regards product quality as the foundation of survival. In order 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 ISO 9001, 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 qualification rate of products delivered by the Company in a one-off way has always remained above 99.5%. 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 respect of after-sales service, the Company upholds the service philosophy of "fast, effective and satisfactory services" to promptly respond to customer needs and provide customers with a full range of services in a standardised and orderly manner. The Company has set up 382 service offices globally and established six two-hour service cycles. In addition, in line with the maintenance planning of State Railway Group and in an ongoing effort to optimise its maintenance coverage, the Company has established 18 localised maintenance bases across the country, forming a global after-sales service network covering key customers, key regions and key products.

### 4. Rail transit industry chain synergy

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, and 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 Company has expanded into the fields of industrial converters, electric drive systems for new energy vehicles, sensor devices and marine equipment, creating much more room for growth. The complete industry chain structure and expanding new business portfolio 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 2,688 research and development personnel, accounting for 35.21% 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.

# Section III Management Discussion and Analysis

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 35 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. Mr. Li Donglin, the current Chairman of the Company, and Mr. Liu Ke'an, the Vice Chairman of the Company, also have more than 25 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. 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

## **IV. DISCUSSION AND ANALYSIS OF OPERATIONS**

In the first half of 2022, amid the persistent rage of the COVID-19 pandemic and complicated situation both at home and abroad, the Company remained committed to its "high-quality, high-efficiency operation" philosophy, made painstaking efforts in the rail transit industry and strived for breakthroughs in emerging industries, thereby securing steady improvement in business performance in the first half of 2022.

With respect to the rail transit equipment business, the Company consolidated its foothold in the domestic market to address the unfavourable situation due to shrinking procurement desire of EMU from the State Railway Group amid COVID-19 pandemic haunting the domestic market. Specifically, the Company maintained a stable market share for its major products, achieved breakthroughs in targeted cross-platform overhaul products, and kept abreast of the pace of OEMs in "going global" to perform fruitfully in Asian, European, American and other overseas markets. Besides, the Company maintained the sound development momentum in the urban rail transit market. New orders secured for the traction system continued to rank at the forefront of the industry, and following the State approval regarding the establishment of five metropolitan areas encompassing Nanjing, Fuzhou, Chengdu, Changsha-Zhuzhou-Xiangtan and Xi'an, railways at the municipality-level will be well positioned for development opportunities. In addition, the Company proactively expanded market share in terms of rail transit machinery equipment business and achieved new breakthroughs, and simultaneously proceeded with several urban rail signal system projects, demonstrating its constantly enhanced engineering capabilities.

In terms of emerging equipment business, the Company leveraged the strategic opportunities brought about by the State carbon peaking and carbon neutrality initiative and launched related energy conservation and green products. In the first half of 2022, various businesses progressed smoothly with details as follows:

## Section III Management Discussion and Analysis

Power semiconductor device business: the phase II chip production line is progressing towards capacity design, and the delivery capacity of medium and low voltage modules has been greatly improved. High-voltage devices for power grid were constantly delivered. The external supply orders of rail transit devices made a historic breakthrough, and were delivered to railway bureaus, locomotive depots and traction manufacturers in small quantities. Low- and medium-voltage devices were under rapid advancement, and the number of new energy vehicle devices delivered increased by more than 5 times compared with the corresponding period in 2021 with its market share rapidly increasing to more than 10%. Wind power modules were continuously delivered to leading equipment manufacturers, and the market share continued to rise. Photovoltaic modules obtained considerable orders. New energy vehicle SiC module was under continuous verification, the technical capability of SiC was improved and the construction projects were in normal progress. Bipolar devices maintained the stable position, and polysilicon with super power supply occupied an absolute market advantage. In terms of research and development, the development of key products in the fields of rail transit, power grid, new energy vehicles, new energy and industry advanced smoothly, and IGBT chip technology reached the international advanced level, thereby effectively supporting market demand.

New energy passenger vehicle electric drive system business: in the first half of 2022, products delivered increased by more than 130% year-on-year, orders for the new models were delivered smoothly, monthly output reached record highs, the production capacity was steadily improved, and industry ranking rose to the top five in a single month. The Company continued to enhance the technical innovation efforts, accelerated the research and development of high-voltage electric drive product platform based on silicon carbide/oil-cooled flat wire, contacted with several projects of major automobile companies and secured intention from considerable customers for their key projects.

Sensor business: breakthrough has been made in product technology development of BMS, and the Hall ASIC chip of independent vehicle gauge has completed the streaming and entered the testing stage. In the first half of 2022, 14 new sensor production lines were constructed, with an additional production capacity of more than 10 million vehicles per year.

The Company has made great achievements in the fields of metallurgy, mining, shipping, air conditioning and new energy power generation equipment. Especially, in new energy power generation field, as the only central enterprise in the field of photovoltaic inverters, the Company boasts the advantages of technology and product quality assurance and synergy along the whole industry chain, and has been shortlisted as a qualified supplier of several power enterprises such as the "five leading government-run power enterprises, six major power industry players, PowerChina and China Energy". The Company continues to deliver wind power converters, and introduces centralized and serialised photovoltaic inverters to the market in succession. Besides, the Company obtained many new orders for its marine equipment business in the domestic and overseas markets.

# Section III Management Discussion and Analysis

Significant changes in the operating condition of the Company during the reporting period, and events that occurred in the reporting period with a material impact or expected to have a material impact on the operation condition of the Company

Applicable  Not applicable

## V. RISK FACTORS

Applicable  Not Applicable

### (I) Core Competitiveness Risk

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.

# Section III Management Discussion and Analysis

## (II) Operating Risk

As the ongoing spread of COVID-19 around the world causes global economic turmoil and falling demand, creates a significant negative impact on economic activities, business operations and market expectations, and subjects the Company to inbound and outbound travel restrictions for its overseas business, the Company may be exposed to risks such as obstruction of technical exchanges and bid clarification, postponement or cancellation of project owners' visits and visit plans, inability to attend exhibitions or suffering delays in exhibitions, and increased difficulty in obtaining orders for potential market projects due to contractionary fiscal policies of the project owners' countries, etc.

Countermeasures: the Company will innovate on market exploration approaches and methods, capitalise on local resources such as overseas subsidiaries or local business partners to step up efforts in expanding target markets. Besides, the Company will commit resources to combat the COVID-19 pandemic. For existing customers, it will thoroughly streamline and assess backlog orders, and negotiate with customers over those orders that may be suspended or cancelled by customers, so as to minimise the adverse impact on the operation of the Company.

## (III) Financial Risk

With the accelerated pace of international operation, the Company's product export, overseas investment, mergers and acquisitions and other business activities are on constant rise, which may cause various risks resulting from exchange rate fluctuations. For instance, 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 pay close attention to changes in exchange rates, formulate and implement appropriate foreign exchange risk management scheme, and adopt foreign exchange risk management scheme at the early stage of undertaking foreign currency business to lock the foreign exchange rate risk.

## (IV) Industry Risk

The rail transit industry where the Company operates is a key field related to the national economy and the people's livelihood. Rail transit construction projects are mainly led by the government. The government's investment in rail transit infrastructure construction is affected by many factors such as China's macroeconomic development, economic cycles, fiscal expenditures, economic development policies of relevant regions, use of existing infrastructure and future development plan of the industry. In the future, if unforeseen factors lead to significant adjustments in macroeconomic and industry policies or changes in investment plans in the segments of the industry, it may reduce the investment in the rail transit industry and cause unfavorable changes in the market demand, which will adversely affect the rail transit equipment industry and the Company's business operations and profitability.

Countermeasures: the Company will proactively collect information regarding national economic, political and industry dynamics, conduct earnest research into market trends and operation strategies, and improve its market operation strategies. Besides, the Company will leverage the guiding role of innovation to optimise the industry structure of the Company and venture into new business models.

# Section III Management Discussion and Analysis

## (V) Macro Environment Risk

Domestic entities of the Company are required to purchase certain raw materials from overseas and make sales to overseas markets, and the Company has also set up a number of operating entities overseas which are responsible for local business operation and development. The Company's overseas operations are influenced by international trade policies and the political and economic environment of countries of business operations. Amid the Sino-US trade friction, the tariff list introduced between the two countries has had a certain impact on the Company's business. If the international political and economic environment or trade policy changes adversely in the future, it may have an adverse impact on the Company's overseas procurement, operation and sales activities.

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.

## (VI) Other Material Risks

In recent years, the Company has been expanding into new industries while developing rail transit business. For expansion into fully competitive industries, the Company may be subject to uncertainties in industry competition, customer acceptance, product technology, quality reliability and cost control, etc. While developing the market and grabbing orders in a new industry, the Company may adopt new business models, be unfamiliar with the relevant industry policies, and lack relevant experience and human resource support, which may make it difficult to realise intended development goals in the new industry and eventually lead to exposures to, among other things, receivables, stagnation and advances. This may adversely affect the Company's operating results and financial situation.

Countermeasures: the Company will continue its efforts in benchmarking against industry models, and conduct research into and learn from them. Besides, the Company will arrange 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 focus on risk events.

# Section III Management Discussion and Analysis

## VI. PRINCIPAL OPERATIONS DURING THE REPORTING PERIOD

During the first half of 2022, the Group realised revenue of RMB6.527 billion, representing a year-on-year increase of 23.19%, of which revenue from the rail transit equipment business amounted to RMB4.600 billion, representing a year-on-year increase of 4.65%, revenue from the emerging equipment business amounted to RMB1.828 billion, representing a year-on-year increase of 135.34%, and revenue from other business amounted to RMB99 million, representing a year-on-year decrease of 21.19%. The Group achieved net profit attributable to shareholders of the parent company of RMB871 million, representing a year-on-year increase of 25.28%, and basic earnings per share of RMB0.61, representing a year-on-year increase of 3.39%.

As at 30 June 2022, total assets of the Group reached RMB45.962 billion, representing a year-on-year increase of 4.10%, and net assets attributable to shareholders of the listed company reached RMB32.899 billion, representing a year-on-year increase of 0.85%.

### (I) Principal Business Analysis

#### 1 Analysis of changes in relevant items in the financial statements

Unit: Yuan Currency: RMB

Account item	Amount for the current period	Amount for the corresponding period of last year	Change (%)
Revenue	6,526,910,740	5,298,119,555	23.19
Cost of sales	4,294,630,650	3,300,418,281	30.12
Selling expenses	403,720,033	405,676,870	(0.48)
Administrative expenses	341,998,639	288,880,216	18.39
Financial expenses	(93,063,204)	(17,484,209)	N/A
R&D expenses	696,057,533	640,930,972	8.60
Net cash flow from operating activities	(442,798,854)	(2,133,688,525)	N/A
Net cash flow from investing activities	(3,492,130,657)	730,015,263	(578.36)
Net cash flow from financing activities	(64,993,694)	(37,750,906)	N/A

# Section III Management Discussion and Analysis

Reasons for changes in revenue: during the first half of 2022, the Group realised revenue of RMB6.527 billion, representing an increase of 23.19% as compared with RMB5.298 billion for the corresponding period of last year. Changes in revenue by product category are set out below: (1) revenue from rail transit equipment products amounted to RMB4.600 billion, representing an increase of 4.65% from RMB4.396 billion for the corresponding period of last year. In particular, revenue from rail transit electrical equipment business amounted to RMB3.633 billion, representing a decrease of 4.99% from RMB3.824 billion for the corresponding period of last year; revenue from railway engineering machinery business amounted to RMB535 million, representing an increase of 95.41% from RMB274 million for the corresponding period of last year; revenue from communication signal business amounted to RMB186 million, representing an increase of 42.76% from RMB131 million for the corresponding period of last year; and revenue from other rail transit equipment business amounted to RMB246 million, representing an increase of 46.58% from RMB168 million for the corresponding period of last year. (2) revenue from the emerging equipment products amounted to RMB1.828 billion, representing an increase of 135.34% as compared with RMB777 million for the corresponding period of last year. In particular, revenue from the power semiconductor devices amounted to RMB772 million, representing an increase of 106.56% as compared with RMB374 million for the corresponding period of last year; revenue from electric drive systems of new energy vehicles amounted to RMB436 million, representing an increase of 197.11% as compared with RMB147 million for the corresponding period of last year; revenue from industrial converter products amounted to RMB326 million, representing an increase of 119.27% as compared with RMB149 million for the corresponding period of last year; revenue from marine equipment amounted to RMB169 million, representing an increase of 112.97% as compared with RMB79 million for the corresponding period of last year; and revenue from sensor devices amounted to RMB125 million, representing an increase of 343.94% as compared with RMB28 million for the corresponding period of last year. (3) revenue from other business amounted to RMB99 million, representing a decrease of 21.19% as compared with RMB125 million for the corresponding period of last year.

Reasons for changes in cost of sales: mainly due to the year-on-year increase in revenue

Reasons for changes in selling expenses: remaining basically unchanged from the corresponding period of last year

Reasons for changes in administrative expenses: mainly due to the year-on-year increase in staff remuneration and depreciation and amortisation

Reasons for changes in financial expenses: mainly due to the year-on-year increase in interest income from certificates of deposit

Reasons for changes in R&D expenses: mainly due to the year-on-year increase in staff remuneration

Reasons for changes in net cash flow from operating activities: mainly due to a year-on-year increase in refund of taxes and surcharges and a year-on-year decrease in cash paid relating to other operating activities

Reasons for changes in net cash flow from investing activities: mainly due to a year-on-year increase in cash paid for acquisition of structured deposits and other investments

Reasons for changes in net cash flow from financing activities: mainly due to a year-on-year increase in cash paid for repayment of debts

## **2 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 III Management Discussion and Analysis

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

Applicable  Not applicable

## (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 year	Percentage of closing balance of the previous year in total assets (%)	Change in closing balance of the current period over the previous year (%)		Note
					Current	Previous	
Cash and bank balances	<b>4,305,691,365</b>	9.37	8,219,320,889	18.62	(47.61)	1)	
Held-for-trading financial assets	<b>9,294,891,435</b>	20.22	7,579,988,489	17.17	22.62	2)	
Bills receivable	<b>3,233,365,438</b>	7.03	2,757,119,757	6.24	17.27	3)	
Trade receivables	<b>8,170,463,732</b>	17.78	6,549,417,025	14.83	24.75	4)	
Trade receivables financing	<b>2,427,531,774</b>	5.28	2,910,527,667	6.59	(16.59)	5)	
Prepayments	<b>449,285,237</b>	0.98	344,522,352	0.78	30.41	6)	
Other receivables	<b>261,547,764</b>	0.57	199,941,167	0.45	30.81	7)	
Inventories	<b>6,066,214,607</b>	13.20	4,921,087,633	11.15	23.27	8)	
Non-current assets due within one year	<b>207,562,564</b>	0.45	—	—	N/A	9)	
Other current assets	<b>386,694,680</b>	0.84	852,738,172	1.93	(54.65)	10)	
Fixed assets	<b>4,494,519,528</b>	9.78	3,964,429,248	8.98	13.37	11)	
Construction in progress	<b>544,892,149</b>	1.19	921,284,020	2.09	(40.86)	12)	
Other non-current assets	<b>3,114,965,170</b>	6.78	1,846,646,362	4.18	68.68	13)	
Held-for-trading financial liabilities	<b>4,615,657</b>	0.01	—	—	N/A	14)	
Bills payable	<b>2,032,101,089</b>	4.42	1,640,341,546	3.72	23.88	15)	
Trade payables	<b>5,321,798,508</b>	11.58	4,677,716,033	10.59	13.77	16)	
Employee benefits payable	<b>276,808,019</b>	0.60	143,687,549	0.33	92.65	17)	
Taxes payable	<b>126,071,351</b>	0.27	190,170,858	0.43	(33.71)	18)	
Other payables	<b>1,499,851,716</b>	3.26	753,174,560	1.71	99.14	19)	
Deferred tax liabilities	<b>43,480,410</b>	0.09	32,201,270	0.07	35.03	20)	

# Section III Management Discussion and Analysis

- 1) Mainly due to a significant year-on-year increase in structured deposits and certificate of deposit
- 2) Mainly due to a year-on-year increase in structured deposits
- 3) Mainly due to a year-on-year increase in commercial acceptance bills receivable
- 4) Mainly due to trade receivables newly increased in the current period
- 5) Mainly due to a year-on-year decrease in bills receivable with high credit ratings
- 6) Mainly due to a year-on-year increase in material prepayments
- 7) Mainly due to a year-on-year increase in deposits and other receivables
- 8) Mainly due to a year-on-year increase in goods in process and finished products
- 9) Due to the change in liquidity of certificate of deposit
- 10) Due to a year-on-year increase in VAT credits and refunds
- 11) Mainly due to the impact of transfer of completed projects in construction to fixed assets during the current period
- 12) Mainly due to the impact of transfer of completed projects in construction to fixed assets during the current period
- 13) Mainly due to a year-on-year increase in the holdings of the large value certificate of deposit
- 14) Due to changes in fair value of forward foreign exchange contracts (as at the end of last year: nil)
- 15) Mainly due to a year-on-year increase in bills payable of which the settlement conditions were not satisfied according to the raw materials procurement progress and contractual payment conditions
- 16) Mainly due to a year-on-year increase in trade payables of which the settlement conditions were not satisfied according to the raw materials procurement progress and contractual payment conditions
- 17) Mainly due to the quarterly estimated provision of annual performance bonus released at year end in one lump sum
- 18) Mainly due to a year-on-year decrease in VAT and other turnover tax
- 19) Mainly due to a year-on-year increase in dividends payable in the current period
- 20) Mainly due to the impact of deferred tax liabilities recognised from changes in fair value of held-for-trading financial assets

# Section III Management Discussion and Analysis

## 2. Overseas assets

Applicable  Not applicable

### (1) Asset size

Where: Overseas assets amounted to RMB1,465,822,483, accounting for 3.19% of total assets.

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

Applicable  Not applicable

Other explanations

Nil

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

Applicable  Not applicable

Please refer to "Section X Financial Report – VII. Notes to Key Items of the Consolidated Financial Statements – 61. Assets with Restrictive Ownership Title or Right of Use".

## 4. Other explanations

Applicable  Not applicable

## (IV) Investment Analysis

### 1. Overall analysis of external equity investment

Applicable  Not applicable

As at the end of the reporting period, book balance of the Group's long-term equity investments and other equity instrument investments amounted to RMB537,768,330 and RMB117,400,000, as of 31 December 2021: RMB611,727,358 and RMB112,400,000, respectively. For details, please refer to "Section X Financial Report – VII. Notes to Key Items of the Consolidated Financial Statements – 12. Long-term Equity Investments and 13. Other Equity Instrument Investments".

### (1) Material equity investment

Applicable  Not applicable

### (2) Material non-equity investment

Applicable  Not applicable

On 12 April 2022, the Company published the "Announcement on Voluntary Disclosure of the Technological Improvement Construction Project of Investment in Silicon Carbide Chip Production Line by A Controlling Subsidiary of Zhuzhou CRRC Times Electric Co., Ltd." on the website of the SSE (2022-016), and simultaneously published the Overseas Regulatory Announcement on the website of the Hong Kong Stock Exchange. As of 30 June 2022, CRRC Times Semiconductor implemented the project in line with schedule.

# Section III Management Discussion and Analysis

## (3) Financial assets measured at fair value

Applicable  Not applicable

Mainly include held-for-trading financial assets (structured deposit measured at fair value), trade receivables financing (bills receivable and trade receivables measured at fair value) and other equity instrument investments. Details are set out in the table below:

Unit: Yuan Currency: RMB

Item	Opening balance	Closing balance	Change in the current period	Impact on the profit of the current period
Held-for-trading financial assets (structured deposit)	7,579,988,489	9,294,891,435	1,714,902,946	136,422,710
Bills receivable measured at fair value	1,172,878,926	807,200,577	(365,678,349)	N/A
Trade receivables measured at fair value	1,737,648,741	1,620,331,197	(117,317,544)	N/A
Other equity instrument investments	<u>112,400,000</u>	<u>117,400,000</u>	<u>5,000,000</u>	<u>–</u>
Total	<u>10,602,916,156</u>	<u>11,839,823,209</u>	<u>1,236,907,053</u>	<u>136,422,710</u>

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

Applicable  Not applicable

## (VI) Analysis of Major Subsidiaries and Associates

Applicable  Not applicable

For details, please refer to "Section X Financial Report – VII. Notes to Key Items of the Consolidated Financial Statements – 12. Long-term Equity Investments" and "IX. Interests in Other Entities".

## (VII) Structured Entities Controlled by the Company

Applicable  Not applicable

## VII. OTHER DISCLOSURES

Applicable  Not applicable

# Section IV Corporate Governance

## I. 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.hkexnews.hk www.sse.com.cn	17 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

### 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 meeting have been considered and approved, and no resolution was vetoed. The convening and holding procedures of the general meeting, 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 meeting were legal and valid.

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

Applicable Not Applicable

Name	Position held	Change
Xu Shaolong	Deputy general manager and core technician	Resigned
Li Peng	Deputy general manager	Appointed

# Section IV Corporate Governance

## Explanations on Changes in the Company's Directors, Supervisors, Senior Management and Core Technical Personnel

Applicable  Not Applicable

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.

## Explanation on Certification of Core Technicians of the Company

Applicable  Not Applicable

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

### Plan for Distribution of Profits or Transfer of Capital Reserve Fund into Share Capital Determined for the Interim Period

Whether to distribute profit or transfer capital reserve into share capital	No
Bonus shares for every 10 shares (share)	—
Profit declared for every 10 shares (RMB) (tax inclusive)	—
Transfer of capital reserve fund into share capital for every 10 shares (share)	—
Explanations on plan for distribution of profits or transfer of capital reserve fund into share capital	Not applicable

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

### (I) Relevant Incentive Events Disclosed in the Temporary Announcements and with no Progress or Change in Subsequent Implementation

Applicable  Not Applicable

### (II) Incentives which were not Disclosed in the Temporary Announcements or with Subsequent Progress

#### *Information on share incentive*

Applicable  Not Applicable

#### *Other explanations*

Applicable  Not Applicable

#### *Employee stock ownership plan*

Applicable  Not Applicable

#### *Other incentive measures*

Applicable  Not Applicable

# Section IV Corporate Governance

## V. INFORMATION ABOUT EMPLOYEES OF THE COMPANY AND THEIR REMUNERATIONS AND TRAININGS

During the reporting period, there was no significant change in the Company's total workforce, employee composition and their remunerations and trainings as compared with those disclosed in the 2021 annual report.

## VI. INFORMATION ABOUT CORPORATE GOVERNANCE

### (I) Corporate Governance Practice

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.

To ensure that the Company earnestly fulfills its duties and responsibilities under the SEHK Listing Rules, the Company has formulated effective corporate supervision structure and reviews and improves its internal control and corporate governance mechanism from time to time.

The Company also effectively carries out information disclosure and investor relations management and services in strict accordance with the Articles of Association, rules of procedures of special committees under the Board, the Company Law and relevant laws, regulations and regulatory documents, as well as requirements of the Hong Kong Stock Exchange.

During the reporting period, the Company has fully complied with all the principles and code provisions of the Corporate Governance Code set out in Appendix 14 to the SEHK Listing Rules.

### (II) 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 30 June 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/she/it 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 for Securities Transactions by Directors of Listed Issuers as contained in Appendix 10 to the SEHK Listing Rules (the "Model Code"), to be notified to the Company and the Hong Kong Stock Exchange.

### (III) 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"). Having made specific enquiry to all the Directors and supervisors, all of them have confirmed that they have complied with the standards as stipulated by the code of conduct for the period ended 30 June 2022.

# Section IV Corporate Governance

## (IV) 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.

## (V) Review of the Interim Report by the Audit Committee

The Audit Committee of the Company currently comprises five independent non-executive Directors, being Mr. Chan Kam Wing, Clement, Mr. Pao Ping Wing, Ms. Liu Chunru, Mr. Chen Xiaoming and Mr. Gao Feng. Mr. Chan Kam Wing, Clement serves as the chairman of the Audit Committee.

The Audit Committee of the Company has reviewed the Group's unaudited interim condensed consolidated financial statements and the interim report for the six months ended 30 June 2022 prepared under the PRC Accounting Standards, and was satisfied that the unaudited interim condensed consolidated financial statements and the interim report complied with applicable accounting standards, relevant regulatory and legal requirements, and sufficient disclosure has been made.

## (VI) Board of Directors

The Board currently comprises ten Directors, of whom Mr. Li Donglin is the chairman and an executive Director; Mr. Liu Ke'an is the vice chairman and an executive Director, Mr. Shang Jing and Mr. Yan Wu are executive Directors, Mr. Zhang Xinning is a non-executive Director, and Mr. Chan Kam Wing, Clement, Mr. Pao Ping Wing, Ms. Liu Chunru, Mr. Chen Xiaoming and Mr. Gao Feng are independent non-executive Directors.

## (VII) Subsequent Events

No other significant subsequent events occurred subsequent to 30 June 2022 and up to the date of this report.

# Section V Environmental and Social Responsibilities

## I. ENVIRONMENTAL INFORMATION

### (I) Explanation on Environmental Protection of Companies and their Major Subsidiaries Classified as the Key Pollutant Discharging Units Announced by the Environmental Protection Department

Applicable  Not Applicable

Zhuzhou CRRC Times Semiconductor Co., Ltd., a major subsidiary of the Company, has been 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

Zhuzhou CRRC Times Semiconductor Co., Ltd. entrusted third-party institutions with testing qualifications to conduct periodic testing of environmental pollution factors in each of the six months in the first half of 2022, and according to the testing results, all of its sewage was discharged up to standard and it satisfied 100% of the discharge standards. Besides, it disposed of hazardous wastes according to laws and regulations, and made declaration on Hunan Solid Waste Management Information Platform and generated the corresponding list. Zhuzhou CRRC Times Semiconductor Co., Ltd. paid the environmental tax in full in the first and second quarters of 2022.

Holder of sewage discharge permit	Issuer of sewage discharge permit	Sewage discharge permit management category	Total sewage generated from January to June 2022 (0'000 tons)	Reclaimed water reused from January to June 2022 (0'000 tons)	Sewage disposed of from January to June 2022 (0'000 tons)	Sewage discharged from January to June 2022 (0'000 tons)	Hazardous waste disposed of from January to June 2022 (ton)
Zhuzhou CRRC Times Semiconductor Co., Ltd.	Zhuzhou Ecological Environment Bureau	Management focus	46.52	4.52	46.52	46.52	435.92

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

Applicable  Not Applicable

During the first half of 2022, no new pollution prevention facilities of Zhuzhou CRRC Times Semiconductor Co., Ltd. were put into operation, and its existing pollution prevention facilities were under normal operation.

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

Applicable  Not Applicable

During the first half of 2022, Zhuzhou CRRC Times Semiconductor Co., Ltd. was not subject to environmental impact assessment for newly established, renovated or expanded construction projects. During the first half of 2022, Zhuzhou CRRC Times Semiconductor Co., Ltd. completed change of information contained in its sewage discharge permit. For details, please refer to the National Sewage Permit Management Information Platform.

# Section V Environmental and Social Responsibilities

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

Applicable  Not Applicable

Zhuzhou CRRC Times Semiconductor Co., Ltd. has completed the preparation of plans for unexpected environment-related issues and has filed the same with local ecological and environmental department. Besides, it also formulated the annual environmental emergency plan drill scheme, and regularly conducted emergency drills and assessment.

## 5. Self-monitoring environmental program

Applicable  Not Applicable

Zhuzhou CRRC Times Semiconductor Co., Ltd. has, in accordance with the State requirements on sewage discharge, entrusted third party institutions with testing qualifications to conduct environmental self-monitoring and issue testing reports.

## 6. Administrative penalties due to environmental issues during the reporting period

Applicable  Not Applicable

## 7. Other disclosable environmental information

Applicable  Not Applicable

## (II) Explanation on the Company's Environmental Protection Other Than Key Pollutant Discharging Unit

Applicable  Not Applicable

The Company and its subsidiaries subject to sewage discharge permits have regularly publicised environmental protection information on the National Sewage Permit Management Information Platform in accordance with State requirements on sewage discharge, discharged waste water, waste gas and noise in line with corresponding standards, and disposed of hazardous waste in compliance with laws and regulations. Besides, the pollutant prevention facilities were under normal operation. The Company and its subsidiaries paid the environmental tax in full in the first and second quarters of 2022. Set out below is the information regarding disposal of major pollutants of units subject to sewage permit simplified management:

Holder of sewage discharge permit	Issuer of sewage discharge permit	Sewage discharge permit management category	Total sewage generated from January to June 2022 (0'000 tons)	Sewage disposed of from January to June 2022 (0'000 tons)	Sewage discharged from January to June 2022 (0'000 tons)	Hazardous waste disposed of from January to June 2022 (ton)
Zhuzhou CRRC Times Electric Co., Ltd.	Zhuzhou Ecological Environment Bureau	Simplified management	7.8	7.8	7.8	24.59
Baoji CRRC Times Engineering Machinery Co., Ltd.	Baoji Ecological Environment Bureau Jintai Branch Bureau	Simplified management	1.6	1.6	1.6	18.58

# Section V Environmental and Social Responsibilities

## 1. Administrative penalties due to environmental issues

Applicable  Not Applicable

## 2. Disclosure of other environmental information with reference to key pollutant discharge units

Applicable  Not Applicable

Group members subject to simplified management and registration management of sewage discharge permit have regularly publicised environmental protection information on the National Sewage Permit Management Information Platform according to State requirements on sewage discharge permit.

## 3. Reasons for non-disclosure of other environmental information

Applicable  Not Applicable

## (III) Explanation on Subsequent Progress or Change of Environmental Information Disclosed During the Reporting Period

Applicable  Not Applicable

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

Applicable  Not Applicable

During the first half of 2022, all of the environmental pollutants generated by the Company were discharged according to standards and disposed of in compliance with regulations, thus effectively protecting the ecological environment. Meanwhile, the Company cooperated with local ecological and environmental authorities to launch outdoor legal knowledge publicising activity on the World Environment Day, in a bid to fulfill its environmental and social responsibilities.

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

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 unwavering 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 device, energy management, wind power generation and photovoltaic power generation, thereby contributing to energy conservation and carbon reduction. Besides, the Company conducted research into the railway traction energy dispatching system. The 6 MW energy dispatching device developed by the Company has been successfully put into operation in CR Taiyuan, which was based on the structure of the renewable energy storage system, significantly improves the quality of power supply system and comprehensive energy efficiency, and saves 15,000 kWh of electricity on average per day with utilisation rate of renewable energy exceeding 50%. The Company also plans to develop a three-level high-power wind-cooled doubly-fed wind power converter. It is estimated that a single converter can generate 8 MW of power per hour and 192 MWh per day under strong wind conditions, which will facilitate the high-power driven development of wind power new energy industry.

# Section V Environmental and Social Responsibilities

The Company has set up a leading group and working organisation to promote carbon peak and neutrality initiatives, facilitate the implementation of 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 in the first half of the year 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.

