

CSG HOLDING CO., LTD.

ANNUAL REPORT 2022



Chairman of the Board:

CHEN LIN

April 2023

Section I. Important Notice, Content and Paraphrase

Board of Directors and the Supervisory Committee of CSG Holding Co., Ltd. (hereinafter referred to as the Company) and its directors, supervisors and senior executives hereby confirm that there are no any fictitious statements, misleading statements, or important omissions carried in this report, and shall take individual and joint legal responsibilities for the facticity, accuracy and completeness of the whole contents.

Ms. Chen Lin, Chairman of the Board, Ms. Wang Wenxin responsible person in charge of accounting and Ms. Wang Wenxin, principal of the financial department (accounting officer) confirm that the Financial Report enclosed in this Annual Report 2022 is true, accurate and complete.

All directors were present at the meeting of the Board for deliberating the annual report of the Company in person.

The future plans, development strategies and other forward-looking statements mentioned in this report do not constitute a material commitment of the Company to investors. Investors and relevant parties should pay attention to investment risks, and understand the differences between plans, forecasts and commitments.

The Company has described the risk factors and countermeasures of the Company's future development in detail in this report. Please refer to Section III. Management Discussion and Analysis.

The Company is required to comply with the disclosure requirements of "Non metallic Building Materials Related Business" in the "Self regulatory Guidelines for Listed Companies on the Shenzhen Stock Exchange No. 3- Industry Information Disclosure (Revised in 2023)".

The deliberated and approved plan of profit distribution in the Board Meeting is distributing cash dividend of RMB 1.5 yuan (tax included) for every 10 shares to all shareholders based on 3,070,692,107 shares of the total current share capital, 0 bonus shares (including tax) will be given, and no capital stock will be converted from provident fund. The actual amount of the cash dividend distributed will be determined according to the total share capital on the registration date of the Company's implementation of the profit distribution plan.

This report is prepared both in Chinese and English. Should there be any inconsistency between the Chinese and English versions, the Chinese version shall prevail.

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Documents Available for Reference

- I. Text of the financial report carrying the signatures and seals of the legal representative, responsible person in charge of accounting and person in charge of financial institution;
- II. Original of the Auditors' Report carrying the seal of accounting firm and the signatures and seals of the certified public accountants;
- III. All texts of the Company's documents and original public notices disclosed in the website and papers appointed by CSRC in the report period.

Paraphrase

Items	Refers to	Contents
Company, the Company, CSG or the Group	Refers to	CSG Holding Co., Ltd.
Foresea Life	Refers to	Foresea Life Insurance Co., Ltd.
Flat glass	Refers to	Including float glass, photovoltaic glass
Ultra-thin electronic glass	Refers to	The electronic glass with thickness between 0.1~1.1mm
AG glass	Refers to	Anti-glare glass

Section II. Company Profile & Financial Highlights

I. Company information

Short form for A-share	Southern Glass A	Short form for B-share	Southern Glass B
Code for A-share	000012	Code for B-share	200012
Listing stock exchange	Shenzhen Stock Exchange		
Legal Chinese name of the Company	中国南玻集团股份有限公司		
Abbr. of legal Chinese name of the Company	南玻集团		
Legal English name of the Company	CSG Holding Co., Ltd.		
Abbr. of legal English name of the Company	CSG		
Legal Representative	Chen Lin		
Registered Add.	CSG Building, No.1, the 6th Industrial Road, Shekou, Shenzhen, P. R.C.		
Post Code	518067		
Office Add.	CSG Building, No.1, the 6th Industrial Road, Shekou, Shenzhen, P. R.C.		
Post Code	518067		
Internet website	www.csgholding.com		
E-mail	securities@csgholding.com		

II. Person/Way to contact

	Secretary of the Board	Representative of security affairs
Name	Chen Chunyan	Xu Lei
Contacts add.	CSG Building, No.1 of the 6th Industrial Road, Shekou, Shenzhen, P. R.C.	CSG Building, No.1 of the 6th Industrial Road, Shekou, Shenzhen, P. R.C.
Tel.	(86)755-26860666	(86)755-26860666
Fax.	(86)755-26860685	(86)755-26860685
E-mail	securities@csgholding.com	securities@csgholding.com

III. Information disclosure and preparation place

The website of the stock exchange where the company discloses the annual report	www.szse.cn
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The name and website of the media where the company discloses the annual report	Securities Times, China Securities Journal, Shanghai Securities News, Securities Daily and Juchao Website (www.cninfo.com.cn)
The place for preparation of the annual report	Office of the Board of Directors of the Company

IV. Registration changes of the Company

Unified social credit code:	914403006188385775
Changes of main business since listing (if applicable)	No changes
Previous changes for controlling shareholders (if applicable)	No changes

V. Other relevant information

CPA firm engaged by the Company

Name of CPA firm	Asia Pacific (Group) CPAs (special general partnership)
Offices add. for CPA firm	2001, 20th Floor, Building 3, No. 16, Lize Road, Fengtai District, Beijing
Signing Accountants	Wang Donglan, Wei Jian

