



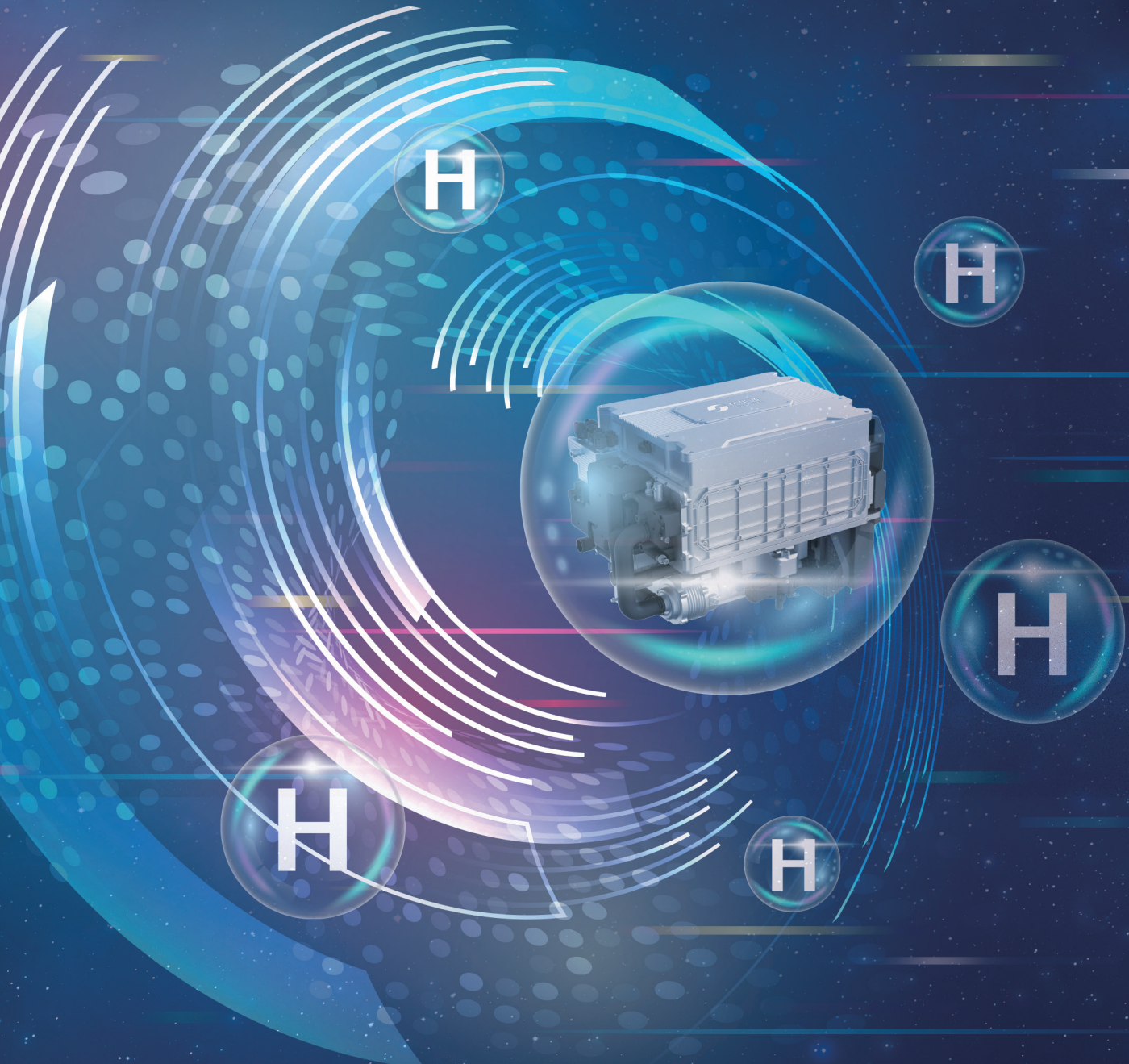
亿华通
SinoHytec

北京億華通科技股份有限公司
Beijing SinoHytec Co., Ltd.

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

Stock Code: 2402

INTERIM REPORT 2023



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SECTION I

DEFINITIONS

In this report, unless the context otherwise requires, the following terms shall have the following meanings:

Company/SinoHytec	Beijing SinoHytec Co., Ltd., a joint stock company incorporated in the PRC with limited liability, the A Shares of which are listed on the SSE STAR Market and the H Shares of which are listed on the Main Board of the Hong Kong Stock Exchange
Group	the Company and its subsidiaries
SinoFuelCell	Shanghai SinoFuelCell Co., Ltd., a majority-controlled subsidiary of the Company
SinoHytec Power	SinoHytec Power Technology Co., Ltd., a wholly-owned subsidiary of the Company
Chengdu SinoHytec	Chengdu SinoHytec Power Technology Co., Ltd., a wholly-owned subsidiary of the Company
Juxinghuatong	Beijing Juxinghuatong Hydrogen Energy Technology Co., Ltd., a wholly-owned subsidiary of the Company
Shenjie New Energy	Shanghai Shenjie New Energy Technology Center (L.P.), a shareholding platform of core staff of SinoFuelCell
Zhangjiakou Haiper	Zhangjiakou Haiper New Energy Technology Co., Ltd., an associate of the Company
Toyota Sinohytec	Toyota Sinohytec Fuel Cell Co., Ltd., a joint venture of the Company
United Fuel Cell	United Fuel Cell System R&D (Beijing) Co., Ltd., an associate of the Company
Shuimu Sail	Beijing Shuimu Sail Venture Capital Investment Center (L.P.)
Shuimu Yuanjing	Nanning Shuimu Yuanjing Venture Capital Investment Center (L.P.)
Shuimu Changfeng	Beijing Shuimu Changfeng Equity Investment Center (L.P.)
Beiqi Foton	Beiqi Foton Motor Co., Ltd.
Yutong Bus	Yutong Bus Co., Ltd.
Tunghsu Optoelectronic	Tunghsu Optoelectronic Technology Co., Ltd.

SECTION I DEFINITIONS

Ministry of Science and Technology	Ministry of Science and Technology of the People's Republic of China
MOF	Ministry of Finance of the People's Republic of China
MIIT	Ministry of Industry and Information Technology of the People's Republic of China
CSRC	China Securities Regulatory Commission
Beijing Municipal Science and Technology Commission/STCSM	Beijing Municipal Science & Technology Commission/Science and Technology Commission of Shanghai Municipal
Hong Kong Stock Exchange	The Stock Exchange of Hong Kong Limited
Hong Kong Listing Rules	the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange
SSE	Shanghai Stock Exchange
Trading Days	Business days of the Shanghai Stock Exchange
Listing Date	January 12, 2023, being the date on which the H Shares are listed and from which dealings therein are permitted to take place on the Hong Kong Stock Exchange
Global Offering	has the meaning as defined in the prospectus of the Company dated December 29, 2022
RMB	Renminbi, the lawful currency of the PRC
Shares	A Shares and H Shares
Shareholders	Holder of Shares
Controlling Shareholder	has the meaning ascribed to it under the Companies Law
Accountant	Moore Stephens Da Hua Certified Public Accountants (Special General Partnership)
Articles of Association	the Articles of Association of Beijing SinoHytec Co., Ltd., currently in force (as amended, modified or otherwise supplemented from time to time)

SECTION I DEFINITIONS

Company Law	Company Law of the PRC
Securities Law	Securities Law of the PRC
A Shares	domestic shares of the Company, with a nominal value of RMB1.00 each, which are listed on the SSE STAR Market and traded in RMB
H Shares	overseas listed foreign shares in the share capital of the Company with a nominal value of RMB1.00 each, which are subscribed for and traded in Hong Kong dollars and listed on the Hong Kong Stock Exchange
A Shares Prospectus	Prospectus for the Initial Public Offering and Listing of Shares on the GEM of Beijing SinoHytec Co., Ltd.
Reporting Period	the six months ended June 30, 2023
fuel cell/hydrogen fuel cell	A power generation device that directly converts externally supplied fuel and chemical energy in oxidants into electricity, heat and other reactants through electrochemical reactions. The externally supplied fuel is hydrogen, while the oxidant is oxygen. Unless otherwise specified, the fuel cell system or hydrogen fuel cell or fuel cell mentioned in this report refers to proton-exchange membrane hydrogen fuel cell, a type of hydrogen fuel cell with perfluorosulfonic acid solid polymer as electrolyte
fuel cell vehicles/ hydrogen fuel cell vehicles	vehicles with fuel cell system as the power source or main power source
fuel cell system/engine system/ power system	the hydrogen storage and power generation compound system in fuel cell vehicles consists of stacks, air supply system, hydrogen supply system, cooling system, control system, hydrogen storage system, DC/DC and other components
stack	A combination of two or more monomer cells with common pipes and unified power output through a fastener structure

SECTION I DEFINITIONS

bipolar plates	stack parts, a conductive partition that collects electric current, separates oxidants and reducers and guides the flow of oxidants and reducers on the electrode surface of the battery
PEM	membrane with proton as the conductive charge
catalyst	a substance that can produce an electric catalytic effect and does not enter the molecular composition of the final product itself. The catalyst in this report specifically refers to the catalyst in the membrane electrode module. Catalysts are typically tiny particles that are evenly coated on the proton exchange membrane. These tiny particles are typically carbon carriers and platinum particles, allowing hydrogen to be separated into hydrogen ions (hydrogen ions are the protons), so that hydrogen ions can react to the oxygen in the air through the proton exchange membrane
air compressor	air compressor, a device used to compress gas and increase gas pressure
DC/DC	DC-to-DC converter, in the application scenarios of fuel cell vehicles, is responsible for converting the DC voltage from fuel cell output to the working voltage of the vehicle-driven motor, forming a stable and controllable DC power supply with the fuel cell
rated power	the maximum continuous output power of fuel cell system under the normal operating conditions as specified by the state. The measurement unit of the rated power is kilowatt (kW)
freeze-start temperature	freeze-start temperature, which enables the fuel cell system start up when environmental temperature is lower than 0°C and refers to the start-up of a fuel cell system at a standard environmental temperature after a fully immersive vehicle
durable performance	a period that the fuel cell system can last when it works at a rated work point with power loss of 20%, measured in hours (h)
energy conversion efficiency	conversion of chemical energy in hydrogen into power output efficiency, the higher energy conversion efficiency, the more effective use of hydrogen
PRC	the People's Republic of China excluding, for the purpose of this report, Hong Kong, Macau Special Administrative Region of the PRC and Taiwan
Hong Kong	Hong Kong Special Administrative Region
RMB, RMB0,000, RMB00 million	Renminbi, Renminbi10,000 and Renminbi100 million

Note: This report is prepared in both Chinese and English. In case of any inconsistency, the Chinese version shall prevail. Any discrepancies between the sum of the data in the tables and the sum shown in the interim report are due to rounding.

SECTION II COMPANY PROFILE AND MAJOR FINANCIAL INDICATORS

I. BASIC INFORMATION OF THE COMPANY

Chinese name of the Company	北京億華通科技股份有限公司
Abbreviation of the Chinese name	億華通
English name of the Company	Beijing SinoHytec Co., Ltd.
Abbreviation of the English name	SINOHYTEC
Legal representative of the Company	Zhang Guoqiang
Registered address of the Company	Room C701, 7th Floor, Block C, Building B-6, Dongsheng Science Park, Zhongguancun, No. 66, Xixiaokou Road, Haidian District, Beijing, the PRC
Historical change of the registered address of the Company	No change of registered address after the listing of the Company on the SSE STAR Market
Office address of the Company	Room C701, 7th Floor, Block C, Building B-6, Dongsheng Science Park, Zhongguancun, No. 66, Xixiaokou Road, Haidian District, Beijing, the PRC
Postal code of the office address of the Company	100192
Company website	http://www.sinohytec.com
Principal place of business in Hong Kong	40/F, Dah Sing Financial Centre, 248 Queen's Road East, Wanchai, Hong Kong
E-mail	sinohytec@autoht.com

II. CONTACT PERSON AND CONTACT METHOD

	Secretary to the Board (Domestic Securities Affairs Representative representative for information disclosure)	
Name	Kang Zhi	Bao Xingzhu
Address	Room C701, 7th Floor, Block C, Building B-6, Dongsheng Science Park, Zhongguancun, No. 66, Xixiaokou Road, Haidian District, Beijing, the PRC	Room C701, 7th Floor, Block C, Building B-6, Dongsheng Science Park, Zhongguancun, No. 66, Xixiaokou Road, Haidian District, Beijing, the PRC
Telephone	86-10-62796418-821	86-10-62796418-821
Fax	86-10-62794725	86-10-62794725
E-mail	sinohytec@autoht.com	sinohytec@autoht.com

III. CHANGE OF INFORMATION DISCLOSURE AND PLACE FOR INSPECTION

Names of the newspaper designated by the Company for information disclosure	Shanghai Securities News and China Securities Journal
Website address for publishing A shares interim reports	www.sse.com.cn
Website address for publishing H shares interim reports	www.hkex.com.hk
Place for inspection of A shares interim reports	Board Office
Place for inspection of H shares interim reports	40/F, Dah Sing Financial Centre, 248 Queen's Road East, Wanchai, Hong Kong

SECTION II

COMPANY PROFILE AND MAJOR FINANCIAL INDICATORS

IV. STOCK OF THE COMPANY

(I) STOCK PROFILE OF THE COMPANY

Class of shares	Stock exchange and sector on which the shares are listed	Stock abbreviation	Stock code	Stock abbreviation before change
A shares	The SSE STAR Market	SinoHytec	688339	Nil
H shares	Main Board of the Hong Kong Stock Exchange	SINOHYTEC	02402	Nil

Upon approval by the Hong Kong Stock Exchange, the Company's H Shares were listed and traded on the Main Board of the Hong Kong Stock Exchange on January 12, 2023. The Chinese abbreviation and English abbreviation of its H shares are "德華通" and "SINOHYTEC", respectively, with stock code "02402".

V. MAJOR ACCOUNTING DATA AND FINANCIAL INDICATORS OF THE COMPANY

(I) Major accounting data

Unit: RMB

Major Accounting Data	For the Reporting Period (January – June)	For the same period last year		Increase/decrease as compared with the same period last year (%)
		Post-adjustment	Pre-adjustment	
Operating income	153,519,255.42	269,142,831.61	269,142,831.61	-42.96
Net profit attributable to shareholders of the listed company ("-" for loss)	-76,511,130.16	-60,004,630.05	-60,038,546.38	-
Net profit attributable to shareholders of the listed company after deducting non-recurring profit or loss ("-" for loss)	-124,084,939.94	-61,715,209.67	-61,749,126.00	-
Net cash flows from operating activities ("-" for loss)	-276,367,270.27	-22,723,511.45	-22,723,511.45	-

	As of the end of the Reporting Period	As of the end of last year		Increase/decrease as compared with the end of last year (%)
		Post-adjustment	Pre-adjustment	
Net assets attributable to shareholders of the listed company	3,190,713,254.36	2,342,103,146.24	2,342,621,962.46	36.23
Total assets	4,818,255,767.60	3,783,956,307.25	3,778,976,563.77	27.33

SECTION II COMPANY PROFILE AND MAJOR FINANCIAL INDICATORS

Reasons for retrospective adjustment or restatement

On December 13, 2022, the MOF of the PRC issued the Circular on Printing and Distributing the Accounting Standards for Business Enterprises Interpretation No. 16 (Cai Kuai [2022] No. 31), which provides a regulatory interpretation on the accounting policy that “deferred income tax related to assets and liabilities arising from a single transaction is not applicable to the accounting treatment of the initial recognition exemption”. Moreover, the interpretation stipulates that enterprises shall abide by it to adjust the opening balance of retained earnings and other related items in the financial statements to reflect the cumulative effect of the aforesaid circular.

(II) Key financial indicators

Key Financial Indicators	For the Reporting Period (January – June)	For the same period last year		Increase/decrease as compared with the same period last year (%)
		Post-adjustment	Pre-adjustment	
Basic earnings per share (RMB/share) ("-" for loss)	-0.67	-0.60	-0.60	-
Diluted earnings per share (RMB/share) ("-" for loss)	-0.67	-0.60	-0.60	-
Basic earnings per share after nonrecurring profit or loss (RMB/share) ("-" for loss)	-1.08	-0.62	-0.62	-
Weighted average return on net assets (%)	-2.49	-2.43	-2.44	Decrease by 0.06 percentage point
Weighted average return on net assets after non-recurring profit or loss (%)	-4.04	-2.50	-2.50	Decrease by 1.54 percentage points
Proportion of R&D investment in operating income (%)	49.89	29.20	29.20	Increase by 20.69 percentage points

SECTION II

COMPANY PROFILE AND MAJOR FINANCIAL INDICATORS

Explanation on the major accounting data and financial indicators of the Company

The Company achieved operating income of RMB153.5193 million, representing a year-on-year decrease of 42.96%. The net loss attributable to shareholders of the listed company was RMB76.5111 million, a year-on-year increase in loss of RMB16.5065 million, and the net cash outflow from operating activities was RMB276.3673 million, a year-on-year increase of RMB253.6438 million. This is mainly because (i) the fuel cell industry is still in the early stage of commercialization and the operating results of the Group are subject to certain fluctuation, and recognition of operating income of the Group is usually concentrated in the second half of the year; and (ii) the positive impact of the initial launch of fuel cell vehicle demonstration city clusters and the related supportive government policies in China influenced and facilitated the increase in the Group's sales of fuel cell systems for the corresponding period of last year. As of the end of the Reporting Period, the total assets of the Company amounted to RMB4,818.2558 million, representing an increase of RMB1,034.2995 million compared to that of December 31, 2022, and the net assets attributable to shareholders of the listed company amounted to RMB3,190.7133 million, representing an increase of RMB848.6101 million compared to that of December 31, 2022, mainly because the Company completed listing on the Main Board of the Hong Kong Stock Exchange to obtain equity raising funds. The proportion of the Company's R&D investment in operating income for the Reporting Period was 49.89%, representing an increase of 20.69 percentage points as compared to the same period last year, which was mainly attributable to the decrease in operating income during the Reporting Period as compared to the same period last year. In particular, the Company's R&D investment for the Reporting Period was RMB76.5973 million, remaining comparable with that for the same period last year of RMB78.5927 million.

VI. NON-RECURRING PROFIT OR LOSS ITEMS AND AMOUNTS

Unit: RMB

Non-recurring profit or loss items	Amount	Notes (where applicable)
Government grants included in profit or loss for the period, except for those closely related to the normal operation of the Company and continuously conferred on in compliance with national policies and regulations and the standard quota or quantity basis	10,521,385.06	Note 67, Note 74
Profit or loss from changes in fair value of financial assets held for trading, derivative financial assets, financial liabilities held for trading and derivative financial liabilities, and investment income from disposal of financial assets held for trading, derivative financial assets, financial liabilities held for trading, derivative financial liabilities and other debt investments, except for effective hedging business related to the Company's normal operations	49,070,642.88	Note 68, Note 70
Other non-operating income and expenses other than the above items	-3,116,805.73	Note 74, Note 75
Less: Effect of income tax	8,362,136.85	-
Effect of minority interests (after tax)	539,275.58	-
Total	47,573,809.78	-

SECTION III

MANAGEMENT DISCUSSION AND ANALYSIS

I. DESCRIPTION OF THE MAIN BUSINESSES AND INDUSTRY OF THE COMPANY DURING THE REPORTING PERIOD

(I) Main businesses, main products or services

The Company is a high-tech enterprise focusing on the R&D and industrialization of fuel cell systems with independent core intellectual property rights and achieved mass production of fuel cell systems. The Company has successively undertaken a number of major projects in the field of fuel cell, such as the State High-Tech Development Plan, (Program 863), Project for the Ministry of Science and Technology, and projects for Beijing Municipal Science and Technology Commission and STCSM.

The Company's main products and services include fuel cell systems and related technology development and technical services, which are mainly used for commercial vehicles such as busses, logistics vehicles and heavy trucks. The Company has established in-depth cooperation with major domestic commercial vehicle enterprises such as Yutong Bus and Beiqi Foton. Fuel cell vehicles equipped with our fuel cell systems have been operating in Beijing, Zhangjiakou, Shanghai, Chengdu, Zhengzhou and Tangshan.

(II) Main business models

1. R&D model

Under the R&D concept of "Advance Research, Continuous Development and In-depth Promotion", the Company follows the vertically integrated R&D roadmap, and insists on independent R&D. At the same time, the Company committed to improving the power density, durability and reducing product costs of fuel cell systems by undertaking major national scientific and technological projects and carrying out industry-university-research cooperation with colleges and universities and cooperating with industry-leading technology enterprises, major customers and suppliers.

2. Procurement model

The main materials for production of fuel cell systems in the Company include cell stack and related components, air compressors and direct current voltage transformers. The Company is capable to manufacture made-in-China cell stacks. Our procurement procedures mainly include approval of parts and components, supplier development and management, and order procurement.

3. Production model

The Company generally arranges production after receiving customer orders, and stocks up with the goods of appropriate quantity based on market forecast. Production processes mainly comprise production preparation, first-piece production, formal production, production process monitoring, and inspection and warehousing of finished product. Strict quality control is exercised throughout the production process to ensure the quality of final products.

4. Sales model

Direct sales are the sales model of the Company, under which the goods are mainly sold to domestic commercial vehicle manufacturers. Our sales processes mainly comprise the formation of preliminary sales intention, technical matching and certification of prototype, publication of catalog and mass sales.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(III) Industry conditions

1. Development stage, basic characteristics and main technical threshold of the industry

As a type of secondary energy, hydrogen energy has the characteristics and advantages of diversified sources, zero emission, low carbon, easy storage and transportation, flexibility and efficiency. Hydrogen energy can be widely used in chemical, transportation, construction, energy storage, power generation and other fields. In response to the global environmental crisis, major economies around the world unanimously decide to peak carbon emission and achieve carbon neutrality, and they have formulated their development strategy plan for the hydrogen energy industry at the national level. The development of hydrogen energy has become a global consensus.

Developing hydrogen energy industry is one of the important ways to achieve China's strategic goals of carbon peaking and carbon neutrality, and has special strategic significance for improving China's energy structure, promoting low-carbon transformation in the transportation sector, and improving the international competitiveness and technological innovation of key industries. China attaches great importance to the development of hydrogen energy and fuel cell vehicles. In 2021, hydrogen energy was included into the "Outline of the Fourteenth Five-Year Plan for the National Economic and Social Development and the Long-Range Objectives Through the Year 2035" as a future-proof industry. The hydrogen energy industry thus became an important part of China's energy strategy. The strategic position of the hydrogen energy and fuel cell industry is clarified in the Medium- and Long-term Plan for the Development of Hydrogen Energy Industry (2021–2035), the Outline of the National Innovation-driven Development Strategy, the China Energy Technology Innovation Action Plan (2016–2030), the Made in China 2025 and the New Energy Vehicle Industry Development Plan (2021–2035). In March 2022, the Medium- and Long-term Plan for the Development of Hydrogen Energy Industry (2021–2035) clarified that hydrogen energy is an important part of the future national energy system, an important focus in the green and low-carbon transformation with energy terminals, and a key development prospect for strategic emerging industries and future-proof industries. Local governments have also made efforts in the hydrogen energy and fuel cell industry. Up to date, dozens of regions across the country have issued relevant policies on hydrogen energy and fuel cell vehicles, promoting the development of hydrogen energy and fuel cell industry.