## II. DETAILS ON CONSOLIDATION AND EXPANSION OF ACHIEVEMENTS OF POVERTY ALLEVIATION AND INFORMATION ABOUT RURAL REVITALISATION

Applicable  Not Applicable

## 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

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	If the undertaking fails to be performed	If the undertaking fails to be performed	
Undertakings associated with the initial public offering	Restricted shares	CRRC Group	CRRC 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 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 losses 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 VI 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 explain the specific reasons for the failure
Restricted shares	CRRC ZEIRI, CRRC Zhuzhou, CRRC Investment & Leasing	CRRC ZEIRI, CRRC Zhuzhou, CRRC Investment & Leasing	CRRC ZEIRI, CRRC Zhuzhou and CRRC Investment & 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.	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 VI 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 explain the specific reasons for the failure
Restricted shares	CRCCCE	CRCCCE	CRCCCE 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'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	Beijing Maohuan	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 VI 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 explain the specific reasons for the failure
Others	CRRC ZEIRI, CRRC Zhuzhou, CRRC Investment & Leasing	CRRC ZEIRI, CRRC Zhuzhou and CRRC Investment & 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; 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 or 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 reduces its holding of Times Electric's A Shares in breach of the above undertakings, 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 has 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.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-	-

# Section VI Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	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 explain the specific reasons for the failure
Others	The Company, CRRC ZERI and the Company's Directors (excluding independent non-executive Directors) and senior management	The Company, CRRC ZERI (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><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 increases 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 Term: long-term effective</p>	Yes	Yes

# Section VI 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 explain the specific reasons for the failure
<b>II. Specific Measures of the Share Price Stabilisation Plan</b>								

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 RMB 100 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 explain the specific reasons for the failure
	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 RMB100 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.							

# Section VI 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	If the undertaking fails to be performed
			<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>					

# Section VI      Significant Events

# Section VI 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 explain the specific reasons for the failure
<b>III. Relevant Restraint Measures</b>								
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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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings		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
				Is there a term for performance	Time of undertakings			
Others	The Company		<p>4. If the controlling Shareholders, the Company, the Directors and senior management cannot fulfill their obligations of shareholding increase in A Shares or share a 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.</p>	Yes	Yes	-	-	-

  

The Company's Measures and Undertakings in respect of Share Repurchase and Share Buy-back		
The issuer has given the following undertakings in respect of share repurchase and share buy-back:		
1. 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.		
2. 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.		
3. 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:		

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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 explain the specific reasons for the failure

(1) 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.

(2) 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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Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings		Whether or not timely and strictly performed	Is there a term for performance	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 explain the specific reasons for the failure
				Time of undertakings	Term for performance				
Others	CRRC ZEERI	CRRC ZEERI has given the following undertakings in respect of share repurchase and share buy-back:	1. 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.  2. 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.  3. 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.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	Yes	-	-

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.

# Section VI 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	CRRC Group has given the following undertakings in respect of share repurchase and share buy-back.	1. 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.  2. 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 liability 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.	Time of undertakings: 28 December 2020  Term: long-term effective	Yes	Yes	-	-

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.

# Section VI Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings		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 explain the specific reasons for the failure
				Is there a term for performance	Time of undertakings			
Others	The Company	The Company has given the following undertakings in respect of no-fraud in the issuance and listing.	<ul 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> </ul>	Yes	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	-	-
Others	CRRC ZERI	CRRC ZERI has given the following undertakings in respect of no-fraud in the issuance and listing.	<ul 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> </ul>	Yes	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	-	-
Others	CRRC Group	CRRC Group has given the following undertakings in respect of no-fraud in the issuance and listing.	<ul 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> </ul>	Yes	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	-	-

# Section VI 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 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	CRRC ZERI		CRRC ZERI has given the following undertakings on the remedial measures for dilution of immediate returns in respect of the issue and listing:	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	—	—
			<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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 (《關於首發及再融資、重大資產重組等期初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 other shareholders of Times Electric, the company is willing to be liable for corresponding compensation liabilities according to law.</li> </ol>					

# Section VI Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	If there is 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 explain the specific reasons for the failure
Others	CRRC Group	CRRC Group has given the following undertakings on the remedial measures for dilution of immediate returns in respect of the issue and listing:	<p>1. 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.</p> <p>2. 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.</p> <p>3. 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 (《關於首發及再融資、重大資產重組擴大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.</p>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	Yes	-

# Section VI 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 explain the specific reasons for the failure
Others	The Directors and senior management of the Company	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>1. 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;</p> <p>2. undertake to restrict the post consumption behaviour of directors and senior management;</p> <p>3. undertake not to appropriate the Company's assets to engage in investment and consumption activities unrelated to the performance of their duties;</p> <p>4. 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;</p> <p>5. 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);</p> <p>6. 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;</p> <p>7. 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 supplemental(s) undertaking(s) in accordance with the provisions of the CSRC or the Shanghai Stock Exchange.</p>	Time of undertakings: 28 December 2020 Term: long-term effective	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 explain the specific reasons for the failure
Profit distribution	The Company	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.		Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-
Others	The Company	The Company 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 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. 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 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. 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 Company, the Company shall voluntarily and unconditionally abide by such requirements.	Time of undertakings: 28 December 2020 Term: long-term effective	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
				Time of undertakings:	Term: long-term effective				
Others	CRRC ZERI	CRRC ZERI has given the following undertakings in respect of compensation under the law or compensation liabilities:	<p>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 ZERI shall bear corresponding legal responsibilities for the authenticity, accuracy and completeness of the contents contained in the prospectus and other information disclosure materials.</p> <p>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 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 on the way or amount determined by the China Securities Regulatory Commission, Shanghai Stock Exchange or judicial authorities when the above situations actually occur.</p> <p>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 company, the company shall voluntarily and unconditionally abide by such requirements.</p>	28 December 2020	Yes	Yes	-	-	

# Section VI Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings	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 explain the specific reasons for the failure
					Is there a term for performance	Whether or not timely and strictly performed
Others	CRRC Group	CRRC Group has given the following undertakings in respect of compensation under the law or compensation liabilities:	<p>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.</p> <p>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.</p> <p>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.</p>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes

# Section VI Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings		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
				Is there a term for performance	Time of undertakings			
Others	Directors, supervisors and senior management of the Company	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, 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>	Yes	28 December 2020 Term: long-term effective	Yes	Yes	-

# Section VI 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 explain the specific reasons for the failure
				Time of undertakings	Term for performance				
Others	The Company	The Company agrees to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings.	1. 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.  2. 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:  (1) 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;  (2) The Company shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;  (3) 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;  (4) 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;  (5) Other measures available for adoption according to the then prevailing regulations.	28 December 2020	Term: long-term effective	Yes	Yes	-	-

# Section VI 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 explain the specific reasons for the failure
Others	CRRC ZEERI	CRRC ZEERI agrees to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings.	1. 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.  2. 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:  (1) 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;  (2) The company shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;  (3) 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;  (4) Other measures available for adoption according to the then prevailing regulations.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VI Significant Events

Background of undertakings	Category of undertakings	Party providing undertakings	Contents of undertakings	Time and term of undertakings		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 explain the specific reasons for the failure
				Is there a term for performance	Time of undertakings			
Others	CRRC Group	CRRC Group	CRRC Group agrees to take the following restrictive measures in case that it fails to fulfill the relevant public undertakings.	Yes	Yes	Yes	-	-

28 December 2020  
Term: long-term effective

1. 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.

2. 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:

- (1) 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;
- (2) The group shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;
- (3) 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;
- (4) Other measures available for adoption according to the then prevailing regulations.

# Section VI 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 explain the specific reasons for the failure
Others	Directors, supervisors and senior management of the Company	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> <p>1. 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.</p> <p>2. Where the relevant undertakings made publicly by me in the prospectus do not contain restrictive measures and fail to fully or effectively fulfill such undertakings due to reasons other than force majeure, I agree to adopt the following restrictive measures:</p> <ul style="list-style-type: none"> <li>(1) 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>(2) I shall assume corresponding responsibilities in accordance with the provisions of relevant laws and regulations and the requirements of regulatory authorities;</li> <li>(3) 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>(4) 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>(5) Other measures available for adoption according to the then prevailing regulations.</li> </ul>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VI      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 explain the specific reasons for the failure
Others	CRRC ZEIRI	CRRC ZEIRI has given the following undertakings in respect of avoiding appropriation of funds:	1. 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.  2. 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.  3. 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.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VI 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 explain the specific reasons for the failure
Others	CRRC Group	CRRC Group has given the following undertakings in respect of avoiding appropriation of funds:	1. 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.  2. 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.  3. 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.	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VI 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 explain the specific reasons for the failure
				Time of undertakings	Term: long-term effective				
Related Party Transactions	CRRC ZEERI	CRRC ZEERI has given the undertakings in respect of regulating related party transactions, details of which are as follows:	1. 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.  2. 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.  3. 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.  4. 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.	28 December 2020	Yes	Yes	Yes	-	-

# Section VI 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 explain the specific reasons for the failure
Related Party Transactions	CRRC Group	CRRC Group has given the undertakings in respect of regulating related party transactions, details of which are as follows:	<p>1. 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.</p> <p>2. 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.</p> <p>3. 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.</p> <p>4. 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.</p>	Time of undertakings: 28 December 2020 Term: long-term effective	Yes	Yes	-	-

# Section VI 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	Explain the specific reasons for the failure	If the plan in the next step
					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 explain the specific reasons for the failure	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 explain the specific reasons for the failure
Non-competition undertakings	CRRC Group	CRRC Group has given the undertakings in respect of non-competition, details of which are as follows:	1. The group is a wholly state-owned company established on the basis of former China Northern Locomotive & Rolling Stock Industry (Group) Corporation (中國北方機車車輛工業集團公司). There is certain business overlapping between the holding company of former China Northern Locomotive & 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.  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.	Time of undertakings: 20 December 2020  Term: the letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when CRRC 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.	Yes	Yes	-	-

# Section VI 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
Non-competition undertakings	CRRC ZERI	CRRC ZERI has given the undertakings in respect of non-competition, details of which are as follows:	<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>	Time of undertakings: 20 December 2020 Term: the letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when CRRC ZERI 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.	Yes	Yes	-	-
Non-competition undertakings	CRRC ZERI	CRRC ZERI has given the undertakings in respect of non-competition, details of which are as follows:	<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>	Time of undertakings: 20 December 2020 Term: the letter of undertakings takes effect from the date of issuance, and will continue to be effective during the period when CRRC ZERI 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.	Yes	Yes	-	-

# Section VI      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 explain the specific reasons for the failure
Other Undertakings	Non-competition undertakings	CRRC	<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>	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	–	–
Other Undertakings	Non-competition undertakings	CRRC	In respect of the undertaking of non-competition with Zhezhou 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.	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 VI Significant Events

## 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. AUDIT OF INTERIM REPORT

Applicable Not applicable

## V. CHANGES AND TREATMENT OF MATTERS SUBJECT TO NON-STANDARD AUDIT OPINIONS IN LAST YEAR'S ANNUAL REPORT

Applicable Not applicable

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

Applicable Not applicable

## VII. MATERIAL LITIGATION AND ARBITRATION MATTERS

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

## VIII. INFORMATION ON BREACH OF LAWS 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

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

Applicable Not applicable

# Section VI      Significant Events

## X. MAJOR CONTRACTS AND THEIR PERFORMANCE

## (I) Entrustment, contracting and leasing matters

Applicable  Not applicable

**(II) Major guarantees performed and outstanding during the reporting period**

Applicable  Not applicable

Unit: Yuan Currency: RMB

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

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

Guarantees provided by the Company and its subsidiaries for subsidiaries														
Guarantor	Relationship between the guarantor and the listed company		Relationship between the guaranteed party and the listed company		Amount guaranteed	Date of guarantee (date of agreement)	Commencement date of guarantee	Expiry date of guarantee	Type of guarantee	Whether the guarantee has been performed		Overdue	Amount overdue	Whether there is counter guarantee
	Guaranteed party	Guarantor	Relationship between the guaranteed party and the listed company	Amount guaranteed	Date of guarantee (date of agreement)	Commencement date of guarantee	Expiry date of guarantee	Type of guarantee	has been performed	Overdue				
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	CRRC Times Electric Australia Pty Ltd	Wholly-owned subsidiary	55,374,000.00	2021/10/12	2021/10/12	2022/10/11	Joint liability guarantee	No	No	0	No		
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	CRRC Times Electric (Hong Kong) Co., Limited	Wholly-owned subsidiary	85,519,000.00	2021/10/12	2021/10/12	2022/10/11	Joint liability guarantee	No	No	0	No		
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	Dynex Semiconductor Ltd	Wholly-owned subsidiary	122,047,500.00	2021/10/12	2021/10/12	2022/10/11	Joint liability guarantee	No	No	0	No		
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	Specialist Machine Developments (SMD) Limited	Wholly-owned subsidiary	244,095,000.00	2021/10/12	2021/10/12	2022/10/11	Joint liability guarantee	No	No	0	No		
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	Specialist Machine Developments (Shanghai) Co., Ltd.	Wholly-owned subsidiary	10,286,792.20	2021/12/6	2021/12/6	2023/12/31	Joint liability guarantee	No	No	0	No		
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	Specialist Machine Developments (Shanghai) Co., Ltd.	Wholly-owned subsidiary	65,513,092.60	2021/12/6	2021/12/6	2022/12/31	Joint liability guarantee	No	No	0	No		
Zhuzhou CRRC Times Electric Co., Ltd.	The Company	CRRC Times Electric Australia Pty Ltd	Wholly-owned subsidiary	8,306,100.00	2022/1/1	2022/1/1	2022/12/31	Joint liability guarantee	No	No	0	No		
Total guarantee to subsidiaries incurred during the reporting period												8,306,100.00		
Total balance of guarantee to subsidiaries as at the end of the reporting period (8)												591,141,484.80		

# Section VI Significant Events

## Aggregate guarantee of the Company (including those provided to subsidiaries)

Aggregate guarantee (A+B)	591,141,484.80
Percentage of aggregate guarantee to net assets of the Company (%)	1.80
Representing:	
Amount of guarantee provided for shareholders, actual controller and related parties (C)	Not applicable
Amount of debt guarantee directly or indirectly provided to guaranteed parties with gearing ratio over 70% (D)	469,093,984.80
Excess amount of aggregate guarantee over 50% of net assets (E)	Not applicable
Aggregate amount of the above three categories (C+D+E)	469,093,984.80
Description of the contingent joint and several repayment liability in connection with unexpired guarantee	Not applicable
Description of guarantee	The guarantees provided to subsidiaries were considered and approved at the 20th meeting of the sixth session of the Board on 29 March 2022.

## (III) Others material contracts

Applicable Not applicable

## XI. EXPLANATION ON PROGRESS IN USE OF PROCEEDS

Applicable Not applicable

### (I) Overall utilisation of proceeds

Applicable Not applicable

Unit: Yuan Currency: RMB

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 (1)	Progress of accumulated investment as of the end of the reporting period (%)	Investment amount for the period (4)	Percentage of investment amount for the period (%)	
					(3)=(2)/(1)	(5)=(4)/(1)		
Initial public issue on the STAR Market	7,555,057,430	7,443,212,046	7,443,212,046	7,443,212,046	2,759,880,053	37.08	883,450,840	11.87

# Section VI Significant Events

## (II) Particulars of investment projects

Applicable Not applicable

Unit: Yuan Currency: RMB

Name of project	Change of the project or not	Source of proceeds	Total promised investment amounts of proceeds for project	Total promised investment amounts of proceeds after adjustments (1)	Total accumulated investment amount of proceeds as of the end of the reporting period (2)	Progress of accumulated investment as of the end of the reporting period (%)	Date of the projects becoming ready for intended use	Whether the project is completed or not	Whether the progress of investment 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 change significantly, if any, please state specific reason	Amount of and reason for balance	Expected timetable for using the unutilised proceeds
			(3)=(2)/(1)											
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	555,998,646	26.53	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable	2024
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	123,264,821	11.51	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable	2023
Advanced technology R&D application project of new industry	No	Initial public issue on the STAR Market	869,270,000	869,270,000	189,180,916	21.76	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable	2024
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	170,456,465	21.31	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable	2023
Innovative experimental platform construction project	No	Initial public issue on the STAR Market	931,000,000	931,000,000	39,618,619	4.26	Not ready yet	No	Not applicable	Not applicable	Not applicable	No	Not applicable	2024
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	Not applicable
Total			7,766,600,000	7,443,212,046	2,759,880,053	37.08								

## (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 swap of raised funds

Applicable Not applicable

# Section VI Significant Events

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:

Unit: Yuan Currency: RMB

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	5,766,600,000.00	780,193,985.74	780,193,985.74

# Section VI 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:

Unit: Yuan Currency: RMB

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 14th meeting of the sixth session of the Board and the 13th meeting of the sixth session of the Supervisory Committee held on 27 September 2021, 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 RMB4,700 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 VI 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 30 June 2022, the cash management products yet falling due were as follows:

Bank for deposit	Product type	Maturity date	Term of deposit	Balance (RMB)
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	10 October 2022	376 days	605,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	1 July 2022	274 days	39,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	1 July 2022	274 days	39,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	30 September 2022	365 days	344,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	30 September 2022	365 days	344,000,000
China Construction Bank Zhuzhou Tianxin Branch	Structured deposit	11 July 2022	274 days	75,000,000
China Construction Bank Zhuzhou Tianxin Branch	Structured deposit	11 October 2022	366 days	268,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	1 July 2022	275 days	6,500,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	1 July 2022	275 days	6,500,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	30 September 2022	366 days	18,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	30 September 2022	366 days	18,000,000
China Construction Bank Zhuzhou Tianxin Branch	Structured deposit	19 July 2022	274 days	26,000,000
China Construction Bank Zhuzhou Tianxin Branch	Structured deposit	19 October 2022	366 days	50,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	24 October 2022	273 days	50,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	24 October 2022	273 days	50,000
Bank of China Zhuzhou Branch	Structured deposit	12 August 2022	186 days	34,000,000
Bank of China Zhuzhou Branch	Structured deposit	12 August 2022	186 days	36,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	15 November 2022	274 days	35,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	15 November 2022	274 days	35,000,000

# Section VI Significant Events

Bank for deposit	Product type	Maturity date	Term of deposit	Balance (RMB)
China Merchants Bank Zhuzhou Branch	Structured deposit	7 July 2022	91 days	100,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	7 July 2022	91 days	100,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	7 July 2022	91 days	120,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	7 July 2022	91 days	120,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	13 July 2022	92 days	40,000,000
China Construction Bank Zhuzhou Tianxin Branch	Structured deposit	8 October 2022	183 days	20,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	30 January 2023	276 days	25,000,000
Bank of Changsha Zhuzhou Tianxin Branch	Structured deposit	30 January 2023	276 days	25,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	12 August 2022	94 days	100,000,000
Industrial and Commercial Bank of China Tianxin Branch	Structured deposit	13 February 2023	279 days	100,000,000
China CITIC Bank Zhuzhou Jianshe Middle Road Branch	Structured deposit	23 September 2022	91 days	1,350,000,000
China CITIC Bank Zhuzhou Jianshe Middle Road Branch	Structured deposit	23 September 2022	91 days	100,000,000
Bank of China Zhuzhou Branch	Structured deposit	23 September 2022	95 days	11,000,000
Bank of China Zhuzhou Branch	Structured deposit	23 September 2022	95 days	9,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	22 September 2022	92 days	40,000,000
China Merchants Bank Zhuzhou Branch	Structured deposit	22 September 2022	92 days	120,000,000
Agricultural Bank of China Zhuzhou High-tech Development Zone Branch	Certificate of deposit	On demand	1095 days	66,000,000
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
Total				4,445,100,000

#### **4. Permanently supplement liquidity or repay bank loans with over-raised proceeds**

Applicable Not applicable

#### **5. Others**

Applicable Not applicable

## **XII. EXPLANATION OF OTHER SIGNIFICANT EVENTS**

Applicable Not applicable

# Section VI Significant Events

## APPOINTMENT AND REMOVAL OF ACCOUNTING FIRMS

Pursuant to the relevant regulations of the Ministry of Finance of the PRC and the State-owned Assets Supervision and Administration Commission of the State Council of the PRC (the "SASAC"), 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 Zhuzhou CRRC Times Electric Co., Ltd (i.e. 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 account the business development of the Company and the need for annual audit, the Company proposed the change of auditor. Upon consideration and approval at the Company's 2021 annual general meeting held on 17 June 2022, the Company engaged KPMG Huazhen as its auditor for year 2022.

# Section VII 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 of shares	Percentage (%)	New shares	Bonus shares	Reserve transferred to shares	Others	Subtotal	Number of shares	Percentage (%)
<b>I. Shares subject to trading</b>									
<b>moratorium</b>	703,896,963	49.70	-	-	-	(10,599,544)	(10,599,544)	693,297,419	48.95
1. State-owned shares	-	-	-	-	-	-	-	-	-
2. State-owned legal person shares	640,101,305	45.20	-	-	-	2,872,000	2,872,000	642,973,305	45.40
3. Other domestic shareholding	63,788,283	4.50	-	-	-	(13,464,169)	(13,464,169)	50,324,114	3.55
Of which: Domestic non-state-owned legal person shares	63,788,283	4.50	-	-	-	(13,464,169)	(13,464,169)	50,324,114	3.55
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>									
<b>to trading moratorium</b>	712,339,949	50.30	-	-	-	10,599,544	10,599,544	722,939,493	51.05
1. RMB ordinary shares	165,010,549	11.65	-	-	-	10,599,544	10,599,544	175,610,093	12.40
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>	<b>1,416,236,912</b>	<b>100.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>1,416,236,912</b>	<b>100.00</b>

#### 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](http://www.sse.com.cn)) on 26 February 2022 (Ann No. 2022-008).

Save for the release of restricted shares stated above, shares of the Company subject to trading moratorium decreased by 555,900, which was due to lending of shares by the shareholders pursuant to the Implementation Rules on Refinancing and Lending Shares for Securities Financing Business of the STAR Market, and in line with the requirements of relevant laws and regulations.

# Section VII Changes in Shares and Particulars of Shareholders

- 3. The impact of changes in shares on financial indicators such as earnings per share and net assets per share during the period subsequent to the end of the reporting period and up to the date of this interim report (if any)**

Applicable Not applicable

- 4. Other disclosure 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 reporting period	Number of shares released from trading moratorium for the reporting period	Number of new shares subject to trading moratorium for the reporting period	Number of shares subject to trading moratorium at the end of the reporting period	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	0	0	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	0	0	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	0	0	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	0	0	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－北京懋恒軌道交通產業投資管理合夥企業(有限合夥))	9,380,769	0	0	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

# Section VII Changes in Shares and Particulars of Shareholders

Name of shareholders	Number of shares subject to trading moratorium at the beginning of the reporting period	Number of shares released from trading moratorium for the reporting period	Number of new shares subject to trading moratorium for the reporting period	Number of shares subject to trading moratorium at the end of the reporting period	Reason for the trading moratorium	Date of release from trading moratorium
Yingda Securities Co., Ltd. (英大證券有限公司)	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
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 STAR Market (中金公司－農業銀行－中金公司時代電氣1號員工參與科創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 STAR Market (中金公司－農業銀行－中金公司時代電氣2號員工參與科創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 STAR Market (中金公司－農業銀行－中金公司時代電氣3號員工參與科創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

# Section VII Changes in Shares and Particulars of Shareholders

Name of shareholders	Number of shares subject to trading moratorium at the beginning of the reporting period	Number of shares released from trading moratorium for the reporting period	Number of new shares subject to trading moratorium for the reporting period	Number of shares subject to trading moratorium at the end of the reporting period	Reason for the trading moratorium	Date of release from trading moratorium
CICC – Agricultural Bank of China – CICC Times Electric No. 4 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣4號員工參與科創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
CICC – Agricultural Bank of China – CICC Times Electric No. 6 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣6號員工參與科創板戰略配售集合資產管理計劃)	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 STAR Market (中金公司－農業銀行－中金公司時代電氣8號員工參與科創板戰略配售集合資產管理計劃)	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 places	10,043,644	10,043,644	-	-	Strategic placement on initial public issue	7 March 2022
Total	<u>710,418,963</u>	<u>10,043,644</u>	<u>-</u>	<u>700,375,319</u>	/	/

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., CICC – Agricultural Bank of China – CICC Times Electric No. 1 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣1號員工參與科創板戰略配售集合資產管理計劃), CICC – Agricultural Bank of China – CICC Times Electric No. 2 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣2號員工參與科創板戰略配售集合資產管理計劃), CICC – Agricultural Bank of China – CICC Times Electric No. 3 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣3號員工參與科創板戰略配售集合資產管理計劃), CICC – Agricultural Bank of China – CICC Times Electric No. 6 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣6號員工參與科創板戰略配售集合資產管理計劃), CICC – Agricultural Bank of China – CICC Times Electric No. 8 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣8號員工參與科創板戰略配售集合資產管理計劃) and China CICC Wealth Management Securities Company Limited pursuant to the Implementation Rules on Refinancing and Lending Shares for Securities Financing Business of the STAR Market, which complied with the requirements of relevant laws and regulations.

# Section VII Changes in Shares and Particulars of Shareholders

## II. SHAREHOLDERS

### (I) Total Number of Shareholders:

Total number of ordinary shareholders as at the end of the reporting period (account)	19,778
Total number of shareholders of preference shares with restored voting rights as at the end of the reporting period (account)	-
Total number of shareholders holding shares with special voting rights as at the end of the reporting period (account)	-

Note: As at the end of the reporting period, the Company had 18,674 A shareholders and 1,104 registered H shareholders.

### Numbers of depositary receipt holders

Applicable Not applicable

### (II) Particulars of Shareholdings of the Top Ten Shareholders and the Top Ten Shareholders Not Subject to Trading Moratorium as at the End of the Reporting Period

#### Particulars of shareholdings of the top ten Shareholders through ordinary securities accounts and client credit trading guarantee securities accounts of securities companies

Applicable Not applicable

Unit: Share

Name of shareholders (full name)	Particulars of shareholdings of the top ten shareholders						Status of shares	Number of shares	Nature of shareholders
	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			
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	No	-	-	State-owned legal person
HKSCC NOMINEES LIMITED	3,599	545,933,166	38.55	-	-	Unknown	-	-	Overseas legal person
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)	2,600,000	23,600,000	1.67	-	-	No	-	-	Unknown

# Section VII Changes in Shares and Particulars of Shareholders

Name of shareholders (full name)	Particulars of shareholdings of the top ten shareholders						Number of restricted shares	Number of shares including lending shares for securities financing	Shares pledged, marked or frozen	Status of shares	Number of shares	Nature of shareholders
	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								
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	No	-	-	State-owned legal person	-	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	9,800,000	9,800,000	No	-	-	State-owned legal person	-	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	No	-	-	State-owned legal person	-	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))	-	9,380,769	0.66	9,380,769	9,380,769	No	-	-	Other	-	Other	
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)	1,590,100	6,630,632	0.47	6,630,632	8,285,532	No	-	-	State-owned legal person	-	State-owned legal person	
Hong Kong Securities Clearing Company Limited	3,630,589	5,630,121	0.40	-	-	Unknown	-	-	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)	-	5,258,156	0.37	-	-	No	-	-	Unknown	-	Unknown	

# Section VII Changes in Shares and Particulars of Shareholders

Name of shareholder	Particulars of shareholdings of the top ten shareholders not subject to trading moratorium		
	Number of shares held not subject to trading moratorium	Class and number of shares	Number
	Class		
HKSCC NOMINEES LIMITED <small>Note 1</small>	545,933,166	Overseas listed foreign shares	545,933,166
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)	23,600,000	RMB ordinary shares	23,600,000
Hong Kong Securities Clearing Company Limited	5,630,121	RMB ordinary shares	5,630,121
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)	5,258,156	RMB ordinary shares	5,258,156
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)	3,109,897	RMB ordinary shares	3,109,897
China Merchants Bank Co., Ltd – Oriental Alpha Advantageous Industry Hybrid Initiated Securities Investment Fund (招商銀行股份有限公司－東方阿爾法優勢產業混合型發起式證券投資基金)	2,929,826	RMB ordinary shares	2,929,826
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)	2,263,787	RMB ordinary shares	2,263,787
China Construction Bank Corporation Limited – efunds STAR Two-year Periodic Opening Hybrid Securities Investment Fund (中國建設銀行股份有限公司－易方達科創板兩年定期開放混合型證券投資基金)	2,220,791	RMB ordinary shares	2,220,791
Shanghai Pudong Development Bank Co., Ltd. – Invesco Great Wall New Energy Industry Stock Securities Investment Fund (上海浦東發展銀行股份有限公司－景順長城新能源產業股票型證券投資基金)	1,921,649	RMB ordinary shares	1,921,649
Bank of Communications Co., Ltd.– Bosera Emerging Growth Hybrid Securities Investment Fund (交通銀行股份有限公司－博時新興成長混合型證券投資基金)	1,886,948	RMB ordinary shares	1,886,948
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.		
Explanation on the preference shareholders with voting right restored and their shareholdings	Save as aforementioned, the Company is not aware whether the other shareholders have related party relationship or acting-in-concert arrangement. Not applicable		

# Section VII Changes in Shares and Particulars of Shareholders

**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	CRCC High-Tech Equipment Corporation Limited (中國鐵建高新裝備股份有限公司)	9,800,000	7 September 2022	-	12 months from the date on which the Company's shares are listed on the SSE
4	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
5	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))	9,380,769	7 September 2022	-	12 months from the date on which the Company's shares are listed on the SSE
6	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)	6,630,632	7 September 2023	-	24 months from the date on which the Company's shares are listed on the SSE
7	CICC – Agricultural Bank of China – CICC Times Electric No. 3 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣3號員工參與科創板戰略配售集合資產管理計劃)	4,394,637	7 September 2022	-	12 months from the date on which the Company's shares are listed on the SSE
8	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
9	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
10	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
11	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
12	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
13	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. and CICC – Agricultural Bank of China – CICC Times Electric No. 3 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market (中金公司－農業銀行－中金公司時代電氣3號員工參與科創板戰略配售集合資產管理計劃) were 8,285,532 and 4,609,837, respectively, and the difference between 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 STAR Market.