Sponsor institute engaged by the Company for performing continuous supervision duties in the report period

Applicable Not applicable

Financial consultant engaged by the Company for performing continuous supervision duties in the report period

Applicable Not applicable

VI. Main accounting data and financial indexes

Whether it has retroactive adjustment or restatement on previous accounting data

Yes No

Reasons of retroactive adjustment or restatement

changes in accounting policies

	2022	2021		Changes over the previous year After adjustment	2020	
		Before adjustment	After adjustment		Before adjustment	After adjustment
Operating income (RMB)	15,198,706,998	13,629,033,650	13,672,372,823	11.16%	10,671,253,445	10,671,253,445
Net profit attributable to shareholders of the listed company (RMB)	2,037,202,500	1,529,329,304	1,526,392,754	33.47%	779,325,592	779,325,592

Net profit attributable to shareholders of the listed company after deducting non-recurring gains and losses (RMB)	1,819,429,258	1,439,540,257	1,436,603,707	26.65%	539,976,457	539,976,457
Net cash flow arising from operating activities (RMB)	1,957,123,231	3,902,084,385	3,899,648,030	-49.81%	2,730,619,636	2,730,619,636
Basic earnings per share (RMB/Share)	0.66	0.50	0.50	32%	0.25	0.25
Diluted earnings per share (RMB/Share)	0.66	0.50	0.50	32%	0.25	0.25
Weighted average ROE	16.78%	14.13%	14.11%	2.67%	7.91%	7.91%
	As at 31 Dec. 2022	As at 31 Dec. 2021		Changes over the end of the previous year	As at 31 Dec. 2020	
		Before adjustment	After adjustment		After adjustment	Before adjustment
Total assets (RMB)	25,904,013,306	19,939,364,510	19,935,902,125	29.94%	17,882,914,898	17,882,914,898
Net assets attributable to shareholders of the listed company (RMB)	12,854,883,706	11,429,661,046	11,426,724,496	12.50%	10,212,989,847	10,212,989,847

Reasons for changes in accounting policies and correction of accounting errors

The Ministry of Finance issued a notice in December 2021 on the issuance of "Interpretation of Accounting Standards for Business Enterprises No. 15" (Finance and Accounting [2021] No. 35), which was implemented by the Company from January 1, 2022. For trial sales that occurred between the beginning of the financial statement presentation period and the date of implementation of this interpretation for the first time, the Company has made retrospective adjustments in accordance with the provisions of the interpretation, and retroactively adjusted comparable period information.

The lower of the Company's net profit before and after the deduction of non-recurring gains and losses in the last three fiscal years is negative, and the auditor's report of the previous year shows that the Company's going concern ability is uncertain

Yes No

The lower of the net profit before and after the deduction of the non-recurring gains and losses is negative

Yes No

VII. Accounting Data Differences under and Foreign Accounting Standards

1. Net Income and Equity Differences under CAS and IFRS

Applicable Not applicable

No such differences for the Report Period.

2. Net Income and Equity Differences under CAS and Foreign Accounting Standards

Applicable Not applicable

No such differences for the Report Period.

VIII. Main financial indexes by quarter

Unit: RMB

	Q1	Q2	Q3	Q4
Operating income	2,785,709,687	3,733,506,989	4,284,558,670	4,394,931,652
Net profit attributable to shareholders of the listed company	383,682,831	617,491,567	649,353,658	386,674,444
Net profit attributable to shareholders of the listed company after deducting non-recurring gains and losses	336,240,261	551,354,559	593,590,206	338,244,232
Net cash flow arising from operating activities	102,057,062	800,746,059	715,807,686	338,512,424

Whether there are significant differences between the above-mentioned financial index or its total number and the relevant financial index disclosed in the Company's quarterly report and semi-annual report or not

Yes No

IX. Items and amounts of non-recurring gains and losses

Applicable Not applicable

Unit: RMB

Item	2022	2021	2020	Note
Gains/losses from the disposal of non-current asset (including the write-off that accrued for impairment of assets)	15,213,059	-1,493,248	-1,158,984	
Governmental subsidy reckoned into current gains/losses (not including the subsidy enjoyed in quota or ration according to national standards, which are closely relevant to enterprise's business)	188,756,525	104,507,242	99,660,400	
Profit and loss from debt restructuring		-285,025		
In addition to the effective hedging business related to the normal business of the company, the profit and loss from changes in fair value arising from holding trading financial assets and trading financial liabilities, as well as the investment income obtained from the disposal of trading financial assets, trading financial liabilities and available for sale financial assets	31,567,854	17,132,672	2,654,504	
Reversal of provision for impairment of receivables that have been individually tested for impairment	6,389,385	1,429,653		
Loss and profit from external entrusted loan			5,546,384	
Profits and losses arising from changes in the fair value of investment real estate that are subsequently measured using the fair value model			179,911,200	
Other non-operating income and expenditure except for the aforementioned items	14,743,778	-13,526,210	-6,284,556	
Less: Impact on income tax	34,242,061	14,201,899	38,334,180	
Impact on minority shareholders' equity (post-tax)	4,655,298	3,774,138	2,645,633	
Total	217,773,242	89,789,047	239,349,135	--

Particulars about other gains and losses that meet the definition of non-recurring gains and losses:

Applicable Not applicable

It did not exist that other profit and loss items met the definition of non-recurring gains and losses.