At present, the hydrogen fuel cell vehicle market has not yet achieved economies of scale as it is in the initial stage of commercialization, resulting in high overall cost. However, with the large-scale application of hydrogen fuel cell vehicles in events such as the Beijing Winter Olympics, the global goal of carbon peaking and carbon neutrality and the opportunities arising from China's fuel cell vehicle demonstration city cluster policy, unprecedented new driving force will drive development of hydrogen fuel cell vehicles. According to the public data released by the China Association of Automobile Manufacturers, more than 2,400 fuel cell vehicles were sold in the first half of 2023 in China, representing a year-on-year increase of more than 70%. Meanwhile, from the perspective of application scenarios, the application scenarios of fuel cell vehicles in China have been transformed from the commercial demonstration application in public transportation field to the demonstration application in multiple scenarios such as public transportation, sanitation, urban logistics and distribution, cold chain transportation, and slag transportation. At the same time, it has also been applied in new fields such as ships and combined heat and power.

SECTION III

MANAGEMENT DISCUSSION AND ANALYSIS

2. Analysis of the industry position of the Company and its changes

As a pioneer in the R&D and commercialization of fuel cell systems in China, the Company possesses proprietary core intellectual property rights and is capable to manufacture fuel cell systems and stack on a mass production basis.

Based on the industry experience and forward-looking market assessment, the Company expanded the 100kW high-power fuel cell system in advance, and actively cooperated with domestic mainstream automobile manufacturers to develop new vehicles such as passenger vehicles, sanitation vehicles, tractors and cold chain logistics, which increased the market coverage of products, thus satisfying diversified market demands.

As the country has clarified the positioning of hydrogen energy industry in the top-level design, and the fuel cell demonstration city cluster policy has been implemented, the number of market participants in the fuel cell industry is increasing. However, there are certain technical barriers for fuel cell system products, leading to high market concentration. According to the statistics of "Road Power-Driven Vehicle Manufacturing Enterprises and Products" published by the Ministry of Industry and Information Technology of the PRC, as of the end of June of 2023, a total of 877 fuel cell vehicles (excluding chassis announcement) were published in the PRC, of which 133 vehicles were equipped with the Company's fuel cell system, ranking forefront of the industry.

3. Development status and future development trend of new technologies, industries, types of operation and models during the Reporting Period

Thanks to technology accumulation and demonstration application in the fuel cell industry over the past years, China boasts basically complete industry chain related to fuel cell. At present, domestic enterprises in China have basically mastered the key technologies of fuel cell systems and core parts and components, realizing domestic mass manufacturing and application of core parts and components from fuel cell systems to cell stacks, air compressors, and hydrogen circulation systems to bipolar plates, and membrane electrodes. That brings about certain improvement in comprehensive system costs and product reliability.

Driven by the goal of "carbon peaking and carbon neutrality", infrastructure related to hydrogen energy will be continuously improved. At the same time, with the promotion of the fuel cell demonstration city cluster policy, the scale effect of fuel cell vehicle application will gradually emerge, and the fuel cell cost will decline rapidly. In the future, China will stimulate the development of the fuel cell industry and expand the scale of downstream applications by through creation of a system for storage, transportation and supply of hydrogen energy, regional demonstration applications and financial incentives. China has set a milestone development goal of "50,000 fuel cell vehicles running on road by 2025".

In addition, as an emerging industry, hydrogen energy and fuel cell industry are not only an opportunity for the automobile industry, but also can further expand the green and low-carbon industry system. Hydrogen energy and fuel cells can also be widely used in transportation fields such as rail transit and ships, and can also be applied in distributed power generation, building cogeneration and other fields. From the production, storage and transportation of hydrogen to the downstream application of hydrogen energy industry chain, it can effectively drive the transformation and upgrading of traditional industries in multiple fields such as energy, materials, equipment manufacturing, automobile, power, and construction, and create a new green and low-carbon industry chain to contribute to China's green and sustainable development.

SECTION III

MANAGEMENT DISCUSSION AND ANALYSIS

II. CORE TECHNOLOGY AND R&D PROGRESS

1. Core technologies, their advantages and changes during the Reporting Period

During the Reporting Period, the Company kept investing in R&D, introduced R&D professionals, and maintained core competitiveness by continuously improving technical capabilities and enhancing R&D management system. Currently, the core technologies of the Company mainly include:

No.	Core technology	Source of technology	Technical features and advantages
1	Electric-electric hybrid power system matching and control technology	Self-developed	Based on matching of fuel cell system and dynamic modeling of electric-electric hybrid power system through multi-objective optimization design, the Company establishes multi-objective optimization energy management control strategy and power distribution strategy, and achieve simultaneous enhancement of fuel cell life and energy conversion efficiency through flexible load control and efficiency search control.
2	Long-life fuel cell system control technology	Self-developed	Based on the simulation analysis of the dynamic performance of fuel cells, the Company takes a deep dive into the impact relationship between fuel cell operation parameters and life expectancy, conduct in-depth analysis on fuel cell failure mechanism, clarify the association between impact factors of fuel cell life and the operation working conditions, and ensures the life of fuel cells through the anode pressure control, flow pressure coupling control, voltage clamping control, and closed loop control of water content.
3	High-reliability fuel cell system fault diagnosis and fault tolerance control technology	Self-developed	Based on the long-term technology accumulation, the system failure mechanism of fuel cell system is revealed, allowing for accurate identification of the failure in the system, and then fault tolerance control to be exercised for the failure.
4	Low-temperature rapid fuel cell activation technology	Self-developed	The cell stack self-heating technology developed by the Company enables the cell stack to operate in low-efficiency areas, and transform the chemical energy in hydrogen into thermal energy, rapidly improving the temperature of the cell stack, thus reducing the cold start energy consumption, shortening the cold start time, and ultimately improving the driving experience of fuel cell vehicles.
5	High-power density fuel cell system integration technology	Self-developed	Through high integration, the technology allows for less energy loss of pipelines, wire harness, mechanical drive and other parts, reduction in energy consumption of auxiliary systems, less structural redundancy, and lighter fuel cell system.

SECTION III

MANAGEMENT DISCUSSION AND ANALYSIS

No.	Core technology	Source of technology	Technical features and advantages
6	Efficient waste heat utilization from efficient fuel cell	Self-developed	Based on the simulation analysis of multi-heat domain and multi-heat flow of fuel cell vehicles, the Company designs a waste heat utilization programme that is highly adaptable and efficient for low-temperature environment, and develops a waste heat utilization control strategy for fuel cell system based on multi-heat domain coupling control to improve the energy conversion efficiency of the system.
7	High-safety on-board hydrogen system integration and control technology	Self-developed	Taking into account factors such as the layout of hydrogen system in the vehicle, safety monitoring, fault diagnosis, fault tolerance control, failure protection, electric protection and high-speed stability, the Company conducted coupling design for hydrogen safety, electrical safety and structural safety, and verified the hydrogen system of fuel cell vehicle in extreme scenarios such as fire, collision and collision. The Company develops the rapid hydrogen filling technology while ensuring safety.
8	Design and integration technology of cell stack of high power density fuel cell	Self-developed	To address problems related to power density, cost and durability of cell stacks, the Company improves the power density of stack by optimizing the bipolar plate flow field to improve power generation performance, and enhances power density of stack through high-level integration of end plates, lightweight materials, and optimized synergy between membrane electrodes and electrode plates. Cost of stacks is reduced by means of localization of membrane electrodes, optimization of graphite bipolar plate process and use of lightweight bipolar plates, combination of component functions, and overall molding design of multi-functional end plate. By controlling the parts and components of stacks and assembly process, as well as testing methods, the yield rate is enhanced, which is to reduce consumption from the production perspective. Based on the analysis on the overall stack failure pattern and the failure pattern of parts and components, the life of stack is extended through design and control strategy optimization.
9	Test and evaluation technology	Self-developed	With the goals of enhancing adverse weather capabilities, long life, high reliability, high efficiency, low cost and high safety, the Company establishes an all-round integrated test and evaluation system covering five aspects: electric-electric hybrid power system, fuel cell system and BOP components, stack assembly and core components, on-board hydrogen system, and special DC/DC for fuel cell.

There was no change in core technologies of the Company during the Reporting Period.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

Awarding the national-level specialized and sophisticated “little giant” enterprises that produce new and unique products and manufacturing individual champion

Grantee	Title	Year of awarding	Product name
Beijing SinoHytec Co., Ltd.	National-level specialized and sophisticated “little giant” enterprises that produce new and unique products	2020–2023	Hydrogen fuel cell motor

2. R&D Achievements during the Reporting Period

The Company has always adhered to independent R&D, continuously explored and researched cutting-edge technologies in the field of fuel cell systems, and realized technological progress, product performance optimization and iteration based on its own R&D advantages and long-term transformation of scientific and technological achievements. In the first half of 2023, the Company invested RMB76.5973 million in R&D to carry out R&D on core technical indicators such as environmental adaptability, durability and reliability of fuel cell systems to further improve the performance and consistency of the Company’s products. At the same time, in order to diversify the application scenarios of our products, the Company has developed a new application of combined heat and power supply, which can provide green solutions for distributed energy in the future.

During the Reporting Period, the Company obtained 153 authorized patents and accumulatively obtained more than 1,100 intellectual property rights.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

List of intellectual property achieved during the Reporting Period

	Increase during the period		Accumulative number	
	Number of applications (patents)	Number of IPs obtained (patents)	Number of applications (patents)	Number of IPs obtained (patents)
Invention patents	157	35	1,061	261
Utility model patents	94	118	787	714
Design patents	0	0	27	23
Software copyrights	0	0	103	103
Total	251	153	1,978	1,101

3. R&D investment

Unit: RMB

	For the period	For the corresponding period of last year	Change (%)
Expensed R&D investment	55,192,267.56	60,264,171.88	-8.42
Capitalized R&D investment	21,405,033.32	18,328,577.73	16.79
Total R&D investment	76,597,300.88	78,592,749.61	-2.54
Proportion of total R&D investment in operating income (%)	49.89	29.20	20.69
Proportion of capitalized R&D investment (%)	27.94	23.32	4.62

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

4. Status of projects under development

Unit: RMBO'000

No.	Project name	Estimated investment amount		Progress or project milestones	Target to be achieved	Technology level	Prospect for specific application
		total investment amount	Accumulated investment amount				
1	Research on the application of high-performance perfluorocarbons membrane in fuel cells	1,725.26	439.24	1,352.04	The design report of the perfluorocyte membrane assessment and evaluation system and the research on the wet circulation of perfluorocyte membrane, OCV test and COCV test have been completed. The relevant indicators have been achieved. Applications for 12 invention patents have been submitted and three papers have been published.	Domestically advanced	Battery and short stacks for fuel cells
2	Development of fuel cell stack testing equipment	420.00	121.46	365.74	The principle design of cell stack test bench, design and validation of various sub-systems, and completed the internal testing and commissioning optimization of functional prototypes have been completed.	Domestically advanced	Test equipment for high-power fuel cell stacks

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

No.	Project name	Estimated total investment amount	Current amount of investment	Accumulated investment amount	Progress or project milestones	Target to be achieved	Technology level	Prospect for specific application
3	Single battery life verification and research on material attenuation characteristics of key components	1,200.00	52.23	80.49	Project implementation plan and technical demand research have been completed. Three research reports related to the subject have been prepared. The single battery performance verification has been completed. The durability test is underway.	To develop online and offline verification and characterization methods for key fuel cell components used in power stations, and establish a complete certification system with the ultimate goal of reasonable prediction of service life for fuel cell power stations.	Domestically advanced	Battery and short stacks for fuel cells
4	R&D of multi-energy efficient coupling control and key components of hybrid power generation system	908.20	3.72	3.72	Preliminary research and preparation of relevant information have been completed.	To develop a fuel cell system prototype with a power generation quota of 240KW or above; and to develop five or more invention patents.	Domestically leading	To be applied in scenarios such as heavy-duty equipment and distributed power supply equipment
5	Integration and demonstration of hybrid power generation system of fuel cell and hydrogen combustion engine	360.00	1.53	1.53	Preliminary research and preparation of relevant information have been completed.	To develop a system control module for hydrogen fuel cell with four or above invention patents.	Domestically leading	To be applied in scenarios such as heavy-duty equipment and distributed power supply equipment
6	Development of cell stack series products	4,966.51	1,237.65	2,806.72	Applications of a series of stack products have been expanded into different application scenarios, and the development of stacks power stations suitable for passenger vehicles have been completed. The preliminary verification of domestic alternative solutions for the main materials of the stack has been completed.	To realize the productization of various technologies and optimize various prototypes into marketable products.	Domestically advanced	To be installed in various fuel cell systems to be mainly applied in logistics vehicles, large and medium-sized passenger vehicles, and trucks, etc.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

No.	Project name	Estimated total investment amount	Current amount of investment	Accumulated investment amount	Progress or project milestones	Target to be achieved	Technology level	Prospect for specific application
7	R&D of domestic fuel cell system series	15,642.83	2,773.64	7,346.66	Part of the key testing and verification of the soft tooling of 240kW high-power product has been completed. Continuously optimize the 80kW and 120kW systems through continuous optimization of control strategies and improvement of alternative components. Partial trial verification of the combined heat and power supply system for new applications has been completed.	The technical indicators of each power product prototype to pass the test and to be launched.	Domestically advanced	Fuel cell systems to be developed for different types of vehicles to meet the needs of different applications such as logistics vehicles, large and medium-sized passenger vehicles and trucks
8	Research on forward-looking technology	6,263.05	955.86	3,547.17	The development design and development requirement decomposition of the next-generation system have been completed. The system durability testing evaluation system has been completed through accelerated testing and optimization of activation conditions, and has been promoted to the system development process.	To focus research on the common technology, underlying pillar technology and basic science of fuel cell system as the research results would improve product attributes.	Domestically advanced	To be applied in new product series

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

No.	Project name	Estimated total investment amount	Current amount of investment	Accumulated investment amount	Progress or project milestones	Target to be achieved	Technology level	Prospect for specific application
9	Development of fuel cell parts	2,420.57	358.98	992.85	Optimization and iteration of key fuel cell components were continued. Continuously optimize and iterate key components of fuel cells, and the development iteration of components such as contrast valves and thermostats has been completed. The validation of the vertical development plan for the core components has been completed.	To design and develop a series of high-reliability and high-level integrated fuel cell components for the inheritance of domestic fuel cell systems.	Domestically advanced	Fuel cell reactor/system
10	Multi-size simulation method and testing of vehicle proton exchange membrane fuel cell stacking	45.23	-	14.07	The design and operating parameters of the cell stack have been developed. The control strategy of the cell stack and the matching of hydrothermal power and hydropower has been optimized and verified.	To establish a high-precision predictive model for three-dimensional multi-physical field of cell stacks, which will be applied in design large-scale vehicle fuel cell reactor and optimization of water and heat management strategy.	Domestically advanced	Fuel cell system
11	Development of fuel cell system applicable to on-board liquid hydrogen storage and supply system with low pressure input and its application in vehicles	900.00	498.46	498.46	The design of fuel cell and vehicle layout plans and system indicators have been completed, and the design of electric reactor system has been completed.	To complete the development of fuel cell reactors and engine systems that match the low pressure of liquid hydrogen.	Domestically leading	Heavy commercial vehicles applying liquid hydrogen such as 49-ton tractors and 31-ton dump trucks

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

No.	Project name	Estimated total investment amount	Current amount of investment	Accumulated investment amount	Progress or project milestones	Target to be achieved	Technology level	Prospect for specific application
12	Development of high-power long-life fuel cell engine system for long-distance heavy-load application scenarios	200.00	27.00	27.00	Research and exploration of core material preparation technology for fuel cells have been completed.	In terms of conditions such as climbing, decelerating and high and low temperature, starting from the system-reactor-component, the Company aims to solve key scientific and engineering problems such as material, process, design and control through multi-level collaboration, improved the system output performance, durability, economic efficiency and environmental adaptability, thus achieving full-service demand coverage for long-distance heavy-loaded commercial vehicles.	Domestically leading	Long-distance heavy-haul commercial vehicles such as tractors and dump trucks
13	Key technologies for core parts and components of air compressors and humidifiers	1,020.00	209.88	813.30	The testing and calibration of the fuel cell system equipped with air compressors and humidifiers have been completed. The relevant BOP auxiliary performance and life test has been completed, and the relevant task indicators have been accomplished.	To complete the research on the impact of air compressors and humidifiers on the performance indicators of fuel cell systems, propose the needs for mechanical interface design, electrical interface design, performance indicator definition of air compressors and humidifiers in fuel cell systems, and complete the construction of air compressors, humidifiers and fuel cell systems matching test benches.	Domestically advanced	Fuel cell system

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

No.	Project name	Estimated total investment amount	Current amount of investment	Accumulated investment amount	Progress or project milestones	Target to be achieved	Technology level	Prospect for specific application
14	Key technology and application demonstration of fuel cell	360.00	32.17	277.17	The shelf test and low temperature start-up of fuel cell system, high altitude adaptability test and durability test have been completed. Vehicle test is in progress.	To develop over 160KW high-power fuel cell system, and to break through the key technologies of long mileage, high power and long life of fuel cell heavy commercial vehicles so that the vehicles could operate steadily in low temperature and high altitude scenarios. To build a smart monitoring platform for big data of fuel cell vehicles.	Domestically advanced	Application of fuel cell system with low consumption and high efficiency in special circumstances such as low temperature, high altitude, steep slope and long-distance transportation
15	Development of stack durability prediction application and intelligent platform of on-board hydrogen fuel cell stack for Winter Olympics and high cold areas	635.00	169.25	652.99	The durability prediction model was built and applied in real-life analysis, and the relevant task indicators have been completed.	Through the big data software, the Company is to conduct artificial intelligence correlation analysis to extract the characteristics of different application scenarios, and then on the basis of the results of the accelerated test of the ionization in the laboratory, determine the compound curve of life attenuation of the whole working condition, thus establishing a durability algorithm model, and finally build a smart platform for real vehicle life monitoring and online analysis. At the same time, based on the results of online analysis, the Company will actively intervene and adjust the control of operating stacks, thereby extending the useful life of stacks.	Domestically advanced	Performance monitoring of fuel cell stacks
Total	/	37,066.65	6,881.07	18,779.91	/	/	/	/

Explanation:

The projects under research did not include projects that have been completed and accepted during the Reporting Period. The investment amount and accumulated investment amount for the current period did not include the expenditure for purchase of fixed assets and intangible assets.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

5. R&D personnel

Currency: RMB Unit: 0'000

	For the period	For the corresponding period of last year
Basic information		
Number of the R&D personnel of the Company (persons)	336	270
Proportion of the R&D personnel in the total number of employees of the Company (%)	30.71	30.72
Total emoluments of the R&D personnel	3,635.74	2,796.22
Average emoluments of a R&D personnel	11.14	10.65

	Number (persons)	Percentage (%)
Level of education		
Education background		
Doctor's degree	20	5.95
Master's degree	165	49.11
Bachelor's degree	115	34.23
Junior college degree	15	4.46
High school diploma and below	21	6.25
Total	336	100.00

	Number (persons)	Percentage (%)
Age structure		
Age group		
Under 30 years old (exclusive)	116	34.52
30–40 years old (including 30, excluding 40)	199	59.23
40–50 years old (including 40, excluding 50)	20	5.95
50–60 years old (including 50, excluding 60)	1	0.30
60 years old and above	0	–
Total	336	100.00

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

III. ANALYSIS OF CORE COMPETITIVENESS DURING THE REPORTING PERIOD

(I) Analysis of Core Competitiveness

After years of accumulation in technology and operation, the Company has gained a relatively strong technical and R&D advantages, large-scale production and promotion advantages, market layout advantages, core parts and components supply advantages and talent advantages, details of which are as follows:

1. Technology and R&D advantages

The Company has always adhered to the R&D concept of “Advance Research”, “Continuous Development” and “In-depth Promotion”. After years of exploration and development, the Company has accumulated rich technical experience, breaking through a number of technical difficulties such as fuel cell system integration with high level of power density, rapid activation of fuel cell system at low temperature, air flow and pressure decoupling control, and water content closed loop control. The key performance of products can be close to the international advanced level and have been widely used in commercial practice. The Company has a series of proprietary core intellectual property rights. As of June 30, 2023, the Company has obtained 1,000 patents and 103 software copyrights. At the same time, with the support of major projects from the Ministry of Science and Technology, the Beijing Municipal Science and Technology Commission and STCSM, a wealth of scientific research achievements and technical reserves have been achieved through the completion of national science and technology special projects.

2. Market layout and large-scale promotion advantages

Through demonstration operation, joint undertaking of national projects and joint development of fuel cell models, the Company has established a sound and long-term cooperation relationship with major commercial vehicle enterprises in China such as Yutong Bus and Beiqi Foton, and accumulated a large number of high-quality customer resources and favorable brand reputation, and has been widely recognized for its technical capability. At the same time, the Company has joined hands with Beiqi Foton and Yutong Bus to participate in the major demonstration operation projects of fuel cell vehicles led by the Beijing Municipal Science and Technology Commission and the United Nations Development Programme since its establishment, and has accumulated extensive operational experience. Fuel cell vehicles equipped with the Company’s fuel cell system have been put into commercial demonstration operations in Beijing, Zhangjiakou, Shanghai, Chengdu, Zhengzhou and Tangshan. Large-scale promotion and operation have accumulated a large number of real operation data, providing reliable data support for the iterative development of the Company.

3. Core parts and components supply system

The Company has formed a relatively complete selection, verification and quality inspection system for parts and components. The fuel cell system industry in China is at the early stage of industrialization, and the foundation of the industry chain is relatively weak. However, the production of fuel cell systems and stacks involves the procurement of a large number of parts and components. The Company has established a stable supply relationship and cooperative development mechanism with domestic mainstream suppliers of parts and components through long-term cooperation and self-cultivation of suppliers. Meanwhile, the Company has mastered a number of core technologies in the field of fuel cell system, stack and component testing through independent R&D, establishing a complete testing system covering fuel cell system and key valve parts. The domestic component supply system has laid a solid foundation for large-scale industrialization, which is conducive to large-scale cost reduction, ensuring the safety of component supply and improving the quality assurance of upstream components.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

4. Talent advantages

The Company introduced R&D, technology and production talents in the fuel cell field through the establishment of R&D innovation platforms such as academician workstations and engineering technology centers. Meanwhile, by undertaking major national projects, industry-academia-research collaborations, participating in the formulation of national standards and continuous R&D, the Company provided a good foundation for the subsequent cultivation of such talents, and reserved a number of technical, R&D and production teams with professional capabilities and extensive experience.

As of the end of the Reporting Period, the Company had 336 R&D personnel, accounting for 30.71% of the total number of employees of the Company. More than 50% of the R&D personnel hold a master's degree or above, which has formed a sufficient talent pool for the rapid development of the Company in the fuel cell industry.