# Section VII 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)	7 September 2021	–
Explanation on the agreed term of shareholding of strategic investors or general legal persons participating in the placing of the new shares	Nil	

## III INTERESTS AND SHORT POSITIONS OF SUBSTANTIAL SHAREHOLDERS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

As at 30 June 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 shares of the Company
CRRC ZELRI	A Shares	589,585,699 (Long position)	Beneficial owner	67.85%	–	41.63%
CRRC (Note 1)	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%

# Section VII 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 shares of the Company
CRRC 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%
CRRC Hong Kong Capital Management Co., Limited	H Shares	41,520,000 (Long position)	Interest in controlled entity	–	7.59%	2.93%
Citigroup Inc	H Shares	17,063,150 (Long position)	Interest in controlled entity	–	3.12%	1.20%
	H Shares	1,617,100 (Short position)	Interest in controlled entity	–	0.30%	0.11%
	H Shares	22,138,452 (Lending pool shares – Long position)	Approved lending agent	–	4.04%	1.56%
Vontobel Asset Management AG	H Shares	33,112,400 (Long position)	Investment manager	–	6.05%	2.34%
Brown Brothers Harriman & Co.	H Shares	27,451,108 (Long position)	Approved lending agent	–	5.02%	1.94%

Notes: As at 30 June 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. CRRC is interested in 100% of the registered capital of CRRC ZELRI, CRRC Zhuzhou and CRRC Investment & Leasing Co., Ltd.. Accordingly, CRRC is deemed under the SFO to be interested in the shares held by each of CRRC ZELRI, CRRC Zhuzhou and CRRC Investment & Leasing Co., Ltd.. CRRC is interested in 41,520,000 H Shares through CRRC Hong Kong Capital Management Co., Limited, a wholly-owned subsidiary of CRRC.
2. CRRC Group is directly and indirectly interested in 51.35% of the shares of CRRC. Accordingly, CRRC Group is deemed under the SFO to be interested in the shares held by CRRC.

Save as disclosed above, as at 30 June 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 VII Changes in Shares and Particulars of Shareholders

## IV. INFORMATION OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND CORE TECHNICIANS

### (I) Changes in Shareholding of Current and Resigned Directors, Supervisors, Senior Management and Core Technicians During the Reporting Period

Applicable Not applicable

Unit: Share

Name	Position	Number of shares held as at the beginning of the period	Number of shares held as at the end of the period	Change of shares during the reporting period	Reason for change
He Wen	Core technician	0	1,065	1,065	Acquisition in the secondary market

#### *Other explanations*

Applicable Not applicable

During the reporting period, there was no change in the indirect shareholding of Directors, supervisors, senior management and core technicians of the Company. As of 30 June 2022, as each of Shang Jing, Yan Wu, Mei Wenqing, Yi Weihua, Cao Weichen, Wang Yeliu, Lv Yang, Liu Liangjie, Zhang Dinghua, Zhang Min, He Wen and Liu Yongjiang held 2.07% interest in the No. 1 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market of Times Electric managed by CICC (the "No. 1 Asset Management Plan of Times Electric"), Li Peng held 1.38% interest in the No. 1 Asset Management Plan of Times Electric, and each of Niu Jie, Tan Yongneng, Yan Changqi, Gong Tong, Yu Kang, Liu Zehua, Xu Shaolong, Zhu Hongjun, Zhang Dongfang and Liu Yong held 2.06% interest in the No. 3 Collective Asset Management Plan for Employees' Participation in Strategic Placement on the STAR Market of Times Electric managed by CICC (the "No. 3 Asset Management Plan of Times Electric"), they therefore indirectly held interest in the shares of the Company. 4,598,422 shares were issued for the purpose of the No. 1 Asset Management Plan of Times Electric upon strategic placement, and 4,609,837 shares were issued for the purpose of the No. 3 Asset Management Plan of Times Electric upon strategic placement. The shares of the Company held under the above-mentioned asset management plans are subject to a lock-up period of 12 months commencing from the date the publicly issued shares were listed on the SSE.

# Section VII Changes in Shares and Particulars of Shareholders

## (II) The Equity Incentives Granted to the Directors, Supervisors, 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

## (III) Other Explanations

Applicable Not applicable

## V. CHANGES IN THE CONTROLLING SHAREHOLDER OR ACTUAL CONTROLLER

Applicable Not applicable

## VI. IMPLEMENTATION AND CHANGES OF ARRANGEMENTS RELATED TO DEPOSITORY RECEIPTS DURING THE REPORTING PERIOD

Applicable Not applicable

## VII. SHARES WITH SPECIAL VOTING RIGHTS

Applicable Not applicable

## Section VIII Preference Shares

Applicable Not applicable

# Section IX 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

# Section X Financial Report

## I. AUDITOR'S REPORT

Applicable  Not applicable

## II. FINANCIAL STATEMENTS

### Consolidated Balance Sheet

30 June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	Note	30 June 2022	31 December 2021
<b>Current assets</b>			
Cash and bank balances	VII、1	<b>4,305,691,365</b>	8,219,320,889
Held-for-trading financial assets	VII、2	<b>9,294,891,435</b>	7,579,988,489
Bills receivable	VII、3	<b>3,233,365,438</b>	2,757,119,757
Trade receivables	VII、4	<b>8,170,463,732</b>	6,549,417,025
Trade receivables financing	VII、5	<b>2,427,531,774</b>	2,910,527,667
Prepayments	VII、6	<b>449,285,237</b>	344,522,352
Other receivables	VII、7	<b>261,547,764</b>	199,941,167
Including: Interest receivable		—	—
Dividends receivable		<b>90,000</b>	90,000
Inventories	VII、8	<b>6,066,214,607</b>	4,921,087,633
Contract assets	VII、9	<b>275,035,808</b>	308,318,797
Non-current assets due within one year	VII、10	<b>207,562,564</b>	—
Other current assets	VII、11	<b>386,694,680</b>	852,738,172
<b>Total current assets</b>		<b>35,078,284,404</b>	<u>34,642,981,948</u>

# Section X Financial Report

ITEM	Note	30 June 2022	31 December 2021
<b>Non-current assets</b>			
Long-term receivables		<b>2,587,927</b>	4,027,705
Long-term equity investments	VII、12	<b>537,768,330</b>	611,727,358
Other equity instrument investments	VII、13	<b>117,400,000</b>	112,400,000
Fixed assets	VII、14	<b>4,494,519,528</b>	3,964,429,248
Construction in progress	VII、15	<b>544,892,149</b>	921,284,020
Right-of-use assets	VII、16	<b>130,978,750</b>	129,873,626
Intangible assets	VII、17	<b>652,061,737</b>	713,241,582
Development expenditure	VII、18	<b>388,935,798</b>	366,577,298
Goodwill	VII、19	<b>199,268,932</b>	191,115,323
Long-term prepaid expenses	VII、20	<b>38,029,270</b>	40,688,040
Deferred tax assets	VII、21	<b>662,391,679</b>	605,752,717
Other non-current assets	VII、22	<b>3,114,965,170</b>	1,846,646,362
<b>Total non-current assets</b>		<b>10,883,799,270</b>	9,507,763,279
<b>Total assets</b>		<b>45,962,083,674</b>	44,150,745,227
<b>Current liabilities</b>			
Short-term borrowings	VII、23	<b>338,714,677</b>	389,550,036
Held-for-trading financial liabilities		<b>4,615,657</b>	–
Bills payable	VII、24	<b>2,032,101,089</b>	1,640,341,546
Trade payables	VII、25	<b>5,321,798,508</b>	4,677,716,033
Contract liabilities	VII、26	<b>748,515,658</b>	828,709,519
Employee benefits payable	VII、27	<b>276,808,019</b>	143,687,549
Taxes payable	VII、28	<b>126,071,351</b>	190,170,858
Other payables	VII、29	<b>1,499,851,716</b>	753,174,560
Including: Interest payable		–	–
Dividends payable		<b>637,306,610</b>	–
Non-current liabilities due within 1 year	VII、30	<b>392,323,382</b>	428,664,506
Other current liabilities	VII、31	<b>90,517,403</b>	99,227,805
<b>Total current liabilities</b>		<b>10,831,317,460</b>	9,151,242,412

# Section X Financial Report

ITEM	Note	30 June 2022	31 December 2021
<b>Non-current liabilities</b>			
Long-term borrowings	VII、32	<b>75,188,000</b>	77,688,000
Lease liabilities	VII、33	<b>81,615,650</b>	78,253,791
Long-term payables	VII、34	<b>78,611</b>	525,195
Provisions	VII、35	<b>468,359,690</b>	521,713,812
Deferred income	VII、36	<b>846,170,881</b>	976,067,861
Deferred tax liabilities	VII、21	<b>43,480,410</b>	32,201,270
Other non-current liabilities		<b>15,829,186</b>	20,408,448
<b>Total non-current liabilities</b>		<b>1,530,722,428</b>	1,706,858,377
<b>Total liabilities</b>		<b>12,362,039,888</b>	10,858,100,789
<b>Owners'(Shareholders') equity</b>			
Paid-in capital (Share capital)	VII、37	<b>1,416,236,912</b>	1,416,236,912
Capital reserve	VII、38	<b>10,519,465,513</b>	10,519,465,513
Other comprehensive income	VII、39	<b>(168,883,741)</b>	(208,084,629)
Special reserve	VII、40	<b>36,424,843</b>	30,785,734
Surplus reserve	VII、41	<b>2,545,778,284</b>	2,545,778,284
Retained earnings	VII、42	<b>18,550,466,840</b>	18,316,811,951
<b>Total equity attributable to owners (shareholders) of the Parent</b>		<b>32,899,488,651</b>	32,620,993,765
<b>Non-controlling interests</b>		<b>700,555,135</b>	671,650,673
<b>Total owners'(shareholders') equity</b>		<b>33,600,043,786</b>	33,292,644,438
<b>Total liabilities and (owners') shareholders' equity</b>		<b>45,962,083,674</b>	44,150,745,227

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## The Company's Balance Sheet

30 June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	Note	30 June 2022	31 December 2021
<b>Current assets</b>			
Cash and bank balances		<b>1,957,564,843</b>	5,514,146,561
Held-for-trading financial assets		<b>8,371,758,839</b>	6,624,150,077
Bills receivable		<b>2,925,521,956</b>	2,450,742,139
Trade receivables	XVII 、 1	<b>7,047,964,075</b>	4,878,414,970
Trade receivables financing		<b>1,628,658,156</b>	2,301,829,596
Prepayments		<b>265,499,012</b>	176,060,834
Other receivables	XVII 、 2	<b>671,018,521</b>	754,644,349
Including: Interest receivable		—	—
Dividends receivable		<b>255,406,181</b>	242,006,181
Inventories		<b>4,010,232,581</b>	3,516,881,961
Contract assets		<b>101,070,687</b>	78,976,234
Non-current assets due within one year		<b>213,657,114</b>	—
Other current assets		<b>134,368,654</b>	626,036,437
<b>Total current assets</b>		<b>27,327,314,438</b>	26,921,883,158
<b>Non-current assets</b>			
Long-term receivables		<b>1,890,538,630</b>	1,858,637,704
Long-term equity investments	XVII 、 3	<b>6,030,375,175</b>	6,037,237,536
Other equity instrument investments		<b>117,400,000</b>	112,400,000
Fixed assets		<b>2,850,145,543</b>	2,192,500,738
Construction in progress		<b>398,339,341</b>	826,575,159
Right-of-use assets		<b>39,313,742</b>	45,910,923
Intangible assets		<b>245,157,785</b>	270,815,456
Development expenditure		<b>263,645,169</b>	238,978,574
Long-term prepaid expenses		<b>10,639,265</b>	11,520,121
Deferred tax assets		<b>266,317,097</b>	266,660,119
Other non-current assets		<b>2,842,877,193</b>	1,543,741,355
<b>Total non-current assets</b>		<b>14,954,748,940</b>	13,404,977,685
<b>Total assets</b>		<b>42,282,063,378</b>	40,326,860,843

# Section X Financial Report

ITEM	Note	30 June 2022	31 December 2021
<b>Current liabilities</b>			
Short-term borrowings		<b>30,980,928</b>	–
Held-for-trading financial liabilities		<b>4,615,657</b>	–
Bills payable		<b>1,371,751,057</b>	1,073,417,447
Trade payables		<b>5,285,010,082</b>	5,189,271,956
Contract liabilities		<b>532,105,603</b>	652,306,273
Employee benefits payable		<b>112,713,937</b>	51,436,647
Taxes payable		<b>13,172,037</b>	41,183,857
Other payables		<b>1,622,408,447</b>	612,386,268
Including: Interest payable		–	–
Dividends payable		<b>637,306,610</b>	–
Non-current liabilities due within 1 year		<b>275,871,047</b>	316,059,820
Other current liabilities		<b>68,406,412</b>	84,024,375
<b>Total current liabilities</b>		<b>9,317,035,207</b>	8,020,086,643
<b>Non-current liabilities</b>			
Long-term borrowings		<b>75,188,000</b>	77,688,000
Lease liabilities		<b>35,715,945</b>	36,820,757
Long-term payables		<b>78,611</b>	525,195
Provisions		<b>376,595,095</b>	440,887,930
Deferred income		<b>385,551,005</b>	394,318,889
Deferred tax liabilities		–	–
Other non-current liabilities		<b>15,829,186</b>	20,408,448
<b>Total non-current liabilities</b>		<b>888,957,842</b>	970,649,219
<b>Total liabilities</b>		<b>10,205,993,049</b>	8,990,735,862

# Section X Financial Report

ITEM	Note	30 June 2022	31 December 2021
<b>Owners' (Shareholders') equity</b>			
Paid-in capital (Share capital)		<b>1,416,236,912</b>	1,416,236,912
Capital reserve		<b>10,579,503,575</b>	10,579,503,575
Other comprehensive income		<b>(17,222,756)</b>	(52,647,013)
Special reserve		<b>4,621,477</b>	4,621,477
Surplus reserve		<b>2,545,778,284</b>	2,545,778,284
Retained earnings		<b>17,547,152,837</b>	16,842,631,746
<b>Total owners' (shareholders') equity</b>		<b>32,076,070,329</b>	31,336,124,981
<b>Total liabilities and owners' (shareholders') equity</b>		<b>42,282,063,378</b>	40,326,860,843

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## Consolidated Income Statement

From January to June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	Note	From January to June 2022	From January to June 2021
I.	Total operating income Including: Operating income	VII. 43 <b>6,526,910,740</b> <b>6,526,910,740</b>	5,298,119,555 5,298,119,555
II.	Total operating costs Including: Operating costs Taxes and surcharges Selling expenses Administrative expenses Research and development expense Financial expenses Including: Interest expenses Interest income Add: Other income Investment income ("-" for losses) Including: Gains from investments in associates and joint ventures Gains on derecognition of financial assets measured at amortized cost ("-" for losses) Gains on changes in fair value ("-" for losses) Credit losses ("-" for losses) Impairment losses ("-" for losses) Gains on disposal of assets ("-" for losses)	VII. 43 VII. 44 VII. 45 VII. 46 VII. 47 VII. 48 VII. 49 VII. 50 <b>5,693,068,614</b> <b>4,294,630,650</b> <b>49,724,963</b> <b>403,720,033</b> <b>341,998,639</b> <b>696,057,533</b> <b>(93,063,204)</b> <b>6,976,594</b> <b>94,099,231</b> <b>228,514,220</b> <b>(17,357,451)</b> <b>(41,562,948)</b> <b>(247,965)</b> <b>106,304,101</b> <b>(41,408,019)</b> <b>(114,781,378)</b> <b>314,198</b>	4,650,985,253 3,300,418,281 32,563,123 405,676,870 288,880,216 640,930,972 (17,484,209) 6,001,132 28,126,762 219,467,419 31,580,149 (11,154,070) (101,331) 8,884,903 (37,023,176) (76,743,393) (200,180)
III.	Operating profit ("-" for losses) Add: Non-operating income Less: Non-operating expenses	VII. 51 VII. 52 VII. 53 VII. 54 <b>995,427,797</b> <b>3,243,622</b> <b>188,346</b>	793,100,024 8,353,116 141,572
IV.	Profit before income tax ("-" for losses) Less: Income tax expenses	VII. 55 VII. 56 <b>998,483,073</b> <b>119,395,811</b>	801,311,568 98,338,894

# Section X Financial Report

ITEM	Note	From January to June 2022	From January to June 2021
V. Net profit ("-" for net losses)		<b>879,087,262</b>	702,972,674
(I) Net profit classified by operating continuity			
1. Net profit from continuing operations ("-" for net losses)		<b>879,087,262</b>	702,972,674
2. Net profit from discontinued operations ("-" for net losses)		<u>—</u>	<u>—</u>
(II) Net profit classified by ownership			
1. Net profit attributable to shareholders of the Company ("-" for net losses)		<b>870,961,499</b>	695,234,768
2. Net profit attributable to non-controlling interests ("-" for net losses)		<b>8,125,763</b>	7,737,906
VI. Other comprehensive income, net of tax	VII、39	<b>39,071,809</b>	(5,714,855)
(I) Other comprehensive income attributable to shareholders of the Company, net of income tax		<b>39,200,888</b>	(5,567,834)
1. Items that will not be reclassified to profit or loss		<u>—</u>	<u>—</u>
2. Items that may be reclassified to profit or loss		<b>39,200,888</b>	(5,567,834)
(1) Changes in fair value of other debt investments		<b>36,453,516</b>	(3,201,774)
(2) Translation differences arising from translation of foreign currency financial statements		<b>2,747,372</b>	(2,366,060)
(II) Other comprehensive income attributable to non-controlling interests, net of income tax		<b>(129,079)</b>	(147,021)
VII. Total comprehensive income		<b>918,159,071</b>	697,257,819
(I) Total comprehensive income attributable to shareholders of the Company		<b>910,162,387</b>	689,666,934
(II) Total comprehensive income attributable to non-controlling interests		<b>7,996,684</b>	7,590,885
VIII. Earnings per share:			
(I) Basic earnings per share (RMB/per share)		<b>0.61</b>	0.59
(II) Diluted earnings per share (RMB/per share)		<b>0.61</b>	0.59

For a business combination involving entities under common control which occurred in the current period, the net profit of the investee before being consolidated was Nil. The net profit in previous period was Nil.

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## The Company's Income Statement

From January to June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	Note	From January to June 2022	From January to June 2021
I. Operating income	XVII、4	<b>5,028,545,836</b>	4,215,874,386
Less: Operating costs	XVII、4	<b>4,084,533,932</b>	3,099,409,683
Taxes and surcharges		<b>21,720,648</b>	7,581,802
Selling expenses		<b>256,613,608</b>	281,825,706
Administrative expenses		<b>158,152,789</b>	129,144,686
Research and development expenses		<b>300,442,568</b>	319,925,205
Financial expense		<b>(114,068,725)</b>	(17,147,510)
Including: Interest expenses		<b>4,681,599</b>	2,968,678
Interest income		<b>87,577,812</b>	30,905,150
Add: Other income		<b>23,404,619</b>	28,767,836
Investment income ("-" for losses)	XVII、5	<b>1,056,529,538</b>	1,362,863,596
Including: Income from investments in associates and joint ventures		<b>(862,361)</b>	(18,963)
Income arising from derecognition of financial assets measured at amortised cost ("-" for losses)		<b>-</b>	-
Gains on changes in fair value ("-" for losses)		<b>98,823,024</b>	8,884,903
Credit losses ("-" for losses)		<b>(40,246,925)</b>	(32,241,991)
Impairment losses ("-" for losses)		<b>(76,523,722)</b>	(65,038,290)
Gains on disposal of assets ("-" for losses)		<b>(235,031)</b>	11,217
II. Operating profit ("-" for loss)		<b>1,382,902,519</b>	1,698,382,085
Add: Non-operating income		<b>1,228,117</b>	1,830,891
Less: Non-operating expenses		<b>7,601</b>	3,632
III. Profit before income tax ("-" for loss)		<b>1,384,123,035</b>	1,700,209,344
Less: Income tax expenses		<b>42,295,334</b>	51,162,041
IV. Net profit for the year ("-" for net loss)		<b>1,341,827,701</b>	1,649,047,303
(I) Net profit from continuing operations ("—" for net loss)		<b>1,341,827,701</b>	1,649,047,303
(II) Net profit from discontinued operations ("—" for net loss)		<b>-</b>	-

# Section X Financial Report

ITEM	Note	From January to June 2022	From January to June 2021
V. Other comprehensive income, net of tax		<b>35,424,257</b>	(2,310,673)
(I) Items that will not be reclassified to profit or loss		—	—
(II) Items that may be reclassified to profit or loss		<b>35,424,257</b>	(2,310,673)
1. Changes in fair value of other debt investments		<b>36,124,158</b>	(2,487,455)
2. Translation differences arising from translation of foreign currency financial statements		<b>(699,901)</b>	176,782
VI. Total comprehensive income		<b>1,377,251,958</b>	1,646,736,630
VII. Earnings per share			
(I) Basic earnings per share (RMB/per share)		<b>0.95</b>	1.67
(II) Diluted earnings per share (RMB/per share)		<b>0.95</b>	1.67

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## Consolidated Cash Flow Statement

From January to June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	Note	From January to June 2022	From January to June 2021
<b>I. Cash flows from operating activities:</b>			
Cash receipts from the sale of goods and the rendering of services		<b>4,840,588,137</b>	4,700,808,197
Receipts of tax refunds		<b>836,192,955</b>	68,597,906
Other cash receipts relating to operating activities	VII、58	<b>131,054,390</b>	160,586,640
<b>Sub-total of cash inflows from operating activities</b>		<b>5,807,835,482</b>	4,929,992,743
Cash payments for goods purchased and services received		<b>4,037,454,410</b>	4,409,950,264
Cash payments to and on behalf of employees		<b>982,562,613</b>	880,693,690
Payment of various taxes		<b>677,790,309</b>	284,916,174
Other cash payments relating to operating activities	VII、58	<b>552,827,004</b>	1,488,121,140
<b>Sub-total of cash outflows from operating activities</b>		<b>6,250,634,336</b>	7,063,681,268
<b>Net cash outflow from operating activities</b>	VII、59	<b>(442,798,854)</b>	(2,133,688,525)
<b>II. Cash flows from investing activities:</b>			
Cash receipts from recovery of investments		<b>8,476,000,000</b>	8,400,000,000
Cash receipts from investment income		<b>99,857,723</b>	42,734,219
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		<b>809,071</b>	298,177
<b>Sub-total of cash inflows from investing activities</b>		<b>8,576,666,794</b>	8,443,032,396
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		<b>298,697,451</b>	430,017,133
Cash payments to acquire investments		<b>11,770,100,000</b>	7,283,000,000
Other cash payments relating to investing activities		<b>—</b>	—
<b>Sub-total of cash outflows from investing activities</b>		<b>12,068,797,451</b>	7,713,017,133
<b>Net cash (outflow) / inflow from investing activities</b>		<b>(3,492,130,657)</b>	730,015,263

# Section X Financial Report

ITEM	Note	From January to June 2022	From January to June 2021
<b>III. Cash flows from financing activities:</b>			
Cash receipts from capital contributions		<b>20,000,000</b>	400,000
Including: Cash receipts from capital contributions from minority shareholders of subsidiaries		<b>20,000,000</b>	400,000
Cash receipts from borrowings		<b>32,979,471</b>	37,454,805
<b>Sub-total of cash inflows from financing activities</b>		<b>52,979,471</b>	37,854,805
Cash repayments of borrowings		<b>77,262,340</b>	28,365,641
Cash payments for distribution of dividends or profits or settlement of interest expenses		<b>3,541,408</b>	6,970,003
Including: Payments for distribution of dividends or profits to non-controlling shareholders of subsidiaries		<b>–</b>	2,303,000
Other cash payments relating to financing activities		<b>37,169,417</b>	40,270,067
<b>Sub-total of cash outflows from financing activities</b>		<b>117,973,165</b>	75,605,711
<b>Net cash outflow from financing activities</b>		<b>(64,993,694)</b>	(37,750,906)
<b>IV. Effect of foreign exchange rate changes on cash and cash equivalents</b>		<b>(1,060,024)</b>	(1,893,126)
<b>V. Net increase in cash and cash equivalents</b>		<b>(4,000,983,229)</b>	(1,443,317,294)
Add: Opening balance of cash and cash equivalents		<b>7,883,060,105</b>	4,783,889,538
<b>VI. Closing balance of cash and cash equivalents</b>		<b>3,882,076,876</b>	3,340,572,244

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## The Company's Cash Flow Statement

From January to June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	Note	From January to June 2022	From January to June 2021
<b>I. Cash flows from operating activities:</b>			
Cash receipts from the sale of goods and the rendering of services		<b>2,941,243,598</b>	2,926,051,646
Receipts of tax refunds		<b>764,325,679</b>	14,560,540
Other cash receipts relating to operating activities		<b>144,952,035</b>	104,440,573
<b>Sub-total of cash inflows from operating activities</b>		<b>3,850,521,312</b>	3,045,052,759
Cash payments for goods purchased and services received		<b>4,192,090,460</b>	4,136,213,178
Cash payments to and on behalf of employees		<b>427,321,943</b>	398,695,832
Payment of various taxes		<b>291,011,317</b>	116,347,457
Other cash payments relating to operating activities		<b>156,882,370</b>	1,214,718,935
<b>Sub-total of cash outflows from operating activities</b>		<b>5,067,306,090</b>	5,865,975,402
<b>Net cash outflow from operating activities</b>		<b>(1,216,784,778)</b>	(2,820,922,643)
<b>II. Cash flows from investing activities:</b>			
Cash receipts from recovery of investments		<b>7,478,000,000</b>	8,400,000,000
Cash receipts from investment income		<b>1,116,922,109</b>	1,350,682,559
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		<b>75,808</b>	129,555
<b>Sub-total of cash inflows from investing activities</b>		<b>8,594,997,917</b>	9,750,812,114
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		<b>212,166,777</b>	424,600,271
Cash payments to acquire investments		<b>10,840,000,000</b>	7,348,968,089
Other cash payments relating to investing activities		<b>—</b>	485,000,000
<b>Sub-total of cash outflows from investing activities</b>		<b>11,052,166,777</b>	8,258,568,360
<b>Net Cash (outflow) / inflow from Investing Activities</b>		<b>(2,457,168,860)</b>	1,492,243,754

# Section X Financial Report

ITEM	Note	From January to June 2022	From January to June 2021
<b>III. Cash flows from financing activities:</b>			
Cash receipts from capital contributions		—	—
Cash receipts from borrowings		<b>30,980,928</b>	300,000,000
<b>Sub-total of cash inflows from financing activities</b>		<b>30,980,928</b>	300,000,000
Cash repayments of borrowings		<b>2,500,000</b>	3,149,013
Cash payments for distribution of dividends or profits or settlement of interest expenses		<b>3,714,521</b>	2,227,092
Other cash payments relating to financing activities		<b>14,246,689</b>	29,733,204
<b>Sub-total of cash outflows from financing activities</b>		<b>20,461,210</b>	35,109,309
<b>Net cash flow from financing activities</b>		<b>10,519,718</b>	264,890,691
<b>IV. Effect of foreign exchange rate changes on cash and cash equivalents</b>		<b>(915,478)</b>	(1,893,126)
<b>V. Net increase in cash and cash equivalents</b>		<b>(3,664,349,398)</b>	(1,065,681,324)
Add: Opening balance of cash and cash equivalents		<b>5,204,158,056</b>	3,005,589,102
<b>VI. Closing balance of cash and cash equivalents</b>		<b>1,539,808,658</b>	1,939,907,778

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## Consolidated statement of changes in owners' equity

From January to June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd.

Unit: Yuan Currency: RMB

ITEM	From January to June 2022 Equity attributable to owners of the Company								
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Sub-total	Non-controlling interests	Total
I. Closing balance 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 increases) (I) Total comprehensive income	-	-	39,200,888	5,639,109	-	233,654,889	278,494,886	28,904,462	307,399,348
(II) Owners' contributions and reduction in capital	-	-	-	-	-	870,961,499	910,162,387	7,996,684	918,159,071
1. Capital contribution from owners	-	-	-	-	-	-	-	20,000,000	20,000,000
(III) Profit distribution	-	-	-	-	-	(637,306,610)	(637,306,610)	-	(637,306,610)
1. Appropriation for surplus reserve	-	-	-	-	-	-	-	-	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	(637,306,610)	(637,306,610)	-	(637,306,610)
(IV) Special reserve	-	-	-	5,639,109	-	-	5,639,109	907,778	6,546,887
1. Transfer to special reserve in the period	-	-	-	38,929,023	-	-	38,929,023	1,313,287	40,242,310
2. Amount utilized in the period	-	-	-	(33,289,914)	-	-	(33,289,914)	(405,509)	(33,695,423)
(V) Others	-	-	-	-	-	-	-	-	-
IV. Closing balance of the current period	1,416,236,912	10,519,465,513	(168,883,741)	36,424,843	2,545,778,284	18,550,466,840	32,899,488,651	700,555,135	33,600,043,786

# Section X Financial Report

ITEM	From January to June 2021								
	Equity attributable to owners of the Company								
	Paid-in capital (or share capital)	Capital reserve	comprehensive income	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Sub-total	Non-controlling interests
I. Closing balance 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)	-	-	(5,567,834)	5,319,273	-	695,234,768	694,986,207	6,635,198	701,621,405
(I) Total comprehensive income	-	-	(5,567,834)	-	-	695,234,768	689,666,934	7,590,885	697,257,819
(II) Owners' contributions and reduction in capital	-	-	-	-	-	-	-	400,000	400,000
1. Capital contribution from owners	-	-	-	-	-	-	-	400,000	400,000
(III) Profit distribution	-	-	-	-	-	-	-	(2,303,000)	(2,303,000)
1. Appropriation for surplus reserve	-	-	-	-	-	-	-	-	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	-	-	(2,303,000)	(2,303,000)
(IV) Special reserve	-	-	-	5,319,273	-	-	5,319,273	947,313	6,266,586
1. Transfer to special reserve in the period	-	-	-	26,799,465	-	-	26,799,465	1,420,969	28,220,434
2. Amount utilized in the period	-	-	-	(21,480,192)	-	-	(21,480,192)	(473,656)	(21,953,848)
(V) Others	-	-	-	-	-	-	-	-	-
IV. Closing balance of the current period	1,175,476,637	3,321,880,949	(157,906,565)	30,566,530	2,325,644,999	17,851,791,818	24,547,454,368	413,757,441	24,961,211,809

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## The Company's Statement of Changes in Owners' Equity

From January to June 2022

Prepared by: Zhuzhou CRRC Times Electric Co., Ltd

Unit: Yuan Currency: RMB

ITEM	From January to June 2022						
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	Total
I. Closing balance 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. Changes in equity during the period ("-" for decreases)							
(I) Total comprehensive income	-	-	35,424,257	-	-	704,521,091	739,945,348
(II) Owners' contributions and reduction in capital	-	-	35,424,257	-	-	1,341,827,701	1,377,251,958
1. Capital contribution from owners	-	-	-	-	-	-	-
(III) Profit distribution	-	-	-	-	-	(637,306,610)	(637,306,610)
1. Appropriation for surplus reserve	-	-	-	-	-	-	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	(637,306,610)	(637,306,610)
(IV) Special reserve	-	-	-	-	-	-	-
1. Transfer to special reserve in the period	-	-	-	9,987,343	-	-	9,987,343
2. Amount utilized in the period	-	-	-	(9,987,343)	-	-	(9,987,343)
(V) Others	-	-	-	-	-	-	-
III. Closing balance of the current period	1,416,236,912	10,579,503,575	(17,222,756)	4,621,477	2,545,778,284	17,547,152,837	32,076,070,329

# Section X Financial Report

ITEM	From January to June 2021						Total
	Paid-in capital (or share capital)	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Retained earnings	
I. Closing balance 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. Changes in equity during the period ("—" for decreases)	-	-	(2,310,673)	-	-	1,649,047,303	1,646,736,630
(I) Total comprehensive income	-	-	(2,310,673)	-	-	1,649,047,303	1,646,736,630
(II) Owners' contributions and reduction in capital	-	-	-	-	-	-	-
1. Appropriation for surplus reserve	-	-	-	-	-	-	-
2. Distributions to owners (or shareholders)	-	-	-	-	-	-	-
(III) Special reserve	-	-	-	-	-	-	-
1. Transfer to special reserve in the period	-	-	-	11,848,537	-	-	11,848,537
2. Amount utilized in the period	-	-	-	(11,848,537)	-	-	(11,848,537)
(IV) Others	-	-	-	-	-	-	-
III. Closing balance of the current period	1,175,476,637	3,371,446,430	(28,408,867)	4,296,322	2,325,644,999	17,147,786,094	23,996,241,615

Legal representative:  
**Li Donglin**

Chief Financial Officer:  
**Liu Zehua**

Head of Accounting Department:  
**Sun Shan**

# Section X Financial Report

## III. 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 the consolidated financial statements

Applicable  Not applicable

The consolidated and Company's financial statements have been approved by the Company's board of directors on 26 August 2022.