Explanation of the non-recurring gains and losses listed in the Explanatory Announcement No.1 on Information Disclosure for

Companies Offering their Securities to the Public - Non-recurring Gains and Losses as recurring gains and losses

Applicable Not applicable

It did not exist that non-recurring profit and loss items listed in the "Explanatory Announcement No. 1 on Information Disclosure of Companies Offering Securities to the Public - Non-recurring Profit and Loss" were defined as recurring profit and loss items in the report period.

Section III. Management Discussion and Analysis

I. Particulars about the industry the Company engages in during the report period

Flat glass industry

Float glass industry: In 2022, the float glass industry saw a decline in production capacity due to a weaker market. According to the statistics of third-party industry information institutions, by the end of 2022, there were 241 float glass production lines in production in China, with a total daily melting capacity of about 162,000 tons, a year-on-year decrease of 7.37%.

The traditional application direction of float glass is mainly building materials, and its market demand change is positively related to infrastructure investment and the prosperity of the real estate industry. According to the data from the National Bureau of Statistics, in 2022, the new construction area of domestic housing and the completed area declined by 39.4% and 15% year-on-year respectively. The adjustment of the real estate market resulted in a cyclical adjustment in the float glass market. However, with the progressive implementation of the national “double carbon policy” over recent years, the proportion of green buildings has been continuously increasing, and that of energy-saving glass will demonstrate a significant rise. It can be expected that the deep processing rate of flat glass in the building materials field will further increase during the “14th Five-Year Plan” period, which will drive the structural demand for deep-processing high-end float products to increase. With the development of the economy and the promotion of people’s living standards, the need for improvement has been booming, and the demand for high-quality products such as ultra-white float glass will see a sharp increase. The above-mentioned adjustment of product demand structure and the incremental demand for high-quality products will benefit the leading enterprises in the industry’s high-end market.

Photovoltaic glass industry: With the booming development of the global new energy industry, the photovoltaic industry is stepping into a phase of rapid development. In 2022, due to the imbalance between supply and demand, the price of the photovoltaic industrial chain has kept rising. However, at the end of the year, the release of the production capacity of silicon materials and slack season of the industry led to a considerable drop in the prices of silicon materials, silicon wafers, and cells. The price fluctuation of the photovoltaic industrial chain has made a certain influence on the installation demand in the downstream photovoltaic market. In 2022, multiple photovoltaic glass production lines were put into production, seeing a significant increase in the supply of glass, increasingly fierce competitions in the photovoltaic glass market, and an imbalanced supply-demand relationship in the market in a short term. In 2022, the domestic price of photovoltaic glass remained at a middle or low level, with little fluctuation in general. In addition, the rise of natural gas saw a dramatic increase and that of dense soda ash maintained at a high level, leading to a constant rise in the production costs of photovoltaic glass.

In 2022, the demand in the global photovoltaic industry was still powerful. According to the data from the China Photovoltaic Industry Association (“CPIA”), the global photovoltaic installed capacity was approximately 230GW in 2022, a year-on-year increase of 35.3%. With the orderly implementation of the domestic distributed photovoltaic policy of “whole-county promotion” and a large-scale wind power photovoltaic bases, the photovoltaic installed capacity in China has kept increasing. According to the statistics of the National Energy Administration, the domestic photovoltaic installed capacity was approximately 87.41GW in 2022, a year-on-year increase of 59.3%. In particular, the centralized photovoltaic installed capacity was approximately 36.29GW, accounting for around 41.5% of the installed capacity in China. The distributed photovoltaic installed capacity was approximately 51.11GW, consuming about 58.5% of the installed capacity in China. In 2022, the demand in overseas market has increased as well. Chinese total export of photovoltaic products (silicon wafers, cells, and modules) saw a year-on-year growth of 80.3%, and European