IV. BUSINESS DISCUSSION AND ANALYSIS

In the first half of 2023, the Company actively promoted the implementation of development strategies and business objectives, and continued to place R&D and technological innovation at an important position in the growing path of the Company. The Company continued to invest in R&D for product technology updates and iterations, and developed and deployed new business areas, aiming to actively transform R&D results into industrialization. Meanwhile, the Company strengthened the organization construction and deepened the operation management in the management, optimized the talent structure, and continued to improve the resource layout, laying a solid foundation for the Company's business development.

The Company's operations in the first half of 2023 are mainly as follows:

1. The Company achieved operating income of RMB153.5193 million, representing a year-on-year decrease of 42.96%. The net loss attributable to shareholders of the listed company was RMB76.5111 million, a year-on-year increase in loss of RMB16.5065 million, and the net cash outflow from operating activities was RMB276.3673 million, a year-on-year increase of RMB253.6438 million. This is mainly because (i) the fuel cell industry is still in the early stage of commercialization and the operating results of the Group are subject to certain fluctuation, and recognition of operating income of the Group is usually concentrated in the second half of the year; and (ii) the positive impact of the initial launch of fuel cell vehicle demonstration city clusters and the related supportive government policies in China influenced and facilitated the increase in the Group's sales of fuel cell systems for the corresponding period of last year. As of the end of the Reporting Period, the total assets of the Company amounted to RMB4,818.2558 million, representing an increase of RMB1,034.2995 million compared to that of December 31, 2022, and the net assets attributable to shareholders of the listed company amounted to RMB3,190.7133 million, representing an increase of RMB848.6101 million compared to that of December 31, 2022, mainly because the Company completed listing on the Main Board of the Hong Kong Stock Exchange to obtain equity raising funds.

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2. In terms of R&D and new product development, the Company has always adhered to the R&D philosophy of “Advance Research” (預研一代), “Continuous Development” (開發一代) and “In-depth Promotion” (推廣一代). In the first half of the year, the Company invested RMB76.5973 million in research and development, and carried on R&D activities focusing on core technical indicators such as environmental adaptability, durability and reliability of fuel cell systems, aiming at further improving the Company’s product performance and consistency. Meanwhile, in order to diversify and expand the application scenarios of the Company’s products, the Company carried out the development of new applications for electricity and heat cogeneration supply, which can provide green solutions for distributed energy in the future.
3. In terms of industrial cooperation, the Company has established in-depth cooperation with Tsinghua University, Beijing University of Chemical Technology, Tianjin University and other universities in scientific and technological innovation and talent training. The Company and these universities jointly established a university-enterprise talent training and industry-university research cooperation platform in order to reserve relevant talent and technologies in advance. During the Reporting Period, the Company was also selected as one of the leading units of the first batch of players constituting the “National Energy R&D and Innovation Platform” (fuel cell field) in the “14th Five-Year Plan” of the National Energy Administration. As a selected unit, the Company will work with other units in the industry in accordance with the task requirements put forward by the National Energy Administration, focusing on independent innovation of related technologies, and insisting on localized development of fuel cell systems.
4. In terms of product market, the Company continues to adhere to the development strategy of “point, line and plane”, focusing on the development surrounding the fuel cell demonstration city clusters and potential cities. Fuel cell vehicles equipped with the Company’s products have been put into operation in Beijing, Zhangjiakou, Shanghai, Chengdu, Zhengzhou, Tangshan and other cities, and the Company’s product application scenarios have been further expanded to various scenarios such as cold chain transportation, sanitation and heavy truck. According to the statistics of “Road Power-Driven Vehicle Manufacturing Enterprises and Products” published by the Ministry of Industry and Information Technology of the PRC, as of the end of June 2023, a total of 877 fuel cell vehicle announcements (excluding chassis announcement) were published in the PRC, of which 133 vehicles were equipped with the Company’s fuel cell system, ranking forefront in the industry. In order to better promote the development of the entire fuel cell industry, the Company established a hydrogen energy technology subsidiary during the Reporting Period. The new company will integrate and deploy resources of all parties in the upstream hydrogen production field to gradually develop the hydrogen energy business market.
5. In respect of the capital market, during the Reporting Period, the Company completed the listing on the Main Board of the Hong Kong Stock Exchange. The successful listing of the Company in the Hong Kong stock capital market has further replenished the funds required for the Company’s operation and development, and is more conducive to the international development of the Company.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

V. RISK FACTORS

(I) Risks of negative profit margin

During the Reporting Period, the net loss attributable to shareholders of the Company was RMB76.5111 million. In the future, the Company will focus on increasing investment in enhancing R&D capabilities, expanding cell stack production capacity, improving supply chain and enhancing brand awareness. With the development of the Company's business, operating and management expenses will further increase. With the intensification of market competition, the selling prices of products and gross profit margins of the Company may decline. If the Company fails to meet expectations in terms of market promotion in the future, the Company will suffer continued losses and have negative cash flow from operating activities.

(II) Risks of performance loss

During the Reporting Period, the net loss attributable to shareholders of the Company was RMB76.5111 million, representing a year-on-year increase in loss of RMB16.5065 million. The loss for the period was mainly due to the following: (1) the fuel cell industry is still in the initial stage of industrialization at this stage with a small market scale. The operating income is subject to certain fluctuations and is usually concentrated in the second half of the year; (2) the Company always adheres to R&D-driven development, and the continuous high level of R&D investment has a certain impact on the current operating performance; (3) according to the continuous expansion of the business scale, the Company has correspondingly increased its investments in market expansion and talent reserve to fully grasp the opportunities of the large-scale development of the fuel cell market. The number of employees has increased from 879 in the same period last year to 1,094; and (4) in order to further consolidate the Company's asset quality, the Company has made provision for impairment losses for certain inventories that cannot meet customer market demand or are incompatible for the Company's products for sale.

Although the Company's management has taken measures to respond positively, the future market development of the industry may not meet expectations, resulting in a continuous decline in market demand or further intensified market competition. With increasing costs in various aspects, if the order quantity and sales volume of the Company fail to reach a level that will reverse the loss, the operating performance of the Company may suffer a significantly adverse impact and a continued loss.

(III) Core competitiveness risk

With the rapid development of the hydrogen fuel cell industry in recent years, the number of new entrants in the fuel cell field has increased rapidly. Meanwhile, major vehicle manufacturers and system manufacturers have continuously increased their resource investment in the fuel cell field which also led to fierce competition. Constantly, the Company invests in R&D in order to maintain high technical barriers and meet needs of customers and market. Nevertheless, if the results of the Company's R&D activities are not as expected or the company cannot respond to future changes in the fuel cell vehicle market in a timely manner, it would face the risk of losing market share and falling product prices due to intensified market competition.

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(IV) Risk of operation

1. Risk of high customer concentration

As the fuel cell vehicle industry in China is still in the early stages of commercialization, vehicle manufacturers have not yet generally carried out research, development and production of fuel cell models. Domestic leading vehicle manufacturers have entered the fuel cell vehicle market early and had a significant advantage in their key regional markets, accounting for more than half of the sales of fuel cell vehicles, resulting in a small number of customers and a high concentration of customers at the current stage of the Company. Currently, the Company's main customers are vehicle manufacturers such as Beiqi Foton and Yutong Bus. If the current business expansion of major customers is unfavorable or the Company is unable to further explore new customers or new markets, the Company's independent continuous operation ability may be affected.

2. Product quality and safety risks

The fuel cell system manufactured by the Company is widely used in public transport and other fields. As the core component of fuel cell vehicles, the fuel cell system plays an important role in the safety of vehicle operation. Because of the physical and chemical characteristics of hydrogen, such as flammability, explosiveness and fast diffusion, the public has widespread concerns about the safety of fuel cell vehicles. Standardization is the basis for improving the quality of fuel cell products. At present, China's fuel cell and hydrogen energy standard system is gradually improving. With the rapid development of the industry, the upgradation of the system will accelerate, improving the industry management level and product competitiveness.

If the Company cannot adapt to changes in national quality standards in the future; it cannot strictly control the product quality of purchased core components; or quality defects or even safety hazards occur due to the issues of its own design, production and techniques, the Company may face administrative penalties, litigation compensations and negative public opinion, which may adversely affect the Company's brand reputation and business performance.

3. Risk of seasonal fluctuations in performance

At present, the production and sales of fuel cell vehicles in the PRC are seasonal, so the Company's business is affected by such seasonality. Automobile manufacturers usually select the required product models after reviewing the government subsidy policies and market demand at the beginning of the year to ensure that the fuel cell vehicles to be manufactured meet the subsidy conditions and market demand. The Company also confirm the order and schedule the production based on such practice. In addition, as the fuel cell vehicle industry is still at an early stage of commercialization, the supply chain is not as developed as the fuel vehicle industry or the electric vehicle industry. As a result, completion and delivery of the final product typically take place in the fourth quarter after the Company commences production in the second half of the year. Given that the fuel cell industry in PRC is still in the early stage of commercialization, and that the industry remains affected by the subsidy policies and the insufficient industrial development for a certain period of time in the future, it is expected that production and operation activities will remain seasonal.

4. Risks of supply chain management

The domestic fuel cell vehicle industry is still in an early stage of development, and its supply chain is not yet fully mature, the number of existing high-quality fuel cell system component suppliers is limited, and the Company's supplier selection is also limited to some extent. If the Company's main suppliers cannot continuously meet the Company's quality standards, delivery time and other delivery requirements, or the development of the fuel cell vehicle industry is fall short of expectations, resulting in a lag in the Company's supply chain integration, the Company's operating costs may rise, affecting the Company's performance.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(V) Financial risk

1. Risk of overdue accounts receivable

Affected by the fuel cell subsidy policies, new energy vehicle manufacturers settle with consumers based on prices after subsidy deduction. The central or local financial departments subsequently allocate the subsidy funds advanced by the production enterprises in accordance with the procedure. Consequently, the new energy vehicle industry chain presents varying degrees of capital turnover problems among upstream and downstream enterprises. Because of the relatively strong position of vehicle manufacturers in the automotive industry chain, the Company is greatly affected by the fund chain of vehicle manufacturers, and the Company's collection period of accounts receivable is relatively long. The actual collection periods are generally approximately one to two years or longer. The Company's collection progress generally depends on the customer's own financial situation. If a customer's business situation deteriorates, or the financial environment of the new energy vehicle industry chain cannot be fundamentally improved, the Company's collection instability will last, which may lead to the Company's risk of not being able to timely recover or even losing accounts receivable. As of the end of the Reporting Period, the balance of accounts receivable of the Company was RMB1,533.0338 million.

2. Risk of continued negative operating cash flows

The Company remains negative operating cash flow mainly because the accounts receivable and inventory of the Company took up a large amount of working capital. The industry in which the Company operates is currently entering a period of rapid development, and its capital demand will still grow rapidly. Therefore, the continued negative operating cash flow may lead to a lack of working capital of the Company. The Company is still in the initial stage of R&D and industrialization, and its debt financing capacity is relatively limited. If it cannot continuously expand financing channels in the future and effectively improve its operational cash flow situation, the Company may be at risk of insufficient working capital.

(VI) Industry risk

1. Subsidy policy risks in the fuel cell vehicle industry

Currently, the Company's main operating income comes from the sale of fuel cell systems. The current development of the fuel cell vehicle industry highly relies on the support of subsidy policies. In 2020, the Ministry of Finance and other departments adjusted the subsidy policies for fuel cell vehicles, shifting from subsidizing fuel cell vehicle manufacturers to incentivizing demonstration application city cluster. Since August 2021, China approved five fuel cell vehicle demonstration application city cluster, i.e. Beijing, Shanghai, Guangdong, Zhengzhou and Zhangjiakou, in which most of the Company's customers are situated. Due to the relatively new and evolving regulatory framework and policies for fuel cell vehicles in China, these policies may be affected by restrictions and uncertainties that the Company cannot control. If policies change, fiscal austerity or other reasons result in the reduction or cancellation of preferential policies such as financial subsidies and economic incentives, it will have a negative impact on the Company's fuel cell system business.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

VI. MAJOR OPERATING INFORMATION FOR THE REPORTING PERIOD

(I) Analysis of principal business

1. Details of changes related to the financial statements

Unit: RMB

Item	For the period	For the corresponding period of last year	Percentage of change (%)
Operating income	153,519,255.42	269,142,831.61	-42.96
Operation cost	97,274,022.69	163,205,952.82	-40.40
Selling expenses	30,156,681.44	33,652,766.19	-10.39
Administrative expenses	117,484,673.21	85,125,538.31	38.01
Financial expenses	-21,338,640.23	-2,352,643.20	-
R&D expenses	55,192,267.56	60,264,171.88	-8.42
Gains on change in fair value	48,699,437.40	2,082,082.32	2,238.98
Losses on credit impairment	-14,016,353.78	2,379,223.56	-689.11
Net cash flows from operating activities ("-" for loss)	-276,367,270.27	-22,723,511.45	-
Net cash flows from investing activities ("-" for loss)	-700,781,640.41	-223,205,583.03	-
Net cash flows from financing activities	1,108,462,911.36	75,379,544.77	1,370.51

1. Explanation on changes in operating income: the operating income of the Company decreased by 42.96% year-on-year, which was mainly because: (i) the fuel cell industry is still in the early stage of commercialization and the operating results of the Group are subject to certain fluctuation, and recognition of operating income of the Group is usually concentrated in the second half of the year; and (ii) the positive impact of the initial launch of fuel cell vehicle demonstration city clusters and the related supportive government policies in China influenced and facilitated the increase in the Group's sales of fuel cell systems for the corresponding period of last year.
2. Explanation on changes in operating cost: the Company's operating cost decreased by 40.40% year-on-year. This is because the Company's operating cost decreased accordingly due to the year-on-year decrease in the Company's operating income during the Reporting Period.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

3. Explanation on changes in administrative expenses: the administrative expenses of the Company increased by 38.01% year-on-year, mainly due to: (1) the increase in labor expenses as a result of the introduction of professional management talents to improve the Company's operation and management standards; (2) the increase in long-term assets in production and operation resulted in an increase in depreciation and amortization with the continuous expansion of the Company's scale; and (3) the increase in the rental, property, water and electricity costs of office and production sites with the continuous expansion of the Company's scale.
4. Explanation on changes in financial expenses and gains on change in fair value: the Company's financial expenses decreased by RMB18.986 million year-on-year, and gains on change in fair value increased by 2,238.98% year-on-year. The primary reason is the confirmation of exchange and wealth management gains during the Reporting Period.
5. Explanation on changes in losses on credit impairment: the Company's losses on credit impairment increased by 689.11% year-on-year, mainly because the Company made provision for bad debt losses on Zhangjiakou Haiper's receivables based on expected credit losses and aging at the end of the Reporting Period.
6. Explanation on changes in net cash flows from operating activities: the net cash outflow from operating activities of the Company increased by RMB253.6438 million year-on-year, which was mainly due to following: (1) affected by the delay in the disbursement of government subsidies, the overall payment of customers was slow. During the Reporting Period, the Company's sales proceeds decreased by RMB231.2768 million year-on-year; and (2) with the expansion of business scale and in order to seize the opportunities for the large-scale development of the fuel cell market, the Company increased its investment in building talent team, and the cash flows for payment to employees during the Reporting Period increased by RMB29.9537 million year-on-year.
7. Explanation on changes in net cash flows from investing activities: the net cash outflow from investing activities of the Company increased by RMB477.5761 million year-on-year, which was mainly caused by the redemption of bank wealth management products at maturity in the same period last year.
8. Explanation on changes in net cash flows from financing activities: the net cash flows from financing activities of the Company increased by 1,370.51% year-on-year, which was mainly because (1) during the Reporting Period, the Company obtained RMB914.3646 million of equity raised funds after listing on the main board of the Stock Exchange; and (2) the Company reasonably increased the level of financial leverage, and the net increase of bank loan financing during the Reporting Period was RMB138.6073 million.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(II) Explanation on material changes in profit due to non-principal business

Unit: RMB

Item	For the period	For the corresponding period of last year	Percentage of change (%)
Gains on change in fair value	48,699,437.40	2,082,082.32	2,238.98
Losses on credit impairment	-14,016,353.78	2,379,223.56	-689.11

- Gains on change in fair value of the Company increased by 2,238.98% year-on-year, mainly due to the confirmation of exchange and wealth management gains during the Reporting Period.
- Explanation on changes in losses on credit impairment: the Company's losses on credit impairment increased by 689.11% year-on-year, mainly because the Company made provision for bad debt losses on Zhangjiakou Haiper's receivables based on expected credit losses and aging at the end of the Reporting Period.

(III) Analysis of assets and liabilities

1. Assets and liabilities

Unit: RMB

Item name	Closing balance of current period	Percentage of total assets at the end of the period (%)	Closing balance of previous period	Percentage of total assets at the end of the previous period (%)	Change in amount at the end of the period over the end of the previous period (%)	Description
Financial assets held-for-trading	705,979,100.68	14.65	25,165,123.28	0.67	2,705.39	1
Note receivables	8,790,641.18	0.18	31,170,000.00	0.82	-71.80	2
Prepayments	26,418,502.50	0.55	19,554,147.32	0.52	35.10	3
Other receivables	16,940,561.85	0.35	26,271,763.46	0.69	-35.52	4
Right-of-use assets	37,442,908.42	0.78	25,669,719.66	0.68	45.86	5
Short-term borrowings	430,308,057.22	8.93	229,872,186.96	6.07	87.19	6
Advances from customers	-	-	27,522.93	-	-100.00	7
Contract liabilities	8,148,142.14	0.17	5,532,261.91	0.15	47.28	8
Taxes payable	1,685,243.91	0.03	7,929,205.25	0.21	-78.75	9
Non-current liabilities due within one year	15,800,743.79	0.33	9,113,362.44	0.24	73.38	10
Other current liabilities	16,032,439.24	0.33	11,614,079.94	0.31	38.04	11
Lease liabilities	22,881,539.41	0.47	14,299,147.15	0.38	60.02	12
Long-term payables	6,473,829.73	0.13	-	-	-	13

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

Other explanation

1. Financial assets held for trading increased by 2,705.39% as compared with the end of the previous period, mainly due to the purchase of bank wealth management products by the Company.
2. Note receivables decreased by 71.80% as compared with the end of the previous period, mainly due to the acceptance of the note receivables due held by the Company.
3. Prepayments increased by 35.10% as compared with the end of the previous period, mainly due to the Company's advance procurement and stocking to meet production needs.
4. Other receivables decreased by 35.52% as compared with the end of the previous period, mainly because the Company made provision for bad debt losses on Zhangjiakou Haiper's receivables based on expected credit losses and aging at the end of the Reporting Period.
- 5.&12. Right-of-use assets and lease liabilities increased by 45.86% and 60.02% respectively as compared with the end of the previous period, mainly due to the renewal of the leases and new operating office premises during the Reporting Period to meet the Company's needs in terms of production and operation.
6. Short-term borrowings increased by 87.19% as compared with the end of the previous period, mainly due to the Company's reasonable use of bank credit in light of its operating conditions to obtain bank loans within the credit line.
7. Advances from customers decreased by 100.00% as compared with the end of the previous period, mainly due to the fact that the Company's advances from customers at the beginning of the period were converted into income during the Reporting Period.
8. Contract liabilities increased by 47.28% as compared with the end of the previous period, mainly due to the increase in the Company's advance receipts for contracts during the Reporting Period.
9. Taxes payable decreased by 78.75% as compared with the end of the previous period, mainly due to the Company's payment of value-added tax during the reporting period.
10. Non-current liabilities due within one year increased by 73.38% as compared with the end of the previous period, mainly due to the reclassification of lease liabilities due within one year.
11. Other current liabilities increased by 38.04% as compared with the end of the previous period, mainly due to the accounting treatment of the low-credit grade bank bills endorsed and discounted by the Company which were not derecognized during the Reporting Period.
13. Long-term payables increased by RMB6.4738 million as compared with the end of the previous period, mainly due to the Company's new financial leasing business during the Reporting Period.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(IV) Analysis of investment status

Overall analysis of external equity investment

Unit: RMB

Investment amount during the Reporting Period	Amount invested in the same period of previous year	Change
402,774,000.00	30,000,000.00	1,242.58%

Details of the Company's external equity investment during the Reporting Period are as follows: 1. Guochuang Hebei Hydrogen Energy Industry Innovation Center Co., Ltd. established Hebei Guochuang Hydrogen Energy Technology Co., Ltd. as its wholly-owned subsidiary, with a registered capital of RMB10 million; 2. the Company established SinoHytec International Limited as its wholly-owned subsidiary in Hong Kong, with a registered capital of US\$30 million (exchange rate: 7.2258); 3. the Company established Yifan Hydrogen Technology Co., Ltd. as its majority-controlled subsidiary, with a registered capital of RMB100 million, in which the Company holds 51% shareholdings, i.e. RMB51 million; 4. the Company established Beijing SinoHytec Hydrogen Technology Co., Ltd. as its wholly-owned subsidiary, with a registered capital of RMB50 million; 5. the Company and Beijing Huasheng Xin'an Electronic Technology Development Co., Ltd. and other companies jointly established Shanxi Huasheng Weipu Technology Co., Ltd., with a registered capital of RMB20 million, in which the Company holds 25% shareholdings, i.e. RMB5 million; 6. the Company and institutions including Yining Lianchuang Urban Construction (Group) Co., Ltd. and Zhongqingneng Oasis (Beijing) Energy Technology Co., Ltd. jointly established Xinjiang Zhaolian Qingtong Energy Technology Co., Ltd., with a registered capital of RMB200 million, in which the Company holds 35% shareholdings, i.e. RMB70 million. The above equity investments amounted to RMB402.7740 million. The reason for the substantial change in the current period is mainly due to the fact that only one external equity investment occurred in the same period last year. SinoFuelCell established Tangshan SinoFuelCell Co., Ltd. as its wholly-owned subsidiary, with a registered capital of RMB30 million.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(V) Significant disposal of assets or equity interests

Not Applicable

VII. OTHER DISCLOSURES

(I) Change in the scope of consolidation

The Company established a wholly-owned subsidiary, Hebei Guochuang Hydrogen Energy Technology Co., Ltd.* (河北國創氫能科技有限公司) on February 27, 2023, a wholly-owned subsidiary, SinoHytec International Limited* (億華通科技國際有限公司) on May 17, 2023, a non-wholly-owned subsidiary, Yifan Hydrogen Energy Technology Co., Ltd.* (億凡氫能科技有限公司) on June 12, 2023 and a wholly-owned subsidiary, Beijing SinoHytec Hydrogen Energy Technology Co., Ltd.* (北京億華通氫能科技有限公司) on June 14, 2023. Save as disclosed above, there were no changes in the scope of consolidation of the Company during the Reporting Period.

(II) Audit Committee and review of financial data

The audit committee of the Company (the “**Audit Committee**”) comprises three members, namely Mr. Li Zhijie (chairman), Mr. Ji Xuehong and Mr. Chan So Kuen, all of whom are independent non-executive directors. The Audit Committee reports to the Board and has held regular meetings to review and make recommendations to improve the Group’s financial reporting process and internal controls. In addition, the primary duties of the Audit Committee are to make recommendations to the Board on the appointment, reappointment and removal of the external auditor, review the financial statements and make significant judgments in respect of financial reporting and internal control of the Company.