Details of the scope of consolidated financial statements for the current period are set out in Note IX "Interests in Other Entities". Details of the changes in the scope of consolidated financial statements for the current period are set out in Note VIII "Changes in Scope of Consolidation".

# Section X Financial Report

## IV. 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 assessed its ability to continue as a going concern for the 12 months from 30 June 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 in the financial statements. Where assets are impaired, provisions for asset impairment are made in accordance with relevant requirements.

Where the historical cost is adopted as the measurement basis, assets are recorded at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition. Liabilities are recorded at the amount of proceeds or assets received or the contractual amounts for assuming the present obligation, or, at the amounts of cash and cash equivalents expected to be paid to settle the liabilities in the 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 measurements date, regardless of whether that price is directly observable or estimated using valuation technique. Fair value measurement and/or 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.

# Section X Financial Report

## IV. 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 degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

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

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

### 1. Statement of compliance with the Accounting Standards for Business Enterprises ("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 of 30 June 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 30 June 2022.

### 2. Accounting period

The accounting period of the Group is from 1 January to 31 December of each calendar year.

### 3. Operating cycle

Applicable  Not applicable

An operating cycle refers to the period since when an enterprise purchases assets for processing purpose till the realization of those assets in cash or cash equivalents. The Group's operating cycle is 12 months.

### 4. Functional 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.

# Section X Financial Report

## V. 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 constitutes a business combination when the Group obtains control of one or more entities (or a group of assets or net assets). Business combination is 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 acquired set of assets constitute a business. The Group may elect to apply the simplified assessment method, the concentration test, to determine whether an acquired set of assets is not a business. If the concentration test is met, the set of assets is determined not to be a business. If the concentration test is not met, the Group shall 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 assets and liabilities at their acquisition date fair values. It is not required to apply the accounting of business combination described as below.

#### **(1) Business combinations involving enterprises under common control**

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

# Section X Financial Report

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

The cost of combination is the aggregate of the fair values, at the acquisition date, 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 recognized 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 recognized as goodwill, which is measured at cost on initial recognition. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer firstly reassesses the measurement of the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities and measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer recognizes the remaining difference immediately in profit or loss for the current period.

Goodwill arising on a business combination is measured at cost less accumulated impairment losses, and is presented separately in the consolidated financial statements.

### 6. 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 6. Preparation of consolidated financial statements (continued)

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. Influence over the consolidated financial statements arising from significant intra-group 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. If the capital reserve is not sufficient to absorb the difference, the excess are adjusted against retained earnings.

When the Group loses control over a subsidiary due to disposal of certain equity interest or other reasons, any retained interest is re-measured at its fair value at the date when control is lost. The difference between the aggregate of the consideration received on disposal and the fair value of any retained interest and 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 7. Classification of joint arrangements and accounting treatments of joint operation

Applicable  Not applicable

A joint arrangement is classified into joint operation and joint venture, depending on the rights and obligations of the parties to the arrangement, which is assessed by considering the structure and the legal form of the arrangement, the terms agreed by the parties in the contractual arrangement and, when relevant, other facts and circumstances. A joint operation is a joint arrangement 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 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 VII 12 Long-term equity investments accounted for using the equity method" for details.

### 8. Recognition criteria of cash and cash equivalents

Applicable  Not applicable

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 recognized 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 capitalization are capitalized as part of the cost of the qualifying asset during the capitalization period; (ii) exchange differences arising from changes in the carrying amounts (other than the amortized cost) of monetary items that classified as measured at FVOCI are recognized as other comprehensive income.

When the consolidated financial statements include foreign operation(s), if there is foreign currency monetary item constituting a net investment in a foreign operation, exchange difference arising from changes in exchange rates are recognized 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 recognized in profit and loss or as other comprehensive income.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

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

#### (2) *Translation of financial statements denominated in foreign currencies*

For the purpose of preparing the consolidated financial statements, financial statements of a foreign operation are translated from the functional 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 partial disposals of equity interests 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".

### 10. Financial instruments

Applicable  Not applicable

Financial assets and financial liabilities are recognized 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 recognizes assets acquired and liabilities assumed on a trade date basis, or derecognizes 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 recognized in profit or loss. For other financial assets and financial liabilities, transaction costs are included in their initial recognized amounts. For accounts receivable excluding significant financing components or regardless of financing components of contracts less than one year recognized based on the Accounting Standards for Business Enterprises No. 14 – Revenue (the "Revenue Standards"), accounts receivable initially recognized 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 amortized cost of a financial asset or a financial liability and of allocating the interest income or interest expense over each accounting period.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

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 to the net carrying amount of the financial asset or the amortized cost of 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 including earlier repayment, extension, call option or other similar options etc. without considering future credit losses.

The amortized cost of a financial asset or a financial liability is the amount of a financial asset or a financial liability initially recognized net of principal repaid, plus or less the cumulative amortized amount arising from amortization of the difference between the amount initially recognized and the amount at the maturity date using the effective interest method, net of cumulative loss allowance (only applicable to financial assets).

#### (1) Classification, recognition and measurement of financial assets

Subsequent to initial recognition, the Group's financial assets of various categories are subsequently measured at amortized cost, fair value through other comprehensive income ("FVTOCI") or fair value through profit or loss ("FVTPL").

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 amortized cost. Such type of financial assets mainly comprise cash and bank balances, notes 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 notes 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 recognized in the business combination not under the same control as financial assets at FVTOCI based on individual financial assets. Such type of financial assets are presented as other equity instrument investments.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (1) Classification, recognition and measurement of financial assets (continued)

A financial asset is classified as held for trading if one of the following conditions is satisfied:

- 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 centralized management upon initial recognition and there is objective evidence indicating that recently there exists a short-term profit model;
- Relevant financial assets are derivatives, excluding derivatives following the definition of financial guarantee contracts as well as derivatives designated as effective hedging instruments.

Financial assets at FVTPL include financial assets classified as at fair value through profit or loss and those designated as at fair value through profit or loss:

- Financial assets that are unqualified for the classification as at amortized cost and at FVTOCI are classified as at FVTPL.
- Upon initial recognition, to eradicate or significantly reduce accounting mismatches, the Group can irrevocably designate financial assets as at fair value through profit or loss.

Financial assets at FVTPL are presented as held-for-trading financial assets. Financial assets due over one year (or without a fixed term) and expected to be held over one year as of the balance sheet date are presented as other non-current financial assets.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (1) Classification, recognition and measurement of financial assets (continued)

##### (a) Financial assets measured at amortized cost

Financial assets at amortized cost are measured subsequently at amortized 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 recognizes interest income for financial assets measured at amortized 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 original credit-impaired financial assets, the Group recognizes their interest income based on amortized cost and credit-adjusted effective interest rate of such financial assets since initial recognition.
- For purchased or original financial assets without credit impairment but subsequently becoming credit impaired, the Group subsequently recognizes their interest income based on amortized 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 recognizes interest income based on applying effective interest rate to carrying amount of the financial assets.

##### (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 recognized 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 amortized cost through profit or loss over each period. Upon derecognition of the financial assets, cumulative gains or losses previously recognized 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 recognized in other comprehensive income. Upon derecognition of the financial asset, cumulative gains or losses previously recognized 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 recognized 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 is 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (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.

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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (2) Impairment of financial instruments (continued)

##### (a) Significant increase 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 loan commitment and financial guarantee contracts, when applying the provision of impairment of financial instruments, the Group shall take the date when it becomes the party making an irrevocable undertaking as the initial 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.

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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (2) Impairment of financial instruments (continued)

##### (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 that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- Significant financial difficulty of the issuer or borrower;
- A breach of contract by the debtor, such as a default or delinquency in interest or principal payments;
- The creditor, for economic or legal reasons relating to the debtor's financial difficulty, granting a concession to the debtor that would not otherwise consider;
- It is becoming probable that the debtor will enter bankruptcy or other financial reorganisation;
- The disappearance of an active market for that financial asset because of financial difficulties of the borrower or issuer.

##### (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 aging 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.

# Section X Financial Report

## V. 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 recognized 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 recognized 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (3) Transfer of financial assets

The Group derecognizes 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, it recognizes the financial asset to the extent of its continuing involvement in the transferred financial asset and recognizes an associated liability. Relevant liabilities are measured using the following methods:

- For transferred financial assets carried at amortized cost, the carrying amount of relevant liabilities is the carrying amount of financial assets transferred with continuing involvement less amortized cost of the Group's retained rights (if the Group retains relevant rights upon transfer of financial assets) with addition of amortized 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 or retained earnings.

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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (4) Classification of financial liabilities and equity instruments

Financial instruments or their components 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 fair value through profit or loss

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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (4) Classification of financial liabilities and equity instruments (continued)

##### (a) Classification, recognition and measurement of financial liabilities (continued)

###### (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.

###### (b) Derecognition of financial liabilities

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

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

###### (c) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued (including refinanced), repurchased, sold and cancelled by the Group are recognized as changes of equity. Change of fair value of equity instruments is not recognized by the Group. Transaction costs related to equity transactions are deducted from equity.

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

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 10. Financial instruments (continued)

#### (5) Derivative instruments

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 recognized financial assets and financial liabilities, and intends either to settle on a net basis, or to realize the financial asset and settle the financial liability simultaneously, a financial asset and a financial liability shall be offset and the net amount is presented in the balance sheet. Except for the above circumstances, financial assets and financial liabilities shall be presented separately in the balance sheet and shall not be offset.

### 11. Inventories

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 realizable value of inventories

At the balance sheet date, inventories are measured at the lower of cost and net realizable value. If the net realizable value is below the cost of inventories, a provision for decline in value of inventories is made.

Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion, the estimated costs necessary to make the sale and relevant taxes. Net realizable value is determined on the basis of clear evidence obtained, and takes into consideration the purposes of holding inventories and effect of events after balance sheet date. 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 realizable 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 11. Inventories (continued)

#### (4) Inventory count system

The perpetual inventory system is maintained for stock system.

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

Turnover materials include low value consumables and packing materials, which are amortized by using the immediate write-off method.

### 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 book value 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 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 no-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 recognized in impairment loss of assets and included in profit or loss for the period. Meanwhile, provision for impairment of held-for-sale assets are 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 recognized after the classification of held-for-sale category, and the reverse amount is include in profit or loss for the period.

Non-current assets classified as held-for-sale or disposal groups are not depreciated or amortized, interest and other costs of liabilities of disposal group classified as held for sale continue to be recognized.

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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 13. Long-term equity investments

Applicable  Not applicable

#### (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.

#### (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 recognized 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 book value 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 or in respect of auditing, legal services, valuation and consultancy services and other associated administrative expenses attributable to the business combination are recognized 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 13. Long-term equity investments (continued)

#### (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.

##### (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 recognized in profit or loss for the period, and the cost of the long-term equity investment is adjusted accordingly.

Under the equity method, the Group recognizes its share of the net profit or loss and other comprehensive income of the investee for the period as investment income 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 recognized in the capital reserve. The Group recognizes 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 recognizes investment income and other comprehensive income after making appropriate adjustments to conform to the Company's accounting policies and accounting period. However, unrealized 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 recognized. However, unrealized losses are not eliminated if they result from the Group's transactions with its associates and joint ventures which represent impairment losses on the transferred assets.

The Group discontinues recognizing 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 recognized 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 recognizing its share of those profits only after its share of the profits exceeds the share of losses previously not recognized.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 13. Long-term equity investments (continued)

#### (3) Subsequent measurement and recognition of profit or loss (continued)

##### (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 recognized in profit or loss for the period.

(d) Methods of impairment assessment approach and provision for impairment are set out in Note V 18.

### 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 selfconstructed fixed assets is recognised in accordance with Note V 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 14. Fixed assets (continued)

#### (2) Depreciation method

Applicable  Not applicable

A fixed asset is depreciated over its useful life using the straight-line method since the month subsequent to the one in which it is ready for intended use. The useful life, estimated net residual value rate and annual depreciation rate of each category of fixed assets are as follows:

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	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 derecognized. When a fixed asset is sold, transferred, retired or damaged, the amount of any proceeds on disposal of the asset net of the carrying amount and related taxes is recognized in profit or loss for the period.

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 V 18.

# Section X Financial Report

## V. 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 capitalized 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 V 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 capitalized when expenditures for such asset and borrowing costs are incurred and activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced. Capitalization of borrowing costs ceases when the qualifying asset being acquired, constructed or produced becomes ready for its intended use or sale. Capitalization of borrowing costs is suspended during periods in which the acquisition, construction or production of a qualifying asset is suspended abnormally and when the suspension is for a continuous period of more than 3 months. Capitalization is suspended until the acquisition, construction or production of the asset is resumed. Other borrowing costs are recognized 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 capitalized 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 capitalized on such borrowings by applying a capitalization rate to the weighted average of the excess of cumulative expenditures on the asset over the amounts of specific-purpose borrowings. The capitalization rate is the weighted average of the interest rates applicable to the general-purpose borrowings.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 17. Intangible asset

#### (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 amortized over its estimated useful life. An intangible asset with an indefinite useful life is not amortized. The amortization methods, useful lives, and estimated net residual value rates of each class of intangible assets are as follows:

Category	Amortization 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 amortization method at the end of the period, and makes adjustments when necessary. For the impairment testing of intangible assets, please refer to Note V、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 recognized as an expense in the period in which it is incurred.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 17. Intangible asset (continued)

#### (2) Research and development expenditure (continued)

Expenditure during the development phase that meets all of the following conditions at the same time is recognized as intangible asset. Expenditure during development phase that does not meet the following conditions is recognized 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 recognizes 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.

# Section X Financial Report

## V. 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 recognized in accordance with other relevant ASBEs and related to the contract; then, for assets related to contract costs, the Group shall recognize 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 assets group(s) expected to benefit from the synergies of the combination. An impairment loss is recognized 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 recognized 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, recognize in profit or loss a reversal of some or all of an impairment loss previously recognized 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 recognized previously.

# Section X Financial Report

## V. 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 amortized over the current and subsequent periods (together of more than one year), including leasehold improvement. Long-term prepaid expenses are amortized 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 recognized 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 recognized 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 recognized 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 recognized as liabilities, and recognized in profit or loss or related costs of assets.

# Section X Financial Report

## V. 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 recognizes any related restructuring costs or expenses.

### 21. Provisions

Applicable  Not applicable

Except for contingent consideration arised 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 recognized 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 recognized 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.

# Section X Financial Report

## V. 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 recognizes 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 utilization, and the Group is entitled to collect amounts of cumulative performance part which have been done up to now. Otherwise, the Group will recognize revenue at the point in time when the customer obtains control over relative goods or services.

The Group adopts the input method to determine performance schedules, namely according to the Group’s input into the performance of contractual obligations. When the performance progress cannot be identified reasonably, and where the cost having occurred is expected to be compensated, the Group recognizes revenue in accordance with the cost having occurred until the performance progress can be identified reasonably.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 22. Revenue (continued)

#### (1) Accounting policy for revenue recognition and measurement (continued)

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 recognized based on the total consideration received or receivable; otherwise, the Group is an agent, and the revenue shall be recognized 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 recognize 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 recognized 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 V 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.

#### (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 recognized 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 recognized 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 recognizes revenue according to the progress of performance.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 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 recognizes it as an asset. The asset mentioned above shall be amortized on a basis that is consistent with the transfer to the customer of the goods or services to which the asset relates and recognized in profit or loss for the period. If the amortization period of the asset does not exceed one year, it is recognized in profit or loss for the period in which it occurs. Other expenses incurred by the Group for obtaining the contract are recognized 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 recognize an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria: 1) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify; 2) the costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future; and 3) the costs are expected to be recovered.

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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 24. Government grants

Applicable  Not applicable

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

#### **(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 recognized 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 recognized as deferred income and recognized in profit or loss over the periods in which the related costs or losses are recognized; If the grant is a compensation for related expenses or losses already incurred, the grant is recognized 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 recognized in other income based on the nature of economic activities; a government grant not related to the Group's daily activities is recognized in non-operating income.

For the return of a government grant already recognized, if there is any related deferred income, the repayment is offset against the carrying amount of the deferred income, with any excess recognized in profit or loss for the period.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 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 recognized in profit or loss for the period, except when they arise from transactions or events that are directly recognized in other comprehensive income or in shareholders' equity, in which case they are recognized 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.

#### (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 recognized as assets or liabilities and their tax base that can be determined according to tax laws, deferred tax assets and liabilities are recognized using the balance sheet liability method.

Deferred tax is generally recognized for all temporary differences. Deferred tax assets for deductible temporary differences are recognized to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilized. 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 recognized.

For deductible losses and tax credits that can be carried forward, deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized.

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

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 25. Deferred tax assets and deferred tax liabilities (continued)

#### (2) Deferred tax assets and deferred tax liabilities (continued)

At the balance sheet date, deferred tax assets and liabilities are measured at the tax rates, according to tax laws, that are expected to apply in the period in which the asset is realized or the liability is settled.

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 realize 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 realize 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.

### 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.

#### (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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases (continued)

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

##### (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 recognizes 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 V 18 for details.

##### (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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases (continued)

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

##### (c) Lease liabilities (continued)

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 recognized 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 re-measures 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 recognizes 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.

# Section X Financial Report

## V. 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 recognize 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 buildings, machinery, 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 recognizes 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 recognize 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 V · 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.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 26. Leases (continued)

#### (2) The Group as a lessor (continued)

##### (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.

##### (c) The Group as a lessor under operating leases

Receipts of lease under operating leases are recognized 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 capitalized when incurred, and are recognized 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 recognized 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. Production safety expenses

Applicable  Not applicable

According to the "Administrative Measures for the Collection and Utilization of Enterprise Work Safety Funds" issued by the Ministry of Finance and the State Administration of Work Safety on 14 February 2012, the Group withdraws production safety expenses. The production safety expenses shall be recognized in profit or loss for the current period and in special reserve. When the production safety expenses are utilized as expenses, they should be directly used to offset against the special reserve. When the production safety expenses incurred relate to fixed assets, relevant expenditures shall be accrued in the item of "Construction in progress" and then recognized as fixed asset when the project is completed and ready for intended use; meanwhile, special reserve shall be offset at the amount of cost of the fixed assets and accumulated depreciation shall be recognized at the same amount. Such fixed asset is not subject to any further depreciation in subsequent periods.

# Section X Financial Report

## V. 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 judgments, estimates and assumptions upon reporting items that cannot be accurately calculated in applying the above accounting policies set out in Note V. These judgments, estimates and assumptions are made based on historical experiences of the management of the Group, taking other related factors into consideration. The actual results may be different from the estimates of the Group.

The Group reviews the above judgments, 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 recognized in the current period and the future period.

#### (1) Critical judgements in applying accounting policies

In the process of applying the Group's accounting policies, management has made the following judgements which have the most significant effect on the amounts recognized in the financial statements:

##### (a) Scope of consolidation – the Group holds 50% or less than 50% of the voting rights of the investee

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 articles 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.

#### (2) Key assumptions and uncertainties used in accounting estimates

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 forwardlooking 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 2021, the Group has reassessed the historical actual credit loss rate and considered changes in forward-looking information.

# Section X Financial Report

## V. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (continued)

### 28. Critical judgement in applying accounting policies and key assumptions and uncertainties in accounting estimates (continued)

#### (2) Key assumptions and uncertainties used in accounting estimates (continued)

##### (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.

##### (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 VII 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 recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, 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.

# Section X Financial Report

## V. 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).

#### (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.

#### (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.

# Section X Financial Report

## V. 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.

#### (2) Changes in significant accounting estimates

Applicable  Not applicable

## VI. 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

# Section X Financial Report

## VI. TAXATION (continued)

### 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%.

#### (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"), Shenyang CRRC Times Transportation Technology Co., Ltd. ("Shenyang 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.

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") are in compliance with the relevant provisions of the preferential enterprise income tax policy for the Western China Development, Chongqing CRRC Electric and Kunming Electric are subject to the rate of 15% for enterprise income tax in 2021 and 2022. Chengdu CRRC Electric is subject to the rate of 15% for enterprise income tax since 2022.

# Section X Financial Report

## VI. TAXATION (continued)

### 2. Tax incentive (continued)

#### (2) Enterprise income tax (continued)

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 changed to be entitled to the policy of "two-year exemption and three-year half payment" for enterprise income tax since 2019, it paid the enterprise income tax at the preferential tax rate of 12.5% in 2021 and 2022.

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 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), for the Company and its subsidiaries 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 are qualified for the R&D expenses actually incurred by the enterprise in the course of its R&D activities in the manufacturing industry, 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 recognized as intangible asset and included in the current profits and losses; if the said expenses have been recognized as an intangible asset, such expenses may be amortized at the rate of 200% of the costs of the intangible assets before tax payment in 2021 and 2022; CRRC Times Software is qualified for an extra 75% 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 recognized as intangible asset and included in the current profits and losses; if the said expenses have been recognized as an intangible asset, such expenses may be amortized at the rate of 175% of the costs of the intangible assets before tax payment in 2021 and 2022.

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 recognized as a small low-profit enterprise in 2021, the taxable income reduce as 25% and is subject to a tax rate of 20% for the enterprise income tax and for annual taxable income no exceeding RMB1 million. The taxable income reduce as 50% and is subject to a tax rate of 20% for the enterprise income tax and for annual taxable income exceeding RMB1 million but no more than RMB3 million. It is in compliance with the relevant provisions of the preferential enterprise income tax policy for the Western China Development, and is subject to the rate of 15% for enterprise income tax in 2022.

### 3. Others

Applicable  Not applicable

# Section X Financial Report

## VII. 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	<b>33,312</b>	29,256
Bank deposits	<b>4,299,799,749</b>	8,193,019,354
Other monetary funds	<b>5,858,304</b>	26,272,279
Total	<b>4,305,691,365</b>	8,219,320,889
Including: Total funds deposited overseas	<b>191,892,219</b>	199,717,650

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	<b>4,258,304</b>	14,272,279
Security deposits of the bank acceptances	<b>1,600,000</b>	12,000,000
Total	<b>5,858,304</b>	26,272,279

# Section X Financial Report

## VII. 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>417,756,185</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>9,294,891,435</u>	7,579,988,489
Including:		
Structured deposits	<u>9,294,891,435</u>	<u>7,579,988,489</u>
Total	<u>9,294,891,435</u>	<u>7,579,988,489</u>

Other information:

Applicable  Not applicable

As at 30 June 2022, the yield rate per annum of structured deposits held by the Group ranges from 1.05% to 6.18%.

# Section X Financial Report

## VII. 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	220,321,148	282,239,607
Commercial acceptances	3,017,418,038	2,478,720,481
Less: Provision for credit loss	(4,373,748)	(3,840,331)
Total	<u><u>3,233,365,438</u></u>	<u><u>2,757,119,757</u></u>

#### (2) Pledged bills receivable at the end of the period

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Pledged bills receivable at the end of the period
Bank acceptances	2,060,000
Commercial acceptances	7,905,000
Total	<u><u>9,965,000</u></u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 3. Bills receivable (continued)

*(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 derecognized at the end of the period
Bank acceptances	80,268,744
Commercial acceptances	138,198,356
Total	<u>218,467,100</u>

*(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	<u>600,000</u>

# Section X Financial Report

## VII. 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

Applicable  Not applicable

##### Bank acceptances

As at 30 June 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.

##### Analysis of bills receivable for which provision for credit loss is assessed on a portfolio basis of four categories of customers is as follows:

Applicable  Not applicable

Portfolio accrual items:

Unit: Yuan Currency: RMB

Item	Closing balance		
	Gross carrying amount	Provision for credit loss	Expected average loss rate (%)
Receivables from central state-owned enterprise except State Railway Group	<b>1,143,658,324</b>	<b>1,143,658</b>	<b>0.10</b>
Receivables from local government or local state-owned enterprise	<b>38,655,400</b>	<b>386,555</b>	<b>1.00</b>
Receivables from State Railway Group (Note)	<b>1,813,795,314</b>	<b>1,813,795</b>	<b>0.10</b>
Receivables from other customers	<b>21,309,000</b>	<b>1,029,740</b>	<b>4.83</b>
Total	<b>3,017,418,038</b>	<b>4,373,748</b>	

Note: State Railway Group represents China National Railway Group Co., Ltd. and its affiliates.

# Section X Financial Report

## VII. 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)

Analysis of bills receivable for which provision for credit loss is assessed on a portfolio basis of four categories of customers is as follows: (continued)

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	0.10
Receivables from local government or local state-owned enterprise	34,494,690	344,947	1.00
Receivables from State Railway Group	1,776,237,068	1,776,237	0.10
Receivables from other customers	51,693,560	1,102,852	2.13
<b>Total</b>	<b><u>2,478,720,481</u></b>	<b><u>3,840,331</u></b>	

Recognition criteria and description of accrual provision for credit loss

Applicable  Not applicable

#### (6) Provision for credit loss of bills receivable:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Change amount in the current period					<b>Closing balance</b>
	Opening balance	Accrual for the period	Provision (Reversal) for the period	Written-off for the period		
Expected credit loss in the next 12 months (Not credit impaired)	<u>3,840,331</u>	<u>1,403,914</u>	<u>(870,497)</u>	<u>—</u>	<u>—</u>	<b>4,373,748</b>
<b>Total</b>	<b><u>3,840,331</u></b>	<b><u>1,403,914</u></b>	<b><u>(870,497)</u></b>	<b><u>—</u></b>	<b><u>—</u></b>	<b><b>4,373,748</b></b>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 3. Bills receivable (continued)

#### *(7) Bills receivable actually written off in the current period*

Applicable  Not applicable

Other information:

Applicable  Not applicable

As at 30 June 2022, bills receivable due from related parties of the Group are set out in Note XII 6.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable

#### (1) Disclosed by aging

Applicable  Not applicable

Unit: Yuan Currency: RMB

Aging	Closing balance	Opening balance
Within 1 year		
Among them: Sub-items within 1 year		
Within 6 months	<b>4,999,291,476</b>	5,160,346,451
6 months to 1 year	<b>2,395,421,312</b>	638,971,921
Subtotal within 1 year	<b>7,394,712,788</b>	5,799,318,372
1 to 2 years	<b>924,063,085</b>	865,797,373
2 to 3 years	<b>56,070,939</b>	77,767,356
Over 3 years	<b>62,798,910</b>	31,486,417
Total	<b>8,437,645,722</b>	6,774,369,518
Less: Provision for credit loss	<b>(267,181,990)</b>	(224,952,493)
Book Value	<b>8,170,463,732</b>	6,549,417,025

# Section X Financial Report

## VII. 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	39,687,410	0.47	39,687,410	100.00	-	42,782,876	0.63	42,782,876	100.00	-
Provision on portfolio basis	8,397,958,312	99.53	227,494,580	2.71	8,170,463,732	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	3,256,691,095	38.60	48,321,120	1.48	3,208,369,975	1,753,334,085	25.88	22,679,393	1.29	1,730,654,692
Receivables from local government or local state-owned enterprise	2,683,391,827	31.80	116,401,022	4.34	2,566,990,805	2,305,951,133	34.04	92,677,551	4.02	2,213,273,582
Receivables from State Railway Group (Note)	912,555,072	10.82	1,324,659	0.15	911,230,413	1,484,839,673	21.92	10,856,703	0.73	1,473,982,970
Receivables from other customers	1,545,320,318	18.31	61,447,779	3.98	1,483,872,539	1,187,461,751	17.53	55,955,970	4.71	1,131,505,781
Total	8,437,645,722	/	267,181,990	/	8,170,463,732	6,774,369,518	/	224,952,493	/	6,549,417,025

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (continued)

Accounts receivable for which provision for credit loss is assessed individually:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Entity	Closing balance			
	Gross carrying amount	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
Huasheng Green Energy (Changxing) Agricultural Technology Co., Ltd.	1,500,000	1,500,000	100	Low probability of recovery
Jiutai Energy (Zhungeer) Co., Ltd.	1,400,000	1,400,000	100	Low probability of recovery
Shengnuo Chuangke (Beijing) Electric Co., Ltd.	1,188,000	1,188,000	100	Low probability of recovery
Others	2,740,948	2,740,948	100	Low probability of recovery
Total	39,687,410	39,687,410	100	/

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

(2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (continued)

Unit: Yuan Currency: RMB

Entity	Gross carrying amount	Provision for credit loss	Opening balance	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.					
Huasheng Green Energy (Changxing)	2,680,000	2,680,000		100	Low probability of recovery
Agricultural Technology Co., Ltd.					
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	/

As part of the Group's credit risk management, the Group uses the aging to assess the expected credit losses of accounts receivable arising from the following four categories of customers. These four categories of customers involve a large number of customers with the same risk characteristics respectively, and the aging information can reflect their solvency when the accounts receivable fall due.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (continued)

Items for which the credit loss is assessed collectively: Receivables from central state-owned enterprise except State Railway Group

Unit: Yuan Currency: RMB

Item	Closing balance		
	Accounts receivable	Provision for credit loss	Proportion of provision (%)
Within 6 months	2,171,824,067	22,091,870	1.02
6 months to 1 year	804,512,366	9,160,503	1.14
1 to 2 years	239,996,375	9,639,517	4.02
2 to 3 years	34,427,818	4,875,545	14.16
Over 3 years	5,930,469	2,553,685	43.06
Total	3,256,691,095	48,321,120	1.48

Unit: Yuan Currency: RMB

Item	Opening balance		
	Accounts receivable	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	1,753,334,085	22,679,393	1.29

Recognition criteria and description of accrual provision for credit loss:

Applicable  Not applicable

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (continued)

Items for which the credit loss is assessed collectively: Accounts receivable from local government or local state-owned enterprise

Unit: Yuan Currency: RMB

Item	Closing balance		
	Accounts receivable	Provision for credit loss	Proportion of provision (%)
Within 6 months	1,286,509,713	44,492,260	3.46
6 months to 1 year	864,829,727	28,150,561	3.26
1 to 2 years	512,394,963	38,475,119	7.51
2 to 3 years	10,623,819	2,121,320	19.97
Over 3 years	9,033,605	3,161,762	35.00
Total	2,683,391,827	116,401,022	4.34

Unit: Yuan Currency: RMB

Item	Opening balance		
	Accounts receivable	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	2,305,951,133	92,677,551	4.02

Recognition criteria and description of accrual provision for credit loss:

Applicable  Not applicable

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (continued)

Items for which the credit loss is assessed collectively: Receivables from State Railway Group

Unit: Yuan Currency: RMB

Item	Closing balance		
	Accounts receivable	Provision for credit loss	Proportion of provision (%)
Within 6 months	428,073,242	514,436	0.12
6 months to 1 year	410,120,152	467,881	0.11
1 to 2 years	72,327,948	296,583	0.41
2 to 3 years	2,033,730	45,759	2.25
Over 3 years	—	—	—
Total	<u>912,555,072</u>	<u>1,324,659</u>	<u>0.15</u>

Unit: Yuan Currency: RMB

Item	Opening balance		
	Accounts receivable	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>	<u>0.73</u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (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

Unit: Yuan Currency: RMB

Item	Closing balance		
	Accounts receivable	Provision for credit loss	Proportion of provision (%)
Within 6 months	1,112,884,453	34,381,108	3.09
6 months to 1 year	315,959,068	10,323,907	3.27
1 to 2 years	99,343,799	9,430,154	9.49
2 to 3 years	8,023,798	1,545,472	19.26
Over 3 years	9,109,200	5,767,138	63.31
Total	1,545,320,318	61,447,779	3.98

Unit: Yuan Currency: RMB

Item	Opening balance		
	Accounts receivable	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	1,187,461,751	55,955,970	4.71

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (2) Analysis of accounts receivable by categories based on method of provision for credit loss allowance (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

#### (3) Provision for credit loss of accounts receivable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Change amount in the current period				Differences resulting from the translation of foreign currency financial statements	Closing balance
		Transferred to credit-impaired losses	Provision	Recoveries or reversals	Transfers out or written-off		
Lifetime ECL (Not credit – impaired)	91,898,003	(21,265,495)	78,964,470	-	-	(14,453)	149,582,525
Lifetime ECL (Credit – impaired)	133,054,490	(21,265,495)	-	(39,287,614)	2,567,094	-	117,599,465
Total	224,952,493	-	78,964,470	(39,287,614)	2,567,094	(14,453)	267,181,990

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

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 4. Accounts receivable (continued)

#### (5) Top five accounts receivable categorized by debtors

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the entity	Closing gross carrying amount	Proportion to total accounts receivable (%)	Closing provision for credit loss
Customer 1	550,104,851	6.52	19,412,628
Customer 2	487,567,083	5.78	5,183,290
Customer 3	383,490,435	4.54	4,258,327
Customer 4	372,455,720	4.41	15,400,202
Customer 5	162,482,730	1.93	1,614,449
Total	1,956,100,819	23.18	45,868,896

#### (6) Accounts receivable derecognized due to transfer of financial assets

Applicable  Not applicable

During the first half year in 2022, the Group derecognized accounts receivable of RMB7,335,000respectively, due to factoring of accounts receivable.