market showed the largest increase. The Russia-Ukraine conflict in 2022 resulted in a surge in European electricity prices. Major European countries have made an increase adjustment in the photovoltaic installation plan. According to the statistics of the Solar Power Europe, in 2022, the photovoltaic installed capacity of the 27 countries in the EU was 41.4GW, a year-on-year growth of 47%. With the constant advancement of photovoltaic module technologies, the photovoltaic glass will embrace a new development trend. The production of photovoltaic rolled glass has demonstrated the development trend of larger kilns, wider plates, thinner thickness, and larger glass size. Besides, the utilization rate of double-glass modules has seen a constant increase. At present, the kiln scale of photovoltaic glass has been sharply increased, most of which is 1000t/d and above; each proposed kiln is mainly with at least five lines; the plate of photovoltaic glass has been widened with a width of 1.3m; the double-glass modules mainly adopt glass with a thickness of 2.0mm in the cover plates and back panels, and some enterprises have started to use ultra-thin glass with a thickness of 1.6mm; in 2022, the demand for large-size modules of 182mm and 210mm was rapidly increased. According to the statistics of CPIA (CHINA PHOTOVOLTAIC INDUSTRY ASSOCIATION), the proportion of silicon wafers with the size of 182mm and 210mm has reached 82.8% in 2022, and the glass with a plate width of 1,128mm and 1,297mm emerged as the mainstream in the market.

Architectural glass industry

The architectural glass business is to further process the original float glass sheet to manufacture energy-saving building glass products with both safety and aesthetic effects in order to improve the energy-saving and safety performance of buildings, as well as the visual aesthetic effects. Building energy-saving glass has made a significant contribution to energy saving in the process of building use. The penetration rate in developed countries in Europe and the United States has already exceeded 80%, but the overall penetration rate in China is still low. The total number of buildings in China is huge. In order to cope with the pressure of global warming, to achieve the goals of “Carbon Peaking in 2030 and Carbon Neutrality in 2060”, and to reduce building energy consumption and carbon emissions, it is imperative to reduce the energy consumption and carbon emissions of buildings, to vigorously develop green buildings, and to carry out energy-saving renovation of existing buildings. According to the *Action Plan for Promoting the Establishment of Green Buildings* issued by the Ministry of Housing and Urban-Rural Development and the Ministry of Industry and Information Technology, as well as the national *Action Plan for Carbon Peaking Before 2030, Comprehensive Work Plan for Energy Conservation and Emission Reduction during the 14th Five-Year Plan*, and other guidance documents’ requirements, 100% of the newly-built urban building should meet the green building standards in 2025 (about 50% in 2020). It is expected that the architectural glass business will gain significant development opportunities during the “14th Five-Year Plan” period. In addition, with the gradual improvement of domestic social consumption level in recent years, building energy conservation, safety standards, and quality requirements have been continuously improved. In practice, the bad practice of winning the bid by the lowest price for construction projects has been initially reversed, and the quality and influence of “Made in China” have been increasingly recognized around the world, which will bring broader development space to advantageous enterprises that attach importance to product quality and technological innovation, as well as stable industrial chain and supply chain.

Electronic glass and display industry

Electronic glass

Electronic glass, with its unique performance advantages such as high transmittance, high strength in ultra-thin state, reliable and stable weather resistance, and processing convenience, is an indispensable material for cover glass and touch control plate of intelligent display interactive application terminals such as smartphones, tablets, and computers. And it is developing rapidly with the intelligent interactive display industry. With the popularization of information and communication technologies such as 5G and the

development of the mobile Internet, the production and lifestyle of human society are gradually developing into a new form of high integration of people, machines, things, and information, in which everything is interconnected, driving the demand for intelligent equipment to increase rapidly and significantly. In recent years, in addition to the rapid popularization of mobile Internet terminals such as smartphones, tablets, and computers, the vigorous development of smart homes, new energy vehicles, smart factories, smart business displays, advanced education, medical care, conferences, self-service, and other industries has brought about the incremental demand for human-computer interaction equipment, which provides a broader market prospect and market space for the electronic glass industry, and also provides a market opportunity for leapfrogging development to upstream material manufacturers with leading technological innovation capability and benign operation.

Display

With the rapid development of new energy vehicles and intelligent vehicles, the demand for vehicle display panels has become powerful. According to the latest research report from the industrial research data on 8 February 2023, the demand for vehicle display panels will keep increasing in 2023. The total shipment volume is estimated to exceed 200 million, with an average of over two vehicle display panels per car. According to the data from Omdia, the shipment volume of vehicle display panels is expected to achieve 253 million in 2026, with a compound growth rate of 6.7% from 2021 to 2026. The intelligent vehicle industry has a good development prospect.

Solar energy industry

At present, the new development ideology centred on “Green Development” has gradually become the consensus of all countries in the world. Major economies in the world have successively proposed “Carbon Neutrality” timetables. China has also made a solemn commitment of “Carbon Peaking in 2030 and Carbon Neutrality in 2060” to the world. The transformation of the global energy structure has begun to accelerate, and photovoltaic energy has become an important engine to undertake energy transformation with its significant advantages such as cleanliness, safety, and economy. Driven by favourable factors such as the continuous decline in the cost of photovoltaic power generation and the global green recovery, the photovoltaic installed capacity around the world will continue to grow rapidly, and the solar photovoltaic industry will have huge development potential and industry prospects in the future.