The Audit Committee has reviewed, together with the management, the accounting principles and practices adopted by the Group, the unaudited interim financial information and this report.

(III) Corporate Governance Code

The H shares of the Company were listed on the Main Board of the Hong Kong Stock Exchange on the Listing Date. From the Listing Date to June 30, 2023, save as disclosed below, the Board is of the view that the Company has complied, to the extent applicable and permissible, with the code provisions as set out in the Corporate Governance Code (the “**CG Code**”) as set out in Appendix 14 to the Hong Kong Listing Rules.

Under code provision C.2.1 of the CG Code, the roles of chairman and chief executive officer should be separate and should not be performed by the same individual. Mr. Zhang Guoqiang is our general manager and concurrently serves as the chairman of the Board as he has over ten years of experience in the fuel cell system industry. The Board is of the view that vesting the roles of both chairman and general manager in the same person has the benefit of ensuring consistent leadership within the Group, thus making the overall strategic planning of the Group more effective and efficient.

The Board is committed to achieving high standards of corporate governance. The Board believes that high standard of corporate governance is essential in providing a framework for the Group to safeguard the interests of shareholders and to enhance corporate value and accountability. The Company will continue to review and monitor its corporate governance practices to ensure compliance with the CG Code.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(IV) Model Code for securities transactions by directors and supervisors

During the Reporting Period, the Company has adopted a code of conduct regarding securities transactions by directors and supervisors on terms no less exacting than the required standards set out in the model code (the “**Model Code**”) as set out in Appendix 10 to the Listing Rules. Having made specific enquiry of all directors and supervisors, the Company confirmed that, from the Listing Date to June 30, 2023, each of the directors and supervisors has complied with the required standards set out in the Model Code regarding securities transactions by the directors.

(V) Purchase, sale or redemption of listed securities of the Company

During the Reporting Period, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company’s listed securities.

(VI) Use of proceeds from the Global Offering

The Company issued ordinary shares at HK\$60 per share, offered 17,628,000 H shares in Hong Kong and over-allotted 670,450 H shares in the nominal value of RMB1.00 per H share, which were listed on the Main Board of the Hong Kong Stock Exchange on January 12, 2023 and February 8, 2023, respectively. The net proceeds from the Global Offering received by the Company, after deducting underwriting fees and commissions and other expenses payable by the Company in connection with the Global Offering, amounted to approximately HK\$1,022 million (equivalent to approximately RMB886 million), representing the net price of approximately HK\$55.85 per H share.

As of June 30, 2023, the net proceeds from the Global Offering were used as follows. The Group will further use the proceeds from the Global Offering for the proposed purposes set out in the prospectus of the Company dated December 29, 2022.

Use of proceeds	Approximate percentage of total net proceeds (%)	Net proceeds from the Global Offering (RMB million)	Net proceeds utilized up to June 30, 2023 (RMB million)	Remaining net proceeds up to June 30, 2023 (RMB million)	Expected time of full utilization of the remaining net proceeds
Develop a new generation of integrated research and development platform	50.20	444.90	20.77	424.14	By the end of the year ending December 31, 2025
Financing overseas research and development projects	24.80	219.79	0.00	219.79	By the end of the year ending December 31, 2025
Product promotion and marketing	15.00	132.94	12.93	120.01	By the end of the year ending December 31, 2025
General working capital	10.00	88.63	88.63	0.00	/
Total	100.00	886.26	122.33	763.94	

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(VII) Interim dividend

The Board did not recommend the payment of an interim dividend for the six months ended June 30, 2023 (interim dividend for 2022: nil).

(VIII) Significant subsequent events

In July 2023, the Company issued 4 new shares for every 10 existing shares to shareholders by way of capitalization of capital reserve, representing a total increase of 47,275,935 shares, comprising 39,956,555 A shares and 7,319,380 H shares, based on the total share capital of the Company of 118,189,837 shares as of March 31, 2023. Upon the completion of the equity distribution, the registered capital of the Company was increased to RMB165,465,772. For details, please refer to the announcements of the Company dated April 27, 2023 and June 16, 2023 and the circular of the Company dated May 25, 2023. Save for the above, the Group has no significant subsequent events up to the date of this report.

(IX) Interests and short positions of directors and supervisors in the shares and underlying shares or debentures of the Company and its associated corporations under Hong Kong laws and regulations

As of June 30, 2023, based on the information available to the Company and to the best knowledge of the directors, the following directors and supervisors of the Company had interests and/or short positions in the shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which are required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and/or short positions which they are taken or deemed to have under such provisions of the SFO), or which are required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Hong Kong Listing Rules, or interests and/or short positions required to be recorded in the register kept by the Company under section 352 of the SFO:

Interests in shares of the Company

Name	Nature of interest	Class of shares	Number of shares held	Approximate percentage of interest in the relevant class of shares (%) ^(Note 1)	Approximate percentage of interest in the total shares (%) ^(Note 1)
Zhang Guoqiang	Beneficial owner	A Shares	18,594,117 (Long position)	18.61	15.73
Zhang He	Beneficial owner	A Shares	2,800,000 (Long position)	2.80	2.37
Song Haiying	Beneficial owner	A Shares	1,332,022 (Long position)	1.33	1.13
Dai Dongzhe	Beneficial owner	A Shares	207,822 (Long position)	0.21	0.18

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

Note:

1. The percentage is calculated by dividing the number of relevant class of shares of the Company in issue as of June 30, 2023 by the total number of shares.

Interests in associates of the Company

Name	Name of associate	Capacity/ Nature of interest	Approximate percentage of shareholding (%)
Song Haiying	Zhangjiakou Haiper	Interest of controlled corporation ^(Note 1)	29.26

Note:

1. As of the end of the Reporting Period, Zhangjiakou Qindahang Technology Partnership (L.P.) holds approximately 29.26% equity interest in Zhangjiakou Haiper. Zhangjiakou Qindahang Technology Partnership (L.P.) is owned as to 80% by Song Haiying. Accordingly, Song Haiying is deemed to be interested in the equity interest held by Zhangjiakou Qindahang Technology Partnership (L.P.) by virtue of the SFO.

Save as the interests disclosed above, as of June 30, 2023, none of the directors, supervisors, chief executive or their respective associates had any interest or short position in any shares, underlying shares or debentures of the Company or any of its associated corporations.

SECTION III

MANAGEMENT DISCUSSION AND ANALYSIS

(X) Substantial shareholders' interests in securities

As of the June 30, 2023, to the best knowledge of the directors of the Company, the following persons (other than the directors, supervisors or chief executive of the Company) had interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed under Divisions 2 and 3 of Part XV of the SFO, or which were recorded in the register of interests required to be kept under Section 336 of the SFO, or who were deemed to be directly and/or indirectly interested in 5% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of the Company:

Name of shareholder	Capacity/Nature of interest	Class of shares	Number of shares held	Approximate percentage of interest in the relevant class of shares (%) ^(Note 1)	Approximate percentage of interest in the total shares (%) ^(Note 1)
Xu Huini	Interest of spouse ^(Note 2)	A Shares	18,594,117 (Long position)	18.61	15.73
Wu Yong	Interest of controlled corporation ^(Note 3)	A Shares	5,634,115 (Long position)	5.64	4.77
Cheng Wenhua	Interest of spouse ^(Note 4)	A Shares	5,634,115 (Long position)	5.64	4.77
Gongqingcheng Shuimuxin Venture Capital Investment Management Center (L.P.)	Interest of controlled corporation ^(Note 3)	A Shares	5,634,115 (Long position)	5.64	4.77
Beijing Shuimu Chuangxin Investment Management Center (G.P.)	Interest of controlled corporation ^(Note 3)	A Shares	5,634,115 (Long position)	5.64	4.77
Astonish Investment Pte Ltd	Beneficial owner	H Shares	3,866,650 (Long position)	21.13	3.27
Apstar Investment Pte Ltd	Interest of controlled corporation ^(Note 5)	H Shares	3,866,650 (Long position)	21.13	3.27
GIC (Ventures) Pte. Ltd.	Interest of controlled corporation ^(Note 5)	H Shares	3,866,650 (Long position)	21.13	3.27
GIC Special Investments Private Limited	Interest of controlled corporation ^(Note 5)	H Shares	3,866,650 (Long position)	21.13	3.27

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

Name of shareholder	Capacity/Nature of interest	Class of shares	Number of shares held	Approximate percentage of interest in the relevant class of shares (%) ^(Note 1)	Approximate percentage of interest in the total shares (%) ^(Note 1)
GIC Private Limited	Interest of controlled corporation ^(Note 5)	H Shares	3,866,650 (Long position)	21.13	3.27
Harvest International Premium Value (Secondary Market) Fund SPC for and on behalf of Harvest Great Bay Investment SP	Beneficial owner	H Shares	2,593,750 (Long position)	14.17	2.19
Harvest Global Investments Limited	Interest of controlled corporation ^(Note 6)	H Shares	2,593,750 (Long position)	14.17	2.19
Harvest Fund Management Co., Ltd.	Interest of controlled corporation ^(Note 6)	H Shares	2,593,750 (Long position)	14.17	2.19
China Credit Trust Co., Ltd	Interest of controlled corporation ^(Note 6)	H Shares	2,593,750 (Long position)	14.17	2.19
Huatai Securities Co., Ltd.	Interest of controlled corporation ^(Note 7)	H Shares	929,750 (Long position)	5.08	0.79
			921,250 (Short position)	5.03	0.78
JPMorgan Chase & Co.	Interest of controlled corporation ^(Note 8)	H Shares	24,700 (Long position)	0.13	0.02
			5,250 (Short position)	0.03	–
	Person having a security interest in shares	H Shares	921,250 (Long position)	5.03	0.78

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

Notes:

1. The percentage is calculated by dividing the number of relevant class of shares of the Company in issue as of June 30, 2023 by the total number of shares.
2. Xu Huini is the spouse of Zhang Guoqiang, a director of the Company. By virtue of the SFO, she is deemed to be interested in the 18,594,117 A Shares held by Zhang Guoqiang.
3. Beijing Shuimu Chuangxin Investment Management Center (G.P.) is the general partner of Shuimu Sail, Shuimu Changfeng and Shuimu Yuanjing. Wu Yong is the general partner of Beijing Shuimu Chuangxin Investment Management Center (G.P.), which is owned as to 10% by Wu Yong and 80% by Gongqingcheng Shuimu Guoxin Venture Capital Management Center (L.P.). Gongqingcheng Shuimu Guoxin Venture Capital Management Center (L.P.) is owned as to approximately 54.55% by Wu Yong. Therefore, each of Wu Yong, Gongqingcheng Shuimu Guoxin Venture Capital Management Center (L.P.) and Beijing Shuimu Chuangxin Investment Management Center (G.P.) is deemed to be interested in the shares held by Shuimu Sail, Shuimu Changfeng and Shuimu Yuanjing under the SFO.
4. Cheng Wenhua is the spouse of Wu Yong. By virtue of the SFO, she is deemed to be interested in the shares of the Company held by Wu Yong.
5. Astonish Investment Private Limited is held as to 100% of the issued share capital by Apstar Investment Private Limited, Apstar Investment Private Limited is held as to 100% of the issued share capital by GIC (Ventures) Pte. Ltd., GIC (Ventures) Pte. Ltd. is held as to 100% of the issued share capital by GIC Special Investments Private Limited and GIC Special Investments Private Limited is held as to 100% of the issued share capital by GIC Private Limited. Therefore, each of Apstar Investment Private Limited, GIC (Ventures) Pte. Ltd., GIC Special Investments Private Limited, GIC Special Investments Private Limited and GIC Private Limited is deemed to be interested in the shares held by Astonish Investment Private Limited under the SFO.
6. Harvest International Premium Value (Secondary Market) Fund SPC for and on behalf of Harvest Great Bay Investment SP is held as to 91% of the issued share capital by Harvest Global Investments Limited, Harvest Global Investments Limited is held as to 100% of the issued share capital by Harvest Fund Management Co., Ltd. and Harvest Fund Management Co., Ltd. is held as to 40% of the issued share capital by China Credit Trust Co., Ltd. Therefore, each of Harvest Global Investments Limited, Harvest Fund Management Co., Ltd. and China Credit Trust Co., Ltd is deemed to be interested in the shares held by Harvest International Premium Value (Secondary Market) Fund SPC for and on behalf of Harvest Great Bay Investment SP under the SFO.

SECTION III

MANAGEMENT DISCUSSION AND ANALYSIS

7. Huatai Financial Holdings (Hong Kong) Limited is held as to 100% by Huatai International Financial Holdings Company Limited and Huatai International Financial Holdings Company Limited is held as to 100% by Huatai Securities Co., Ltd. Therefore, Huatai Securities Co., Ltd. is deemed to be interested in the Shares held by Huatai Financial Holdings (Hong Kong) Limited under the SFO.
8. J.P. MORGAN SECURITIES PLC is held as to 100% of the issued share capital by J.P. MORGAN CAPITAL HOLDINGS LIMITED, J.P. MORGAN CAPITAL HOLDINGS LIMITED is held as to 100% of the issued share capital by J.P. Morgan International Finance Limited, J.P. Morgan International Finance Limited is held as to 100% of the issued share capital by JPMorgan Chase Bank, National Association and J.P. Morgan International Finance Limited is held as to 100% of the issued share capital by JPMorgan Chase & Co. Therefore, JPMorgan Chase & Co. is deemed to be interested in the Shares held by J.P. MORGAN SECURITIES PLC under the SFO.

(XI) Sufficient public float

The Company has maintained sufficient public float from the Listing Date until June 30, 2023.

(XII) Significant investments, material acquisitions and disposals of subsidiaries, associates and joint ventures, and future plans for material investments or capital assets

Save as disclosed in this report, during the Reporting Period, the Group had no significant investments, no material acquisitions and disposals of subsidiaries, associates and joint ventures, and no future plans for material investments or capital assets.

(XIII) Details of charges on assets of the Company

For details of the charges on assets of the Company, please refer to “81. Assets with restricted ownership or right-of-use” under “Notes to the Consolidated Financial Statements” of “Section VII Financial Statements”.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(XIV) Analysis of financial position

The Company implements a prudent financial policy, establishes a strict risk control system for investment, financing and cash management, and always maintains a stable capital structure and good financing channels. The Company strictly controls the scale of loans, and at the same time meets the capital needs of the Company's operating activities, and makes full use of financial instruments to reduce financial expenses and prevent financial risks in a timely manner, so as to achieve sustainable development of the Company and maximize shareholders' value.

Liquidity and capital structure	Closing	Opening
(1) Gearing ratio	26.00%	27.49%
(2) Quick ratio	2.78	2.36
(3) Current ratio	3.14	2.73

Notes:

- (1) Gearing ratio = Total liabilities/Total assets
- (2) Quick ratio = (Current assets – Inventories)/Current liabilities
- (3) Current ratio = Current assets/Current liabilities

(XV) Exposure to fluctuations in exchange rates

The Company's main operations are located in the PRC and its main businesses are settled in RMB. However, the Company is exposed to foreign exchange risk arising from the recognized assets and liabilities and future transactions denominated in foreign currencies, primarily with respect to US dollars. The finance department of the Company is responsible for monitoring the scale of foreign currency transactions and foreign currency assets and liabilities of the Company to minimize the exchange rate risk. In this regard, the Company will pay close attention to the foreign exchange rate on the public website of the State Administration of Foreign Exchange in real time to avoid the exchange rate risk.

(XVI) Contingent liabilities

Save as disclosed in this report, as of June 30, 2023, the Group had no other material contingent liabilities.

SECTION III MANAGEMENT DISCUSSION AND ANALYSIS

(XVII) Indebtedness

The Group manages its capital needs by taking into account its cash flows, working capital needs and risk tolerance levels. The subsidiaries of the Company are responsible for their own cash flow projections based on the results of which the Company constantly monitors its short-term and long-term capital needs at the Company level to ensure that there are sufficient cash reserves.

As of June 30, 2023, the Group's financial liabilities which were presented based on the remaining contract lives of undiscounted contractual cash flows were as follows:

Unit: RMB

Item	Closing balance			Total
	Within 1 year	1-3 years	Over 3 years	
Short-term borrowings	430,308,057.22	/	/	430,308,057.22
Long-term borrowings	/	19,400,000.00	/	19,400,000.00
Note payables	124,423,211.42	/	/	124,423,211.42

The directors confirm that as of June 30, 2023, there was no material covenant on any of the Group's outstanding debts, and there was no breach of any covenants. The directors further confirm that the Group did not experience any unusual difficulty in obtaining bank loans and other borrowings, default in payment of bank loans and other borrowings or breach of covenants.

(XVIII) Details of employees

The number of in-service employees of the Group as of June 30, 2023 was as follows:

	Number (person)
Number of in-service employees of the Company	448
Number of in-service employees of the subsidiaries	646
Total number of in-service employees	1,094

The Company strictly abides by national labor-related laws and regulations, adheres to the concept of common growth of the Company and employees based on business performance, and has established a remuneration policy system based on the principles of legality, competitiveness, incentives and fairness. Guided by the strategic objectives, the Company specifies the organizational performance targets from top to bottom, and relies on the performance management evaluation methods to ensure that employees' abilities are matched with their positions. The Company implements a job-level based wage system adjusted by employee's work performance and gives preference to outstanding employees in sales, research and development and technology, etc. The Company implements an incentive and relatively fair remuneration mechanism to attract and retain talents. For details of the employees' remuneration during the Reporting Period, please refer to "39. Accrued payroll" under "Notes to the Consolidated Financial Statements" of "Section VII Financial Statements".

The Company has formulated specific training plans for specific business needs based on its strategic development plan and annual business objectives. Adhering to the principle of teaching as per requests, being practical and effective, the Company carried out training activities with rich contents and flexible forms for employees at different levels and categories, so as to enhance employees' sense of belonging and improve employees' job competence, professional skills and comprehensive quality. The Company has built a good career development channel for employees and reserved talents to achieve a win-win situation for both the Company and employees.

I. BRIEF INTRODUCTION OF GENERAL MEETINGS

Session of the meeting	Date of convening	Query index of the designated website for publishing resolutions	Date of disclosure for publishing resolutions	Resolutions of meeting
2023 First Extraordinary General Meeting	March 9, 2023	http://static.sse.com.cn/disclosure/listedinfo/announcement/c/new/2023-03-10/6888339_20230310_11QW.pdf	March 10, 2023	Announcement of Resolutions of 2023 First Extraordinary General Meeting of Beijing SinoHytec Co., Ltd.
2022 Annual General Meeting, 2023 First A Share Class Meeting and 2023 First H Share Class Meeting	June 16, 2023	http://static.sse.com.cn/disclosure/listedinfo/announcement/c/new/2023-06-17/6888339_20230617_9Y70.pdf	June 17, 2023	Announcement of Resolutions of 2022 Annual General Meeting, 2023 First A Share Class Meeting and 2023 First H Share Class Meeting of Beijing SinoHytec Co., Ltd.

II. CHANGES IN DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND CORE TECHNICIANS

Name	Position	Changes
Chan So Kuen	Independent non-executive director	Election
Fang Jianyi	Independent non-executive director	Resignation
Li Zhijie	Independent non-executive director	Election
Wu Yong	Non-executive director	Resignation
Song Feng	Non-executive director	Election

SECTION IV CORPORATE GOVERNANCE

Explanation on changes in directors, supervisors, senior management and core technicians

1. The Company convened the third extraordinary general meeting of 2022 on May 24, 2022, and elected Mr. Chan So Kuen as an independent non-executive director of the Company's third session of the Board, taking effect from the date when the overseas listed foreign shares (H shares) issued by the Company was listed and traded on the main board of the Hong Kong Stock Exchange (i.e. January 12, 2023);
2. Mr. Fang Jianyi, an independent non-executive director of the Company, applied to resign from relevant positions in the Company on April 27, 2023 because of the gradual implementation of his retirement plan. After review and approval at the ninth meeting of the Company's third session of the Board, Mr. Li Zhijie was nominated as the candidate for independent non-executive directors of the Company's third session of the Board. Mr. Wu Yong, a non-executive director of the Company, applied to resign from relevant positions in the Company on May 31, 2023. After review and approval at the tenth meeting of the Company's third session of the Board, Mr. Song Feng was nominated as the candidate for non-executive directors of the Company's third session of the Board. For details, please refer to the Announcement on the Resignation and Election of Independent Non-executive Directors (Announcement No. 2023-021) and the Announcement on the Resignation and Election of Non-executive Directors (Announcement No. 2023-028) disclosed by the Company on the website of Shanghai Stock Exchange (www.sse.com.cn) on April 28, 2023 and June 1, 2023, respectively;
3. The Company convened the 2022 annual general meeting, 2023 first A share class meeting and 2023 first H share class meeting on June 16, 2023, and elected Mr. Li Zhijie as an independent non-executive director of the Company's third session of the Board and Mr. Song Feng as a non-executive director of the Company's third session of Board.

III. PROPOSAL FOR PROFIT DISTRIBUTION OR CAPITALIZATION OF CAPITAL RESERVE

Proposal for profit distribution and proposal for capitalization of capital reserve for the interim period

Whether making distribution or capitalization	No
Bonus shares for every 10 shares (share)	N/A
Dividend per 10 shares (RMB) (tax inclusive)	N/A
Number of conversions per 10 shares (share)	N/A
Explanation on proposal for profit distribution or capitalization of capital reserve	N/A

SECTION V SIGNIFICANT EVENTS

I. OCCUPATION OF FUNDS BY CONTROLLING SHAREHOLDER AND OTHER RELATED PARTIES FOR NON-OPERATIONAL PURPOSE DURING THE REPORTING PERIOD

Unit: RMB

Name of shareholder or related party	Affiliations	Occupancy time	Reason for occurrence	Opening balance	Amount of new occupied fund during the Reporting Period	Total amount reimbursed during the Reporting Period	Closing balance	Balance as of the date of disclosure of the interim report	Expected reimbursement method	Expected repayment amount	Expected repayment date
Zhangjiakou Haiper	Other related parties	July 2019 to date	Current payments	29,708,400.39	-	-	30,439,850.94	30,406,588.45	Cash and hydrogen discounts	31,022,087.79	2023.12.31
Total	/	/	/	29,708,400.39	-	-	30,439,850.94	30,406,588.45	/	31,022,087.79	/

Ratio of the total value at the end of the period to the latest audited net assets 1.30%

Decision-making procedures for occupation of funds by controlling shareholder and other related parties for non-operational purpose

The fund transfer between the Company and Zhangjiakou Haiper was due to the change in the scope of the consolidated statements of the Company. Zhangjiakou Haiper was a secondary subsidiary of the Company's consolidated statements from its date of establishment to September 2019. The borrowings provided by the Company to support its business development were within the above consolidated statements period. Since September 2019, the Company has not provided any new funds to it. The change in the balance of current accounts was due to the accrued interest on loans.