#### (7) Amount of assets and liabilities formed by transferring accounts receivable but continuing involvement

Applicable  Not applicable

Other information:

Applicable  Not applicable

As at 30 June 2022, amounts due from related parties of the Group are set out in Note XII 、6.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 5. Trade receivables financing

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Bills receivable measured at fair value	<b>807,200,577</b>	1,172,878,926
Trade receivable measured at fair value	<b>1,620,331,197</b>	1,737,648,741
Total	<b>2,427,531,774</b>	2,910,527,667

Increase/decrease changes and fair value changes of trade receivables financing in the current period:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Cost	<b>2,458,290,068</b>	2,984,400,555
Carrying amount	<b>2,427,531,774</b>	2,910,527,667
Accumulated changes in fair value	<b>(30,758,294)</b>	(73,872,888)

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.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 5. Trade receivables financing (continued)

#### (1) Bills receivable pledged at the end of the period

Unit: Yuan Currency: RMB

Item	Pledged amount at 30 June 2022
Bank acceptances	<u>61,691,500</u>
Total	<u>61,691,500</u>

#### (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 derecognized at the end of the period
Bank acceptances	<u>740,385,313</u>
Commercial acceptances	<u>-</u>
Total	<u>740,385,313</u>

As at 30 June 2022, amounts due from related parties of the Group are set out in Note XII 6.

### 6. Prepayments

#### (1) Aging analysis of prepayments is as follows:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Aging	Closing balance		Opening balance	
	Carrying amount	Proportion (%)	Carrying amount	Proportion (%)
Within 1 year	<b>429,061,359</b>	<b>95.50</b>	330,781,189	96.01
1 to 2 years	<b>15,781,638</b>	<b>3.51</b>	6,388,352	1.85
2 to 3 years	<b>2,316,309</b>	<b>0.52</b>	1,882,872	0.55
Over 3 years	<b>2,125,931</b>	<b>0.47</b>	5,469,939	1.59
Total	<b>449,285,237</b>	<b>100.00</b>	344,522,352	<b>100.00</b>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 6. Prepayments (continued)

#### (1) Aging analysis of prepayments is as follows: (continued)

At the balance sheet date, significant prepayments aged over one year are as follows:

Unit: Yuan Currency: RMB

Name of the entity	Gross carrying amount	Aging
Supplier 1	8,100,300	1 to 2 years
Supplier 2	3,000,000	1 to 2 years
Total	<u>11,100,300</u>	

Description of the reasons why the prepayments with an aging 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.

#### (2) Top five balances of prepayments categorized by receivers

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the entity	Gross carrying amount	Proportion to total closing balance of prepayments (%)
Supplier 3	60,192,730	13.40
Supplier 4	25,470,806	5.67
Supplier 5	22,897,909	5.10
Supplier 6	18,529,758	4.12
Supplier 7	16,500,000	3.67
Total	<u>143,591,203</u>	<u>31.96</u>

Other information

Applicable  Not applicable

As at 30 June 2022, prepayments made to related parties of the Group are set out in Note XII 6.

# Section X Financial Report

## VII. 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	90,000
Other receivables	<u>261,457,764</u>	<u>199,851,167</u>
Total	<u>261,547,764</u>	<u>199,941,167</u>

Other information:

Applicable  Not applicable

As at 30 June 2022, Dividends receivable due from related parties of the Group are set out in Note XII 、6.

As at 30 June 2022, other receivables due from related parties of the Group are set out in Note XII 、6.

#### *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

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 7. Other receivables (continued)

#### *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.	<u>90,000</u>	<u>90,000</u>
Total	<u>90,000</u>	<u>90,000</u>

##### (2) Significant dividends receivable with aging over 1 year

Applicable  Not applicable

##### (3) Provision for bad debts

Applicable  Not applicable

Other information:

Applicable  Not applicable

#### *Other receivables*

##### (1) Other receivables disclosed by aging

Applicable  Not applicable

Unit: Yuan Currency: RMB

Aging	Closing balance	Opening balance
Within 1 year	<b>179,250,112</b>	127,148,931
1 to 2 years	<b>49,435,001</b>	39,867,349
2 to 3 years	<b>3,304,590</b>	1,874,046
Over 3 years	<b>34,922,828</b>	35,197,861
Total	<u><b>266,912,531</b></u>	<u>204,088,187</u>
Less: Provision for credit loss	<b>(5,454,767)</b>	(4,237,020)
Book value	<b>261,457,764</b>	199,851,167

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 7. Other receivables (continued)

**Other receivables** (continued)

(2) Other receivables categorized by nature

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Deposits and guarantees	<b>149,849,037</b>	127,956,931
Tax refunds receivable	<b>21,524,501</b>	27,012,094
Others	<b>95,538,993</b>	49,119,162
Total	<b>266,912,531</b>	204,088,187

(3) Details of provision for credit loss allowance

Applicable  Not applicable

Unit: Yuan Currency: RMB

Credit loss allowance	Phase 1 12-month ECL	Phase 2		Phase 3 Lifetime ECL – Credit impaired	Total
		Lifetime ECL – Not credit impaired	Lifetime ECL – Credit impaired		
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	2,610,579	–	–	–	2,610,579
Reversal	(1,412,833)	–	–	–	(1,412,833)
Transfer out	–	–	–	–	–
Written-off	–	–	–	–	–
Other changes	20,001	–	–	–	20,001
Balance at 30 June 2022	<b>5,454,767</b>	–	–	–	<b>5,454,767</b>

# Section X Financial Report

## VII. 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)

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

Including the amount of bad debt reversed or recovered in significant in current period.

Applicable  Not applicable

(5) Other receivables actually written off in the current period

Applicable  Not applicable

(6) Top five other receivables categorized by debtors

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the entity	Nature	Closing gross carrying value	Aging	Proportion to total closing balance of other receivables (%)	Closing balance of provision for credit loss
Entity 1	Others	34,353,729	Within 1 year	12.87	-
Entity 2	Deposits and guarantees	33,894,620	Over 3 years	12.70	1,168,456
Entity 3	Deposits and guarantees	30,000,000	1-2 years	11.24	1,280,406
Entity 4	Tax refunds receivable	13,914,114	Within 1 year	5.21	-
Entity 5	Others	10,370,000	Within 1 year	3.89	407,400
Total		122,532,463		45.91	2,856,262

# Section X Financial Report

## VII. 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

Unit: Yuan Currency: RMB

Name of the entity	Name of government grants project	Closing gross carrying value	Aging	Expected time and amount of receipt and its basis
Entity 4	Grants for R&D expenditure	13,914,114	Within 1 year	It is expected to receive a tax refund of GBP1,710,086 (equivalent to RMB13,914,114) in 2022.

(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

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 8. Inventories

#### (1) Category of inventories

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Gross carrying amount	Closing balance		Book value	Gross carrying amount	Opening balance	
		Provision for decline	in value			Provision for decline	in value
Raw materials	1,259,196,909	307,131,296	952,065,613	1,150,161,573	230,241,517	919,920,056	
Work in progress	2,082,847,981	59,703,059	2,023,144,922	1,368,695,562	30,063,896	1,338,631,666	
Finished goods	3,104,993,102	50,999,705	3,053,993,397	2,676,873,047	47,597,760	2,629,275,287	
Turnover materials	42,059,401	5,048,726	37,010,675	37,854,383	4,593,759	33,260,624	
Total	6,489,097,393	422,882,786	6,066,214,607	5,233,584,565	312,496,932	4,921,087,633	

#### (2) Provision for decline in value of inventories is as follows

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Increase in current period		Decrease in current period		Translation differences of financial statements denominated in foreign currencies	Closing balance
		Increase Provision	Recovery or transfer-out	Write-off			
Raw materials	230,241,517	81,564,042	2,416,820	719,648	1,537,795	307,131,296	
Work in progress	30,063,896	36,435,021	4,837,101	1,243,033	715,724	59,703,059	
Finished goods	47,597,760	13,898,834	10,093,804	-	403,085	50,999,705	
Turnover materials	4,593,759	633,700	178,733	-	-	5,048,726	
Total	312,496,932	132,531,597	17,526,458	1,962,681	2,656,604	422,882,786	

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 8. Inventories (continued)

#### (3) Description of ending balance of inventory including capitalization of borrowing costs

Applicable  Not applicable

#### (4) Description of amortization amount of contract performance cost in the current period

Applicable  Not applicable

Other information:

Applicable  Not applicable

### 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	638,842,607	16,295,289	622,547,318	692,022,984	16,996,520	675,026,464
Construction service contract assets	65,921,264	477,470	65,443,794	76,422,445	-	76,422,445
Less: Contract assets included in other non-current assets (Note VII. 22)	(425,093,809)	(12,138,505)	(412,955,304)	(455,282,087)	(12,151,975)	(443,130,112)
Net amount	279,670,062	4,634,254	275,035,808	313,163,342	4,844,545	308,318,797

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 9. Contract assets (continued)

#### (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	1,366,838	(1,577,129)	–	–
Lifetime ECL – Credit impaired	–	–	–	–
Total	<b>1,366,838</b>	<b>(1,577,129)</b>	–	/

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 30 June 2022, book value of contract assets of related parties of the Group are set out in Note XII 6.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 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	<b>206,023,260</b>	—
Long-term receivables due within one year	<b>1,539,304</b>	—
Total	<b>207,562,564</b>	—

Significant debt investment and other debt investment at the end of the period:

Applicable  Not applicable

Other information:

None

### 11. Other current assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
VAT retained for deduction	<b>321,674,839</b>	729,803,139
Other taxes prepaid/retained for deduction	<b>14,853,591</b>	72,935,033
Certificate of deposits ("CDs")	<b>50,166,250</b>	50,000,000
Total	<b>386,694,680</b>	852,738,172

Other information:

None

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 12. Long-term equity investments

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of investees	Balance at 1 January 2022	Changes for the period					Balance at 30 June 2022	Impairment provision at 30 June 2022
		Investment income or loss recognized under equity method	Profits declared to be distributed	Provision for impairment loss	Translation differences of financial statements denominated in foreign currencies			
I. Joint ventures								
Zhuzhou Shiling Transportation Equipment Co., Ltd. ("Shiling")	170,989,491	870,307	36,000,000	-	-	135,859,798	-	
LANP Electrical Co., Ltd. ("LANP Electrical")	16,029,889	(1,137,071)	-	-	-	14,892,818	-	
Shanghai Shentong CRRC rail transit operation safety engineering technology research Co., Ltd ("Shanghai shenzhong")	6,220,214	123,504	-	-	-	6,343,718	-	
Zhengzhou Times Transportation Electrical Equipment Co., Ltd. ("Zhengzhou Times")	5,795,314	(380,287)	-	-	-	5,415,027	-	
Guangzhou Qinglan Semiconductor Co., Ltd. ("Qinglan Semiconductor")	73,500,000	(507,822)	-	-	-	72,992,178	-	
Sub-total	272,534,908	(1,031,369)	36,000,000	-	-	235,503,539	-	
II. Associates								
Wuxi CRRC Hofer Powertrain Co., Ltd. ("CRRC Hofer")	96,606,179	(37,380,237)	-	-	(3,603,920)	62,829,862	-	
Siemens Traction Equipment Ltd., Zhuzhou ("Zhuzhou Siemens")	46,325,738	184,489	-	-	-	46,510,227	-	
Hunan Guoxin Semiconductor Technology Co., Ltd. ("CRRC Guoxin Technology")	50,059,852	(1,024,286)	-	-	-	49,035,566	-	
Hunan Times Wabtec Transit Transport & Equipment Co., Ltd. ("Times Wabtec")	13,852,984	2,540,344	-	-	-	16,393,328	-	
Zhixin Semiconductor Co., Ltd. ("Zhixin Semiconductor")	90,303,798	(2,812,528)	-	-	-	87,491,270	-	
CRRC India Private Limited ("CRRC India")	15,243,267	125,079	-	-	-	15,368,346	-	
Wuxi Times Smart Transportation Institute Co., Ltd. ("Wuxi Times")	20,480,632	(1,911,442)	-	-	-	18,569,190	-	
Foshan Zhongshi Zhihui Transportation Technology Co., Ltd. ("Foshan Zhongshi")	6,320,000	(252,998)	-	-	-	6,067,002	-	
Sub-total	339,192,450	(40,531,579)	-	-	(3,603,920)	302,264,791	-	
Total	611,727,358	(41,562,948)	36,000,000	-	(3,603,920)	537,768,330	-	

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 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.	<b>80,000,000</b>	80,000,000
CRRC Environmental & Technology Co., Ltd.	<b>30,000,000</b>	30,000,000
Guochuang Energy Internet Innovation Center (Guangdong) Co., Ltd.	<b>2,400,000</b>	2,400,000
Jinhua CRRC Rail Vehicle Co., Ltd.	<b>5,000,000</b>	—
Total	<b>117,400,000</b>	<b>112,400,000</b>

Note 1: In January 2022, the Group contributed RMB5,000,000 to Jinhua CRRC Railway Vehicle Co., Ltd., with a shareholding ratio of 10%.

Details of fair value measurement of the above other equity instrument investments are set out in Note XI.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 13. Other equity instrument investments (continued)

#### (2) Details of non-tradable equity instrument investments

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Dividend income recognized in this period		Accumulative gains	Accumulative losses	Amount of other comprehensive income transferred to retained earnings	Reason for being designated at FVTOCI	Reason of other comprehensive income transferred to retained earnings
	Period	Amount					
Xicheng CRRC (Wuxi) Urban Transit Transport Engineering Co., Ltd.	—	—	—	—	—	Note	/
CRRC Environmental & Technology Co., Ltd.	—	—	—	—	—	Note	/
Guochuang Energy Internet Innovation Center (Guangdong) Co., Ltd.	—	—	—	—	—	Note	/
Jinhua CRRC Rail Vehicle Co., Ltd.	—	—	—	—	—	Note	/

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 do not intend to sell in the near term for short-term gain. Therefore, the above investments are designated as financial assets at FVTOCI by the Group.

Other information:

Applicable  Not applicable

### 14. Fixed assets

Presented by item

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Fixed assets	<b>4,494,519,528</b>	3,964,429,248
Disposal of fixed assets	—	—
Total	<b>4,494,519,528</b>	3,964,429,248

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 14. Fixed assets (continued)

#### **Fixed assets**

##### (1) Details of Fixed assets

Applicable  Not applicable

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	15,349,703	788,589,620	516,476	8,368,393	812,824,192
(1) Additions	294,883	30,979,746	516,476	3,693,109	35,484,214
(2) Transfer from construction in progress	15,054,820	757,609,874	-	4,674,735	777,339,429
(3) Translation differences arising from translation of foreign currency financial statements	-	-	-	549	549
3. Decreases	1,320,544	17,496,380	1,144,103	1,757,613	21,718,640
(1) Disposal or retirement	-	1,354,054	1,144,103	1,738,507	4,236,664
(2) Translation differences arising from translation of foreign currency financial statements	1,320,544	16,142,326	-	19,106	17,481,976
4. Closing balance	1,960,712,789	5,095,664,472	43,266,256	597,114,994	7,696,758,511
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	31,304,951	205,012,716	1,322,563	39,270,555	276,910,785
(1) Provision	31,304,951	205,012,716	1,322,563	39,270,006	276,910,236
(2) Translation differences arising from translation of foreign currency financial statements	-	-	-	549	549
3. Decreases	359,899	12,835,726	1,051,359	1,648,529	15,895,513
(1) Disposal or retirement	-	1,055,896	1,051,359	1,634,435	3,741,690
(2) Translation differences arising from translation of foreign currency financial statements	359,899	11,779,830	-	14,094	12,153,823
4. Closing balance	632,113,644	2,096,038,430	39,925,719	381,410,606	3,149,488,399
III. Provision for impairment					
1. Opening balance	10,513,264	42,237,320	-	-	52,750,584
2. Increases	-	-	-	-	-
3. Decreases	-	-	-	-	-
4. Closing balance	10,513,264	42,237,320	-	-	52,750,584
IV. Carrying amount					
1. Carrying amount at the end of the period	1,318,085,881	2,957,388,722	3,340,537	215,704,388	4,494,519,528
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

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 14. Fixed assets (continued)

#### **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><b>49,592,798</b></u>	<u><b>52,496,879</b></u>
Plant and buildings	<u><b>49,592,798</b></u>	<u><b>52,496,879</b></u>

##### (5) Details of fixed assets of which property right certificates had not been obtained yet

Applicable  Not applicable

Other information:

Applicable  Not applicable

Liquidation of fixed assets

Applicable  Not applicable

# Section X Financial Report

## VII. 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	<b>544,892,149</b>	921,284,020
Construction materials	<u>—</u>	<u>—</u>
Total	<b>544,892,149</b>	<u>921,284,020</u>

#### Construction in progress

##### (1) Details of construction in progress

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Gross carrying amount	Closing balance Provision for impairment	Book Value	Gross carrying amount	Opening balance Provision for impairment	Book Value
Automobile components supporting construction project	<b>175,018,818</b>	<u>—</u>	<b>175,018,818</b>	623,253,029	<u>—</u>	623,253,029
The revamping and expansion of high voltage IGBT chip module production line	<b>159,503,120</b>	<u>—</u>	<b>159,503,120</b>	124,031,946	<u>—</u>	124,031,946
Chencang base project	<b>121,930,175</b>	<u>—</u>	<b>121,930,175</b>	72,831,031	<u>—</u>	72,831,031
Innovation experiment platform construction project	<b>58,393,558</b>	<u>—</u>	<b>58,393,558</b>	48,491,380	<u>—</u>	48,491,380
Semiconductor intelligent manufacturing project	<u>—</u>	<u>—</u>	<u>—</u>	15,278,779	<u>—</u>	15,278,779
Investments in manufacturing equipment of IGBT manufacturing center in 2017	<u>—</u>	<u>—</u>	<u>—</u>	8,998,114	<u>—</u>	8,998,114
PLM Phase II Project	<b>4,729,246</b>	<u>—</u>	<b>4,729,246</b>	4,180,189	<u>—</u>	4,180,189
Substation and distribution system project of PCB plant renovation project	<u>—</u>	<u>—</u>	<u>—</u>	2,648,309	<u>—</u>	2,648,309
Coating thickness tester/step profiler (TEG-GZ1916BHKS)	<u>—</u>	<u>—</u>	<u>—</u>	1,185,923	<u>—</u>	1,185,923
Others	<b>25,317,232</b>	<u>—</u>	<b>25,317,232</b>	20,385,320	<u>—</u>	20,385,320
Total	<b>544,892,149</b>	<u>—</u>	<b>544,892,149</b>	<u>921,284,020</u>	<u>—</u>	<u>921,284,020</u>

# Section X Financial Report

## VII. 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

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of project	Budget	Opening balance	Increase	Transferred to fixed assets	Transferred to intangible assets	Translation differences of financial statements denominated in foreign currencies	Closing balance	Proportion of amount injected to the budget (%)	Cumulative capitalisation of interests			Source of funds
									Project progress (%)	Project progress (%)	Cumulative capitalisation of interests	
Automobile components supporting construction project	3,337,700,000	623,253,029	304,510,221	746,748,113	5,996,319	-	175,018,818	92.00	95.00	-	-	Self-raised
The revamping and expansion of high voltage IGBT chip module production line	505,000,000	124,031,946	35,471,174	-	-	-	159,503,120	89.00	95.00	-	-	Government grants and Self-raised
Chencang base project	600,000,000	72,831,031	49,099,144	-	-	-	121,930,175	20.32	20.32	-	-	Raised funds and Self-raised
Innovation experiment platform construction project	991,600,000	48,491,380	9,902,178	-	-	-	58,393,558	13.00	13.00	-	-	Raised funds and Self-raised
Semiconductor intelligent manufacturing project	60,846,400	15,278,779	-	10,009,224	5,269,555	-	-	100.00	100.00	-	-	Self-raised
Investments in manufacturing equipment of IGBT manufacturing center in 2017	66,990,000	8,998,114	973,983	9,972,097	-	-	-	100.00	100.00	-	-	Self-raised
PLM phase II project	5,570,000	4,180,189	549,057	-	-	-	4,729,246	84.90	84.90	-	-	Self-raised
Substation and distribution system project of PCB plant renovation project	4,600,000	2,648,309	1,479,158	4,127,467	-	-	-	100.00	100.00	-	-	Self-raised
Coating thickness tester/step profiler (TEG-GZ1916BHKs)	1,300,000	1,185,923	107,380	1,293,303	-	-	-	100.00	100.00	-	-	Self-raised
Others	-	20,385,320	10,558,419	5,189,225	-	(437,282)	25,317,232	-	-	-	-	-
Total	5,573,606,400	921,284,020	412,650,714	777,339,429	11,265,874	(437,282)	544,892,149	-	-	-	-	-

##### (3) Provision for impairment of construction in progress in the current period

Applicable  Not applicable

#### **Other information**

Applicable  Not applicable

#### **Materials for construction of fixed assets**

Applicable  Not applicable

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 16. Right-of-use assets

Applicable  Not applicable

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. Balance at 1 January 2022	23,535,849	171,187,666	22,614,231	11,747,442	1,348,105	230,433,293
2. Increases	4,338,937	26,367,524	6,629,272	20,196	-	37,355,929
(1) Newly added lease	4,338,937	26,367,524	6,629,272	20,196	-	37,355,929
3. Decreases	-	13,455,730	5,585,111	723,378	1,139,050	20,903,269
(1) Translation differences of financial statements denominated in foreign currencies	-	2,700,963	512,476	39,950	-	3,253,389
(2) Expired lease contracts	-	10,754,767	5,072,635	683,428	1,139,050	17,649,880
4. Balance at 30 June 2022	27,874,786	184,099,460	23,658,392	11,044,260	209,055	246,885,953
II. Accumulated depreciation						
1. Balance at 1 January 2022	4,037,325	82,999,825	8,346,014	3,937,242	1,239,261	100,559,667
2. Increases	1,382,485	25,624,808	7,176,380	1,538,324	-	35,721,997
(1) Provision for the year	1,382,485	25,624,808	7,176,380	1,520,942	-	35,704,615
3. Decreases	-	-	-	17,382	-	17,382
(1) Expiration or termination of the lease contract	-	13,388,110	5,573,350	343,100	1,069,901	20,374,461
(2) Translation differences of financial statements denominated in foreign currencies	-	10,754,767	5,072,635	343,100	1,069,901	17,240,403
4. Balance at 30 June 2022	5,419,810	95,236,523	9,949,044	5,132,466	169,360	115,907,203
III. Provision for impairment						
1. Balance at 1 January 2022	-	-	-	-	-	-
2. Increases	-	-	-	-	-	-
3. Decreases	-	-	-	-	-	-
4. Balance at 30 June 2022	-	-	-	-	-	-
IV. Carrying amount						
1. Balance at 30 June 2022	22,454,976	88,862,937	13,709,348	5,911,794	39,695	130,978,750
2. Balance at 1 January 2022	19,498,524	88,187,841	14,268,217	7,810,200	108,844	129,873,626

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, 2034, and the total undiscounted rent is equivalent to RMB31,409,325. 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.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 17. Intangible assets

#### (1) Details of intangible assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Land use rights	Software licenses	Patents, licenses and technical 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	6,712	12,470,069	5,447,736	-	-	17,924,517
(1) Additions	-	1,204,195	-	-	-	1,204,195
(2) Transfer from development expenditure	-	-	5,447,736	-	-	5,447,736
(3) Transfer from construction in progress	-	11,265,874	-	-	-	11,265,874
(4) Translation differences arising from translation of foreign currency financial statements	6,712	-	-	-	-	6,712
3. Decreases	1,009,235	2,217,890	14,070,613	10,608,496	-	27,906,234
(1) Translation differences arising from translation of foreign currency financial statements	1,009,235	2,217,890	14,070,613	10,608,496	-	27,906,234
4. Closing balance	227,909,787	206,919,151	915,261,962	109,722,753	51,231,637	1,511,045,290
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	2,169,880	9,643,094	55,028,323	2,875,675	-	69,716,972
(1) Provision	2,169,880	9,643,094	55,028,323	2,875,675	-	69,716,972
3. Decreases	-	2,063,321	7,931,933	8,523,590	-	18,518,844
(1) Translation differences arising from translation of foreign currency financial statements	-	2,063,321	7,931,933	8,523,590	-	18,518,844
4. Closing balance	56,691,977	161,681,755	521,726,134	52,735,006	51,231,637	844,066,509
III. Provision for impairment						
1. Opening balance	-	506,859	14,410,185	-	-	14,917,044
2. Increases	-	-	-	-	-	-
3. Decreases	-	-	-	-	-	-
4. Closing balance	-	506,859	14,410,185	-	-	14,917,044
IV. Carrying amount						
1. Carrying amount at the end of the period	171,217,810	44,730,537	379,125,643	56,987,747	-	652,061,737
2. Carrying amount at the beginning of the period	174,390,213	42,058,131	434,844,910	61,948,328	-	713,241,582

At the end of the period, the proportion of intangible assets formed through internal research and development of the company to the cost value of intangible assets was 26.65%.

# Section X Financial Report

## VII. 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 of June 30, 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

Unit: Yuan Currency: RMB

Item	Opening balance	Increases		Decreases		Translation differences of financial statements	denominated in foreign currencies	Closing balance
		Internal R&D expenses	Recognized as intangible assets	Transferred to profit or loss	-			
Research expenses	-	696,057,533	-	696,057,533	-		-	-
Development expenditure	366,577,298	31,473,561	5,447,736	-	-	3,667,325	388,935,798	
Total	366,577,298	727,531,094	5,447,736	696,057,533	-	3,667,325	388,935,798	

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 19. Goodwill

#### (1) Cost of goodwill

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of investee or events forming goodwill	Opening balance	Increases Translation differences of financial statements denominated in foreign currencies	Closing balance
Dynex Power Inc. ("Canada Dynex")	46,517,958	—	<b>46,517,958</b>
Ningbo CRRC Times	437,432	—	<b>437,432</b>
CRRC Times Electronics	13,333,101	—	<b>13,333,101</b>
SMD	553,612,467	<b>25,452,902</b>	<b>579,065,369</b>
Total	<b>613,900,958</b>	<b>25,452,902</b>	<b>639,353,860</b>

#### (2) Provision for impairment of goodwill

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of investee or events forming goodwill	Opening balance	Increases Translation differences of financial statements denominated in foreign currencies	Closing balance
Dynex Power Inc. ("Canada Dynex")	46,517,958	—	<b>46,517,958</b>
Ningbo CRRC Times	—	—	—
CRRC Times Electronics	—	—	—
SMD	376,267,677	<b>17,299,293</b>	<b>393,566,970</b>
Total	<b>422,785,635</b>	<b>17,299,293</b>	<b>440,084,928</b>

# Section X Financial Report

## VII. 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

As at 30 June 2022, the Group performed impairment tests on goodwill arising from the acquisitions of SMD. The recoverable amount of the goodwill was determined based on present value of the expected future cash flows. The management prepared 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	30 June 2022	31 December 2021
SMD	<u>13.50</u>	<u>13.50</u>

A key assumption in predicting future cash flows is the revenue growth rate for the budget period, and the expected revenue growth rate at the end of each period/year is as follows:

Item	30 June 2022	31 December 2021
Revenue growth rate	<u>2%</u>	<u>2%</u>

Other key assumptions used in predicting future cash flows include a stable gross margin of budget. The gross margin of budget is determined based on SMD's past performance.

#### (5) Results of impairment test on goodwill

Applicable  Not applicable

As at 30 June 2022, the Group has performed impairment test on goodwill arising from the acquisitions of SMD and no impairment of goodwill was recognized.