The photovoltaic new energy industry is a strategic emerging industry in China, acting as an essential guarantee for the country to realize energy safety and green development. After over twenty years of development, the industrial position has developed from clean energy to “the most economical” energy today. Driven by the global climate environment requirements of “carbon peaking and carbon neutrality”, photovoltaic power generation will progressively become the mainstay of the energy structure. With the ever-changing innovation of photovoltaic industrial technologies, photovoltaic power generation will comprehensively move towards an era of parity price. Most areas in China have achieved parity or even lower than the coal-fired benchmark electricity price. Under this circumstance, the market share of the photovoltaic industry will further concentrate on the enterprises with core advantages, including technologies, scales, and supply chain management. Due to the significant advantages such as cleanliness, safety, and inexhaustibility, solar energy sees a limitless and promising development prospect. In 2022, according to the statistics of InfoLink Consulting’s supply and demand database, the global photovoltaic supply volume was 278GW, with an annual growth rate of 56%. The total demand in 2023 is estimated to be 338-398GW. According to the relevant information from the National Energy Administration, the domestic photovoltaic industry has made considerable achievements with new breakthroughs. First, the annual installed capacity of photovoltaic power generation reached 87.41GW, a year-on-year increase of 60%, which hit another record high and emerged as the type of power source with the largest scale of installation and the fastest growth rate. Second, the annual installed

capacity of distributed photovoltaics reached 51.11GW, a year-on-year increase of 75%, consuming 60% of the total installation scale of photovoltaic power generation, emerging as the primary force for new photovoltaic installation, and demonstrating a new pattern that divided the domain into three, referring to the centralized power stations, commercial and industrial distributed photovoltaics, and household photovoltaics. Third, the overall installed capacity of photovoltaic power generation surpassed 390GW, becoming the power with the third largest installation scale after the thermal power and the hydroelectricity. Fourth, the annual amount of photovoltaic power generation reached 425 billion kWh, having increased by approximately 100 billion kWh, taking up 30% of the total new power generation capacity. The effect of renewable energy substitution has become increasingly obvious, acting as a strong support for green and low-carbon transformation of energy. Fifth, the export of photovoltaic products exceeded USD50 billion for the first time and the year-on-year increase was over 80%, emerging as a major highlight of China's foreign trade exports and playing a significant role in stabilizing investment, growth, employment, and foreign trade. The huge incremental demand in the market will spur and drive the constant and rapid increase in all respects of the photovoltaic industry.

II. Main business of the Company during the report period

CSG is a leading domestic brand of energy-saving glass and a renowned brand of solar PV products and display devices. Its products and technologies are well-known at home and abroad. Its main business includes R&D, manufacturing and sales of high-quality float glass, architectural glass, photovoltaic glass, new materials and information display products such as ultra-thin electronic glass and display devices, as well as renewable energy products such as silicon materials, photovoltaic cells and modules, and it provides one-stop services for photovoltaic power station project development, construction, operation and maintenance, etc.

Flat glass business

The flat glass business of CSG includes float glass and photovoltaic glass. The production mode, business strategy, technical requirements and development direction of the two businesses have similarities and considerable differences due to the difference of industrial chain environment, industry development stage and policy environment.

In the field of float glass, CSG has 10 advanced float glass production lines in Dongguan, Chengdu, Langfang, Wujiang and Xianning, and has quartz sand raw material processing and production bases in Jiangyou, Sichuan Province, Qingyuan, Guangdong Province and Fengyang, Anhui Province. Its products that cover high-quality float glass and ultra-white float glass with various thicknesses and specifications of 1.6-25 mm are trusted by customers because of their quality. CSG float glass products are all high-end products that can be directly used for downstream deep processing, and the proportion of differentiated glass products with special specifications and special application scenarios such as ultra-white, ultra-thin, and ultra-thick is large, which are widely used in high-end building curtain walls, decoration and furniture, mirrors, car windshields, scanners and copiers, home appliance panels, display protection and other application fields with high requirements on glass quality. CSG has established long-term and stable business cooperation with many well-known processing enterprises.

The profit level of the float glass business is generally positively correlated with the level of real estate new construction and completion data, and is also affected by multiple factors such as current energy, raw material prices, product structure, and enterprise management level. Differentiated glass products have higher added value due to specific application scenarios, higher production process difficulties, stable demand, and relatively proactive pricing by manufacturers. To cope with the downward pressure of the market, the Company focuses on improving management efficiency, improving the level of lean production of conventional products, firmly implementing the differentiated competition strategy, carefully cultivating and developing differentiated product markets, and

continuously increasing the proportion of high-value-added product sales, such as ultra-white products, so as to continuously consolidate and enhance the industry competitiveness of the Company's float glass business.

In 2022, the new construction and completion of the real estate industry dropped significantly compared with the same period in recent years, the domestic downstream architectural glass market demand slowed down in stages, and the price of float glass declined. Meanwhile, affected by external environment, Russia Ukraine conflict, inflation and other factors, the prices of raw materials and fuels rose sharply, and the profit level of float glass dropped significantly compared with the previous year. However, under the macro background of "Steady Growth" of the national economy and the realization of "dual carbon" goals, the demand for high-quality differentiated products and energy-saving products remains comparatively stable.