Reasons for occupation of funds by new controlling shareholders and other

Nil
related parties for non-operational purpose in the current period, investigation on accountability of responsible person and description of measures to be taken by the Board

Reasons for the failure to settle the occupation of funds for non-operational

Nil
purpose as planned, investigation on accountability of responsible person and description of measures to be taken by the Board

Special audit opinion on the occupation of funds by certified public accountants

Nil
(if any)

II. MAJOR CONTRACTS AND THE PERFORMANCE

(I) Custody, contracting and leasing matters

Not Applicable

SECTION V SIGNIFICANT EVENTS

(II) Performed and not yet fulfilled material guarantees during the Reporting Period

Unit: RMB

External guarantees of the Company (excluding guarantees for subsidiaries)																
Guarantor	Relationship between the guarantor and the listed company	Guaranteed party	Amount guaranteed	Date of guarantee (date of agreement)	Commencement date of guarantee	Maturity date of guarantee	Type of guarantee	Major debts (if any)	Collateral (if any)	Whether the guarantee has been fulfilled	Whether the guarantee is overdue	Overdue amount of guarantee	Counter-guarantee	Whether it is a related party	Overdue amount of guarantee	Affiliations
																-
																-
Total amount of guarantees incurred during the Reporting Period (excluding guarantees for subsidiaries)																
Total balance of guarantees at the end of the Reporting Period (A) (excluding guarantees for subsidiaries)																

Guarantees provided by the Company and its subsidiaries to its subsidiaries

Guarantor	Relationship between the guarantor and the listed company	Guaranteed party	Amount guaranteed	Date of guarantee (date of agreement)	Commencement date of guarantee	Maturity date of guarantee	Type of guarantee	Whether the guarantee has been fulfilled	Whether the guarantee is overdue	Overdue amount of guarantee	Any counter guarantee
The Company	Headquarters of the Company	SinoHytec Power	1,440,325.00	2022-1-19	2022-1-19	2023-1-19	Joint liability guarantee	Yes	No	0	No
The Company	Headquarters of the Company	SinoHytec Power	4,637,870.50	2022-1-18	2022-1-18	2023-1-18	Joint liability guarantee	Yes	No	0	No
The Company	Headquarters of the Company	Chengdu SinoHytec	1,345,403.00	2022-7-22	2022-7-22	2023-1-22	Joint liability guarantee	Yes	No	0	No
The Company	Headquarters of the Company	Chengdu SinoHytec	624,945.00	2022-8-10	2022-8-10	2023-2-10	Joint liability guarantee	Yes	No	0	No
The Company	Headquarters of the Company	Chengdu SinoHytec	7,506,923.51	2022-9-28	2022-9-28	2023-3-28	Joint liability guarantee	Yes	No	0	No
The Company	Headquarters of the Company	Juxinghuatong	10,863,799.00	2023-5-23	2023-5-23	2025-11-23	Joint liability guarantee	No	No	0	No
The Company	Headquarters of the Company	Juxinghuatong	842,679.96	2023-5-29	2023-5-29	2025-11-29	Joint liability guarantee	No	No	0	No
The Company	Headquarters of the Company	Juxinghuatong	3,449,523.00	2023-6-1	2023-6-1	2025-12-1	Joint liability guarantee	No	No	0	No

SECTION V SIGNIFICANT EVENTS

Guarantees provided by the Company and its subsidiaries to its subsidiaries

Guarantor	Relationship between the guarantor and the listed company	Guaranteed party	Relationship between the guaranteed party and the listed company	Amount guaranteed	Date of agreement (date of)	Date of guarantee (date of)	Commencement date of guarantee	Maturity date of guarantee	Type of guarantee	Whether the guarantee has been fulfilled	Whether the guarantee is overdue	Overdue amount of guarantee	Any counter guarantee
The Company	Headquarters of the Company	Juxinghuatong	Wholly-owned subsidiary	754,841.40	2023-6-5	2023-12-5	2023-6-5	2025-12-5	Joint liability guarantee	No	No	0	No
The Company	Headquarters of the Company	Juxinghuatong	Wholly-owned subsidiary	10,161,180.50	2023-6-9	2025-12-9	2023-6-9	2025-12-9	Joint liability guarantee	No	No	0	No
The Company	Headquarters of the Company	Juxinghuatong	Wholly-owned subsidiary	1,668,543.22	2023-6-20	2025-12-20	2023-6-20	2025-12-20	Joint liability guarantee	No	No	0	No
The Company	Headquarters of the Company	Juxinghuatong	Wholly-owned subsidiary	2,200,000.00	2023-6-26	2025-12-26	2023-6-26	2025-12-26	Joint liability guarantee	No	No	0	No
SinoFuelCell	Majority-controlled subsidiary	Beijing Shenchuan Technology	Majority-controlled subsidiary	10,000,000.00	2023-6-26	2026-12-26	2023-6-26	2026-12-26	Joint liability guarantee	No	No	0	No
Co. Ltd.													
Total amount of guarantees provided to subsidiaries during the Reporting Period													
39,940,567.08													
Total balance of guarantees provided to subsidiaries at the end of the Reporting Period (B)													
39,940,567.08													
Total amount of guarantees provided by the Company (including guarantees for subsidiaries)													
39,940,567.08													
Percentage of total guarantee amount to net assets of the Company (%)													
1.12													
Including:													
Amount of guarantees provided for shareholders, de facto controllers and their related parties (C)													
-													
Amount of debt guarantees directly or indirectly provided for guaranteed parties with gearing ratio over 70% (D)													
39,940,567.08													
Amount of total guarantee exceeding 50% of net assets (E)													
-													
Total amount of the above three guarantees (C + D + E)													
39,940,567.08													
Explanation on the potential joint and several liability for outstanding guarantees													
Nil													
Explanation on guarantee													
Nil													

SECTION VI CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

Unit: share

Shareholdings of the top ten shareholders

Name of shareholder (Full name)	Increase and decrease during the Reporting Period	Number of shares held at the end of the period	Percentage (%)	Number of restricted shares held	Number of restricted shares including lending shares for securities financing	Shares pledged, marked or frozen		Nature of shareholder
						Status of shares	Number	
Zhang Guoqiang	0	18,594,117	15.73	18,570,202	18,570,202	Nil	0	Domestic natural person
HKSCC Nominees Limited (Note 1)	18,295,690	18,295,690	15.48	0	0	Unknown	0	Unknown
Yutong Bus	0	3,919,129	3.32	0	0	Nil	0	Domestic non- state-owned legal person
Tunghsu Optoelectronic	0	3,589,746	3.04	0	0	Frozen	3,589,746	Domestic non- state-owned legal person
Zhang He	0	2,800,000	2.37	0	0	Nil	0	Domestic natural person
Shuimu Sail	-60,100	2,560,000	2.17	0	0	Nil	0	Others
Shuimu Changfeng	-	1,700,710	1.44	0	0	Nil	0	Others
Bai Wei	-25,000	1,433,334	1.21	0	0	Nil	0	Domestic natural person
Zhou Pengfei	-	1,400,000	1.18	0	0	Pledge	500,000	Domestic natural person
Song Haiying	0	1,332,022	1.13	0	0	Nil	0	Domestic natural person

SECTION VI

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

Shareholdings of the top ten shareholders of non-restricted shares

Name of shareholder	Number of tradable non-restricted shares	Type and number of shares	
		Type	Number
HKSCC Nominees Limited (Note 1)	18,295,690	Overseas listed foreign shares	18,295,690
Yutong Bus	3,919,129	RMB-denominated ordinary shares	3,919,129
Tungshu Optoelectronic	3,589,746	RMB-denominated ordinary shares	3,589,746
Zhang He	2,800,000	RMB-denominated ordinary shares	2,800,000
Shuimu Sail	2,560,000	RMB-denominated ordinary shares	2,560,000
Shuimu Changfeng	1,700,710	RMB-denominated ordinary shares	1,700,710
Bai Wei	1,433,334	RMB-denominated ordinary shares	1,433,334
Zhou Pengfei	1,400,000	RMB-denominated ordinary shares	1,400,000
Song Haiying	1,332,022	RMB-denominated ordinary shares	1,332,022
Shuimu Yuanjing	1,308,305	RMB-denominated ordinary shares	1,308,305
Explanation on buyback account among the top ten shareholders	N/A		
Explanation on the above shareholders' entrusting voting rights, entrusted voting rights and waiver of voting rights	N/A		
Explanation on connected relationship or acting in concert among the above shareholders	The general partner of the Company's shareholders Shuimu Sail and Shuimu Changfeng is Beijing Shuimu Chuangxin Investment Management Center (G.P.).		
Explanation on the preference shareholders with restored voting rights and the number of shares held	N/A		

Shareholdings of the top ten shareholders of restricted shares and the restrictions

Unit: share

No.	Name of shareholders of restricted shares	Listing and trading of restricted shares			Restrictions
		Number of restricted shares held	Time available for listing and trading	Number of new shares available for listing and trading	
1	Zhang Guoqiang	18,570,202	August 10, 2023	0	36 months from the listing date (Note 2)
Explanation on connected relationship or acting in concert among the above shareholders		N/A			

Note 1: The shares held by HKSCC Nominees Limited were held on behalf of clients. As the relevant rules of The Stock Exchange of Hong Kong Limited do not require clients to report whether there are any pledges and freezes on the shares held by them, HKSCC Nominees Limited is not in a position to compile statistics or provide information on the number of shares pledged or frozen.

Note 2: According to the "Listing Rules of the Sci-Tech Innovation Board of the Shanghai Stock Exchange", the pre-IPO shares of the Company held by the controlling shareholder and actual controller Mr. Zhang Guoqiang are restricted for 36 months. In addition, in view of the fact that the Company was not profitable when it was listed, according to the "Listing Rules of the Sci-Tech Innovation Board of the Shanghai Stock Exchange" and his commitment, before the Company achieves profitability, it will not reduce its holdings of the ex-shares within three complete fiscal years from the date of listing of the Company's stocks. As of the date of this report, the above-mentioned relevant shares have not applied for lifting of sales restrictions.

SECTION VII FINANCIAL STATEMENTS

Consolidated Statements of Balance Sheets

June 30, 2023

Unit: RMB

Item	Notes	June 30, 2023	December 31, 2022
Current assets:			
Cash and cash equivalents	Note 1	792,043,157.00	649,887,994.07
Balance with clearing companies		–	–
Placements with other financial institutions		–	–
Financial assets held-for-trading	Note 2	705,979,100.68	25,165,123.28
Derivative financial assets		–	–
Note receivables	Note 4	8,790,641.18	31,170,000.00
Account receivables	Note 5	1,164,259,526.12	1,083,033,929.46
Receivables financing	Note 6	21,052,827.55	21,990,000.00
Prepayments	Note 7	26,418,502.50	19,554,147.32
Premium receivables		–	–
Reinsurance accounts receivable		–	–
Provision for reinsurance contract receivable		–	–
Other receivables	Note 8	16,940,561.85	26,271,763.46
Including: Interest receivable		–	–
Dividend receivable		–	–
Purchases of resold financial assets		–	–
Inventories	Note 9	373,345,570.85	302,903,534.87
Contract assets	Note 10	38,264,843.50	33,719,757.81
Held-for-sale assets		–	–
Non-current assets due within one year		–	–
Other current assets	Note 13	83,840,364.99	67,337,509.57
Total current assets		3,230,935,096.22	2,261,033,759.84

SECTION VII
FINANCIAL STATEMENTS

Consolidated Statements of Balance Sheets (Continued)

June 30, 2023

Unit: RMB

Item	Notes	June 30, 2023	December 31, 2022
Non-current assets:			
Loans and advances to customers		–	–
Debt investments		–	–
Other debt investments		–	–
Long-term receivables		–	–
Long-term equity investments	Note 17	343,115,899.99	333,849,340.97
Other equity instrument investments	Note 18	173,500,000.00	173,500,000.00
Other non-current financial assets	Note 19	2,800,000.00	2,800,000.00
Investment properties		–	–
Fixed assets	Note 21	468,849,269.20	478,969,668.22
Construction in progress	Note 22	17,240,146.28	14,446,330.11
Productive biological assets		–	–
Oil and gas assets		–	–
Right-of-use assets	Note 25	37,442,908.42	25,669,719.66
Intangible assets	Note 26	231,669,958.12	204,985,879.25
Development expenses	Note 27	63,759,909.71	72,941,726.28
Goodwill		–	–
Long-term deferred expenditures	Note 29	33,260,169.98	27,933,004.82
Deferred income tax assets	Note 30	155,623,248.57	135,525,491.45
Other non-current assets	Note 31	60,059,161.11	52,301,386.65
Total non-current assets		1,587,320,671.38	1,522,922,547.41
Total assets		4,818,255,767.60	3,783,956,307.25

SECTION VII FINANCIAL STATEMENTS

Consolidated Statements of Balance Sheets (Continued)

June 30, 2023

Unit: RMB

Item	Notes	June 30, 2023	December 31, 2022
Current liabilities:			
Short-term borrowings	Note 32	430,308,057.22	229,872,186.96
Borrowings from central bank		–	–
Loans from other financial institutions		–	–
Financial liabilities held-for-trading		–	–
Derivative financial liabilities		–	–
Note payables	Note 35	124,423,211.42	114,143,006.75
Accounts payable	Note 36	393,359,487.81	399,794,860.24
Advances from customers	Note 37	–	27,522.93
Contract liabilities	Note 38	8,148,142.14	5,532,261.91
Proceeds from disposal of repurchased financial assets		–	–
Absorption of deposits and interbank deposits		–	–
Acting sale of securities		–	–
Acting underwriting of securities		–	–
Accrued payroll	Note 39	37,481,828.67	49,339,486.30
Taxes payable	Note 40	1,685,243.91	7,929,205.25
Other payables	Note 41	1,264,879.73	1,612,717.10
Including: Interest payable		–	–
Dividend payable		–	–
Handling fee and commission payable		–	–
Reinsurance accounts payable		–	–
Held-for-sale liabilities		–	–
Non-current liabilities due within one year	Note 43	15,800,743.79	9,113,362.44
Other current liabilities	Note 44	16,032,439.24	11,614,079.94
Total current liabilities		1,028,504,033.93	828,978,689.82

SECTION VII
FINANCIAL STATEMENTS

Consolidated Statements of Balance Sheets (Continued)

June 30, 2023

Unit: RMB

Item	Notes	June 30, 2023	December 31, 2022
Non-current liabilities:			
Reserve fund for insurance contracts		-	-
Long-term borrowings	Note 45	19,400,000.00	19,417,783.33
Bonds payable		-	-
Including: Preferred shares		-	-
Perpetual bonds		-	-
Lease liabilities	Note 47	22,881,539.41	14,299,147.15
Long-term payables		6,473,829.73	-
Long-term accrued payroll		-	-
Accrued liabilities	Note 50	38,515,258.64	37,428,122.52
Deferred income	Note 51	104,629,733.31	109,666,422.97
Deferred income tax liabilities	Note 30	32,101,737.45	30,248,893.97
Other non-current liabilities		-	-
Total non-current liabilities		224,002,098.54	211,060,369.94
Total liabilities		1,252,506,132.47	1,040,039,059.76

SECTION VII
FINANCIAL STATEMENTS

Consolidated Statements of Balance Sheets (Continued)

June 30, 2023

Unit: RMB

Item	Notes	June 30, 2023	December 31, 2022
Owners' equity (or shareholders' equity):			
Paid-up capital (or share capital)	Note 53	118,189,837.00	99,891,387.00
Other equity instruments		–	–
Including: Preferred shares		–	–
Perpetual bonds		–	–
Capital reserve	Note 55	3,283,433,987.86	2,378,146,637.90
Less: Treasury shares		–	–
Other comprehensive income	Note 57	94,682,771.34	94,682,771.34
Special reserve	Note 58	6,354,782.86	4,819,344.54
Surplus reserve	Note 59	9,216,035.02	9,216,035.02
Provision for general risk		–	–
Undistributed profit	Note 60	-321,164,159.72	-244,653,029.56
Total equity attributable to owners of the listed company (or shareholders' equity)		3,190,713,254.36	2,342,103,146.24
Minority interests		375,036,380.77	401,814,101.25
Total owners' equity (or shareholders' equity)		3,565,749,635.13	2,743,917,247.49
Total liabilities and owners' equity (or shareholders' equity)		4,818,255,767.60	3,783,956,307.25

SECTION VII
FINANCIAL STATEMENTS

Consolidated Income Statement

January to June 2023

Unit: RMB

Item	Notes	2023 1H	2022 1H
I. Total operating income		153,519,255.42	269,142,831.61
Including: Operating income	Note 61	153,519,255.42	269,142,831.61
Interest income		-	-
Premiums earned		-	-
Handling fee and commission income		-	-
II. Total operation costs		280,417,141.31	341,350,134.33
Including: Operation costs	Note 61	97,274,022.69	163,205,952.82
Interest expense		-	-
Handling fee and commission expenses		-	-
Surrenders value		-	-
Net expenditure for insurance claims settlement		-	-
Net drawing on provision for insurance contracts		-	-
Expenditures for policy dividend		-	-
Reinsurance expenditures		-	-
Tax and surcharges	Note 62	1,648,136.64	1,454,348.33
Selling expenses	Note 63	30,156,681.44	33,652,766.19
Administrative expenses	Note 64	117,484,673.21	85,125,538.31
Research and development expenses	Note 65	55,192,267.56	60,264,171.88
Financial expenses	Note 66	-21,338,640.23	-2,352,643.20
Including: Interest expense		5,957,051.15	3,419,210.81
Interest income		9,540,738.42	6,159,357.72
Add: Other income	Note 67	14,541,255.21	14,932,434.12
Investment income ("-" for losses)	Note 68	-15,782,235.50	-12,187,133.57
Including: Investment income from associates and joint ventures		-15,733,440.98	-11,140,823.18
Gains from derecognition of financial assets at amortized cost ("-" for losses)		-	-
Exchange gains ("-" for losses)		-	-
Gains on net exposure hedges ("-" for losses)		-	-
Gains on change in fair value ("-" for losses)	Note 70	48,699,437.40	2,082,082.32
Losses on credit impairment ("-" for losses)	Note 71	-14,016,353.78	2,379,223.56
Impairment losses on assets ("-" for losses)	Note 72	-24,421,018.10	-26,690,668.54
Gains from asset disposal ("-" for losses)	Note 73	-	-112,914.94

SECTION VII FINANCIAL STATEMENTS

Consolidated Income Statement (Continued)

January to June 2023

Unit: RMB

Item	Notes	2023 1H	2022 1H
III. Operating profits (“-” for losses)		-117,876,800.66	-91,804,279.77
Add: Non-operating income	Note 74	306,122.81	114,891.02
Less: Non-operating expenses	Note 75	3,422,928.54	3,935,991.27
IV. Total profits (“-” for total losses)		-120,993,606.39	-95,625,380.02
Less: Income tax expenses	Note 76	-17,603,398.54	-13,849,392.99
V. Net profits (“-” for net losses)		-103,390,207.85	-81,775,987.03
(1) Classified by continuity of operations			
1. Net profit from continuing operations (“-” for net loss)		-103,390,207.85	-81,775,987.03
2. Net profit from discontinued operations (“-” for net loss)		-	-
(2) Classified by ownership			
1. Net profit attributable to equity shareholders of the listed company (“-” for net loss)		-76,511,130.16	-60,004,630.05
2. Minority interests (“-” for net losses)		-26,879,077.69	-21,771,356.97
VI. Net amount of other comprehensive income after tax	Note 77	-	40,715,000.00
(1) Net amount of other comprehensive income after tax attributable to equity shareholders of the listed company		-	40,715,000.00
1. Other comprehensive income that cannot be reclassified to profit or loss		-	40,715,000.00
(1) Re-measurement of changes under defined benefit plan		-	-
(2) Other comprehensive income which cannot be reclassified to profit or loss under equity method		-	-
(3) Change in fair value of other equity instrument investments		-	40,715,000.00
(4) Changes in fair value of the enterprise’s own credit risk		-	-
2. Other comprehensive income that will be reclassified to profit or loss		-	-
(1) Other comprehensive income that can be reclassified to profit or loss under equity method		-	-
(2) Changes in fair value of other debt investments		-	-
(3) Amount included in other comprehensive income on reclassification of financial assets		-	-
(4) Credit impairment provision for other debt investments		-	-
(5) Cash flow hedging reserve		-	-
(6) Differences on translation of foreign currency statements		-	-
(7) Others		-	-
(2) Net amount of other comprehensive income after tax attributable to minority shareholders		-	-

SECTION VII
FINANCIAL STATEMENTS

Consolidated Income Statement (Continued)

January to June 2023

Unit: RMB

Item	Notes	2023 1H	2022 1H
VII. Total comprehensive income		-103,390,207.85	-41,060,987.03
(1) Total comprehensive income attributable to equity shareholders of the listed company		-76,511,130.16	-19,289,630.05
(2) Total comprehensive income attributable to minority shareholders		-26,879,077.69	-21,771,356.97
VIII. Earnings per share:		-	-
(1) Basic earnings per share (RMB/share)		-0.67	-0.60
(2) Diluted earnings per share (RMB/share)		-0.67	-0.60

SECTION VII FINANCIAL STATEMENTS

Consolidated Statement of Cash Flows

January to June 2023

Unit: RMB

Item	Notes	2023 1H	2022 1H
I. Cash flows from operating activities:			
Cash received from sales of goods and rendering of services		99,788,999.87	331,065,781.26
Net increase in customer deposits and interbank deposits		-	-
Net increase in borrowings from central bank		-	-
Net increase in placements from other financial institutions		-	-
Cash received from premiums under original insurance contracts		-	-
Net cash received from reinsurance business		-	-
Net increase in deposits from policyholder and investment funds		-	-
Cash received from interests, handling fees and commissions		-	-
Net increase in capital borrowed		-	-
Net increase in capital from repurchase business		-	-
Net cash received from acting sale of securities		-	-
Refund of taxes and levies		4,019,870.15	8,787,435.63
Cash received relating to other operating activities	Note 78	15,996,256.59	29,297,923.28
Sub-total of cash inflows from operating activities		119,805,126.61	369,151,140.17
Cash paid for the purchase of goods and the acceptance of services		172,876,263.86	205,997,729.24
Net increase in loans and advances to customers		-	-
Net increase in deposits with central bank and interbank deposits		-	-
Cash paid for compensation payments under original insurance contracts		-	-
Net increase in placements with other financial institutions		-	-
Cash paid for interests, handling fees and commissions		-	-
Cash paid for policyholder dividend		-	-
Cash paid to and for employees		161,183,849.08	131,230,187.56
Payments of all types of taxes		11,220,309.97	17,443,240.66
Cash payments relating to other operating activities	Note 78	50,891,973.97	37,203,494.16
Sub-total of cash outflows from operating activities		396,172,396.88	391,874,651.62
Net cash flows from operating activities		-276,367,270.27	-22,723,511.45

SECTION VII
FINANCIAL STATEMENTS

Consolidated Statement of Cash Flows (Continued)

January to June 2023

Unit: RMB

Item	Notes	2023 1H	2022 1H
II. Cash flows from investing activities:		-	-
Cash received from disposal of investments		65,000,000.00	583,000,000.00
Cash received from investment income		486,938.81	4,116,675.68
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		-	3,260.00
Net cash received from disposal of subsidiaries and other operating units		-	-
Cash received relating to other investing activities		-	-
Sub-total of cash inflows from investing activities		65,486,938.81	587,119,935.68
Cash paid for acquisition of fixed assets, intangible assets and other long-term assets		44,154,039.22	73,325,518.71
Cash paid for investments		722,114,540.00	737,000,000.00
Net increase in pledged loans		-	-
Net cash paid for acquisition of subsidiaries and other operating units		-	-
Cash paid relating to other investing activities		-	-
Sub-total of cash outflows from investing activities		766,268,579.22	810,325,518.71
Net cash flows from investing activities		-700,781,640.41	-223,205,583.03
III. Cash flows from financing activities:		-	-
Cash received from capital contributions		914,364,635.94	-
Including: Cash received by subsidiaries from investment of minority shareholders		-	-
Cash received from borrowings		310,593,548.94	126,123,441.91
Cash received from other financing activities	Note 78	37,487,564.66	80,582,130.78
Sub-total of cash inflows from financing activities		1,262,445,749.54	206,705,572.69
Cash paid for repayment of debts		100,938,886.56	55,076,041.99
Cash payments for distribution of dividends, profits or interest expenses		4,805,940.99	2,687,225.51
Including: Dividends and profits paid to minority shareholders by subsidiaries		-	-
Cash paid relating to other financing activities	Note 78	48,238,010.63	73,562,760.42
Sub-total of cash outflows from financing activities		153,982,838.18	131,326,027.92
Net cash flows from financing activities		1,108,462,911.36	75,379,544.77

SECTION VII
FINANCIAL STATEMENTS

Consolidated Statement of Cash Flows (Continued)

January to June 2023

Unit: RMB

Item	Notes	2023 1H	2022 1H
IV. Effect of exchange rate changes on cash and cash equivalents		19,411,787.81	–
V. Net increase in cash and cash equivalents		150,725,788.49	-170,549,549.71
Add: Balance of cash and cash equivalents at the beginning of the period		616,790,436.73	804,966,776.35
VI. Balance of cash and cash equivalents at the end of the period		767,516,225.22	634,417,226.64

SECTION VII FINANCIAL STATEMENTS

GENERAL INFORMATION

The Company is a leading provider of fuel cell systems in China, focusing on the design, development and manufacture of fuel cell systems and stacks (a key component of the system) mainly for commercial vehicles, such as buses and trucks.