Other information:

Applicable  Not applicable

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 20. Long-term prepaid expenses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Increase for the period	Amortized for the period	Closing balance
Leasehold improvement	40,688,040	865,371	3,524,141	38,029,270
Total	40,688,040	865,371	3,524,141	38,029,270

Other information:

None

### 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	805,261,650	126,419,245	898,295,955	138,244,492
Provision for credit loss	277,129,258	41,189,981	233,029,844	34,789,972
Provision for impairment of assets	430,828,645	62,587,483	359,143,985	54,955,060
Government grants	824,911,137	113,472,972	976,067,861	132,158,343
Unrealized profits from internal transactions	847,747,976	127,162,196	683,254,376	102,488,156
Differences of depreciation/amortization years due to tax laws and accounting treatment differences	43,588,500	6,726,626	77,878,229	11,887,111
Deductible losses	779,500,343	120,444,900	622,956,262	93,644,938
Accrued expenses	78,025,537	9,887,987	59,635,710	8,459,190
Accrued employee benefits that have not been paid yet	118,650,411	17,797,562	2,424,793	363,719
Changes in fair value of financial assets at fair value through other comprehensive income	30,758,293	4,809,568	73,872,888	10,896,855
Items of costs and expenses without invoices obtained	206,680,911	31,002,137	107,867,588	16,495,157
Others	5,452,588	891,022	8,029,783	1,369,724
Total	4,448,535,249	662,391,679	4,102,457,274	605,752,717

# Section X Financial Report

## VII. 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	115,764,690	21,995,291	144,372,227	27,430,723
Depreciation difference due to inconsistency of depreciation period between tax law and accounting	20,075,221	5,321,293	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	107,758,839	16,163,826	—	—
Total	243,598,750	43,480,410	162,369,692	32,201,270

#### (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
		offsetting at the end of the period		beginning of the period
Deferred tax assets	—	662,391,679	—	605,752,717
Deferred tax liabilities	—	43,480,410	—	32,201,270

# Section X Financial Report

## VII. 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	<b>229,549,761</b>	194,193,270
Deductible losses	<b>239,877,521</b>	<u>144,440,930</u>
Total	<b>469,427,282</b>	<u>338,634,200</u>

#### (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
2031	<b>4,284,442</b>	–	
Without fixed term (Note)	<b>235,593,079</b>	<u>194,193,270</u>	
Total	<b>239,877,521</b>	<u>194,193,270</u>	/

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.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 22. Other non-current assets

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Gross carrying amount	Closing balance		Gross carrying amount	Opening balance	
		Provision for impairment	Book value		Provision for impairment	Book value
Large-denomination of certificates of deposit	2,566,335,961	-	2,566,335,961	1,190,080,714	-	1,190,080,714
Prepayments for purchase of machinery and equipment	90,252,073	-	90,252,073	128,052,104	-	128,052,104
Prepayments for construction of projects	2,590,232	-	2,590,232	42,551,832	-	42,551,832
Prepayments for acquisition of land use rights	42,831,600	-	42,831,600	42,831,600	-	42,831,600
Contract assets	425,093,809	12,138,505	412,955,304	455,282,087	12,151,975	443,130,112
Total	3,127,103,675	12,138,505	3,114,965,170	1,858,798,337	12,151,975	1,846,646,362

Other information:

As at 30 June 2022, other non-current assets from related parties of the Group are set out in Note XII 6.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 23. Short-term borrowings

#### (1) Category of short-term borrowings

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Bill borrowings	<b>30,980,928</b>	—
Credit borrowings	<b>307,733,749</b>	<u>389,550,036</u>
Total	<b><u>338,714,677</u></b>	<u>389,550,036</u>

Description of classification of short-term borrowings:

As at June 30, 2022, the annual interest rate of short-term loans ranged from 0.9% to 3.47%.

As at June 30, 2022, the balance of short-term loans borrowed from the Group's related parties is set out in Note XII, 6.

On June 30, 2022, the bill borrowing is the discounted bills receivable that have not been derecognized and have not expired at the balance sheet date.

#### (2) Past due and outstanding short-term loans

Applicable  Not applicable

Other information:

Applicable  Not applicable

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 24. Notes payable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Commercial acceptances	<u>68,115,567</u>	48,730,000
Bank acceptances	<u>1,963,985,522</u>	1,591,611,546
Total	<u><b>2,032,101,089</b></u>	<u><b>1,640,341,546</b></u>

There are no bills payable due and unpaid at the end of the period.

As at June 30, 2022, Notes payable due to related parties of the Group are set out in Note XII, 6.

### 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	<u>961,408,255</u>	555,535,398
Third parties	<u>4,360,390,253</u>	4,122,180,635
Total	<u><b>5,321,798,508</b></u>	<u><b>4,677,716,033</b></u>

Accounts payable bear no interest and are usually repayable within 3 months.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 25. Accounts payable (continued)

#### (2) Accounts payable are disclosed by aging as follows

Unit: Yuan Currency: RMB

Aging	Closing balance	Opening balance
Within 6 months	<b>4,011,226,396</b>	3,726,371,766
6 months to 1 year	<b>694,693,320</b>	464,249,145
1 to 2 years	<b>257,573,743</b>	204,394,491
2 to 3 years	<b>107,712,341</b>	90,476,157
Over 3 years	<b>250,592,708</b>	192,224,474
Total	<b>5,321,798,508</b>	<u>4,677,716,033</u>

#### (3) Significant accounts payable aged over one year

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Reasons for not being repaid or carried forward
Supplier 8	<b>56,252,775</b>	Material payment, unsettled
Supplier 9	<b>35,819,983</b>	Material payment, unsettled
Supplier 10	<b>28,406,467</b>	Material payment, unsettled
Supplier 11	<b>24,554,481</b>	Material payment, unsettled
Supplier 12	<b>24,193,823</b>	Material payment, unsettled
Total	<b>169,227,529</b>	

Other information:

Applicable  Not applicable

As at June 30, 2022, Accounts payable made to related parties of the Group are set out in Note XII, 6.

# Section X Financial Report

## VII. 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	<u><b>748,515,658</b></u>	<u>828,709,519</u>
Total	<u><b>748,515,658</b></u>	<u>828,709,519</u>

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 recognized upon the completion of the transfer of the Group's relevant goods/performance obligations.

As at 30 June 2022, Contract liabilities from related parties of the Group are set out in Note XII 、6.

#### (2) Account and reason for significant changes in the contract liabilities in the current period

Applicable  Not applicable

### 27. Employee benefits payable

#### (1) Details of employee benefits payable

Applicable  Not applicable

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	<u><b>907,586,885</b></u>	<u><b>771,398,585</b></u>	<u>(285,366)</u>	<u><b>265,658,914</b></u>
II. Post-employment benefits-Defined contribution plan	13,931,569	<u><b>135,871,019</b></u>	<u><b>138,302,747</b></u>	<u>(350,736)</u>	<u><b>11,149,105</b></u>
III. Termination benefits	-	<u><b>710,019</b></u>	<u><b>710,019</b></u>	-	-
IV. Labour expenditures	-	<u><b>18,910,641</b></u>	<u><b>18,910,641</b></u>	-	-
Total	<u><b>143,687,549</b></u>	<u><b>1,063,078,564</b></u>	<u><b>929,321,992</b></u>	<u>(636,102)</u>	<u><b>276,808,019</b></u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 27. Employee benefits payable (continued)

#### (2) Details of short-term benefits

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Translation differences of financial statements denominated in foreign currencies			Closing balance
		Increases	Decreases		
I. Salaries, bonuses, allowances and subsidies	2,085,718	697,041,925	573,811,671	(285,366)	125,030,606
II. Welfare benefits	-	48,834,589	48,834,589	-	-
III. Social insurances	8,348,987	70,744,990	68,028,142	-	11,065,835
Including: Basic medical insurance	2,753,670	45,812,349	40,972,276	-	7,593,743
Supplementary medical insurance	5,225,163	19,296,560	22,126,738	-	2,394,985
Work injury insurance	370,154	5,633,062	4,929,128	-	1,074,088
Maternity insurance	-	3,019	-	-	3,019
IV. Housing funds	1,039,858	65,370,984	62,374,746	-	4,036,096
V. Employee union funds and staff education funds	117,388,499	24,726,871	16,685,059	-	125,430,311
VI. Others	892,918	867,526	1,664,378	-	96,066
Total	129,755,980	907,586,885	771,398,585	(285,366)	265,658,914

#### (3) Details of defined contribution plan

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Translation differences of financial statements denominated in foreign currencies			Closing balance
		Increases	Decreases		
1. Basic pension insurance	13,325,940	101,681,910	105,137,149	(350,736)	9,519,965
2. Unemployment insurance	37,049	3,723,591	2,405,089	-	1,355,551
3. Enterprise annuity	568,580	30,465,518	30,760,509	-	273,589
Total	13,931,569	135,871,019	138,302,747	(350,736)	11,149,105

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 28. Tax payable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Enterprise income tax	<b>63,614,820</b>	18,820,345
VAT	<b>50,401,157</b>	104,318,658
City maintenance and construction tax and education surcharges	<b>5,208,249</b>	8,523,696
Individual income tax	<b>2,489,990</b>	51,891,101
Others	<b>4,357,135</b>	6,617,058
Total	<b>126,071,351</b>	<u>190,170,858</u>

### 29. Other payables

*Other payables are analyzed by nature as follows*

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Dividends payable	<b>637,306,610</b>	–
Other payables	<b>862,545,106</b>	<u>753,174,560</u>
Total	<b>1,499,851,716</b>	<u>753,174,560</u>

#### *Interest payable*

Applicable  Not applicable

#### *Dividends payable*

Applicable  Not applicable

# Section X Financial Report

## VII. 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	<b>405,299,273</b>	404,537,638
Deposits and guarantees	<b>157,859,908</b>	285,791,299
Recovery of factoring payable	—	8,640,000
Withholding social security contributions	<b>4,043,078</b>	17,230,973
Others	<b>295,342,847</b>	36,974,650
Total	<b>862,545,106</b>	<b>753,174,560</b>

(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
Entity 6	<b>379,606,848</b>	Not due
Entity 7	<b>6,728,064</b>	Not due
Entity 8	<b>5,700,000</b>	Not due
Entity 9	<b>4,916,501</b>	Not due
Entity 10	<b>4,628,709</b>	Not due
Total	<b>401,580,122</b>	

# Section X Financial Report

## VII. 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 (continued)

Other information:

Applicable  Not applicable

As at June 30, 2022, Other payables made to related parties of the Group are set out in Note XII 6.

### 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 (Note VII. 33)	<b>44,310,935</b>	41,963,370
Provisions due within 1 year (Note VII. 35)	<b>342,988,391</b>	381,673,849
Long-term borrowings due within 1 year (Note VII. 32)	<b>5,024,056</b>	5,027,287
Total	<b>392,323,382</b>	428,664,506

Other information:

As at 30 June 2022, Non-current liabilities due within 1 year from related parties of the Group are set out in Note XII 6.

### 31. Other current liabilities

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
VAT for sales of goods collected in advance	<b>90,517,403</b>	99,227,805
Total	<b>90,517,403</b>	99,227,805

# Section X Financial Report

## VII. 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	<b>80,212,056</b>	82,715,287
Less: Long-term borrowings due within 1 year	<b>(5,024,056)</b>	<b>(5,027,287)</b>
Total	<b>75,188,000</b>	<b>77,688,000</b>

Description of classification of long-term borrowings:

As at 30 June 2022, the balance of long-term loans borrowed from the Group's related parties is set out in Note XII 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
Floating interest rate per annum	—	—
Fixed interest rate per annum	<b>1.08%</b>	<b>1.08%</b>

(2) Maturity analysis:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Due within 1 year	<b>5,024,056</b>	5,027,287
Due within 1 to 2 years	<b>5,000,000</b>	5,000,000
Due within 2 to 5 years	<b>27,000,000</b>	24,000,000
Due over 5 years	<b>43,188,000</b>	48,688,000
Total	<b>80,212,056</b>	<b>82,715,287</b>

# Section X Financial Report

## VII. 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
Lease liabilities	<b>125,926,585</b>	120,217,161
Less: Lease liabilities classified as non-current liabilities due within 1 year (Note VII 30)	<b>(44,310,935)</b>	(41,963,370)
Net amount	<b>81,615,650</b>	<b>78,253,791</b>

Other information:

Maturity analysis:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Due within 1 to 2 years	<b>41,426,053</b>	37,797,585
Due within 2 to 5 years	<b>35,052,269</b>	36,544,755
Due over 5 years	<b>18,256,561</b>	20,335,564
Total	<b>94,734,883</b>	<b>94,677,904</b>
Less: Unrecognized financing expenses	<b>(13,119,233)</b>	(16,424,113)
Lease liabilities	<b>81,615,650</b>	<b>78,253,791</b>

As at 30 June 2022, Lease liabilities from related parties of the Group are set out in Note XII 6.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 34. Long-term payables

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Long-term payables	<b>78,611</b>	525,195
Special payables	<u>—</u>	<u>—</u>
Total	<b>78,611</b>	<b>525,195</b>

Other information:

None

#### ***Long-term payables***

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Quality warranties	<b>78,611</b>	525,195
Total	<b>78,611</b>	<b>525,195</b>

Other information:

None

#### ***Special payables***

Applicable  Not applicable

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 35. Provisions

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance	Cause
Provision for product quality warranties	811,348,081	<b>898,295,955</b>	After sales service agreed in the agreement
Provision for repair of equipment under custody	–	<b>5,091,706</b>	Expected compensation loss
Less: Provisions due within 1 year (Note VII. 30)	<u>(342,988,391)</u>	<u>(381,673,849)</u>	/
Total	<u>468,359,690</u>	<u><b>521,713,812</b></u>	/

Other information, including key assumptions and estimations related to significant provisions:

None

### 36. Deferred income

#### 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	–	<b>22,119,390</b>	<b>222,534,189</b>
Government grants related to income	<u>731,414,282</u>	<u><b>15,520,299</b></u>	<u><b>123,297,889</b></u>	<u><b>623,636,692</b></u>
Total	<u>976,067,861</u>	<u><b>15,520,299</b></u>	<u><b>145,417,279</b></u>	<u><b>846,170,881</b></u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 36. Deferred income (continued)

#### **Deferred income (continued)**

Items relating to government grants:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Liability	Opening balance	Additional subsidies in the period	Amount recognised in non-operating income during the period	Amount recognised in other income during the period	Other decreases	Closing balance	Related to assets/Related to income
Automobile component project	294,271,296	-	-	110,240,388	-	184,030,908	Income
8-inch IGBT intelligent manufacturing and digital factory construction project	69,935,150	-	-	9,481,517	-	60,453,633	Assets
Construction of R&D and trial-manufacturing center 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)	44,117,647	-	-	5,882,353	-	38,235,294	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 automobiles	22,280,271	-	-	3,179,188	-	19,101,083	Assets
Mao tangao public rental housing construction project	17,248,965	-	-	227,459	-	17,021,506	Assets
6 inch SiC single crystal material R & D and industrialization project	9,858,273	-	-	654,537	-	9,203,736	Assets
Electric drive system of electric wheel mine car	8,200,000	-	-	-	-	8,200,000	Income
Electric drive system of electric wheel mine car	7,858,418	-	-	1,799,213	-	6,059,205	Assets
SIC base industrial construction project fund	7,759,200	-	-	103,456	-	7,655,744	Assets
Refund of land subsidy	5,000,000	-	-	-	-	5,000,000	Assets
Hunan governmental earmark on the development of the second batch of mobile internet industry in 2016	3,200,000	-	-	200,000	-	3,000,000	Assets
Semiconductor three-line construction infrastructure subsidies	3,137,600	-	-	-	-	3,137,600	Assets
Industrial support fund	2,430,556	-	-	416,667	-	2,013,889	Assets
Others	356,600,485	15,520,299	-	674,999	(12,557,502)	358,888,283	Assets/Income
Total	976,067,861	15,520,299	-	132,859,777	(12,557,502)	846,170,881	

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 37. Share capital

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Changes during the period (+/-)					Closing balance
		Share issued	Bonus shares	Transfer from reserves	Others	Subtotal	
Total number of shares	1,416,236,912	-	-	-	-	-	1,416,236,912
I Restricted shares							
1. Shares held by state-owned legal person	640,101,305	-	-	-	2,872,000	2,872,000	642,973,305
2. Shares held by other domestic investors	63,788,283	-	-	-	(13,464,169)	(13,464,169)	50,324,114
3. Shares held by foreign investor	7,375	-	-	-	(7,375)	(7,375)	-
II Unrestricted shares							
1. H Shares listed abroad	547,329,400	-	-	-	-	-	547,329,400
2. A Shares listed domestically	165,010,549	-	-	-	10,599,544	10,599,544	175,610,093

Other information:

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 Share 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).

Save for the release of restricted shares stated above, shares of the Company subject to trading moratorium decreased by 555,900, which was due to lending of shares by the shareholders pursuant to the Implementation Rules on Refinancing and Lending Shares for Securities Financing Business of the STAR Market, and in line with the requirements of relevant laws and regulations.

### 38. Capital reserve

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Share premium	10,524,332,720	-	-	10,524,332,720
Other capital reserve	(4,867,207)	-	-	(4,867,207)
Total	10,519,465,513	-	-	10,519,465,513

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 39. Other comprehensive income

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Movement for the period						Closing balance	
		Amount incurred for current period before tax	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		
					to 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)	62,677,856	16,815,890	6,790,157	39,200,888	(129,079)	(168,883,741)		
Changes in fair value of other debt investments	(62,313,730)	59,930,484	16,815,890	6,790,157	36,453,516	(129,079)	(25,860,214)		
Translation differences of financial statements denominated in foreign currencies	(145,770,899)	2,747,372	-	-	2,747,372	-	(143,023,527)		
Total other comprehensive income	(208,084,629)	62,677,856	16,815,890	6,790,157	39,200,888	(129,079)	(168,883,741)		

Other information, include 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:

None

### 40. Special reserve

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Safety production fee	30,785,734	38,929,023	33,289,914	36,424,843
Total	30,785,734	38,929,023	33,289,914	36,424,843

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 41. Surplus reserve

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Opening balance	Increase	Decrease	Closing balance
Statutory surplus reserve	<u>2,545,778,284</u>	—	—	<u>2,545,778,284</u>
Total	<u>2,545,778,284</u>	—	—	<u>2,545,778,284</u>

### 42. Retained earnings

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior year
Retained earnings at the beginning of the period or the year	<b>18,316,811,951</b>	17,156,557,050
Add: Net profit attributable to shareholders of the Parent Company for the period or the year	<b>870,961,499</b>	2,017,694,796
Less: Appropriation to statutory surplus reserve	—	(220,133,285)
Common stock dividends payable	<b>(637,306,610)</b>	(637,306,610)
Retained earnings at the end of the period	<b>18,550,466,840</b>	<u>18,316,811,951</u>

The 2021 year profit distribution proposal of the Company has been reviewed and approved in the 2021 annual general meeting of shareholders for 2021 held on June 17, 2022., pursuant to which a final dividend of 0.45 RMB Yuan (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 637,306,610 RMB Yuan.

# Section X Financial Report

## VII. 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	<b>6,428,096,620</b>	<b>4,209,149,865</b>	5,172,734,504	3,194,567,549
Other operating activities	<b>98,814,120</b>	<b>85,480,785</b>	125,385,051	105,850,732
Total	<b>6,526,910,740</b>	<b>4,294,630,650</b>	5,298,119,555	<b>3,300,418,281</b>

Unit: Yuan Currency: RMB

Item	Current period		Prior period	
	Revenue	Cost of sales	Revenue	Cost of sales
Rail transit equipment business	<b>4,600,415,099</b>	<b>2,796,966,013</b>	4,396,106,410	2,568,705,951
Emerging equipment business	<b>1,827,681,521</b>	<b>1,412,183,852</b>	776,628,094	625,861,598
Others	<b>98,814,120</b>	<b>85,480,785</b>	125,385,051	105,850,732
Total	<b>6,526,910,740</b>	<b>4,294,630,650</b>	5,298,119,555	<b>3,300,418,281</b>

#### (2) Details of revenue from contracts

Applicable  Not applicable

Unit: Yuan Currency: RMB

Type of contract	Current period	Prior period
By geographical areas of sales		
Mainland China	<b>6,169,265,789</b>	5,011,795,724
Other countries and regions	<b>357,644,951</b>	286,323,831
Total	<b>6,526,910,740</b>	5,298,119,555

Other information of revenue from contracts:

None

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 43. Revenue and cost of sales (continued)

#### (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 recognizes revenue upon receipts and acceptance of the goods by the customer.

Advances from customer before delivery of rail transit equipment and components are recognized 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 repairs and maintains rail transit equipment and components. According to the service contract, the maintenance service is subject to customer's acceptance upon delivery, and the Group is entitled to collect the payment upon acceptance by the customer. As the customer can't simultaneously receive and consume the economic benefits provided by the Group's performance as the Group performs; and can't control the service during the Group's performance either; and during the contract period, the Group can't collect the payment in respect of the part of obligations completed up to date, therefore, the maintenance service represents the performance obligation performed at a point in time, and the Group recognizes revenue from maintenance service upon acceptance by customer.

##### *Revenue from construction contracts*

The Group's revenue from construction contracts mainly arises from production of marine engineering products such as deep-sea robot. The Group mainly adopts marine transportation. 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 recognizes 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.

The sales course of marine engineering products has no significant financing component and right of return.

#### (4) Descriptions of allocated remaining performance obligations

Applicable  Not applicable

# Section X Financial Report

## VII. 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	<b>17,504,718</b>	9,216,708
Education surcharges	<b>12,667,134</b>	6,646,377
Others	<b>19,553,111</b>	16,700,038
 Total	 <b>49,724,963</b>	 <b>32,563,123</b>

### 45. Selling expenses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Provision for product quality warranties	<b>236,639,591</b>	224,855,339
Employee benefits	<b>103,339,568</b>	108,860,714
Transportation and handling charges	<b>3,558,284</b>	8,365,630
Office and travel expenses	<b>21,560,464</b>	19,417,816
Business entertainment expenses	<b>15,067,959</b>	13,934,299
Bidding and tendering fee	<b>6,094,346</b>	5,318,926
Advertising and publicity cost	<b>2,161,449</b>	1,257,845
Others	<b>15,298,372</b>	23,666,301
 Total	 <b>403,720,033</b>	 <b>405,676,870</b>

# Section X Financial Report

## VII. 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)	<b>207,998,518</b>	174,309,132
Depreciation and amortization expenses	<b>51,651,562</b>	43,180,275
Facility maintenance cost	<b>6,043,607</b>	5,680,598
Office and travel expenses and conference fee	<b>13,888,577</b>	6,851,015
Property management fee	<b>8,289,787</b>	9,537,188
Service fees for intermediaries and professional institutions	<b>9,121,520</b>	6,757,837
Utilities expenses	<b>5,749,263</b>	7,884,676
Insurance expenses	<b>4,579,800</b>	3,146,551
Rental expenses	<b>4,227,209</b>	8,869,910
Business entertainment expenses	<b>4,348,573</b>	4,406,808
Others	<b>26,100,223</b>	18,256,226
Total	<b>341,998,639</b>	<b>288,880,216</b>

### 47. Research and development expenses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Employee benefits	<b>330,182,312</b>	290,860,340
Cost of materials consumed	<b>98,745,639</b>	83,635,257
Depreciation and amortization expenses	<b>106,093,878</b>	106,599,198
Technical service fee	<b>85,344,144</b>	78,366,400
Office and travel expenses	<b>20,094,989</b>	23,659,500
Experiment and inspection cost	<b>3,997,614</b>	10,396,293
Others	<b>51,598,957</b>	47,413,984
Total	<b>696,057,533</b>	<b>640,930,972</b>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 48. Finance expense

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Interest expenses	<b>3,541,408</b>	3,430,067
Interest expenses of lease liabilities	<b>3,435,186</b>	2,686,422
Less: Capitalized interest expenses	—	(115,357)
Interest income	<b>(94,099,231)</b>	(28,126,762)
Net exchange gains	<b>(9,443,255)</b>	(282,584)
Financial institution charges	<b>5,495,395</b>	5,342,179
Others	<b>(1,992,707)</b>	(418,174)
Total	<b>(93,063,204)</b>	<b>(17,484,209)</b>

### 49. Other income

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Refunds of VAT	<b>67,004,658</b>	68,597,906
Technology project fund	<b>127,080,414</b>	133,263,795
Government rewards	<b>34,429,148</b>	17,605,718
Total	<b>228,514,220</b>	<b>219,467,419</b>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 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	(41,562,948)	(11,154,070)
Gains on disposal of held-for-trading financial assets	25,502,952	42,835,550
Gains (losses) on de-recognition of financial assets measured at amortized cost	(247,965)	(101,331)
others	(1,049,490)	—
Total	<u>(17,357,451)</u>	<u>31,580,149</u>

### 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	110,919,758	8,884,903
Held-for-trading financial liabilities	(4,615,657)	—
Total	<u>106,304,101</u>	<u>8,884,903</u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 52. Credit losses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Losses on credit impairment of notes receivable	(533,417)	1,881,455
Losses on credit impairment of accounts receivable	(39,676,856)	(37,454,935)
Losses on credit impairment of other receivables	(1,197,746)	(1,449,696)
Total	<u>(41,408,019)</u>	<u>(37,023,176)</u>

### 53. Impairment losses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
I. Losses on impairment of inventories and contract costs	(115,005,139)	(74,029,446)
II. Reversals/(losses) on impairment of contract assets	<u>223,761</u>	<u>(2,713,947)</u>
Total	<u>(114,781,378)</u>	<u>(76,743,393)</u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 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	<u>314,198</u>	<u>(200,180)</u>
Total	<u>314,198</u>	<u>(200,180)</u>

### 55. Non-operating income

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period	Amount included in non-recurring gain or loss for the current period	Amount included in non-recurring gain or loss for the prior period
Penalty income and default compensation income	<u>760,989</u>	1,103,337	760,989	1,103,337
Unsettled payment	<u>420,403</u>	1,571,553	420,403	1,571,553
Others	<u>2,062,230</u>	5,678,226	2,062,230	5,678,226
Total	<u>3,243,622</u>	8,353,116	<u>3,243,622</u>	<u>8,353,116</u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 56. Non-operating expenses

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period	Amount included in non-recurring gain or loss for the current period	Amount included in non-recurring gain or loss for prior period
Expenses on penalties and default compensation	<b>20,458</b>	87,655	20,458	87,655
Others	<b>167,888</b>	53,917	<b>167,888</b>	<b>53,917</b>
Total	<b>188,346</b>	<b>141,572</b>	<b>188,346</b>	<b>141,572</b>

### 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	<b>171,509,165</b>	148,798,478
Deferred income tax expenses	<b>(52,113,354)</b>	<b>(50,459,584)</b>
Total	<b>119,395,811</b>	<b>98,338,894</b>

# Section X Financial Report

## VII. 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>998,483,073</u>	<u>801,311,568</u>
Income tax expenses calculated at statutory tax rate of 15%	<u>149,772,461</u>	120,196,735
Effect of preferential tax rate applicable to the Company and its certain subsidiaries	<u>(4,684,890)</u>	7,011,085
Effect of tax-free income	<u>–</u>	(3,941,466)
Effect of joint ventures and associates	<u>7,646,643</u>	1,935,607
Effect of expenses that are not deductible for tax purposes	<u>5,326,406</u>	7,955,078
Effect of using deductible losses for which no deferred tax assets were recognised for the prior period	<u>(6,030,790)</u>	(6,765,997)
Effect of deductible temporary differences or deductible losses for which no deferred tax assets were recognised in the current period	<u>2,198,033</u>	8,181,359
Effect of additional deduction of R & D expenses	<u>(46,201,804)</u>	(41,059,698)
Others	<u>11,369,752</u>	<u>4,826,191</u>
Income tax expenses	<u>119,395,811</u>	<u>98,338,894</u>

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 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 mentioned in Note VI, Chengdu CRRC Times Electric Technology Co., Ltd. is in compliance with the recognition conditions of small and low profit enterprises in 2021, and subject to the income tax rate of 20%. In 2022, it is in compliance with the relevant provisions of the preferential enterprise income tax policy for the Western China Development, and subject to the income tax rate of 15%.