In the field of photovoltaic glass, CSG has taken the lead in entering the field of photovoltaic glass manufacturing in China since 2005. Based on independent research and development, the Company has formed a full closed-loop production capacity from photovoltaic glass original sheet production to deep processing. As at the end of 2022, the Company has six photovoltaic rolled glass original sheet production lines and complementary photovoltaic glass deep processing production lines in Dongguan, Wujiang, Fengyang and Xianning, with an annual output of about 2 million tons of photovoltaic rolled glass original sheets, and its products cover deep-processing products with a variety of thicknesses of 1.6-4mm. The accumulation of more than ten years of photovoltaic glass production experience has enabled CSG to accumulate a solid foundation in key equipment and technologies such as kilns, calendaring, and deep processing. These accumulated technologies and experience have been released in this round of the Company's photovoltaic glass production capacity enhancement.

The Company is firmly optimistic about the long-term development of the photovoltaic new energy industry, seizes the golden opportunity of industrial development, aims at the first echelon of the industry, and makes up for the shortcomings of the Group's photovoltaic glass business production capacity and large-scale layout. The Company is building four photovoltaic glass production kilns and complementary processing lines with a daily melting capacity of 1,200 tons in Fengyang and one photovoltaic glass production line and complementary processing line with a daily melting capacity of 1,200 tons in Xianning. Among them, Fengyang No. 1 kiln has been ignited in May 2022, Fengyang No. 2 kiln has been ignited in August 2022, Fengyang No. 3 kiln has been ignited in December 2022, the Xianning kiln has been ignited in October 2022, the Dongguan photovoltaic glass kiln was upgraded as planned in the first quarter of 2022 and was resumed for ignition in August 2022, and the construction of the remaining production lines is progressing in an orderly manner as planned. Moreover, the Company plans to ignite Fengyang No.4 kiln and put it into operation in 2023. As at the end of 2022, the production capacity scale of the Company had successfully ranked among the top three in the industry. Under the background of carbon peaking and carbon neutrality, the photovoltaic glass business will become the new champion business of CSG.

The current photovoltaic industry is in rapid development. From the analysis of the current policy environment and market development trend, photovoltaic power generation has a broad space for development in the future, and the development of the global market may accelerate. Although the concentrated release of new capacity of photovoltaic glass in recent years may lead to a phased mismatch of supply and demand in the market and cause market price fluctuations, with the rapid development of the global market and the optimization and adjustment of the domestic industrial structure, the industry will still return to the track of healthy development. The Company will make every effort to promote project construction, improve the production capacity of ultra-thin photovoltaic glass and photovoltaic glazed back glass, and consolidate its competitive advantage in the industry. Besides, the Company will strengthen long-term strategic cooperation with industry-leading companies to further enhance the market competitiveness of CSG.

Architectural glass business

As one of the largest high-end building energy-saving glass suppliers in China, CSG integrates R&D and design, technical consulting, production and manufacturing, and marketing and service in the architectural glass business. It always aims to “build green energy-saving products and create quality life” and forms a CSG brand image with quality, service and continuous R&D as its core competitiveness, which is strongly competitive in foreign markets as well.

The Company has already built six deep processing bases of energy-saving glass in Tianjin, Dongguan, Xianning, Wujiang, Chengdu and Zhaoqing. Up to now, the Company has formed an annual production capacity of over 20 million square meters for coated insulating glass and over 60 million square meters for coated glass. As the new bases are completed and put into production step by step and the expansion capacity of existing bases is gradually released in the future, the product diversification and capacity scale of coated insulating glass and coated glass will see continuous and steady growth, which will serve as an adequate guarantee for the comprehensive and steady improvement of product competitiveness, market share and service.

CSG’s architectural glass business adheres to the customized business strategy of trinity of technical service, marketing, R&D and manufacturing, relying on its own manufacturing and R&D strength, as well as the marketing and service network formed domestic and overseas offices, to meet the personalized needs of domestic and foreign customers and construction projects. In 2017, CSG’s low-E coated glass was awarded the title of Single Champion Product by the Ministry of Industry and Information Technology, and it passed the review again in 2020, which fully proves the leading position of CSG’s architectural glass in the industry. The Company has the world’s leading glass deep processing equipment and testing equipment, and its products cover all kinds of architectural and construction glass. The R&D and application level of the Company’s coating technology keeps pace with the world, and its high-end product technology is internationally leading. Following the double silver coated glass products, the Company has successively developed multi-silver high-performance energy-saving glass and multi-function energy-saving glass products featuring further improved sunshade and heat insulation performance and energy-saving contribution. All deep processing bases of the Company are able to produce and process multi-silver high-performance energy-saving glass. Under the background of the “dual carbon” goals and the national green and energy-saving building requirements, the market demand for multi-silver has further expanded. After years of market testing and relying on the Company’s advanced coating technology, its high performance and stability have been well received by the market, CSG’s multi-silver products have become the benchmark in the domestic multi-silver product market, and high-quality, energy-saving, environmentally friendly LOW-E insulating glass continues to lead the domestic high-end market share. The Company has always adhered to the intelligent transformation and digital transformation as the key increment of the development of architectural glass business. It has continuously invested and accumulated rich experience in the research of production automation, intellectualization, information technology and equipment, and the efficiency improvement of intelligent upgrading and transformation of traditional equipment. With technological progress and process optimization, the Company has reduced production manpower consumption, material consumption and energy consumption, actively promoting the Company’s transformation and upgrading to achieve intensive manufacturing and high-quality development.