The Company was established in the People's Republic of China (the "PRC") on July 12, 2012. The registered office of the Company is located at Room C701, 7th Floor, Block C, Building B-6, Dongsheng Science Park, Zhongguancun, No. 66, Xixiaokou Road, Haidian District, Beijing, the PRC.

During the Reporting Period, the Company's revenue was mainly derived from (i) sales of fuel cell systems; (ii) sales of fuel cell components; and (iii) provision of technology services.

The Company's ordinary shares are listed on The Stock Exchange of Hong Kong Limited and the Shanghai Stock Exchange.

BASIS OF PREPARATION

Financial data in this report are extracted from the unaudited financial statements for the six months ended June 30, 2023 (the "Financial Statements") prepared by the Group.

The Company carried out recognition and measurement on an actual transaction and event basis in accordance with the Basic Standard and specific standards of the Accounting Standards for Business Enterprises issued by the Ministry of Finance, and the Application Guidance for Accounting Standard for Business Enterprises, Interpretations of Accounting Standards for Business Enterprises and other relevant regulations (the "Accounting Standards for Business Enterprises"). On this basis, the financial statements are prepared in accordance with the Preparation Convention of Information Disclosure by Companies Offering Securities to the Public No.15 – General Provisions on Financial Reporting (amended in 2014) issued by the China Securities Regulatory Commission.

The Company has evaluated its ability to continue as a going concern for the 12 months from the end of the Reporting Period, and has not found any event or circumstance that may cast significant doubt on its ability to continue as a going concern. Therefore, the financial statements have been prepared on a going concern basis.

In addition, the financial statements also comply with the disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

SIGNIFICANT ACCOUNTING POLICIES, ACCOUNTING ESTIMATES AND PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

1. Accounting period

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

2. Functional currency

The functional currency is Renminbi.

SECTION VII FINANCIAL STATEMENTS

3. Preparation of consolidated financial statements

The consolidation scope of the Company's consolidated financial statements is determined on the basis of control, and all subsidiaries are included in the consolidated financial statements. The consolidated financial statements are prepared by the Company based on the financial statements of the Company and its subsidiaries and other relevant information.

The accounting policies and accounting periods adopted by all subsidiaries included in the consolidation scope of the consolidated financial statements are consistent with those of the Company. If the accounting policies and accounting periods adopted by the subsidiaries are inconsistent with those of the Company, necessary adjustments shall be made in the preparation of the consolidated financial statements in accordance with the accounting policies and accounting periods of the Company.

The financial statements are prepared in such way that the effects of intra-transactions between the Company and its subsidiaries, and among subsidiaries on the consolidated balance sheet, the consolidated income statement, the consolidated cash flow statement and the consolidated statement of changes in equity shall be offset.

4. Changes in accounting policies

On December 13, 2022, the Ministry of Finance issued the Notice on Issuing the Interpretation of Accounting Standards for Business Enterprises No. 16 ("**Interpretation No. 16**"), which explains the issues of "accounting treatment of the deferred income tax related to the assets and liabilities arising from a single transaction is not applicable to the initial recognition exemption", which is implemented by the Company on January 1, 2023.

The Interpretation also provides that entities shall adjust the cumulative impact amounts to retained gains and other relevant financial statement items of the earliest period presented in the financial statements in accordance with the requirements of the Interpretation.

The impacts to consolidated statements of balance sheets of the Company as of December 31, 2022 due to the changes of accounting policies are stated in below table:

Items	Prior to changes	After changes	Impacted amounts
Deferred income tax assets	130,545,747.97	135,525,491.45	4,979,743.48
Deferred income tax liabilities	24,631,301.24	30,248,893.97	5,617,592.73
Undistributed profit	-244,134,213.34	-244,653,029.56	-518,816.22
Minority shareholders' interests	401,933,134.28	401,814,101.25	-119,033.03

The impacts to consolidated income statement of the Company for the six months ended June 30, 2022 are stated in below table:

Items	Prior to changes	After changes	Impacted amounts
Income tax expenses	-13,812,209.87	-13,849,392.99	-37,183.12
Net profit	-81,813,170.15	-81,775,987.03	37,183.12
Net profit attributable to shareholders of listed company	-60,038,546.38	-60,004,630.05	33,916.33
Profit or loss of minority shareholders	-21,774,623.77	-21,771,356.97	3,266.80

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Cash and cash equivalents

Unit: RMB

Item	Closing balance	Opening balance
Cash on hand	161,308.76	125,469.76
Bank deposits	771,080,366.12	598,380,828.34
Other monetary funds	20,801,482.12	51,381,695.97
Total	792,043,157.00	649,887,994.07

Other explanations:

Breakdown of restricted monetary funds are as follows:

Item	Closing balance	Opening balance
Deposits for bank acceptance bills	20,759,123.39	29,303,973.61
Frozen funds due to litigation	3,726,008.39	3,726,008.39
Performance bond	41,800.00	41,800.00
Undue interest	-	25,775.34
Total	24,526,931.78	33,097,557.34

2. Financial assets held-for-trading

Unit: RMB

Item	Closing balance	Opening balance
Financial assets at fair value through profit or loss	705,979,100.68	25,165,123.28
Including:		
Wealth management products	705,979,100.68	25,165,123.28
Total	705,979,100.68	25,165,123.28

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Derivative financial assets

Applicable Not Applicable

4. Bills receivable

(1). Bills receivable by category

Unit: RMB

Item	Closing balance	Opening balance
Bank acceptance bills	6,390,641.18	31,170,000.00
Commercial acceptance bills	2,400,000.00	–
Total	8,790,641.18	31,170,000.00

(2). Bills receivable endorsed or discounted by the Company at the end of the period and not yet due at the balance sheet date

Unit: RMB

Item	Amount derecognized at the end of the period	Amount not derecognized at the end of the period
Bank acceptance bills	2,920,000.00	635,713.54
Commercial acceptance bills	–	–
Total	2,920,000.00	635,713.54

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Bills receivable (Continued)

(3). Disclosure by classification with the method of provision for bad debt

Unit: RMB

Category	Closing balance					Opening balance				
	Book balance		Provision for bad debts			Book balance		Provision for bad debts		
	Amount	Percentage (%)	Amount	Percentage of provision (%)	Carrying value	Amount	Percentage (%)	Amount	Percentage of provision (%)	Carrying value
Provision for bad debts on individual basis										
Including:										
Bank acceptance bills	-	-	-	-	-	-	-	-	-	-
Commercial acceptance bills	-	-	-	-	-	-	-	-	-	-
Provision for bad debts on group basis	8,890,641.18	100.00	100,000.00	1.12	8,790,641.18	31,170,000.00	100.00	-	-	31,170,000.00
Including:										
Bank acceptance bills	6,390,641.18	71.88	-	-	6,390,641.18	31,170,000.00	100.00	-	-	31,170,000.00
Commercial acceptance bills	2,500,000.00	28.12	100,000.00	4	2,400,000.00	-	-	-	-	-
Total	8,890,641.18	/	100,000.00	/	8,790,641.18	31,170,000.00	/	-	/	31,170,000.00

Provision for bad debts on individual basis:

Items provided on group basis: Commercial acceptance bills

Unit: RMB

Name	Closing balance		
	Bills receivable	Provision for bad debts	Percentage of provision (%)
Commercial acceptance bills	2,500,000.00	100,000.00	4.00
Total	2,500,000.00	100,000.00	4.00

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Bills receivable (Continued)

(4). Provision for bad debts

Unit: RMB

Category	Opening balance	Changes during the period			Closing balance
		Provision	Recovered or reversed	Written-back or written-off	
Commercial acceptance bills	–	100,000.00	–	–	100,000.00
Total	–	100,000.00	–	–	100,000.00

5. Accounts receivables

(1). Disclosure by aging

Applicable Not Applicable

Unit: RMB

Age	Closing book balance
Within 1 year	693,184,710.86
1 to 2 years	465,168,363.19
2 to 3 years	39,323,074.69
3 to 4 years	223,464,835.03
4 to 5 years	86,788,334.43
Over 5 years	25,104,480.00
Total	1,533,033,798.20

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Accounts receivables (Continued)

(2). Disclosure by classification with the method of provision for bad debt

Unit: RMB

Category	Closing balance					Opening balance				
	Book balance		Provision for bad debts			Book balance		Provision for bad debts		
	Amount	Percentage (%)	Amount	Percentage of provision (%)	Carrying value	Amount	Percentage (%)	Amount	Percentage of provision (%)	Carrying value
Provision for bad debts on individual basis	318,989,851.00	20.81	290,785,003.90	91.16	28,204,847.10	318,989,851.00	22.01	290,785,003.90	91.16	28,204,847.10
Including:										
Individual provision portfolio	318,989,851.00	20.81	290,785,003.90	91.16	28,204,847.10	318,989,851.00	22.01	290,785,003.90	91.16	28,204,847.10
Provision for bad debts on group basis	1,214,043,947.20	79.19	77,989,268.18	6.42	1,136,054,679.02	1,130,567,777.00	77.99	75,738,694.64	6.70	1,054,829,082.36
Including:										
Aging portfolio	1,214,043,947.20	79.19	77,989,268.18	6.42	1,136,054,679.02	1,130,567,777.00	77.99	75,738,694.64	6.70	1,054,829,082.36
Total	1,533,033,798.20	100.00	368,774,272.08	24.06	1,164,259,526.12	1,449,557,628.00	100.00	366,523,698.54	25.29	1,083,033,929.46

Provision for bad debts on individual basis:

Unit: RMB

Name	Closing balance			
	Book balance	Provision for bad debts	Percentage of provision (%)	Reasons for provision
Shanghai Shenlong Bus Co., Ltd.	282,048,471.00	253,843,623.90	90.00	Lower recoverable amount
Zhongzhi Vehicle (Chun'an) Co., Ltd.	36,941,380.00	36,941,380.00	100.00	Lower recoverable amount
Total	318,989,851.00	290,785,003.90	91.16	/

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Accounts receivables (Continued)

(2). Disclosure by classification with the method of provision for bad debt (Continued)

Provision for bad debts on group basis:

Items provided on group basis: Aging portfolio

Applicable Not Applicable

Unit: RMB

Name	Closing balance		
	Accounts receivables	Provision for bad debts	Percentage of provision (%)
Within 1 year	693,184,710.86	27,637,805.50	4.00
1-2 years	464,902,876.46	26,843,799.42	6.00
2-3 years	39,288,561.42	11,393,682.81	29.00
3-4 years	9,107,636.03	4,553,818.02	50.00
4-5 years	5,455,682.43	5,455,682.43	100.00
Over 5 years	2,104,480.00	2,104,480.00	100.00
Total	1,214,043,947.20	77,989,268.18	6.42

(3). Provision for bad debts

Unit: RMB

Category	Opening balance	Changes during the period				Closing balance
		Provision	Recovered or reversed	Written-back or written-off	Other changes	
Accounts receivables subject to individual provision for expected credit losses	290,785,003.90	-	-	-	-	290,785,003.90
Accounts receivables subject to group provision for expected credit losses	75,738,694.64	9,062,474.80	6,811,901.26	-	-	77,989,268.18
Total	366,523,698.54	9,062,474.80	6,811,901.26	-	-	368,774,272.08

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Accounts receivables (Continued)

(4). Top five accounts receivable by debtors at the end of the period

Unit: RMB

Name of entity	Accounts receivable	Closing balance Percentage of total amount of accounts receivable (%)	Closing balance of provision for bad debts
Customer A	449,397,824.16	29.31	29,387,587.45
Customer M	282,048,471.00	18.40	253,843,623.90
Customer I	267,201,763.03	17.43	12,588,124.30
Customer J	154,720,000.00	10.09	6,188,800.00
Customer F	113,255,000.00	7.39	6,795,300.00
Total	1,266,623,058.19	82.62	308,803,435.65

6. Receivables financing

Unit: RMB

Item	Closing balance	Opening balance
Bills receivable	21,052,827.55	21,990,000.00
Accounts receivable	-	-
Total	21,052,827.55	21,990,000.00

Changes in receivables financing and changes in fair value during the period:

The Company's receivables financing increased for the year by RMB30,966,575.16 and decreased by RMB31,903,747.61, of which the amount that has been endorsed or discounted for derecognition during the year was RMB6,982,747.61.

The Company believes that the fair value of receivables financing at fair value through other comprehensive income approximates to the carrying amount due to the short remaining term.

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. Prepayments

(1). Prepayments presented by aging

Unit: RMB

Age	Closing balance		Opening balance	
	Amount	Percentage (%)	Amount	Percentage (%)
Within 1 year	23,151,992.51	87.64	18,066,384.34	92.39
1 to 2 years	2,469,847.46	9.35	704,115.98	3.60
2 to 3 years	34,909.79	0.13	289,800.00	1.48
Over 3 years	761,752.74	2.88	493,847.00	2.53
Total	26,418,502.50	100.00	19,554,147.32	100.00

(2). Top five prepayments by receivers of advances at the end of the period

Unit: RMB

Receivers of advances	Closing balance	Percentage of total closing balance of prepayments (%)
Shanghai Maximfuelcell Technology Co., Ltd.	7,738,881.25	29.29
Illuming Power Inc.	4,623,471.29	17.50
Beijing Career Dream Technology Co., Ltd.	2,100,000.00	7.95
Rubik's Cube Hydrogen Energy Technology (Jiangsu) Co., Ltd.	1,484,287.61	5.62
Shanghai Deolong Electronic Technology Co., Ltd.	1,308,099.97	4.95
Total	17,254,740.12	65.31

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Other receivables

Breakdown of items

Unit: RMB

Item	Closing balance	Opening balance
Interest receivables	–	–
Dividend receivable	–	–
Other receivables	16,940,561.85	26,271,763.46
Total	16,940,561.85	26,271,763.46

Other receivables

(1). Disclosure by aging

Unit: RMB

Age	Closing book balance
Within 1 year	5,829,995.28
1 to 2 years	4,194,306.74
2 to 3 years	4,690,093.17
3 to 4 years	3,992,896.75
4 to 5 years	22,383,780.63
Over 5 years	418,400.00
Total	41,509,472.57

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Other receivables (Continued)

Other receivables (Continued)

(2). Classified by nature of amount

Unit: RMB

Nature of amount	Closing book balance	Opening book balance
Reserve funds	728,218.48	20,000.00
Current accounts with related parties outside the scope of consolidation	30,439,850.94	29,708,400.39
Deposits and guarantees	9,382,843.26	8,424,852.70
Others	958,559.89	1,021,640.85
Total	41,509,472.57	39,174,893.94

(3). Provision for bad debts

Unit: RMB

Provision for bad debts	Stage 1 Expected credit losses over the next 12 months	Stage 2 Lifetime expected credit losses (not credit-impaired)	Stage 3 Lifetime expected credit losses (credit-impaired)	Total
Balance at January 1, 2023	12,903,130.48	-	-	12,903,130.48
Balance at January 1, 2023 in the current period	-	-	-	-
- Transfer to Stage 2	-12,903,130.48	12,903,130.48	-	-
- Transfer to Stage 3	-	-	-	-
- Transfer back to Stage 2	-	-	-	-
- Transfer back to Stage 1	-	-	-	-
Provision for the period	-	11,665,780.24	-	11,665,780.24
Reversal for the period	-	-	-	-
Written-back for the period	-	-	-	-
Written-off for the period	-	-	-	-
Other changes	-	-	-	-
Balance at June 30, 2023	-	24,568,910.72	-	24,568,910.72

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Other receivables (Continued)

Other receivables (Continued)

(4). Provision for bad debts

Unit: RMB

Category	Opening balance	Changes during the period				Closing balance
		Provision	Recovered or reversed	Written-back or written-off	Other changes	
Grouped by aging	12,903,130.48	11,665,780.24	-	-	-	24,568,910.72
Total	12,903,130.48	11,665,780.24	-	-	-	24,568,910.72

(5). Top five other receivables by debtors at the end of the period

Unit: RMB

Name of entity	Nature of amount	Closing balance	Age	Percentage of total closing balance of other receivables (%)	Closing balance of provision for bad debts
Zhangjiakou Haiper New Energy Technology Co., Ltd.	Current accounts	30,439,850.94	0-5 years	73.33	24,418,910.72
Beijing Dongsheng Bozhan Technology Development Co., Ltd.	Deposits	3,048,509.65	0-3 years	7.34	-
Shuimu Xingchuang (Beijing) Technology Development Co., Ltd.	Deposits	1,148,619.34	0-2 years	2.77	-
Special wage account for farmers in fuel cell engine base phase II of Zhangjiakou Huagong Construction Co., Ltd.	Deposits	970,000.00	2-3 years	2.34	-
Special wage account for farmers in fuel cell construction project of Zhangjiakou Fifth Construction Co., Ltd.	Deposits	940,000.00	3-4 years	2.26	-
Total	/	36,546,979.93	/	88.04	24,418,910.72

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Inventories

(1). Classification of inventories

Unit: RMB

Item	Closing balance			Opening balance		
	Book balance	performance cost	Carrying amount	Book balance	performance cost	Carrying amount
Raw materials	139,425,763.43	21,767,312.63	117,658,450.80	155,101,165.40	20,450,454.43	134,650,710.97
Product in progress	73,262,769.90	2,051,604.74	71,211,165.16	57,539,826.61	2,073,116.99	55,466,709.62
Finished goods	179,692,652.45	47,721,832.92	131,970,819.53	139,108,775.12	64,221,112.83	74,887,662.29
Good delivered	53,541,033.22	1,035,897.86	52,505,135.36	38,847,019.73	948,567.74	37,898,451.99
Total	445,922,219.00	72,576,648.15	373,345,570.85	390,596,786.86	87,693,251.99	302,903,534.87

(2). Provision for inventory impairment and impairment provision for contract performance cost

Unit: RMB

Item	Opening balance	Increase for the period		Decrease for the period		Closing balance
		Provision	Others	Reversal or write-off	Others	
Raw materials	20,450,454.43	5,771,855.28	-	4,454,997.08	-	21,767,312.63
Product in progress	2,073,116.99	688,684.40	-	710,196.65	-	2,051,604.74
Finished goods	64,221,112.83	17,329,423.94	-	33,828,703.85	-	47,721,832.92
Good delivered	948,567.74	87,330.12	-	-	-	1,035,897.86
Total	87,693,251.99	23,877,293.74	-	38,993,897.58	-	72,576,648.15

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. Contract assets

(1). Contract assets

Unit: RMB

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Carrying amount	Book balance	Impairment provision	Carrying amount
Warranty	48,706,647.35	10,441,803.85	38,264,843.50	44,128,201.99	10,408,444.18	33,719,757.81
Total	48,706,647.35	10,441,803.85	38,264,843.50	44,128,201.99	10,408,444.18	33,719,757.81

(2). Provision for impairment of contract assets for the period

Unit: RMB

Item	Provision for the period	Reversal for the period	Write-back/write-off for the period	Reasons
Warranty	603,811.00	570,451.33	–	Provision made based on aging and expected credit risk
Total	603,811.00	570,451.33	–	/

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Held-for-sale assets

Applicable Not Applicable

12. Non-current assets due within one year

Applicable Not Applicable

13. Other current assets

Unit: RMB

Item	Closing balance	Opening balance
Deductible input tax	81,855,480.35	63,398,957.11
Amortization expenses	1,984,884.64	3,938,552.46
Total	83,840,364.99	67,337,509.57

14. Debt investments

(1). Debt investments

Applicable Not Applicable

(2). Significant debt investments at the end of the period

Applicable Not Applicable

(3). Provision for impairment

Applicable Not Applicable

15. Other debt investments

(1). Other debt investments

Applicable Not Applicable

(2). Significant other debt investments at the end of the period

Applicable Not Applicable

(3). Provision for impairment

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. Long-term receivables

(1). Long-term receivables

Applicable Not Applicable

(2). Provision for bad debts

Applicable Not Applicable

(3). Long-term receivables derecognised due to transfer of financial assets

Applicable Not Applicable

(4). Amount of assets or liabilities transferred from long-term receivables with continuing involvement

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. Long-term equity investments

Unit: RMB

Investee	Opening balance	Changes during the period								Closing balance	Closing balance of impairment provision
		Additional investment	Decrease in investment	Investment profit or loss recognized under equity method	Adjustment to other comprehensive income	Other changes in equity	Cash dividend or profit declared	Provision for impairment	Others		
I. Joint ventures											
Toyota Sinohytec Fuel Cell Co., Ltd.	113,639,709.41	-	-	-8,302,342.17	-	-	-	-	-	105,337,367.24	-
Sub-total	113,639,709.41	-	-	-8,302,342.17	-	-	-	-	-	105,337,367.24	-
II. Associates											
Air Sinohytec Hydrogen Technology Co., Ltd.	21,624,713.67	-	-	-497,730.19	-	-	-	-	-	21,126,983.48	-
United Fuel Cell System R&D (Beijing) Co., Ltd.	10,086,344.04	-	-	1,583,680.28	-	-	-	-	-	11,670,024.32	-
Shanghai Maximfuelcell Technology Co., Ltd.	17,626,465.99	-	-	-1,659,428.21	-	-	-	-	-	15,967,037.78	-
Beijing Swift New Energy Technology Co., Ltd.	11,314,822.51	-	-	-1,685,934.32	-	-	-	-	-	9,628,888.19	-
Beijing Shuimu Pilot Venture Capital Center (Limited Partnership)	75,773,951.75	-	-	-127,941.18	-	-	-	-	-	75,646,010.57	-
Zhangjiakou Jiaotou Hydrogen New Energy Technology Co., Ltd.	10,020,594.64	-	-	19,894.52	-	-	-	-	-	10,040,489.16	-
Zhangjiakou Haiper New Energy Technology Co., Ltd.	48,768,101.88	-	-	-1,257,453.99	-	-	-	-	-	47,510,647.89	24,005,376.27
Beijing Caven New Energy Vehicles Co., Ltd.	24,994,637.08	25,000,000.00	-	-3,806,185.72	-	-	-	-	-	46,188,451.36	-
Subtotal	220,209,631.56	25,000,000.00	-	-7,431,098.81	-	-	-	-	-	237,778,532.75	24,005,376.27
Total	333,849,340.97	25,000,000.00	-	-15,733,440.98	-	-	-	-	-	343,115,899.99	24,005,376.27

18. Other equity instrument investments

(1). Other equity instrument investments

Unit: RMB

Item	Closing balance	Opening balance
Hozon New Energy Automobile Co., Ltd.	173,500,000.00	173,500,000.00
Total	173,500,000.00	173,500,000.00

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

18. Other equity instrument investments (Continued)

(2). Investments in equity instruments not held-for-trading

Unit: RMB

Item	Dividend income recognized in the current period	Accumulated gains	Accumulated losses	Amount transferred from other comprehensive income to retained earnings	Reasons for designation as measured at fair value through other comprehensive income	Reasons for transfer from other comprehensive income to retained earnings
Hozon New Energy Automobile Co., Ltd.	-	-	-	-	Long-term holdings for strategic purposes	-

Other explanation:

As of June 30, 2023, the subscribed registered capital of Hozon New Energy Automobile Co., Ltd. was changed to RMB2,664.0735 million. The Company contributed RMB26.9167 million and holds 1.0104% equity interest in Hozon New Energy Automobile Co., Ltd..