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 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	43,075,409	91,887,949
Interest income	60,787,342	28,126,762
Income from insurance claims	20,413,975	—
Others	6,777,664	40,571,929
Total	<u>131,054,390</u>	<u>160,586,640</u>

#### (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	450,925,781	609,530,300
Bank charges	5,495,395	5,342,179
Payment for account current	90,369,556	11,082,073
Increase in cash with restrictive use	—	3,019,780
Increase in fixed deposits of more than three months	—	850,000,000
Others	6,036,272	9,146,808
Total	<u>552,827,004</u>	<u>1,488,121,140</u>

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 58. Items in the cash flow statement (continued)

#### (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	<u>37,169,417</u>	40,270,067
Total	<u>37,169,417</u>	<u>40,270,067</u>

# Section X Financial Report

## VII. 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
1. Reconciliation of net profit to cash flows from operating activities:		
Net profit	<b>879,087,262</b>	702,972,674
Add: Losses on impairment of assets	<b>114,781,378</b>	76,743,393
Losses on credit impairment	<b>41,408,019</b>	37,023,176
Depreciation of fixed assets	<b>276,910,236</b>	188,006,768
Depreciation of right-of-use assets	<b>35,704,615</b>	30,422,210
Amortization of intangible assets	<b>69,716,972</b>	68,423,498
Amortization of long-term prepaid expenses	<b>3,524,141</b>	2,652,512
Losses on disposal of fixed assets, intangible assets and other non-current assets ("-" for gains)	<b>(314,198)</b>	200,180
Losses on changes in fair value(" -" for gains)	<b>(106,304,101)</b>	(8,884,903)
Finance costs("-" for incomes)	<b>(36,473,802)</b>	2,789,937
Investment losses (" -" for gains)	<b>16,059,996</b>	(31,580,149)
Decrease in deferred tax assets("-" for increases)	<b>(64,178,965)</b>	(46,902,125)
Increase in deferred tax liabilities("-" for decrease)	<b>12,065,611</b>	(3,557,459)
Decrease in inventories (" -" for increase)	<b>(1,255,512,828)</b>	(1,294,978,828)
Decrease in operating receivables (" -" for increase)	<b>(2,346,340,461)</b>	(1,397,511,396)
Increase in operating payables(" -" for decrease)	<b>1,910,520,384</b>	(464,827,286)
Increase /(decrease) in special reserve	<b>6,546,887</b>	5,319,273
Net cash flow from operating activities	<b>(442,798,854)</b>	(2,133,688,525)
2. Significant investment and financing activities not involving cash receipts and payments		
Conversion of debt into capital		
Convertible corporate bonds due within one year		
Acquire fixed assets by finance leases		
3. Net movement in cash and cash equivalents:		
Closing balance of cash	<b>3,882,076,876</b>	3,340,572,244
Less: Opening balance of cash	<b>7,883,060,105</b>	4,783,889,538
Net increase (decrease) in cash and cash equivalents	<b>(4,000,983,229)</b>	(1,443,317,294)

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 59. Supplementary information to the cash flow statement (continued)

#### (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

#### (4) Cash and cash equivalents

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
I. Cash		
Including: Cash on hand		
Bank deposits on demand		
	<b>3,882,076,876</b>	7,883,060,105
	<b>33,312</b>	29,256
	<b>3,882,043,564</b>	7,883,030,849
II. Closing balance of cash and cash equivalents	<b>3,882,076,876</b>	<u>7,883,060,105</u>

### 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

### 61. Assets with restrictive ownership title or right of use

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Carrying amount at the end of the period	Reason for restriction
Cash at bank and on hand	<b>5,858,304</b>	Guaranteed
Bills receivable	<b>228,282,497</b>	Endorsed or discounted but not yet due at the balance sheet date and pledged
Trade receivables financing	<b>61,561,079</b>	Pledged
Total	<b>295,701,880</b>	/

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 62. Foreign currency monetary items

#### (1) Foreign currency monetary items

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Foreign currency balance at 30 June 2022	Exchange rate	Equivalent to RMB YUAN at 30 June 2022
Cash and bank balances			
Including: GBP	<b>2,346,820</b>	<b>8.1365</b>	<b>19,094,901</b>
USD	<b>4,079,145</b>	<b>6.7114</b>	<b>27,376,774</b>
EUR	<b>1,682,678</b>	<b>7.0084</b>	<b>11,792,880</b>
Others	/	/	<b>74,108</b>
Accounts receivable			
Including: USD	<b>17,898,940</b>	<b>6.7114</b>	<b>120,126,946</b>
EUR	<b>5,885,024</b>	<b>7.0084</b>	<b>41,244,602</b>
AUD	<b>29,160,010</b>	<b>4.6145</b>	<b>134,558,866</b>
Other receivables			
GBP	<b>1,724,516</b>	<b>8.1365</b>	<b>14,031,524</b>
Accounts payable			
Including: GBP	<b>270,757</b>	<b>8.1365</b>	<b>2,203,014</b>
USD	<b>10,211,158</b>	<b>6.7114</b>	<b>68,531,166</b>
EUR	<b>25,489,660</b>	<b>7.0084</b>	<b>178,641,733</b>
CHF	<b>4,680,878</b>	<b>7.0299</b>	<b>32,906,104</b>
Others	/	/	<b>1,681,372</b>
Other payables			
USD	<b>5,216,742</b>	<b>6.7114</b>	<b>35,011,642</b>
EUR	<b>5,200,381</b>	<b>7.0084</b>	<b>36,446,350</b>
CHF	<b>5,319,881</b>	<b>7.0299</b>	<b>37,398,231</b>
Others	/	/	<b>30,595</b>

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	Main business place	Functional currency
Specialist Machine Developments	Britain	GBP

# Section X Financial Report

## VII. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

(continued)

### 63. Government grants

#### (1) Government grants

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Presenting item	Amount included in non-recurring profit or loss
Refunds of VAT	67,004,658	Other income	67,004,658
Technology project fund	7,358,509	Other income	7,358,509
Government rewards	21,291,276	Other income	21,291,276
Government rewards	15,520,299	Deferred income	13,137,872
Technology project fund	—	Deferred income	119,721,905
Total	<u>111,174,742</u>		<u>228,514,220</u>

#### (2) Return of government grants

Applicable  Not applicable

Other information

None

# Section X Financial Report

## VIII. 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

### 6. Others

Applicable  Not applicable

# Section X Financial Report

## IX. 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	Nature of business	Proportion of shareholding (%)		Acquisition method
				Direct	Indirect	
Ningbo CRRC Times	Ningbo, Zhejiang	Ningbo, Zhejiang 2#	Manufacturing	100	–	Incorporation
CRRC Times Electronics	Zhuzhou, Hunan	Zhuzhou, Hunan 2#	Manufacturing	100	–	Incorporation
Shenyang CRRC Times	Shenyang, Liaoning	Shenyang, Liaoning 2#	Manufacturing	100	–	Incorporation
CRRC Times Semiconductor	Zhuzhou, Hunan	Zhuzhou, Hunan 2#	Manufacturing	93.80	–	Incorporation
Baoji CRRC Times	Baoji, Shaanxi	Baoji, Shaanxi 2#	Manufacturing	93.21	–	Incorporation
Taiyuan CRRC Times	Taiyuan, Shanxi	Taiyuan, Shanxi 2#	Manufacturing	55	Incorporation	
Kunming CRRC Times Electric Equipment Co., Ltd. ("Kunming Electric")	Kunming, Yunnan	Kunming, Yunnan 2#	Manufacturing	100	–	Incorporation
Hangzhou CRRC Times Electric Equipment Co., Ltd. ("Hangzhou Electric")	Hangzhou, Zhejiang	Hangzhou, Zhejiang 2#	Manufacturing	60	–	Incorporation
Guangzhou CRRC Times Electric Technology Co., Ltd. ("Guangzhou Electric")	Guangzhou, Guangdong	Guangzhou, Guangdong 2#	Manufacturing	60	–	Incorporation
HK CRRC Times Electric	Hong Kong	Hong Kong	Investment holding	100	–	Incorporation
Ningbo CRRC Electric	Ningbo, Zhejiang	Ningbo, Zhejiang 2#	Manufacturing	100	–	Incorporation
Chengdu CRRC Electric	Chengdu, Sichuan	Chengdu, Sichuan 2#	Manufacturing	100	–	Incorporation
Qingdao CRRC Electric (Note 1)	Qingdao, Shandong	Qingdao, Shandong 2#	Manufacturing	45	–	Incorporation
Shanghai CRRC Rail Transit Technology Co., Ltd. ("Shanghai CRRC Rail Transit")	Shanghai	Shanghai 2#	Manufacturing	51	–	Incorporation
CRRC Times Software	Zhuzhou, Hunan	Zhuzhou, Hunan 2#	Software service	100	–	Incorporation
Hunan CRRC Signal	Changsha, Hunan	Changsha, Hunan 2#	Manufacturing	100	–	Incorporation
Lanzhou CRRC Times Rail Transit Technology Co., Ltd. ("Lanzhou Times")	Lanzhou, Gansu	Lanzhou, Gansu 2#	Manufacturing	51	–	Incorporation
Shanghai CRRC SMD	Shanghai	Shanghai 2#	Manufacturing	100	–	Incorporation
CRRC Times Electric Australia Pty.Ltd. ("Times Australia")	Australia	Australia	Trading	100	–	Incorporation
CRRC Times Electric USA,LLC ("Times USA")	USA	USA	Trading	100	–	Incorporation
CRRC Times Electric Brasil Ltda. ("Times Brasil")	Brasil	Brasil	Trading	99	1	Incorporation
Chongqing CRRC Electric Canada Dynex	Chongqing, Canada	Chongqing 2#, Canada	Manufacturing Investment holding	60 100	– –	By business combination not involving enterprises under common control

# Section X Financial Report

## IX. 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	Nature of business	Proportion of shareholding (%)	Acquisition method
				Direct	Indirect
Dynex Semiconductor Limited	UK	UK	Manufacturing	-	100
SMD	UK	UK	Investment holding	-	100
Soil Machine Dynamics Limited	UK	UK	Manufacturing	-	100
SMD Offshore Support Limited	UK	UK	Trading	-	100
SMD Robotics Limited	UK	UK	Trading	-	100
Soil Machine Dynamics Singapore Pte.Ltd.	Singapore	Singapore	Manufacturing	-	100
SMD do Brasil, Ltd.	Brasil	Brasil	Trading	-	100
CRRC National Centre of Converters	Zhuzhou, Hunan	Zhuzhou, Hunan #2	Manufacturing	100	-

# Section X Financial Report

## IX. INTERESTS IN OTHER ENTITIES (continued)

### 1. Interests in subsidiaries (continued)

#### (1) Composition of the Group (continued)

Descriptions of the difference between the proportion of shareholding and the proportion of voting rights:

Please refer to note 1.

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 articles 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.

Basis for consolidating 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

# Section X Financial Report

## IX. INTERESTS IN OTHER ENTITIES (continued)

### 1. Interests in subsidiaries (continued)

#### (2) Significant non-wholly owned subsidiaries

Applicable  Not applicable

Unit: Yuan Currency: RMB

Name of the Subsidiaries	Proportion of shareholding of non-controlling shareholders (%)	Net profit (Loss) attributable to non-controlling shareholders	Dividends paid to non-controlling shareholders	Closing balance of non-controlling interests
Baoji CRRC Times	<b>6.79%</b>	<b>(3,617,296)</b>	—	<b>85,680,776</b>
CRRC Times Semiconductor	<b>6.20%</b>	<b>10,273,178</b>	—	<b>228,766,501</b>

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

#### (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
Baoji CRRC Times (Consolidated)	<u>3,325,926,923</u>	<u>488,668,682</u>	<u>3,814,595,605</u>	<u>1,932,152,948</u>	<u>516,462,219</u>	<u>2,448,615,167</u>	<u>3,600,699,321</u>	<u>486,586,242</u>	<u>4,087,285,563</u>	<u>2,156,926,171</u>	<u>510,656,854</u>	<u>2,667,583,025</u>
CRRC Times Semiconductor	<u>2,894,605,691</u>	<u>1,395,500,510</u>	<u>4,290,106,201</u>	<u>671,314,746</u>	<u>406,034,955</u>	<u>1,077,349,701</u>	<u>2,622,844,678</u>	<u>1,487,572,578</u>	<u>4,110,417,256</u>	<u>546,713,286</u>	<u>518,365,181</u>	<u>1,065,078,467</u>

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		
Baoji CRRC Times (Consolidated)	<u>554,379,471</u>	<u>(57,191,955)</u>	<u>(55,540,792)</u>	<u>61,617,949</u>	<u>297,239,909</u>	<u>(53,273,448)</u>	<u>(53,796,097)</u>	<u>(506,828,401)</u>		
CRRC Times Semiconductor	<u>923,574,206</u>	<u>165,696,427</u>	<u>167,417,711</u>	<u>21,478,998</u>	<u>467,243,932</u>	<u>(18,821,797)</u>	<u>(18,565,414)</u>	<u>(264,147,777)</u>		

# Section X Financial Report

## IX. INTERESTS IN OTHER ENTITIES (continued)

### 1. Interests in subsidiaries (continued)

(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

### 2. Transactions that cause changes in the Group's interests in subsidiaries that do not result in loss of control

Applicable  Not applicable

### 3. Equity in associates or joint ventures

Applicable  Not applicable

# Section X Financial Report

## IX. 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 investment in joint ventures or associates
			Direct	Indirect	
<b>Joint ventures</b>					
Shiling	Zhuzhou, Hunan	Manufacturing	50%	–	Equity method
LANP Electrical	Wenzhou, Zhejiang	Manufacturing	50%	–	Equity method
Shanghai Shentong	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>Associate</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

# Section X Financial Report

## IX. 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

	Amount for the current period Shiling	Balance at the end of the period/ beginning of the period/Amount for the prior period Shiling
Current assets	<b>327,423,225</b>	339,796,725
Including: Cash and cash equivalents	<b>236,791,930</b>	315,855,158
Non-current assets	<b>35,434,558</b>	<u>36,983,070</u>
Total assets	<b>362,857,783</b>	<u>376,779,795</u>
Current liabilities	<b>91,138,190</b>	<u>29,569,172</u>
Total liabilities	<b>91,138,190</b>	<u>29,569,172</u>
Net assets	<b>271,719,593</b>	<u>347,210,623</u>
Share of net assets calculated based on the proportion of shareholding	<b>135,859,790</b>	170,989,491
Carrying amount of investments	<b>135,859,790</b>	<u>170,989,491</u>
Revenue	<b>13,993,086</b>	23,381,268
Income tax expenses	—	—
Net profit	<b>1,740,614</b>	3,867,734
Total comprehensive income	<b>1,740,614</b>	3,867,734
Dividends received from joint ventures	<b>36,000,000</b>	<u>—</u>

#### (3) Main financial information of significant associates

Applicable  Not applicable

# Section X Financial Report

## IX. INTERESTS IN OTHER ENTITIES (continued)

### 3. Equity in associates or joint ventures (continued)

#### (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	<b>99,643,749</b>	101,545,417
Aggregate amount calculated based on the shareholding proportion		
– Net Loss	<b>(1,901,668)</b>	(2,319,249)
– Total comprehensive income	<b>(1,901,668)</b>	(2,319,249)
Associates:		
Aggregate carrying amount of investments	<b>302,264,791</b>	339,192,450
Aggregate amount calculated based on the shareholding proportion		
– Net Loss	<b>(40,531,579)</b>	(10,768,688)
– Total comprehensive income	<b>(36,927,659)</b>	(12,023,847)

#### (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 investment in joint ventures

Applicable  Not applicable

#### (8) Contingent liabilities related to investments in joint ventures or associates

Applicable  Not applicable

# Section X Financial Report

## IX. INTERESTS IN OTHER ENTITIES (continued)

### 4. Significant joint operations

Applicable  Not applicable

### 5. Interests in structured entities not included in the consolidated financial statements

Other information about Interests in structured entities that are not included in consolidated financial statements:

Applicable  Not applicable

### 6. Others

Applicable  Not applicable

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS

Applicable  Not applicable

### 1. Category of financial instruments

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, bills payable, trade payables, other payables, borrowings, long-term payables and lease liabilities. As at 30 June 2022, the Group's holdings of financial instruments are as follows, detailed in Note VII. 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	Beginning Balance
<b>Financial assets</b>		
At FVTPL		
Financial assets held for trading	<b>9,294,891,435</b>	7,579,988,489
<i>At FVTOCI</i>		
Receivables financing	<b>2,427,531,774</b>	2,910,527,667
Investments in other equity instruments	<b>117,400,000</b>	112,400,000
<i>At amortised cost</i>		
Cash at bank and on hand	<b>4,305,691,365</b>	8,219,320,889
Bills receivable	<b>3,233,365,438</b>	2,757,119,757
Accounts receivable	<b>8,170,463,732</b>	6,549,417,025
Other receivables	<b>240,137,466</b>	177,166,093
Other current assets	<b>50,166,250</b>	50,000,000
Non-current liabilities due within one year:	<b>207,562,564</b>	–
Long-term receivables	<b>2,587,927</b>	4,027,705
Other non-current financial assets	<b>2,566,335,961</b>	1,190,080,714
<b>Financial liabilities</b>		
<i>At amortised cost</i>		
Short-term loans	<b>338,714,677</b>	389,550,036
Bills payable	<b>2,032,101,089</b>	1,640,341,546
Accounts payable	<b>5,321,798,508</b>	4,677,716,033
Other payables	<b>1,499,851,716</b>	753,174,560
Long-term borrowings (including those due within one year)	<b>80,212,056</b>	82,715,287
Lease liabilities (including those due within one year)	<b>125,926,585</b>	120,217,161
Long-term payables	<b>78,611</b>	525,195

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 2. Transfer of financial assets

The bank acceptances and commercial acceptances endorsed or discounted by the Group are as follows:

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Financial assets that have been transferred but not derecognized in entirety	<b>218,467,100</b>	294,639,370
Financial assets that have been derecognized in entirety but with continuous involvement	<b>740,385,313</b>	948,163,957
Total	<b>958,852,413</b>	1,242,803,327

For the bank acceptances and commercial acceptances that have been transferred but not derecognized in entirety, the Group considers that it has retained substantially all the risks and rewards, including the related default risk. Therefore, the Group continues to recognize these acceptances in full and the related accounts payable that have been settled.

The maturity date of the bank acceptances that have been derecognized and meet certain criteria is 3-12 months, substantially all the risks and rewards of which have been transferred. Therefore, the relevant notes receivable are derecognized.

The Group's derecognition of accounts receivable due to factoring of accounts receivable is as follows:

Unit: Yuan Currency: RMB

Item	Current period
Factoring of accounts receivable	<b>7,335,000</b>

The Group considers that substantially all the risks and rewards of ownership of these accounts receivable have been transferred to the other party and therefore derecognizes these accounts receivable.

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 3. 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 recognized 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, notes 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 recognized and creditworthy third parties, there is no requirement for collateral. As at 30 June 2022 and 31 December 2021, the Group had certain concentrations of credit risk as 4.54% and 5.06% of the Group's accounts receivable were due from the Group's largest customer. As at 30 June 2022 and 31 December 2021, 19.56% 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 V 10.2.

As part of the Group's credit risk management, the Group uses the aging 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 aging 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 impairment losses are made for irrecoverable amounts. In this regard, the management of the Group considers that the Group's credit risk assumed is significantly reduced.

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 3. 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 30 June 2022

Unit: Yuan Currency: RMB

Item	Within 1 year	1-2 years	Over 2 years	Closing Balance	
				Total	Carrying amount
Short-term borrowings	339,294,805	-	-	339,294,805	338,714,677
Notes payable	2,032,101,089	-	-	2,032,101,089	2,032,101,089
Accounts payable	5,321,798,508	-	-	5,321,798,508	5,321,798,508
Other payables	1,499,851,716	-	-	1,499,851,716	1,499,851,716
Long-term borrowings (including long-term borrowings due within 1 year)	5,839,030	5,785,030	72,905,698	84,529,758	80,212,056
Lease liabilities (including lease liabilities due within 1 year)	49,751,517	41,426,053	53,308,830	144,486,400	125,926,585
Long-term payables	-	78,611	-	78,611	78,611
Total	9,248,636,665	47,289,694	126,214,528	9,422,140,887	9,398,683,242

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 3. Risks of financial instruments (continued)

#### (2) Liquidity risk (continued)

As at 31 December 2021

Unit: Yuan Currency: RMB

Item	Openning 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
Notes 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	753,174,560	-	-	753,174,560	753,174,560
Long-term borrowings (including long-term borrowings due within 1 year)	5,920,317	5,839,030	76,179,814	87,939,161	82,715,287
Lease liabilities (including lease liabilities due within 1 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	<u>7,513,889,846</u>	<u>37,769,035</u>	<u>127,421,697</u>	<u>7,679,080,578</u>	<u>7,664,239,818</u>

#### (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.

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 3. Risks of financial instruments (continued)

#### (3) Market risk (continued)

##### Foreign currency risk (continued)

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
GBP	33,126,424	2,203,014	68,682,780	13,273,917
USD	147,503,720	103,542,808	47,860,933	10,462,919
EUR	53,037,482	215,088,083	29,336,348	51,523,136
CHF	–	70,304,335	–	1,587,805
AUD	134,558,866	–	27,526,953	–
Total	368,226,492	391,138,240	173,407,014	76,847,777

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 3. 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%	(2,628,490)	+10%	(4,709,753)
If RMB weakens against GBP	(10%)	2,628,490	(10%)	4,709,753
USD				
If RMB strengthens against USD	+10%	(3,736,678)	+10%	(3,178,831)
If RMB weakens against USD	(10%)	3,736,678	(10%)	3,178,831
EUR				
If RMB strengthens against EUR	+10%	13,774,301	+10%	1,885,877
If RMB weakens against EUR	(10%)	(13,774,301)	(10%)	(1,885,877)
CHF				
If RMB strengthens against CHF	+10%	5,975,868	+10%	134,963
If RMB weakens against CHF	(10%)	(5,975,868)	(10%)	(134,963)
AUD				
If RMB strengthens against AUD	+10%	(11,437,504)	+10%	(2,339,791)
If RMB weakens against AUD	(10%)	11,437,504	(10%)	2,339,791

# Section X Financial Report

## X. RISK RELATED TO FINANCIAL INSTRUMENTS (continued)

### 3. 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 maximize 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 period ended 30 June 2022 and for the year ended 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	338,714,677
Financial liabilities held for trading	4,615,657
Notes payable	2,032,101,089
Accounts payable	5,321,798,508
Employee benefits payable	276,808,019
Taxes payable (excluding enterprise income tax payable)	62,456,531
Other payables	1,499,851,716
Long-term borrowings (including long-term borrowings due within 1 year)	80,212,056
Lease liabilities (including lease liabilities due within 1 year)	125,926,585
Long-term payables	78,611
Less: Cash and cash equivalents	3,882,076,876
Net liabilities	5,860,486,573
Equity attributable to shareholders of the Parent Company	32,899,488,651
Capital and net liabilities	38,759,975,224
Gearing ratio	15.12%

# Section X Financial Report

## XI. 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	-	9,294,891,435	-	9,294,891,435
1. Financial assets at FVTPL	-	9,294,891,435	-	9,294,891,435
(II) Receivables financing	-	2,427,531,774	-	2,427,531,774
(III) Other equity instrument investment	-	-	117,400,000	117,400,000
Total assets measured at fair value on a recurring basis	-	11,722,423,209	117,400,000	11,839,823,209
(IV) Held-for-trading financial liabilities	-	(4,615,657)	-	(4,615,657)
1. Financial liabilities at FVTPL	-	(4,615,657)	-	(4,615,657)
Total liabilities measured at fair value on a recurring basis	-	(4,615,657)	-	(4,615,657)

### 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. Future cash flows are based on forward exchange rate (sourced from the forward exchange rate observed at financial statement date) and estimated contractual forward exchange rate, and discounted using the discounting rate reflecting the credit risk of counterparty.

# Section X Financial Report

## XI. DISCLOSURE OF FAIR VALUE (continued)

### 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.

### 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	5,000,000
30 June 2022	117,400,000

### 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. Valuation technology changes and reasons for changes in the current period

Applicable  Not applicable

### 8. Fair values 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 X、1. As at 30 June 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.

# Section X Financial Report

## XI. DISCLOSURE OF FAIR VALUE (continued)

### 9. Others

Applicable  Not applicable

## XII. RELATED PARTIES AND RELATED PARTY TRANSACTIONS

### 1. Parent of the Company

Applicable  Not applicable

Unit: Yuan 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	RMB8,446,840,000	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 controlling shareholder of parent 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 IX 、1.

Applicable  Not applicable

For details of the subsidiaries of the Company, please refer to Note IX 、1.

### 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 IX 、3.

# Section X Financial Report

## XII. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 3. Particulars of joint ventures and associates of the Company (continued)

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

### 4. Particulars of other related parties

Applicable  Not applicable

Name of other related parties	Relationship between other related parties and the Company
Shanghai CRRC Hange Shipping and Marine Engineering Co., Ltd.	Company controlled by CRRC ZELRI
Xiangyang CRRC Electric Machinery Co., Ltd.	Company controlled by CRRC ZELRI
Zhuzhou Times New Material Technology Co., Ltd.	Company controlled by CRRC ZELRI
CRRC Beijing Heavy Industry and Mechanics Co., Ltd.	Company controlled by CRRC ZELRI
Zhuzhou Times RUIWEI Anti-vibration Equipment Limited	Company controlled by CRRC ZELRI
CRRC-AVC Thermal Technologies (Zhuzhou) Co., Ltd.	Company controlled by CRRC ZELRI
CRRC Electromechanical Technology Co., Ltd.	Company controlled by CRRC ZELRI
Zhuzhou Times Rubber and Plastics Components Development Co., Ltd.	Company controlled by CRRC ZELRI
Hunan CRRC Zhixing Technology Co., Ltd.	Company controlled by CRRC ZELRI
CRRC Zhuzhou Traction Electrical Equipment Test & Certification Co., Ltd.	Company controlled by CRRC ZELRI
Boge Rubber & Plastics (Zhuzhou) Co., Ltd.	Company controlled by CRRC ZELRI
Hunan Lixing Power Technology Co., Ltd.	Company controlled by CRRC ZELRI
BOGE Elastmetall GmbH	Company controlled by CRRC ZELRI
Zhuzhou Times Fiber Pioneer Material Technology Co., Ltd.	Company controlled by CRRC ZELRI
Tianjin CRRC Wind Equipment Technology Co., Ltd.	Company controlled by CRRC ZELRI
Qingdao CRRC Huaxuan Water Co., Ltd.	Company controlled by CRRC ZELRI
Xiangyang China Railway Hongji Engineering Co., Ltd.	Company controlled by CRRC ZELRI
Changzhou CRRC Ruitai Equipment Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Meishan CRRC Brake Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Tianjin JL Equipment 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 Taiyuan Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Brake System 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

# Section X Financial Report

## XII. 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 Zhuzhou Vehicle 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 Dalian Institute 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
Nanjing CRRC Logistics Service Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shandong CRRC Huateng Environmental Protection Technology 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 Beijing Erqi Locomotive Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Times Electric Vehicle 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 Yongji Electric 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
CRRC (Hong Kong) CO., Ltd	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changzhou CRRC Westinghouse Diesel Engine Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Dalian CRRC Zelong Machinery Co., Ltd	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Meishan CRRC Fastener Science & Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Qishuyan Institute 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

# Section X Financial Report

## XII. 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
Ziyang CRRC Electrical Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Hunan CRRC Environmental Engineering 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
Chengdu CRRC Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Ningbo CRRC Rail Transit Equipment 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 Zhuzhou Electric Locomotive Industrial Management 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
CRRC Information Technology 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 Yangtze Tongling 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
CRRC Shandong Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Xi'an Yongdianjietong Electric Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Guangzhou CRRC Rail Transportation Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Hangzhou CRRC Vehicle 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 Chengdu Locomotive 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
Jiangsu CRRC Urban Development Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Section X Financial Report

## XII. 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 Shenyang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Dalian Locomotive and Rolling Stock Distribution Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Nanjing Puzhen Rolling Stock Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Industry Research Institute 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 Xi'an Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Changchun CRRC Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Nanjing CRRC Puzhen Haitai Brake Equipment 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
Dalian CRRC Mechanical and Electrical Engineering Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Guangdong Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Zhuzhou CRRC Special Equipment 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
Foshan CRRC Sifang Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Zhuzhou Vehicle Industry Management Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Ziyang Locomotive Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Massachusetts 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
CRRC Sifang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Zhengzhou CRRC Sifang Rail Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Section X Financial Report

## XII. 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 Wuhan Railway Equipment 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 Qiqihar Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Nanjing CRRC Puzhen Rapid Transit Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Tianjin CRRC Tangche Railway 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
Suzhou CRRC Rolling Stock Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Chongqing CRRC Changke Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Lanzhou 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
CRRC Dalian Electric Traction R&D Center Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Investment & Leasing 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
Qingdao Kamax Buffer Equipment Company Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Zhongche Zhuzhou Investment Holding 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
Changzhou CRRC Diesel Parts Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Century Huayang Environmental Engineering 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
Zhongche Yongji Electric Machinery Industry Management Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Section X Financial Report

## XII. 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 CRRC Sifang Rail Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Cangzhou CRRC ZELC Railway Equipment & Service Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Australia CRRC Changke 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
Yongji CRRC Motor & Electric Appliance Repair CO., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Chongqing CRRC Sifang Rolling Stock Institute Technology Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Environmental & Technology 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
Bombardier Sifang (Qingdao) Transportation Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Shijiazhuang CRRC Railway Vehicles Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
CRRC Sifang Railway Vehicles (Chengdu) Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Tianjin CRRC Sifang Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Xi'an CRRC Yongdian Electric 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
Wuhan CRRC Sifang Maintenance Center Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Nanjing CRRC Railway Vehicles Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Hunan Zhirong Technology 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
Tianjin CRRC Railway Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Beijing CRRC Changke Erqi Railway Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group

# Section X Financial Report

## XII. 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
Jiangxi CRRC Changke Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Wuhan CRRC Changke Railway Vehicles Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Kunming CRRC Urban Rail Transit Equipment Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Wenzhou CRRC Sifang Rail Vehicle Co., Ltd.	Company controlled by the ultimate holding party other than CRRC ZELRI Group
Urumqi CRRC Rail Transit Equipment 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
Zhuzhou Times Electric Insulation Co., Ltd.	Associate of CRRC ZELRI
Zhuzhou Guochuang Track Technology Co., Ltd	Associate of CRRC ZELRI
Hunan Motor Vehicle Testing Technology Co., Ltd.	Associate of CRRC ZELRI
Shenyang Westinghouse Brake Technology Co., Ltd	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Changzhou Ruiyang Transmission Technology Co., Ltd.	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Shanghai CRRC Shentong rail transit vehicle Co., Ltd	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Shanghai Shentong Changke Railway Vehicles Co., Ltd	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Dalian Toshiba Locomotive Electric Equipment Co., Ltd.	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Qingdao Sifang Faiveley Railway Brake Co., Ltd.	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Shenzhen CRRC Railway Vehicles Co., Ltd.	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Shenyang CRRC Rail Transit Equipment Co., Ltd.	Joint venture of the ultimate holding group other than CRRC ZELRI Group
Changchun Changke Alstom Railway Vehicle Company Ltd.	Joint venture 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
Taiyuan Locomotive Lukai Transportation Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Taiyuan Yingfeng Locomotive Casting Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Guangzhou CRRC Junfa Electrical Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group

# Section X Financial Report

## XII. 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 Jiufang Casting 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
Tianjin Electric Locomotive Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Taiyuan Shenghao Construction and Installation Engineering Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Beijing Er'qi Changtie Transportation Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Taiyuan Railway Rolling Stock Trading Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Ziyang Zhonggong Locomotive Transmission Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
Xinyang Amsted Tonghe Wheels Co., Ltd.	Associate of the ultimate holding group 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 Nanji Railway Equipment Technology Development Co., Ltd.	Associate of the ultimate holding group other than CRRC ZELRI Group
China Railway Baoji Machinery Co., Ltd.	Investor which has significant influence over Baoji CRRC Times

# Section X Financial Report

## XII. 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
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	Purchase of goods	<b>394,245,596</b>	548,748,589
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	Receipt of service	<b>9,167,431</b>	74,325,873
Joint ventures of the ultimate holding group other than CRRC ZELRI Group	Purchase of goods	<b>848,620</b>	8,345,306
Joint ventures of the ultimate holding group other than CRRC ZELRI Group	Receipt of service	—	—
Associates of the ultimate holding group other than CRRC ZELRI Group	Purchase of goods	<b>1,189,141</b>	28,448,655
Associates of the ultimate holding group other than CRRC ZELRI Group	Receipt of service	<b>751,698</b>	—
CRRC ZELRI	Purchase of goods	<b>127,795</b>	311,705
CRRC ZELRI	Receipt of service	<b>69,396,685</b>	39,265,114
Joint ventures of the Company	Purchase of goods	<b>15,483,928</b>	5,741,707
Joint ventures of the Company	Receipt of service	<b>80,659</b>	—
Associates of the Company	Purchase of goods	<b>59,487,309</b>	38,456,379
Associates of the Company	Receipt of service	<b>331,925</b>	6,516,699
Companies controlled by CRRC ZELRI	Purchase of goods	<b>159,686,697</b>	177,055,913
Companies controlled by CRRC ZELRI	Receipt of service	<b>8,933,935</b>	965,255
Joint ventures of CRRC ZELRI	Purchase of goods	<b>52,717,600</b>	—
Joint ventures of CRRC ZELRI	Receipt of service	—	—
Associates of CRRC ZELRI	Receipt of service	<b>361,019</b>	—
Investors which have significant influence over Baoji CRRC Times	Purchase of goods	<b>1,414,035</b>	4,138,326
Investors which have significant influence over Baoji CRRC Times	Receipt of service	—	779,244