The Company’s quality management system for engineering and architectural glass has been respectively approved by organizations of UK AOQC and Australia QAS. The product quality which meets the national standards of the US, the UK and Australia enables CSG has an advantage in the international tendering and bidding. Since 1988, CSG’s engineers and technicians have been continuously participating in the formulation and compilation of various national standards and industry standards. All kinds of high-quality engineering architectural glass provided by the Company are widely used in landmark buildings such as major city CBDs and transportation hubs at home and abroad, which are too numerous to mention. With safe, energy-saving and high-end quality, CSG glass is shortlisted for several landmark projects, including some representative projects such as the National Information and

Finance Building, CZBank Head Office Building, Zhangjiang Gate Of Science, JD.COM Headquarters Phase III, and Linyi Olympic Sports Centre, as well as some early projects using CSG products (Beijing Capital International Airport, Beijing Daxing International Airport, China National Convention Centre and the capital CBD area).

Electronic glass and display business

Electronic glass

After more than a decade of hard work, CSG's electronic glass business has always focused on increasing investment in R&D, breaking through high-end market barriers with independent intellectual property rights and independent innovation, and firmly following the development route of product upgrades and iterations to accelerate import substitution. In 2022, the Company's electronic glass business continued to develop. Its four subsidiaries, Hebei Panel, Yichang Photoelectric, Qingyuan New Energy-Saving Materials and Xianning Photoelectric, continued to actively implement product upgrading and market upgrading in the application fields of intelligent electronic terminals, touch components, vehicle window glass, vehicle-mounted display, industrial control and commercial display, safeguard facility and smart home. Therefore, the market share and brand influence of the Company's medium-alumina and high-alumina electronic glass products were improved greatly. Rich product structure, reliable delivery guarantee and strong technical innovation help the Company's electronic glass business maintain its dominant position in the fierce market competition. In 2022, the Company's high aluminium second generation (KK6-P) lithium aluminosilicate electronic glass products continued to expand the market of new customers, and successfully equipped OLED screens to achieve a breakthrough in high-end screen applications, marking that CSG's electronic glass business has firmly established the supply chain system of domestic high-end customers. At the same time, the Company continued to promote product technology upgrading, developed new products for window glass of new energy vehicles, and successfully passed customer certification. The future market is worth looking forward to. The Company continued to strengthen the research and development of the third generation of high-aluminium and glass ceramics, and achieved good results in end-customer verification. In addition, the Qingyuan CSG Phase II "One Kiln and Two Lines" project is operating well, which has enhanced the overall profitability of electronic glass and further consolidated and strengthened CSG's competitive strength in the domestic electronic glass field. The ultra-thin electronic glass production line with a daily melting capacity of 110 tons invested by Hebei Panel Glass was ignited in October 2022, and the complementary R&D centre has been put into use. At present, CSG electronic glass has fully covered electronic glass products in high, medium and low-end application scenarios and formed a more solid market competition foundation. CSG has long been committed to becoming the industry's leading electronic glass material solution provider, and it will continue to develop glass-based protective materials with higher strength and competitiveness in the field of touch display, develop human-computer interaction interface materials meeting the requirements of material interconnection in the fields of smart home, vehicle display and advanced medical, and develop revolutionary alternative materials in the fields of new-energy vehicles and security.

Display

In the touch display field, CSG has formed a complete touch industry chain from vacuum magnetron sputtering coating, 3A cover plate processing and fine pattern lithography processing, to touch display modules. The main business includes optical coating materials, vehicle-mounted 3A cover plates and vehicle-mounted touch panels. Among them, the optical coating material segment includes the two business types of ITO conductive glass and ITO conductive film, and the products are positioned at middle and high-end customers at home and abroad and are concentrated in differentiated high-value-added ones. The Company placed emphasis on the development of new products in new application fields in 2022. Currently, many products are in the stage of small-batch production. CSG continues to be optimistic about the development prospect of the intelligent vehicle industry. At present, CSG has

mastered the production technology of core products such as vehicle-mounted AG glass, vehicle-mounted multi-functional 3A cover plate and vehicle-mounted touch sensor supporting the vehicle display screen. The Company will continue to increase the investment layout in the field of automotive electronics in the future. In the second half of 2022, the Company's vehicle-mounted 3A cover plate entered the world's leading customer supply chain of vehicle display panels, and the production and sales volume continued to climb and hit a record high.