19. Other non-current financial assets

Unit: RMB

Item	Closing balance	Opening balance
Equity instrument investments	2,800,000.00	2,800,000.00
Total	2,800,000.00	2,800,000.00

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

20. Investment properties

Measurement model of investment properties

Applicable Not Applicable

21. Fixed assets

Breakdown of item

Unit: RMB

Item	Closing balance	Opening balance
Fixed assets	468,849,269.20	478,969,668.22
Disposal of fixed assets	-	-
Total	468,849,269.20	478,969,668.22

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

21. Fixed assets (Continued)

Fixed assets

(1). Fixed assets

Unit: RMB

Item	Buildings and structures	Machinery equipment	Transportation tools	Electronic equipment	Mold	Office equipment and others	Total
I. Original book value:							
1. Opening balance	259,868,693.89	298,737,836.55	3,408,482.34	15,848,550.77	27,016,484.81	10,395,935.05	615,275,983.41
2. Increase for the period		11,494,968.83	495,273.45	564,486.84	1,835,830.94	1,897,132.75	16,287,692.81
(1) Purchase		8,685,164.58	495,273.45	446,290.44	1,835,830.94	1,897,132.75	13,359,692.16
(2) Transfer from construction in progress	-	2,319,773.36	-	118,196.40	-	-	2,437,969.76
(3) Increase in business combination	-	-	-	-	-	-	-
(4) Other increase	-	490,030.89	-	-	-	-	490,030.89
3. Decrease for the period	-	169,157.54	-	534.96	-	5,292.04	174,984.54
(1) Disposal or retirement	-	54,867.28	-	-	-	5,292.04	60,159.32
(2) Other decrease	-	114,290.26	-	534.96	-	-	114,825.22
4. Closing balance	259,868,693.89	310,063,647.84	3,903,755.79	16,412,502.65	28,852,315.75	12,287,775.76	631,388,691.68
II. Accumulated depreciation							
1. Opening balance	29,247,131.11	77,710,393.15	1,641,327.99	7,893,799.17	2,815,401.63	5,144,051.62	124,452,104.67
2. Increase for the period	4,199,634.19	18,705,351.68	258,319.95	1,092,540.76	623,100.14	860,932.27	25,739,878.99
(1) Provision	4,199,634.19	18,705,351.68	258,319.95	1,092,540.76	623,100.14	860,932.27	25,739,878.99
3. Decrease for the period	-	14,622.69	-	-	-	2,513.70	17,136.39
(1) Disposal or retirement	-	7,384.29	-	-	-	2,513.70	9,897.99
(2) Other decrease	-	7,238.40	-	-	-	-	7,238.40
4. Closing balance	33,446,765.30	96,401,122.14	1,899,647.94	8,986,339.93	3,438,501.77	6,002,470.19	150,174,847.27
III. Provision for impairment							
1. Opening balance	-	-	-	-	11,854,210.52	-	11,854,210.52
2. Increase for the period	-	-	-	-	510,364.69	-	510,364.69
(1) Provision	-	-	-	-	510,364.69	-	510,364.69
3. Decrease for the period	-	-	-	-	-	-	-
(1) Disposal or retirement	-	-	-	-	-	-	-
4. Closing balance	-	-	-	-	12,364,575.21	-	12,364,575.21
IV. Carrying amount							
1. Closing book value	226,421,928.59	213,662,525.70	2,004,107.85	7,426,162.72	13,049,238.77	6,285,305.57	468,849,269.20
2. Opening book value	230,621,562.78	221,027,443.40	1,767,154.35	7,954,751.60	12,346,872.66	5,251,883.43	478,969,668.22

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

21. Fixed assets (Continued)

Fixed assets (Continued)

(2). Fixed assets leased in through financial leases

Unit: RMB

Item	Original book value	Accumulated depreciation	Provision for impairment	Carrying amount
Specialized equipment	12,329,522.10	1,455,675.40	–	10,873,846.70
Total	12,329,522.10	1,455,675.40	–	10,873,846.70

(3). Fixed assets for which title certificates have not been obtained

Unit: RMB

Item	Carrying amount	Reason for not obtaining the title certificate
Buildings and structures	174,747,237.72	Transfer to fixed assets in 2022, the relevant acceptance has been completed, and the title certificate is under application
Total	174,747,237.72	

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. Construction in progress

Breakdown of item

Unit: RMB

Item	Closing balance	Opening balance
Construction in progress	17,240,146.28	14,446,330.11
Construction materials	-	-
Total	17,240,146.28	14,446,330.11

Construction in progress

(1). Construction in progress

Unit: RMB

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Carrying amount	Book balance	Impairment provision	Carrying amount
Production line construction	10,788,932.69	-	10,788,932.69	7,558,907.93	-	7,558,907.93
Upgrade and transformation of equipment and facilities	2,838,880.54	-	2,838,880.54	4,727,211.02	-	4,727,211.02
Development project for fuel cell stack testing platform	2,792,820.57	-	2,792,820.57	1,894,633.88	-	1,894,633.88
Others	819,512.48	-	819,512.48	265,577.28	-	265,577.28
Total	17,240,146.28	-	17,240,146.28	14,446,330.11	-	14,446,330.11

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

23. Productive biological assets

(1). Productive biological assets measured at cost

Applicable Not Applicable

(2). Productive biological assets at fair value through profit or loss

Applicable Not Applicable

24. Oil and gas assets

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

25. Right-of-use assets

Unit: RMB

Item	Buildings and structures	Machinery equipment	Transportation equipment	Total
I. Original book value				
1. Opening balance	41,124,690.22	-	2,401,366.08	43,526,056.30
2. Increase for the period	19,536,196.30	-	-	19,536,196.30
(1) New leases	19,536,196.30	-	-	19,536,196.30
3. Decrease for the period	16,528,738.28	-	2,401,366.08	18,930,104.36
(1) Lease expiry	16,528,738.28	-	2,401,366.08	18,930,104.36
4. Closing balance	44,132,148.24	-	-	44,132,148.24
II. Accumulated depreciation				
1. Opening balance	15,655,084.51	-	2,201,252.13	17,856,336.64
2. Increase for the period	6,341,067.53	-	200,113.95	6,541,181.48
(1) Provisions	6,341,067.53	-	200,113.95	6,541,181.48
3. Decrease for the period	15,306,912.22	-	2,401,366.08	17,708,278.30
(1) Disposal	-	-	-	-
(2) Maturity	15,306,912.22	-	2,401,366.08	17,708,278.30
4. Closing balance	6,689,239.82	-	-	6,689,239.82
III. Impairment provision				
1. Opening balance	-	-	-	-
2. Increase for the period	-	-	-	-
(1) Provisions	-	-	-	-
3. Decrease for the period	-	-	-	-
(1) Disposal	-	-	-	-
4. Closing balance	-	-	-	-
IV. Book value				
1. Closing book value	37,442,908.42	-	-	37,442,908.42
2. Opening book value	25,469,605.71	-	200,113.95	25,669,719.66

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

26. Intangibles

(1). Intangible assets

Unit: RMB

Item	Land use rights	Patent/ unpatented technology	Software copyright	Software	Total
I. Original book value					
1. Opening balance	28,428,528.50	162,960,821.13	807,030.64	53,833,104.04	246,029,484.31
2. Increase for the period	–	30,586,849.89	–	8,387,304.20	38,974,154.09
(1) Purchase	–	–	–	8,387,304.20	8,387,304.20
(2) In-house research and development	–	30,586,849.89	–	–	30,586,849.89
(3) Increase in business combination	–	–	–	–	–
3. Decrease for the period	–	–	–	–	–
(1) Disposal	–	–	–	–	–
4. Closing balance	28,428,528.50	193,547,671.02	807,030.64	62,220,408.24	285,003,638.40
II. Accumulated amortization					
1. Opening balance	2,216,708.39	24,601,439.62	571,646.57	13,653,810.48	41,043,605.06
2. Increase for the period	284,395.86	9,054,877.60	40,351.50	2,910,450.26	12,290,075.22
(1) Provision	284,395.86	9,054,877.60	40,351.50	2,910,450.26	12,290,075.22
3. Decrease for the period	–	–	–	–	–
(1) Disposal	–	–	–	–	–
4. Closing balance	2,501,104.25	33,656,317.22	611,998.07	16,564,260.74	53,333,680.28
III. Provision for impairment					
1. Opening balance	–	–	–	–	–
2. Increase for the period	–	–	–	–	–
(1) Provision	–	–	–	–	–
3. Decrease for the period	–	–	–	–	–
(1) Disposal	–	–	–	–	–
4. Closing balance	–	–	–	–	–
IV. Book value					
1. Closing book value	25,927,424.25	159,891,353.80	195,032.57	45,656,147.50	231,669,958.12
2. Opening book value	26,211,820.11	138,359,381.51	235,384.07	40,179,293.56	204,985,879.25

The proportion of intangible assets derived from in-house research and development of the Company in the balance of intangible assets was 68.78% at the end of the period.

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

27. Development expenses

Unit: RMB

Item	Opening balance	Increase for the period	Decrease for the period		Closing balance
		Internal development expenses	Recognized as intangible assets	Transferred to current profit or loss	
120kW high-performance miniaturized fuel cell power generation system	6,800,935.38	-	6,800,935.38	-	-
Single battery life verification and research on material attenuation characteristics of key components	282,554.34	522,326.44	-	-	804,880.78
Research and development of high-performance hydrogen fuel passenger vehicles in Winter Olympics service scenarios	10,602,924.24	-	10,602,924.24	-	-
Research on the application of high-performance perfluorocarbons membrane in fuel cells	9,128,063.36	4,392,358.43	-	-	13,520,421.79
Hydrogen supply system and fuel cell matching test	7,024,888.02	-	7,024,888.02	-	-
Research and development of domestic series fuel cell system	23,521,518.22	17,354,596.59	-	11,822,171.59	29,053,943.22
Research and development of multi-energy efficient coupling control and key components of hybrid power generation system	-	37,214.97	-	-	37,214.97
Forward-looking technology research	7,487,417.23	9,160,384.33	6,158,102.25	7,203,735.20	3,285,964.11
Development of fuel cell stack testing equipment	2,442,740.44	1,214,635.80	-	-	3,657,376.24
Fuel cell parts development	5,650,685.05	3,493,690.86	-	432,591.77	8,711,784.14
Fuel cell-hydrogen combustion engine hybrid power generation system integration and demonstration	-	15,272.01	-	-	15,272.01
Development of fuel cell system and vehicle application for low pressure input of on-board liquid hydrogen storage and supply system	-	4,984,624.27	-	311,571.82	4,673,052.45
Total	72,941,726.28	41,175,103.70	30,586,849.89	19,770,070.38	63,759,909.71

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

28. GOODWILL

(1). Original book value of goodwill

Applicable Not Applicable

(2). Provision for impairment of goodwill

Applicable Not Applicable

(3). Information about the asset group or combination of asset groups to which goodwill is related

Applicable Not Applicable

(4). Description of the process of goodwill impairment test, key parameters (e.g. growth rate in the forecast period, the growth rate in the stable period, the profit margin, the discount rate, the forecast period, etc. applied in estimating the present value of future cash flows, if applicable) and the recognition method of goodwill impairment loss

Applicable Not Applicable

(5). Effect of goodwill impairment test

Applicable Not Applicable

29. Long-term deferred expenditure

Unit: RMB

Item	Opening balance	Increase for the period	Amortization for the period	Other decreases	Closing balance
Construction and renovation costs	4,811,711.91	1,308,714.37	970,912.24	-	5,149,514.04
Renovation expenditure for fuel cell center	20,643,181.53	6,099,083.98	2,696,252.56	-	24,046,012.95
Technical service fee	1,375,223.92	592,334.12	582,298.79	-	1,385,259.25
Tooling fixture	1,102,887.46	363,412.20	185,739.98	-	1,280,559.68
Property management fee	-	1,532,045.42	133,221.36	-	1,398,824.06
Total	27,933,004.82	9,895,590.09	4,568,424.93	-	33,260,169.98

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

30. Deferred income tax assets/deferred income tax liabilities

(1). Deferred income tax assets not offset

Unit: RMB

Item	Closing balance		Opening balance	
	Deductible temporary differences	Deferred income tax assets	Deductible temporary differences	Deferred income tax assets
Provision for asset impairment	511,879,796.93	79,570,313.58	513,388,111.98	79,074,764.40
Unrealized profit from internal transactions	64,447,571.53	9,667,135.73	39,806,863.27	5,971,029.49
Deductible losses	322,184,903.10	48,327,735.47	231,069,502.76	34,660,425.41
Accrued liabilities	36,902,078.00	6,086,733.33	37,379,141.82	5,752,862.43
Deferred income tax difference	34,732,739.65	5,209,910.96	33,911,108.25	5,086,666.24
Lease liabilities	35,712,038.53	6,761,419.49	23,178,156.11	4,979,743.48
Total	1,005,859,127.74	155,623,248.57	878,732,884.19	135,525,491.45

(2). Deferred income tax liabilities not offset

Unit: RMB

Item	Closing balance		Opening balance	
	Taxable temporary differences	Deferred income tax liabilities	Taxable temporary differences	Deferred income tax liabilities
Assets appraisal appreciation from business combination not under common control	16,032,941.72	2,627,094.61	16,463,486.70	2,697,570.12
Changes in fair value of other debt investments	4,353,920.68	653,088.10	41,123.29	6,168.49
Changes in fair value of other equity instrument investments	123,500,000.00	18,525,000.00	123,500,000.00	18,525,000.00
Accelerated depreciation of fixed assets	19,722,212.47	2,958,331.87	21,923,253.93	3,288,488.09
Changes in fair value of other non-current financial assets	760,496.90	114,074.54	760,496.90	114,074.54
Right-of-use assets	37,442,908.41	7,224,148.33	25,669,719.68	5,617,592.73
Total	201,812,480.18	32,101,737.45	188,358,080.50	30,248,893.97

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

30. Deferred income tax assets/deferred income tax liabilities (Continued)

(3). Breakdown of unrecognized deferred income tax assets

Unit: RMB

Item	Closing balance	Opening balance
Deductible losses	129,309,939.52	72,056,335.77
Total	129,309,939.52	72,056,335.77

(4). Deductible losses of unrecognized deferred income tax assets will be expired in the following years

Unit: RMB

Year	Closing amount	Opening balance	Note
2023	2,707,099.26	2,707,099.26	–
2024	2,924,200.38	2,924,200.38	–
2025	7,242,657.42	7,242,657.42	–
2026	41,008,483.03	41,008,483.03	–
2027	18,173,895.68	18,173,895.68	–
2028	57,253,603.75	–	–
Total	129,309,939.52	72,056,335.77	/

31. Other non-current assets

Unit: RMB

Item	Closing balance			Opening balance		
	Book balance	Provision for impairment	Book value	Book balance	Provision for impairment	Book value
Prepayments for purchase of equipment	55,315,764.91	–	55,315,764.91	47,679,446.95	–	47,679,446.95
Prepayments for purchase of other long-term assets	4,743,396.20	–	4,743,396.20	4,621,939.70	–	4,621,939.70
Total	60,059,161.11	–	60,059,161.11	52,301,386.65	–	52,301,386.65

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

32. Short-term borrowings

(1). Classification of short-term borrowings

Unit: RMB

Item	Closing balance	Opening balance
Pledged loans	–	–
Secured borrowings	25,000,000.00	10,000,000.00
Guaranteed loans	76,164,133.63	38,124,725.02
Credit loans	328,836,078.03	181,516,733.22
Unearned interest payable	307,845.56	230,728.72
Total	430,308,057.22	229,872,186.96

33. Financial liabilities held for trading

Applicable Not Applicable

34. Derivative financial liabilities

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

35. Note payables

Unit: RMB

Type	Closing balance	Opening balance
Bank acceptances	124,423,211.42	114,143,006.75
Total	124,423,211.42	114,143,006.75

The total amount of note payables due but not paid at the end of the period was RMB0.

36. Accounts payable

(1). Breakdown of accounts payable

Unit: RMB

Item	Closing balance	Opening balance
Payables for purchase of materials	344,432,107.67	348,246,280.08
Payables for purchase of equipment and construction fees	30,838,807.06	24,616,508.78
Other payables such as freight charges	18,088,573.08	26,932,071.38
Total	393,359,487.81	399,794,860.24

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

36. Trade payables (Continued)

(2). Significant accounts payable aged over one year

Unit: RMB

Item	Closing balance	Reason for being outstanding or carried forward
Zhejiang Niun New Energy Technology Co., Ltd.	11,892,438.75	Outstanding
Toyota Sinohtec Fuel Cell Co., Ltd.	9,185,354.82	Outstanding
Cube Hydrogen Energy Technology (Jiangsu) Co., Ltd.	7,537,314.51	Outstanding
Zhangjiakou Jutong Technology Co., Ltd.	3,479,390.20	Outstanding
Changzhou ECTEK Automotive Electronic System Co., Ltd.	3,352,585.00	Outstanding
Total	35,447,083.28	/

37. Advances from customers

(1). Breakdown of advances from customers

Unit: RMB

Item	Closing balance	Opening balance
Rental expenses	-	27,522.93
Total	-	27,522.93

38. Contract liabilities

(1). Contract liabilities

Unit: RMB

Item	Closing balance	Opening balance
Payment for goods and services fee	8,148,142.14	5,532,261.91
Total	8,148,142.14	5,532,261.91

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

39. Accrued payroll

(1). Breakdown of accrued payroll

Unit: RMB

Item	Opening balance	Increase for the period	Decrease during the period	Closing balance
I. Short-term remuneration	47,309,468.31	141,334,833.24	153,344,359.54	35,299,942.01
II. Post-employment benefits-defined contribution plans	2,030,017.99	13,898,215.06	13,746,346.39	2,181,886.66
III. Termination benefits	–	–	–	–
IV. Other benefits due within one year	–	–	–	–
Total	49,339,486.30	155,233,048.30	167,090,705.93	37,481,828.67

(2). Breakdown of short-term remuneration

Unit: RMB

Item	Opening balance	Increase for the period	Decrease during the period	Closing balance
I. Wages, bonuses, allowances and subsidies	44,866,922.11	122,069,124.48	134,577,308.88	32,358,737.71
II. Employee benefits	–	2,798,220.95	2,773,594.95	24,626.00
III. Social insurance	1,252,109.30	8,473,898.36	8,381,632.58	1,344,375.08
Including: Medical insurance	1,215,170.39	8,181,795.77	8,092,509.90	1,304,456.26
Work-related injury insurance	36,938.91	288,335.18	285,484.57	39,789.52
Maternity insurance	–	3,767.41	3,638.11	129.30
IV. Housing provident fund	322,442.00	5,816,131.91	5,787,617.91	350,956.00
V. Union and employee education expenses	867,994.90	2,177,457.54	1,824,205.22	1,221,247.22
Total	47,309,468.31	141,334,833.24	153,344,359.54	35,299,942.01

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

39. Accrued payroll (Continued)

(3). Breakdown of defined contribution plans

Unit: RMB

Item	Opening balance	Increase for the period	Decrease for the period	Closing balance
1. Basic pension insurance	1,968,501.46	13,464,351.56	13,317,169.46	2,115,683.56
2. Unemployment insurance	61,516.53	433,863.50	429,176.93	66,203.10
Total	2,030,017.99	13,898,215.06	13,746,346.39	2,181,886.66

40. Taxes payable

Unit: RMB

Item	Closing balance	Opening balance
Value-added tax	-	5,424,291.41
Corporate income tax	639,691.62	134,682.15
Individual income tax	692,027.45	909,423.28
City maintenance and construction tax	-	372,940.57
Land use tax	17,330.63	212,618.28
Education surcharge	-	159,831.67
Stamp tax	227,264.17	498,430.85
Local education surcharge	-	106,554.45
Property tax	108,930.04	110,421.76
Others	-	10.83
Total	1,685,243.91	7,929,205.25

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

41. Other payables

Breakdown of items

Unit: RMB

Item	Closing balance	Opening balance
Interest payable	–	–
Dividends payable	–	–
Other payables	1,264,879.73	1,612,717.10
Total	1,264,879.73	1,612,717.10

Other payables

(1). Breakdown of other payables by nature

Unit: RMB

Item	Closing balance	Opening balance
Deposits and guarantees	445,996.40	463,272.55
Employee social security fund	45,024.53	8,911.14
Payables to employees	458,662.09	819,768.15
Current accounts with other entities	226,415.10	260,295.46
Others	88,781.61	60,469.80
Total	1,264,879.73	1,612,717.10