# Section X Financial Report

## XII. 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 of the ultimate holding group other than CRRC ZELRI Group	Sales of goods	<b>15,491,775</b>	69,693,985
Joint ventures of the ultimate holding group other than CRRC ZELRI Group	Rendering of services	<b>2,982,013</b>	141,593
Associates of the ultimate holding group other than CRRC ZELRI Group	Sales of goods	<b>2,674,179</b>	2,798,285
Associates of the ultimate holding group other than CRRC ZELRI Group	Rendering of services	<b>2,100,748</b>	10,807,195
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	Sales of goods	<b>1,724,441,663</b>	1,957,759,920
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	Rendering of services	<b>210,627,117</b>	399,350,571
Associates of the Company	Sales of goods	<b>129,818,382</b>	12,074,901
Associates of the Company	Rendering of services	—	12,574,528
Joint ventures of the Company	Sales of goods	—	4,156,143
Joint ventures of the Company	Rendering of services	—	—
Companies controlled by CRRC ZELRI	Sales of goods	<b>15,289,394</b>	41,446,716
Companies controlled by CRRC ZELRI	Rendering of services	—	—
CRRC ZELRI	Sales of goods	<b>52,043,961</b>	11,512,263
CRRC ZELRI	Rendering of services	—	32,125
Joint ventures of the ultimate holding group other than CRRC ZELRI Group	Sales of goods	<b>41,078,000</b>	—
Joint ventures of the ultimate holding group other than CRRC ZELRI Group	Rendering of services	—	—
Associates of the ultimate holding group other than CRRC ZELRI Group	Sales of goods	<b>7,079,646</b>	—
Associates of the ultimate holding group other than CRRC ZELRI Group	Rendering of services	—	—
Controlling shareholders of CRRC ZELRI	Sales of goods	—	—
Controlling shareholders of CRRC ZELRI	Rendering of services	—	2,169,811
Investor which has significant influence over Baoji CRRC Times	Sales of goods	<b>654,867</b>	—
Investor which has significant influence over Baoji CRRC Times	Rendering of services	—	—

# Section X Financial Report

## XII. 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 current period
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	8,548	214,668
CRRC ZELRI	650,159	67,570
Companies controlled by CRRC ZELRI	1,611,797	2,378,365
Associates of the Company	208,939	-

# Section X Financial Report

## XII. 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	Expenses relating to Short-term lease and leases of low-value assets applied the practical expedient (if applicable)				Variable lease payments not included in the measurement of lease liabilities (if applicable)				Rent paid		Interest expense of lease liabilities		Right-of-use Assets increased	
	Current period		Prior period		Current period		Prior period		Current period		Prior period		Current period	
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,532,719	2,207,321	1,670,664	2,339,397	2,646,875	2,946,195	422,176.53	332,649	1,308,183	-	-	-	-	-
CRRC ZELRI	-	459,454	-	459,454	179,464	639,456	15,805	40,783	-	-	-	-	-	-
Companies controlled by CRRC ZELRI	11,090,041	850,041	11,090,041	850,041	-	-	-	-	-	-	-	-	-	-
Investors which have significant influence over Baoji CRRC Times	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### (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

# Section X Financial Report

## XII. 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
Funds received				
Controlling shareholders of CRRC ZELRI	80,212,056	29/09/2015	28/09/2030	annual interest rate 1.08%
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	77,345,230	20/10/2021	31/10/2022	annual interest rate 0.85%

#### (6) Transfer of assets and debt restructuring

Applicable  Not applicable

#### (7) Remuneration of key management personnel

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Current period	Prior period
Remuneration of key management personnel	<u>5,793,435</u>	<u>6,390,301</u>

#### (8) Other related party transactions

Applicable  Not applicable

Loan interest expense

Unit: Yuan Currency: RMB

Related party	Current period	Prior period
Controlling shareholders of CRRC ZELRI	<u>495,545</u>	<u>469,171</u>

# Section X Financial Report

## XII. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (continued)

### 5. Transactions between the Group and its related parties (continued)

#### (9) Purchases of energy from related parties

Unit: Yuan Currency: RMB

Related party	Current period	Prior period
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	<b>1,127,317</b>	2,327,415
Influence over Baoji CRRC Times	<b>—</b>	<b>283,622</b>

#### (10) Sales of energy to related parties

Unit: Yuan Currency: RMB

Related party	Current period	Prior period
Companies controlled by CRRC ZELRI	<b>1,554,800</b>	536,063
Associates of the Company	<b>3,457</b>	17,800
CRRC ZELRI	<b>—</b>	103,306
Companies controlled by the ultimate holding party other than CRRC ZELRI Group	<b>—</b>	<b>1,678</b>

# Section X Financial Report

## XII. 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	
		Gross carrying amount	Provisions for bad and doubtful debts	Gross carrying amount	Provisions for bad and doubtful debts
Bills receivable	Associates of the ultimate holding group other than CRRC ZELRI Group	21,400,000	21,400	28,400,000	28,400
Bills receivable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,121,474,731	1,106,480	631,633,549	548,192
Accounts receivable	Joint ventures of the ultimate holding group other than CRRC ZELRI Group	81,065,975	3,630,078	79,875,781	2,334,577
Accounts receivable	Associates of the ultimate holding group other than CRRC ZELRI Group	15,335,725	414,353	12,519,437	397,625
Accounts receivable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,981,825,032	23,797,641	1,096,526,655	10,671,518
Accounts receivable	Joint ventures of the Company	712,076	22,328	712,076	24,548
Accounts receivable	Associates of the Company	110,497,020	3,090,708	19,357,110	69,626
Accounts receivable	Companies controlled by CRRC ZELRI	39,700,494	1,092,613	54,570,057	1,818,049
Accounts receivable	CRRC ZELRI	38,061,816	2,798,641	30,330,228	2,534,540
Accounts receivable	Joint ventures of CRRC ZELRI	46,418,140	1,600,181	—	—
Accounts receivable	Associates of CRRC ZELRI	800,000	5,726	—	—
Accounts receivable	Investor which has significant influence over Baoji CRRC Times	1,592,674	6,052	1,751,327	7,531
Prepayments	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	4,465,061	—	6,365,396	—
Prepayments	CRRC ZELRI	108,220	—	108,220	—
Prepayments	Associates of the ultimate holding group other than CRRC ZELRI Group	—	—	367,581	—

# Section X Financial Report

## XII. 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	
		Gross carrying amount	Provisions for bad and doubtful debts	Gross carrying amount	Provisions for bad and doubtful debts
Other receivables	CRRC ZELRI	143,838	47	1,204,710	11,922
Other receivables	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	3,875,447	768	3,109,779	1,147
Other receivables	Associates of the ultimate holding group other than CRRC ZELRI Group	-	-	20,000	504
Other receivables	Associates of CRRC ZELRI	243,045	6,115	243,045	6,115
Other receivables	Companies controlled by CRRC ZELRI	390,331	3,878	226,590	2,251
Dividends receivable	Joint ventures of the Company	90,000	-	90,000	-
Other receivables	Associates of the Company	219,386	2,180	1,317,390	-
Receivables financing	Associates of the ultimate holding group other than CRRC ZELRI Group	12,452,965	-	1,405,897	-
Receivables financing	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	1,331,405,308	-	1,644,990,849	-
Receivables financing	Associates of the Company	4,497,132	-	-	-
Receivables financing	Companies controlled by CRRC ZELRI	29,732,343	-	22,912,466	-
Receivables financing	CRRC ZELRI	62,464,569	-	42,355,544	-
Contract assets	Joint ventures of the ultimate holding group other than CRRC ZELRI Group	-	-	35,101	-
Contract assets	Associates of the ultimate holding group other than CRRC ZELRI Group	1,078,974	52,115	1,078,974	52,134
Contract assets	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	25,368,184	302,485	20,813,911	205,674
Contract assets	Companies controlled by CRRC ZELRI	1,190,731	52,633	1,036,132	56,207
Contract assets	CRRC ZELRI	412,937	28,626	543,498	41,079

# Section X Financial Report

## XII. 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	
		Gross carrying amount	Provisions for bad and doubtful debts	Gross carrying amount	Provisions for bad and doubtful debts
Other non-current assets	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	9,454,599	23,654	45,568,071	120,814
Other non-current assets	Companies controlled by CRRC ZELRI	829,280	71,315	841,297	61,665
Other non-current assets	CRRC ZELRI	16,792,844	1,444,124	14,157,291	1,408,917
Other non-current assets	Associates of the ultimate holding group other than CRRC ZELRI Group	117,143	357	92,783	212
Other non-current assets	Joint ventures of the ultimate holding group other than CRRC ZELRI Group	67,957	2	36,367	-

#### (2) Payables

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Related party	Closing Balance	Opening Balance
Bills payable	Joint ventures of the ultimate holding group other than CRRC ZELRI Group	7,390,000	4,620,000
Bills payable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	11,995,841	2,140,000
Bills payable	Joint ventures of the Company	4,195,000	-
Bills payable	Companies controlled by CRRC ZELRI	590,000	120,000
Accounts payable	Joint ventures of the ultimate holding group other than CRRC ZELRI Group	2,165,971	5,245,029
Accounts payable	Associates of the ultimate holding group other than CRRC ZELRI Group	3,023,430	1,769,551
Accounts payable	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	683,378,941	431,042,400
Accounts payable	Joint ventures of the Company	22,992,689	10,586,035
Accounts payable	Associates of the Company	24,975,543	4,974,941
Accounts payable	Companies controlled by CRRC ZELRI	165,074,145	91,769,154
Accounts payable	CRRC ZELRI	5,565	235,547
Accounts payable	Joint ventures of CRRC ZELRI	55,513,068	8,795,468
Accounts payable	Associates of CRRC ZELRI	2,525,778	-
Accounts payable	Investors which have significant influence over Baoji CRRC Times	1,753,125	1,117,273
Contract liabilities	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	26,177,193	34,292,833
Contract liabilities	Joint ventures of the Company	230,000	22,630,030
Contract liabilities	Companies controlled by CRRC ZELRI	7,392,000	-

# Section X Financial Report

## XII. 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
Contract liabilities	Associates of the ultimate holding group other than CRRC ZELRI Group	–	2,400,000
Other payables	Associates of the ultimate holding group other than CRRC ZELRI Group	151,000	1,000
Other payables	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	11,725,841	11,393,150
Other payables	Companies controlled by CRRC ZELRI	2,602,257	2,994,610
Other payables	CRRC ZELRI	390,181,265	389,868,357
Other payables	Investors which have significant influence over Baoji CRRC Times	638,910	280,521
Dividends payables	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	8,721,346	–
Dividends payables	CRRC ZELRI	265,313,565	–
Non-current liabilities due within one year	Controlling shareholders of CRRC ZELRI	5,024,056	5,000,000
Non-current liabilities due within one year	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	3,520,506	3,573,640
Non-current liabilities due within one year	CRRC ZELRI	449,561	185,143
Long-term loans	Controlling shareholders of CRRC ZELRI	75,188,000	77,688,000
Lease liabilities	Companies controlled by the ultimate holding party other than CRRC ZELRI Group	5,540,586	9,709,950
Lease liabilities	CRRC ZELRI	515,137	1,073,954

### 7. Related party commitments

Applicable  Not applicable

### 8. Others

Applicable  Not applicable

# Section X Financial Report

## XIII. 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 cancelation of share-based payment

Applicable ✓ Not applicable

### 5. Other information

Applicable ✓ Not applicable

# Section X Financial Report

## XIV. COMMITMENTS AND CONTINGENCIES

### 1. Significant commitments

Applicable  Not applicable

Important external commitments, nature and amount existing on the balance sheet date

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Contracted but not recognized in the financial statements		
– Capital commitments	<b>798,994,038</b>	712,960,706
– Investments in associates/joint ventures	<b>267,939,769</b>	177,600,000
– Investments in subsidiaries	<b>50,000,000</b>	50,000,000
Total	<b>1,116,933,807</b>	<u>940,560,706</u>

### 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

# Section X Financial Report

## XV. EVENTS AFTER THE BALANCE SHEET DATE

### 1. Material non-adjusting events

Applicable ✓ Not applicable

### 2. Profit distribution

Applicable ✓ Not applicable

### 3. Sales returns

Applicable ✓ Not applicable

### 4. Description of other events after the balance sheet date

Applicable ✓ Not applicable

## XVI. 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

# Section X Financial Report

## XVI. OTHER SIGNIFICANT EVENTS (continued)

### 6. Segment reporting

#### (1) Basis and accounting policies for determination of reporting segments

Applicable  Not applicable

Based on the requirements of operation management, the Group's operating activities are classified in to one separate operating segment, mainly supplying the market with rail transit equipment and extended products and services, therefore the Group has no other operating segment.

#### (2) Financial information of reporting segments

Applicable  Not applicable

##### Geographical information

Revenue from external customers categorized by source of income and non-current assets categorized by location of assets are as follows:

##### Revenue from external customers

Unit: Yuan Currency: RMB

Countries or regions	Current period	Prior period
Mainland China	<b>6,169,265,789</b>	5,011,795,724
Other countries and regions	<b>357,644,951</b>	286,323,831
Total	<b>6,526,910,740</b>	5,298,119,555

##### Total non-current assets

Unit: Yuan Currency: RMB

Countries or regions	Closing Balance	Opening Balance
Mainland China	<b>9,451,149,152</b>	8,075,999,210
Other countries and regions	<b>650,270,512</b>	709,583,647
Total	<b>10,101,419,664</b>	8,785,582,857

Non-current assets are analyzed by geographic locations where the assets are located, excluding financial assets and deferred tax assets.

# Section X Financial Report

## XVI. 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	2,006,227,439	30.74	2,415,573,056	45.59

#### (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

## 8. Operating lease

Applicable  Not applicable

##### As a lessor

Unit: Yuan Currency: RMB

Aging	Current period	Prior period
Within 1 year (inclusive)	16,961,583	14,356,702
1 to 2 years (inclusive)	11,979,976	4,102,640
2 to 3 years (inclusive)	999,195	608,640
3 to 4 years (inclusive)	591,063	378,000
4 to 5 years (inclusive)	-	378,000
Total	30,531,817	19,823,982

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS

### 1. Accounts receivable

#### (1) Disclosed by aging

Applicable  Not applicable

Unit: Yuan Currency: RMB

Aging	Closing balance	Opening balance
Within 1 year		
Including:sub items within 1 year		
Within 6 months	<b>4,303,332,752</b>	3,661,958,218
6 months to 1 year	<b>1,969,253,084</b>	517,646,621
Sub-total within 1 year	<b>6,272,585,836</b>	4,179,604,839
1 to 2 years	<b>850,914,574</b>	757,992,087
2 to 3 years	<b>55,273,224</b>	38,643,699
Over 3 years	<b>33,341,112</b>	26,274,426
Total	<b>7,212,114,746</b>	5,002,515,051
Less: Provision for credit loss	<b>(164,150,671)</b>	(124,100,081)
Book value	<b>7,047,964,075</b>	4,878,414,970

# Section X Financial Report

## XVII. 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			Gross carrying amount		Credit loss allowance		
	Amount	Proportion (%)	Amount	Proportion of provision	Carrying amount	Amount	Proportion (%)	Amount	Proportion of provision	Carrying amount
Provision on individual basis										
Provision on portfolio basis	7,212,114,746	100	164,150,671	2.28	7,047,964,075	5,002,515,051	100	124,100,081	2.48	4,878,414,970
Including:										
Receivables from central state-owned enterprises other than China Railway Corporation	4,147,928,184	57.51	41,168,678	0.99	4,106,759,506	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	2,274,547,715	31.54	98,801,265	4.34	2,175,746,450	1,980,086,966	39.58	70,090,184	3.54	1,909,996,782
Receivables from China Railway Corporation	157,299,511	2.18	109,768	0.07	157,189,743	251,597,680	5.03	3,256,237	1.29	248,341,443
Receivables from other customers	632,339,336	8.77	24,070,960	3.81	608,268,376	362,475,225	7.25	34,478,463	9.51	327,996,762
Total	7,212,114,746	/	164,150,671	/	7,047,964,075	5,002,515,051	/	124,100,081	/	4,878,414,970

Accounts receivable for which provision for credit loss is assessed on a portfolio basis:

Applicable  Not applicable

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of Credit loss allowance (continued)

Item: Receivables from central state-owned enterprises other than China Railway Corporation

Unit: Yuan Currency: RMB

Item	Closing balance		
	Accounts receivable	Credit loss allowance	Proportion of provision (%)
Within 6 months	2,709,590,916	18,114,755	0.67
6 months to 1 year	1,023,196,787	7,820,046	0.76
1 to 2 years	350,716,550	8,971,810	2.56
2 to 3 years	45,125,559	3,784,964	8.39
Over 3 years	19,298,372	2,477,103	12.84
Total	<u>4,147,928,184</u>	<u>41,168,678</u>	<u>0.99</u>

Unit: Yuan Currency: RMB

Item	Opening balance		
	Accounts receivable	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 to 2 years	171,734,254	1,971,898	1.15
2 to 3 years	32,597,550	2,811,223	8.62
Over 3 years	11,006,696	2,364,722	21.48
Total	<u>2,408,355,180</u>	<u>16,275,197</u>	0.68

Analysis of accounts receivable for which credit loss allowance is provided on a portfolio basis:

Applicable  Not applicable

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of Credit loss allowance (continued)

Item: Accounts receivable from local government or local state-owned enterprise

Unit: Yuan Currency: RMB

Item	Closing balance		
	Accounts receivable	Credit loss allowance	Proportion of provision (%)
Within 6 months	1,105,225,591	38,100,655	3.45
6 months to 1 year	708,903,760	22,228,783	3.14
1 to 2 years	441,700,040	33,410,344	7.56
2 to 3 years	10,099,144	2,044,770	20.25
Over 3 years	8,619,180	3,016,713	35.00
Total	<u>2,274,547,715</u>	<u>98,801,265</u>	<u>4.34</u>

Unit: Yuan Currency: RMB

Item	Opening balance		
	Accounts receivable	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 to 2 years	560,679,471	42,246,220	7.53
2 to 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>	<u>3.54</u>

Analysis of accounts receivable for which credit loss allowance is provided on a portfolio basis:

Applicable  Not applicable

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of Credit loss allowance (continued)

Item: Receivables from China Railway Corporation

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance		Proportion of provision (%)
		Credit loss allowance		
Within 6 months	68,270,555	48,513		0.07
6 months to 1 year	87,569,634	55,366		0.06
1 to 2 years	1,459,322	5,889		0.40
2 to 3 years	—	—		—
Over 3 years	—	—		—
Total	<u>157,299,511</u>	<u>109,768</u>		<u>0.07</u>

Unit: Yuan Currency: RMB

Item	Accounts receivable	Opening balance		Proportion of provision (%)
		Credit loss allowance		
Within 6 months	214,078,946	750,115		0.35
6 months to 1 year	31,534,472	1,655,302		5.25
1 to 2 years	5,923,393	822,450		13.88
2 to 3 years	60,869	28,370		46.61
Over 3 years	—	—		—
Total	<u>251,597,680</u>	<u>3,256,237</u>		<u>1.29</u>

Analysis of accounts receivable for which credit loss allowance is provided on a portfolio basis:

Applicable  Not applicable

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 1. Accounts receivable (continued)

#### (2) Disclosed by method of Credit loss allowance (continued)

Item: Receivables from other customers

Unit: Yuan Currency: RMB

Item	Accounts receivable	Closing balance Credit loss allowance	Proportion of provision (%)
Within 6 months	420,245,691	10,472,850	2.49
6 months to 1 year	149,582,903	4,168,886	2.79
1 to 2 years	57,038,662	5,828,518	10.22
2 to 3 years	48,520	7,239	14.92
Over 3 years	5,423,560	3,593,467	66.26
Total	<u>632,339,336</u>	<u>24,070,960</u>	<u>3.81</u>

Unit: Yuan Currency: RMB

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 to 2 years	19,654,969	6,835,042	34.78
2 to 3 years	954,344	484,713	50.79
Over 3 years	9,905,300	5,640,262	56.94
Total	<u>362,475,225</u>	<u>34,478,463</u>	<u>9.51</u>

Analysis of accounts receivable for which credit loss allowance is provided on a 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

# Section X Financial Report

## XVII. 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

Category	Opening balance	Changes for the period			Differences resulting from the translation of foreign currency financial statements	Closing balance
		Transferred to credit-impaired losses	Provision	Recoveries or reversal		
Lifetime ECL (not credit-impaired)	57,270,870	(27,059,687)	70,813,125	(30,748,081)	(14,454)	101,009,854
Lifetime ECL (credit-impaired)	66,829,211	27,059,687	-	-	-	63,140,817
Total	124,100,081	-	70,813,125	(30,748,081)	(14,454)	164,150,671

Significant recoveries or reversals during the current period:

Applicable  Not applicable

#### (4) Top five accounts receivable at the end of the year categorized by debtor:

Applicable  Not applicable

Entity name	Closing balance	Proportion to total accounts receivable (%)	Closing balance of provision for credit loss
Customer 1	487,539,228	6.76	16,677,265
Customer 6	485,534,872	6.73	-
Customer 2	450,930,743	6.25	5,115,378
Customer 4	372,455,720	5.16	15,400,202
Customer 3	370,425,035	5.14	3,876,197
Total	2,166,885,598	30.04	41,069,042

#### (5) Accounts receivable that are actually written-off are as follows

Applicable  Not applicable

#### (6) Accounts receivable derecognized due to transfer of financial assets

Applicable  Not applicable

#### (7) Amount of assets and liabilities formed by transferring accounts receivable but continuing involvement

Applicable  Not applicable

Other information

Applicable  Not applicable

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables

#### *Details of items*

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Interests receivable	-	-
Dividends receivable	<b>255,406,181</b>	242,006,181
Other receivables	<b>415,612,340</b>	512,638,168
 Total	 <b>671,018,521</b>	 <b>754,644,349</b>

#### *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

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### **Dividends receivable**

##### (1) Dividends receivable

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item (or Investee)	Closing balance	Opening balance
Baoji CRRC Times	<b>169,316,181</b>	169,316,181
Ningbo CRRC Times	<b>86,000,000</b>	72,600,000
Shanghai Shenzhong	<b>90,000</b>	90,000
Total	<b>255,406,181</b>	<u>242,006,181</u>

##### (2) Significant dividends receivable with aging over 1 year

Applicable  Not applicable

##### (3) Provision for bad debts

Applicable  Not applicable

Other information:

Applicable  Not applicable

#### **Other receivables**

##### (1) Other receivables disclosed by aging

Applicable  Not applicable

Unit: Yuan Currency: RMB

Aging	Closing balance	Opening balance
Within 1 year	<b>244,817,811</b>	348,691,691
1 to 2 years	<b>58,471,246</b>	52,592,997
2 to 3 years	<b>1,661,049</b>	61,926,369
Over 3 years	<b>112,463,839</b>	51,571,120
Less: Provision for credit loss	<b>(1,801,605)</b>	<u>(2,144,009)</u>
Total	<b>415,612,340</b>	<u>512,638,168</u>

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### *Other receivables (continued)*

(2) Classification of other receivables by nature

Applicable  Not applicable

Unit: Yuan Currency: RMB

Item	Closing balance	Opening balance
Amounts due from subsidiaries	301,306,122	385,752,860
Deposits and guarantees	59,289,127	73,397,600
Subscribed capital receivable	50,000,000	50,000,000
Others	6,818,696	5,631,717
Total	<b>417,413,945</b>	<b>514,782,177</b>

(3) Provision for credit loss of other receivables is as follows:

Applicable  Not applicable

Unit: Yuan Currency: RMB

Provision for credit loss	Phase 1	Phase 2	Phase 3	Total
	12-month ECL	Lifetime ECL (Not credit impaired)	Lifetime ECL (Credit impaired)	
Balance at 1 January 2022	2,144,009	–	–	2,144,009
Balance at 1 January 2022 during this period	–	–	–	–
Additions during the period	905,551	–	–	905,551
Reversals during the period	(1,247,955)	–	–	(1,247,955)
Transfer out during the period	–	–	–	–
Written-off during the period	–	–	–	–
Other changes	–	–	–	–
Balance at 30 June 2022	<b>1,801,605</b>	–	–	<b>1,801,605</b>

# Section X Financial Report

## XVII. 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

Including the amount of bad debt reversed or recovered in significant in current period.

Applicable  Not applicable

##### (5) Other receivables actually written off in the current period

Applicable  Not applicable

Description of written off of other receivable:

Applicable  Not applicable

##### (6) Top five other receivables categorized by debtors

Applicable  Not applicable

Unit: Yuan Currency: RMB

Company Name	Nature	Closing Balance	Aging	Proportion to total closing balance of other receivables (%)	Closing balance of provision for credit loss
Entity 11	Amounts due from subsidiaries	70,211,486	Within 1 year & More than 5 years	16.82	-
Entity 12	Amounts due from subsidiaries	69,891,419	Within 1 year	16.74	-
Entity 13	Amounts due from subsidiaries	53,936,962	Within 1 year	12.92	-
Customer 4	Deposits and guarantees	33,894,620	Within 3 years	8.12	1,168,456
Entity 14	Amounts due from subsidiaries	28,418,042	Within 1 year and 1-2 years	6.81	-
Total	/	<u>256,352,529</u>	/	<u>61.41</u>	<u>1,168,456</u>

# Section X Financial Report

## XVII. NOTES TO KEY ITEMS OF THE COMPANY'S FINANCIAL STATEMENTS (continued)

### 2. Other receivables (continued)

#### **Other receivables** (continued)

(7) Receivables involving government grants

Applicable  Not applicable

(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

### 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	6,166,691,706	450,771,551	5,715,920,155	6,136,691,706	450,771,551	5,685,920,155
Investments in joint ventures and associates	314,455,020	-	314,455,020	351,317,381	-	351,317,381
Total	6,481,146,726	450,771,551	6,030,375,175	6,488,009,087	450,771,551	6,037,237,536

# Section X Financial Report

## XVII. 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	-	133,507,255	-	-
Times USA	3,187,516	-	3,187,516	-	-
Shenyang CRRC Times	56,000,000	-	56,000,000	-	-
Baoji CRRC Times	1,010,000,000	-	1,010,000,000	-	-
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	-	-
Chengdu CRRC Electric	30,000,000	-	30,000,000	-	-
CRRC Times Semiconductor	2,700,000,000	-	2,700,000,000	-	-
Canada Dynex	282,478,220	-	282,478,220	-	-
Chongqing CRRC Electric	60,000,000	30,000,000	90,000,000	-	-
Total	6,136,691,706	30,000,000	6,166,691,706	-	(450,771,551)

# Section X Financial Report

## XVII. 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

Investee	Opening balance	Changes for the period					Closing balance of impairment provision	
		Investment income or loss recognized under equity method	Cash dividend or profits declared	Provision for impairment	Closing balance			
I. Joint ventures								
Shiling	170,989,491	870,307	36,000,000	-	135,859,798	-		
LANP Electrical	16,029,889	-1,137,071	-	-	14,892,818	-		
Shanghai Shenzhong	6,220,214	123,504	-	-	6,343,718	-		
Zhengzhou Times	5,795,314	-380,287	-	-	5,415,027	-		
Sub-total	199,034,908	-523,547	36,000,000	-	162,511,361	-		
II. Associates								
Zhuzhou Siemens	46,325,738	184,489	-	-	46,510,227	-		
Guoxin Technology	50,059,852	-1,024,286	-	-	49,035,566	-		
Times Wabtec	13,852,984	2,540,344	-	-	16,393,328	-		
CRRC India	15,243,267	125,079	-	-	15,368,346	-		
Wuxi Times	20,480,632	-1,911,442	-	-	18,569,190	-		
Foshan Zhongshi	6,320,000	-252,998	-	-	6,067,002	-		
Sub-total	152,282,473	-338,814	-	-	151,943,659	-		
Total	351,317,381	-862,361	36,000,000	-	314,455,020	-		

Other information:

None

# Section X Financial Report

## XVII. 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	Revenue	Cost of sales
Principal operating activities	<b>4,624,990,300</b>	<b>3,720,005,174</b>	3,932,704,872	2,820,691,118
Other operating activities	<b>403,555,536</b>	<b>364,528,758</b>	283,169,514	278,718,565
Total	<b>5,028,545,836</b>	<b>4,084,533,932</b>	<b>4,215,874,386</b>	<b>3,099,409,683</b>

#### (2) Revenue from contracts

Applicable  Not applicable

Unit: Yuan Currency: RMB

Categories of contracts	Current period	Prior period
By geographic areas of sales		
Mainland China	<b>4,976,730,094</b>	4,166,601,602
Other countries and regions	<b>51,815,742</b>	49,272,784
Total	<b>5,028,545,836</b>	<b>4,215,874,386</b>

Other information of revenue from contracts:

Applicable  Not applicable

# Section X Financial Report

## XVII. 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 recognizes revenue upon receipts and acceptance of the goods by the customer.

Advances from customer before delivery of rail transit equipment and components are recognized 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 Company mainly repairs and maintains rail transit equipment and components. According to the service contract, the maintenance service is subject to customer's acceptance upon delivery, and the Company is entitled to collect the payment upon acceptance by the customer. As the customer can't simultaneously receive and consume the economic benefits provided by the Company's performance as the Company performs; and can't control the service during the Company's performance either; and during the contract period, the Company can't collect the payment in respect of the part of obligations completed up to date, therefore, the maintenance service represents the performance obligation performed at a point in time, and the Company recognizes revenue from maintenance service upon acceptance by customer.

#### (4) Descriptions of allocated remaining performance obligations

Applicable  Not applicable

Other information:

None

# Section X Financial Report

## XVII. 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	(862,361)	(18,963)
Gains on disposal of held-for-trading financial assets	20,441,389	42,835,550
Gains from long-term equity investments under cost method	1,038,000,000	1,320,047,009
Others	(1,049,490)	—
Total	<u>1,056,529,538</u>	<u>1,362,863,596</u>

# Section X Financial Report

## XVIII. 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	314,198	/
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)	161,508,045	/
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	131,807,053	/
Reversal of provision for accounts receivable that are tested for impairment losses individually	5,682,561	/
Other non-operating income or expenses other than the above	3,055,276	/
Less: Tax effect of non-recurring profit or loss	41,821,753	/
Effects of non-recurring profit or loss attributable to minority interests (after-tax)	7,366,630	/
Total	<u>253,178,750</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

# Section X Financial Report

## XVIII. SUPPLEMENTARY INFORMATION (continued)

### 2. Return on net assets and earnings per share

Applicable  Not applicable

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	2.63	0.61	0.61
Net profit after deduction of non-recurring profit or loss attributable to ordinary shareholders of the Company	<u>1.87</u>	<u>0.44</u>	<u>0.44</u>

### 3. Differences between accounting information expressed under domestic and overseas accounting policies

Applicable  Not applicable

Chairman of the Board: Li donglin

The date on which the financial statements are authorised for issue by the Board: 26 August 2022.



**株洲中车时代电气股份有限公司**  
ZHUZHOU CRRC TIMES ELECTRIC CO., LTD.