42. Held-for-sale liabilities

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

43. Non-current liabilities due within one year

Unit: RMB

Item	Closing balance	Opening balance
Long-term borrowings due within one year	216,250.77	200,183.32
Bonds payable due within one year	-	-
Long-term payables due within one year	2,753,993.90	-
Lease liabilities due within one year	12,830,499.12	8,913,179.12
Total	15,800,743.79	9,113,362.44

44. Other current liabilities

Unit: RMB

Item	Closing balance	Opening balance
Notes receivable endorsed or discounted but not derecognized (bill restoration)	15,498,976.98	11,356,093.50
Pending output tax	533,462.26	257,986.44
Total	16,032,439.24	11,614,079.94

45. Long-term borrowings

(1). Classification of long-term borrowings

Unit: RMB

Item	Closing balance	Opening balance
Credit loans	19,600,000.00	19,600,000.00
Accrued interest	16,250.77	17,966.65
Less: Long-term borrowings due within one year (“-” for negative)	-216,250.77	-200,183.32
Total	19,400,000.00	19,417,783.33

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

46. Bonds payable

(1). Bonds payable

Applicable Not Applicable

(2). Changes in bonds payable:(excluding preferred shares, perpetual bonds and other financial instruments classified as financial liabilities)

Applicable Not Applicable

(3). Explanation about the conditions and timing of conversion of convertible corporate bonds

Applicable Not Applicable

(4). Explanation about other financial instruments classified as financial liabilities

Basic information of other financial instruments such as preferred shares and perpetual bonds outstanding at the end of the period

Applicable Not Applicable

Changes in preferred shares, perpetual bonds and other financial instruments outstanding at the end of the period

Applicable Not Applicable

Explanation about basis for classifying other financial instruments as financial liabilities

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

47. Lease liabilities

Unit: RMB

Item	Closing balance	Opening balance
Lease payment	38,014,039.98	24,955,034.26
Less: Unrecognized finance charges (“-” for negative)	-2,302,001.45	-1,742,707.99
Lease liabilities due within one year (“-” for negative)	-12,830,499.12	-8,913,179.12
Total	22,881,539.41	14,299,147.15

48. Long-term payables

Breakdown of item

Unit: RMB

Item	Closing balance	Opening balance
Long-term payables	6,473,829.73	-
Total	6,473,829.73	-

Long-term payables

Unit: RMB

Item	Closing balance	Opening balance
Finance lease payables	6,810,090.38	-
Including: Unrealized finance charges	-336,260.65	-
Total	6,473,829.73	-

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

49. Long-term accrued payroll

Applicable Not Applicable

50. Accrued liabilities

Unit: RMB

Item	Closing balance	Opening balance	Reasons for formation
Product quality assurance	37,428,122.52	38,515,258.64	Provision for warranty
Total	37,428,122.52	38,515,258.64	/

51. Deferred income

Deferred income

Unit: RMB

Item	Opening balance	Increase for the period	Decrease for the period	Closing balance	Reasons for formation
Government grants related to assets	108,009,414.43	2,622,900.00	6,599,810.19	104,032,504.24	Project funds and special subsidies
Government grants related to income	1,657,008.54	219,540.00	1,279,319.47	597,229.07	Project funds and special subsidies
Total	109,666,422.97	2,842,440.00	7,879,129.66	104,629,733.31	/

Other explanations:

Item	Opening balance	New grants for the period	Amount included in non-operating income for the period	Amount included in other income for the period	Other changes	Closing balance	Related to assets/income
Subsidies for scientific research projects (related to assets)	74,445,729.28	2,622,900.00	-	3,767,148.77	-100.00	73,301,380.51	Related to assets
Subsidies for scientific research projects (related to income)	1,657,008.54	219,540.00	-	1,279,319.47	-	597,229.07	Related to income
Phase II of Engine Production Base Construction Project	33,563,685.15	-	-	2,832,561.42	-	30,731,123.73	Related to assets
Total	109,666,422.97	2,842,440.00	-	7,879,029.66	-100.00	104,629,733.31	/

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

52. Other non-current liabilities

Applicable Not Applicable

53. Share capital

Unit: RMB

	Opening balance	Issuance of new shares	Increase or decrease (+, -)			Sub-total	Closing balance
			Bonus issue	Capitalization of provident fund	Others		
Total number of shares	99,891,387.00	18,298,450.00	-	-	-	18,298,450.00	118,189,837.00

Other explanations:

The Company's initial public offering of 17,628,000 overseas-listed foreign shares (H shares) was listed on the main board of The Stock Exchange of Hong Kong Limited on January 12, 2023. For details, please refer to the Announcement of Beijing SinoHytec Co., Ltd. on the Listing of Overseas Listed Foreign Shares (H Shares) (announcement NO.: 2023-003) disclosed by the Company on the website of the Shanghai Stock Exchange (www.sse.com.cn) on January 13, 2023.

With the approval of the Hong Kong Stock Exchange the joint global coordinators partially exercised the over-allotment option on February 3, 2023. A total of 670,450 H shares were listed on the Main Board of the Hong Kong Stock Exchange at 9:00 a.m. on February 8, 2023 and commenced the listing and trading. For details, please refer to the Announcement of Beijing SinoHytec Co., Ltd. on the Partial Exercise of the Over-allotment Option in the Issuance of Overseas-listed Foreign Shares (H Shares) and Share Change (announcement NO.: 2023-007) disclosed by the Company on the website of the Shanghai Stock Exchange (www.sse.com.cn) on February 9, 2023.

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

54. Other equity instruments

- (1). Basic information of other financial instruments such as preferred shares and perpetual bonds outstanding at the end of the period

Applicable Not Applicable

- (2). Changes in preferred shares, perpetual bonds and other financial instruments outstanding at the end of the period

Applicable Not Applicable

Explanation about changes in the current period and the reasons for the changes in other equity instruments, and the basis for relevant accounting treatment:

Applicable Not Applicable

55. Capital reserve

Unit: RMB

Item	Opening balance	Increase for the period	Decrease for the period	Closing balance
Capital appreciation (share appreciation)	2,251,551,700.68	905,287,349.96	–	3,156,839,050.64
Other capital reserve	126,594,937.22	–	–	126,594,937.22
Total	2,378,146,637.90	905,287,349.96	–	3,283,433,987.86

Other explanations, including the changes in the current period and the reasons for the changes:

The capital appreciation in the period is the share appreciation generated by the Company's issuance of a total of 18,298,450 overseas-listed foreign shares (H shares) during the period.

56. Treasury shares

Applicable Not Applicable

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

57. Other comprehensive income

Unit: RMB

Item	Opening balance	Amount for the period						Closing balance
		Amount before income tax for the period	Less: Amount transferred to profit or loss from other comprehensive income	Less: Amount transferred to retained earnings from other comprehensive income	Less: Income tax expenses	Amount attributable to the listed company after tax	Amount attributable to the minority shareholders after tax	
I. Other comprehensive income that cannot be reclassified to profit or loss	94,682,771.34	-	-	-	-	-	-	94,682,771.34
Changes in fair value of other equity instrument investments	94,682,771.34	-	-	-	-	-	-	94,682,771.34
II. Other comprehensive income that will be reclassified to profit or loss	-	-	-	-	-	-	-	-
Total other comprehensive income	94,682,771.34	-	-	-	-	-	-	94,682,771.34

58. Special reserve

Unit: RMB

Item	Opening balance	Increase for the period	Decrease for the period	Closing balance
Safety production fee	4,819,344.54	1,900,670.43	365,232.11	6,354,782.86
Total	4,819,344.54	1,900,670.43	365,232.11	6,354,782.86

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

59. Surplus reserve

Unit: RMB

Item	Opening balance	Increase for the period	Decrease for the period	Closing balance
Statutory surplus reserve	9,216,035.02	–	–	9,216,035.02
Total	9,216,035.02	–	–	9,216,035.02

60. Undistributed profit

Unit: RMB

Item	Current period	Previous year
Retained profit at the end of the previous period before adjustment	-244,134,213.34	-77,679,952.68
Total adjustment to retained profit at the beginning of the period ("+" for increase, and "-" for decrease)	-518,816.22	-228,027.00
Retained profits at the beginning of the period after adjustment	-244,653,029.56	-77,907,979.68
Add: Net profit attributable to owners of the listed company for the period	-76,511,130.16	-166,745,049.88
Less: Appropriation to statutory surplus reserve	–	–
Appropriation to discretionary surplus reserve	–	–
Appropriation to general risk reserve	–	–
Dividends payable on ordinary shares	–	–
Dividends on ordinary shares converted into share capital	–	–
Retained earnings at the end of the period	-321,164,159.72	-244,653,029.56

Breakdown of adjustment to retained profit at the beginning of the period:

1. The effect of the retrospective adjustments according to ASBE and their new related requirements on the retained profits as of the beginning of the period amounted to RMB-518,816.22 (the effect on the retained profits as of the beginning of the period last year: RMB-228,027.00).
2. The effect of the changes in accounting policies on the undistributed profits as of the beginning of the period amounted to RMB0.
3. The effect of corrections of significant accounting errors on the undistributed profits as of the beginning of the period amounted to RMB0.
4. The effect of the change of the scope of combination under common control on the undistributed profits as of the beginning of the period amounted to RMB0.
5. The effect of other adjustments on the undistributed profits as of the beginning of the period amounted to RMB0.

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

61. Operating income and operating costs

(1). Operating income and operating costs

Unit: RMB

Item	Amount for the current period		Amount for the last period	
	Revenue	Cost	Revenue	Cost
Main business	153,175,910.83	97,038,116.99	268,910,885.53	163,152,811.84
Other Businesses	343,344.59	235,905.70	231,946.08	53,140.98
Total	153,519,255.42	97,274,022.69	269,142,831.61	163,205,952.82

(2). Revenue from contracts

Unit: RMB

Classification	Fuel cell system and related services	Total
Type of goods		
Fuel cell system	118,784,384.55	118,784,384.55
Parts	14,742,573.06	14,742,573.06
Technology development and services	7,225,392.96	7,225,392.96
Others	12,766,904.85	12,766,904.85
By time of transfer of goods		
At a point in time	153,187,358.18	153,187,358.18
Over time	331,897.24	331,897.24
Total	153,519,255.42	153,519,255.42

(3). Explanation about allocation to the remaining performance obligations

The amount of revenue corresponding to the performance obligations that have been signed but not yet performed or not yet fulfilled at the end of the reporting period is RMB142,131,745.13, of which:

RMB137,575,101.13 is expected to be recognized in 2023

RMB4,556,644.01 is expected to be recognized in the years after 2023

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

62. Tax and surcharges

Unit: RMB

Item	Amount for the current period	Amount for the last period
City maintenance and construction tax	–	378,713.29
Education surcharge	–	175,107.03
Property tax	1,124,140.28	163,363.39
Land use tax	133,835.70	120,502.29
Vehicle and vessel use tax	6,195.00	3,199.96
Stamp duty	370,708.39	491,386.56
Local education surcharge	–	116,738.05
Others	13,257.27	5,337.76
Total	1,648,136.64	1,454,348.33

63. Selling expenses

Unit: RMB

Item	Amount for the current period	Amount for the last period
Accrued payroll	15,395,835.29	13,544,595.13
Business promotion and service fees	4,345,690.84	7,611,813.92
Product quality guarantee	1,498,551.64	3,846,705.49
Travel expenses	851,349.30	1,156,091.84
Depreciation and amortization expenses, etc.	3,799,238.88	2,897,436.26
Others	4,266,015.49	4,596,123.55
Total	30,156,681.44	33,652,766.19

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

64. Administrative expenses

Unit: RMB

Item	Amount for the current period	Amount for the last period
Accrued payroll	59,907,317.85	44,319,630.07
Depreciation and amortization expenses, etc.	29,927,678.11	19,175,069.27
Intermediary fees	1,662,608.49	1,479,316.32
Listing expenses	9,826,324.95	9,571,976.35
Travel expenses	2,478,200.87	536,784.82
Office expenses	3,003,528.76	2,118,365.97
Entertainment expenses	1,679,733.71	1,789,671.41
Others	8,999,280.47	6,134,724.10
Total	117,484,673.21	85,125,538.31

65. Research and development expenses

Unit: RMB

Item	Amount for the current period	Amount for the last period
Accrued payroll	27,024,509.72	21,126,036.98
Material costs	14,066,607.43	4,880,422.57
Commission fees for external development	939,398.98	6,548,885.23
Depreciation and amortization expenses, etc.	9,573,228.61	10,454,933.27
Testing and processing fee	1,756,168.70	12,281,387.05
Others	1,832,354.12	4,972,506.78
Total	55,192,267.56	60,264,171.88

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

66. Financial expenses

Unit: RMB

Item	Amount for the current period	Amount for the last period
Interest expense	5,291,243.92	3,419,210.81
Less: Interest income	9,540,771.75	6,159,357.72
Exchange gains and losses	-18,701,373.62	13,026.88
Charges and other expenses	1,612,261.22	374,476.83
Total	-21,338,640.23	-2,352,643.20

67. Other income

Unit: RMB

Item	Amount for the current period	Amount for the last period
VAT refund upon collection	4,019,870.15	6,482,412.29
Project subsidy transferred from deferred income (capital related)	6,599,710.19	2,809,010.93
Project subsidy transferred from deferred income (related to income)	1,279,319.47	1,510,620.10
Listing subsidies from Haidian District People's Government Office	–	3,000,000.00
Local government grants	2,366,893.51	644,215.90
Tax relief	93,439.51	257,000.20
Others	182,022.38	229,174.70
Total	14,541,255.21	14,932,434.12

68. Investment income

Unit: RMB

Item	Amount for the current period	Amount for the last period
Income from long-term equity investment under equity method	-15,733,440.98	-11,140,823.18
Investment income from disposal of financial assets held-for-trading	371,205.48	3,556,369.61
Gain on debt restructuring	-420,000.00	-4,602,680.00
Total	-15,782,235.50	-12,187,133.57

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

69. Hedging gains on net exposure

Applicable Not Applicable

70. Gains from changes in fair value

Unit: RMB

Source of gains on changes in fair value	Amount for the current period	Amount for the last period
Financial assets held-for-trading	48,699,437.40	2,082,082.32
Total	48,699,437.40	2,082,082.32

71. Credit impairment losses

Unit: RMB

Item	Amount for the current period	Amount for the last period
Losses on bad debts of bills receivable	-100,000.00	-
Losses on bad debts of accounts receivable	-2,250,573.54	5,332,285.05
Losses on bad debts of other receivables	-11,665,780.24	-2,953,061.49
Total	-14,016,353.78	2,379,223.56

72. Impairment losses of assets

Unit: RMB

Item	Amount for the current period	Amount for the last period
II. Impairment losses of inventories and impairment losses on contract performance costs	-23,877,293.74	-27,605,875.21
V. Impairment losses of fixed assets	-510,364.69	-
XII. Others	-33,359.67	915,206.67
Total	-24,421,018.10	-26,690,668.54

Other explanation:

Impairment losses on other assets represent impairment losses on contract assets.

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

73. Gains from disposal of assets

Unit: RMB

Item	Amount for the current period	Amount for the last period
Gains on disposal of fixed assets	-	-112,914.94
Total	-	-112,914.94

74. Non-operating income

Unit: RMB

Item	Amount for the current period	Amount for the last period	Amount included in non-recurring profit or loss for the current period
Total gains on disposal of non-current assets	-	15,303.51	-
Including: gains on disposal of fixed assets	-	15,303.51	-
Government grants	-	20,411.79	-
Others	306,122.81	79,175.72	306,122.81
Total	306,122.81	114,891.02	306,122.81

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

75. Non-operating expenses

Unit: RMB

Item	Amount for the current period	Amount for the last period	Amount included in non-recurring profit or loss for the current period
Total loss on disposal of non-current assets	–	563,689.45	–
Including: Loss on disposal of fixed assets	–	563,689.45	–
External donations	–	80,000.00	–
Loss on disposal of defective products	1,073,626.86	–	1,073,626.86
Others	2,349,301.68	3,292,301.82	2,349,301.68
Total	3,422,928.54	3,935,991.27	3,422,928.54

76. Income tax expenses

(1). Income tax expense table

Unit: RMB

Item	Amount for the current period	Amount for the last period
Current income tax expense	279,164.96	202,012.94
Deferred income tax expense	-17,882,563.50	-14,051,405.93
Total	-17,603,398.54	-13,849,392.99

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

76. Income tax expenses (Continued)

(2). Reconciliation between accounting profit and income tax expenses

Unit: RMB

Item	Amount for the current period
Total profit	-120,993,606.39
Income tax expenses calculated at statutory/applicable tax rate	-18,149,040.96
Effect of different tax rates applicable to subsidiaries	-1,995,726.11
Effect of adjustment to income tax of previous periods	1,823.50
Effect of non-taxable income	—
Effect of non-deductible costs, expenses and losses	680,278.27
Effect of utilization of deductible losses in deferred income tax assets not recognized in previous period	—
Effect of deductible temporary differences in deferred income tax assets not recognized in current period or effect of deductible losses	10,263,818.09
Additional deduction of research and development expenses	-8,404,551.33
Income tax expenses	-17,603,398.54

77. Other comprehensive income

For details, please see the Note 57: Other comprehensive income.

78. Items of statement of cash flow

(1). Other cash received related to operating activities

Unit: RMB

Item	Amount for the current period	Amount for the last period
Government grants received	2,569,997.63	16,333,516.80
Collection of project fees and return of advances	2,842,440.00	1,606,360.42
Deposit and guarantee refund	115,600.00	677,251.91
Interest income	8,787,365.51	4,624,714.19
Others	1,680,853.45	6,056,079.96
Total	15,996,256.59	29,297,923.28

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

78. Items of statement of cash flow (Continued)

(2). Other cash paid related to operating activities

Unit: RMB

Item	Amount for the current period	Amount for the last period
Operating expenses	38,693,583.66	29,285,612.31
Prepaid expenses such as rental properties	7,260,966.89	5,313,730.50
Transportation fee, technology development fee, etc.	3,209,427.14	1,765,742.12
Others	1,727,996.28	838,409.23
Total	50,891,973.97	37,203,494.16

(3). Other cash received related to financing activities

Unit: RMB

Item	Amount for the current period	Amount for the last period
Collection of notes deposits	37,487,564.66	80,582,130.78
Total	37,487,564.66	80,582,130.78

(4). Other cash paid related to financing activities

Unit: RMB

Item	Amount for the current period	Amount for the last period
Lease related expenses	7,731,702.94	3,666,493.40
Consulting service fee	9,682,315.31	13,313,042.02
Deposit for acceptance of bills	30,823,992.38	56,583,225.00
Total	48,238,010.63	73,562,760.42

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

79. Supplementary information to the statement of cash flows

(1). Supplementary information to the statement of cash flows

Unit: RMB

Supplementary information	Amount for current period	Amount for previous period
1. Adjustment of net profit to cash flows of operating activities:		
Net profit	-103,390,207.85	-81,775,987.03
Add: Provision for impairment of assets	24,421,018.10	26,690,668.54
Credit impairment losses	14,016,353.78	-2,379,223.56
Depreciation of fixed assets, consumption of oil and gas assets and depreciation of productive biological assets	25,739,878.99	16,868,853.02
Amortization of right-of-use assets	6,541,181.48	4,103,950.66
Amortization of intangible assets	12,290,075.22	12,816,745.13
Amortization of long-term deferred expenditures	4,568,424.93	3,361,840.91
Loss on disposal of fixed assets, intangible assets and other long-term assets ("—" for gains)	-	112,914.94
Losses on retirement of fixed assets ("—" for gains)	-	563,689.45
Losses from changes in fair value ("—" for gains)	-48,699,437.40	-2,082,082.32
Financial expenses ("—" for gains)	-13,410,129.70	3,419,210.81
Investment losses ("—" for gains)	15,782,235.50	12,187,133.57
Decrease in deferred income tax assets ("—" for increase)	-20,097,757.12	-13,332,544.18
Increase in deferred income tax liabilities ("—" for decrease)	1,852,843.49	-718,861.75
Decrease in inventories ("—" for increase)	-97,527,952.60	-60,635,273.20
Decrease in operating receivables ("—" for increase)	-90,539,873.52	56,346,939.74
Increase in operating payables ("—" for decrease)	-7,913,923.57	646,347.94
Others		1,082,165.88
Net cash flows from operating activities	-276,367,270.27	-22,723,511.45
2. Major investment and financing activities not involved cash receipts and payments:		
Conversion of debt to capital	-	-
Convertible corporate bonds due within one year	-	-
Fixed assets held under finance leases	-	-
3. Net change in cash and cash equivalents:		
Closing balance of cash	767,516,225.22	634,417,226.64
Less: Opening balance of cash	616,790,436.73	804,966,776.35
Add: Closing balance of cash equivalents	-	-
Less: Opening balance of cash equivalents	-	-
Net increase in cash and cash equivalents	150,725,788.49	-170,549,549.71

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

79. Supplementary information to the statement of cash flows (Continued)

(2). Composition of cash and cash equivalents

Unit: RMB

Item	Closing balance	Opening balance
I. Cash	767,516,225.22	616,790,436.73
Including: Cash on hand	161,308.76	125,469.76
Bank deposits available for payment	767,354,357.73	594,654,819.95
Other monetary funds available for payment	558.73	22,010,147.02
II. Cash equivalents	-	-
Including: Bond investments due within three months	-	-
III. Closing balance of cash and cash equivalents	767,516,225.22	616,790,436.73
Including: Restricted cash and cash equivalents of the parent company or subsidiaries of the Group	-	-

80. Notes to items of statements of changes in owners' equity

Explanation on names and adjusted amounts of "others" items adjusted for the closing balance of the previous year:

Applicable Not Applicable

81. Assets with restricted ownership or right-of-use

Unit: RMB

Item	Closing book value	Reason for restriction
Monetary funds	20,800,923.39	Deposits for security and performance
Monetary funds	3,726,008.39	Frozen funds for litigation
Receivables financing	7,310,000.01	Bill pool pledge
Fixed assets	24,938,508.98	Mortgage of buildings
Total	56,775,440.77	/

SECTION VII FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

82. Foreign currency monetary items

(1). Foreign currency monetary items

Unit: RMB

Item	Balance of foreign currency at the end of the period	Exchange rate	Balance in RMB equivalent at the end of the period
Monetary funds	–	–	281,043,999.20
Including: US Dollar	38,894,516.76	7.2258	281,043,999.20
Account payables	–	–	102,620.81
Including: US Dollar	14,202.00	7.2258	102,620.81

(2). Description of overseas operating entities, including major overseas operating entities, which should disclose their overseas principal places of business, functional currency and basis of selection. Reasons shall be disclosed if there is any change in the functional currency

Applicable Not Applicable

83. Hedging

Applicable Not Applicable

84. Government grants

(1). Basic information of government grants

Unit: RMB

Type	Amount	Item	Amount included in current profit or loss
Government grants included in deferred income	2,842,440.00	Deferred income	7,879,029.66
Government grants included in other income	6,662,225.55	Other income	6,662,225.55
Total	9,504,665.55	–	14,541,255.21

(2). Refund of government grants

Applicable Not Applicable

85. Others

Applicable Not Applicable