Solar energy and other businesses

CSG is one of the enterprises that firstly enter the field of photovoltaic product manufacturing in China. After more than ten years of construction, operation, technological transformation and upgrading, CSG has created a complete industrial chain covering the operation of high-purity crystalline silicon materials, silicon wafers, cells, modules and photovoltaic power stations. The business structure of the entire industry chain enables the Company to have a certain ability to resist risks, be sensitive to the industry, and be able to respond quickly to market changes in the industry. After years of technological accumulation in the photovoltaic sector, CSG has built three national-level scientific research and technology platforms (the "National and Local Joint Engineering Laboratory for Semiconductor Silicon Material Preparation Technology" recognized by the National Development and Reform Commission, "National Enterprise Technology Centre" and "CNAS Accredited Laboratory", seven provincial-level scientific research and technology platforms ("Hubei Semiconductor Silicon Preparation Technology Project Laboratory" and "Hubei Enterprise Technology Centre"; "Hubei Silicon Material Engineering Technology Research Centre" recognized by the Provincial Department of Science and Technology, "Hubei Semiconductor Silicon Material Technology International Cooperation Base", "Hubei Silicon Material Enterprise-School Joint Innovation Centre", "Guangdong Solar Photovoltaic Cell and Component Engineering Technology Research Centre" and "Guangdong Enterprise Technology Centre").

In 2022, the global terminal installation demand exceeded expectations, while the upstream production capacity of high-purity crystalline silicon was limited, and the severe reality of insufficient supply ran through the whole year of 2022. Yichang CSG Polysilicon Co., Ltd., a subsidiary of the Solar Energy Business Department of CSG, fully implemented the strategic decisions and arrangements of the Group's management, unswervingly carried out the technical transformation and resumption of high-purity crystalline silicon production lines and the transformation and upgrading of the silicon wafer business, and achieved good economic benefits. To further enhance competitiveness and increase market share, the Company launched the 50,000-ton high-purity crystalline silicon project in Haixi Prefecture, Qinghai Province on the basis of the development of the existing photovoltaic industry in 2022. As a public listed company with extensive social influence and sense of social responsibility, CSG has always adhered to the concepts of energy conservation, environmental protection and people-oriented, and contributed to the construction of an environment-friendly, resource-saving and sustainable human future.

III. Core competitiveness analysis

CSG, one of the most competitive and influential large-scale enterprises in China's glass industry and new energy industry, is committed to the development of energy conservation, renewable energy, and the new material industry. After nearly 40 years of development and accumulation, the Company has gradually formed a comprehensive competitive advantage in terms of products and brands, technological R&D, industrial chains and layout, talent teams, and green development.

1. Product and brand advantages

“CSG” is a famous domestic brand of energy-saving glass, ultra-thin electronic glass & displays, and solar photovoltaic products. CSG’s products and technology are well-known at home and abroad. The trademarks “南玻” and “SG” held by the Company are both “Famous Trademark of China”. The Company has been listed in the “Top 50 Building Materials Enterprises in China” and the “Preferred Brand of Architectural Glass” in the door, window and curtain wall industry for many consecutive years. In 2018, “CSG” brand was recognized by the United Nations Industrial Development Organization as the fourth batch of “International Reputation Brand”. Moreover, CSG’s low-E coated glass and ultra-thin electronic glass were recognized by the Ministry of Industry and Information Technology as Single Champion Products in the Manufacturing Industry, which made CSG the only manufacturer in the domestic glass industry having two Single Champion Products at one time. In 2022, the Company was awarded the titles of “Top 10 National Leading Enterprise in the Construction Material Industry with Technological Breakthroughs” and “Shenzhen Top 500 Enterprises for 2022” (ranking No. 96).

2. Technology research and development advantages

The Company has always valued technological R&D and adopted independent R&D as its foundation since its establishment. As of 31 December 2022, the Company has had a total of 19 national high-tech enterprises, 2 national-level single champion products in the manufacturing industry, 1 national-level engineering laboratory, 1 national-level enterprise technology centre, 4 national enterprises with intellectual property advantages, 6 national-level specialized, sophisticated, distinctive, and innovative enterprises (“Little Giants”), 1 provincial-level academician workstation, 1 provincial-level doctoral workstation, 12 provincial-level enterprise technology centres, 5 provincial-level engineering technology research centres, 4 provincial-level demonstration enterprises for intellectual property construction, 7 provincial-level “Little Giants”, 1 provincial-level government quality award, 9 provincial-level scientific and technological progress awards and 3 provincial-level patent awards. As of 31 December 2022, the Company has applied for a total of 2,718 patents, including 1,101 invention patents, 1,607 utility model patents, and 10 design patents. Moreover, the Company has had a total of 1,972 authorized patents, including 374 invention patents, 1,588 utility model patents, and 10 design patents.

3. Industrial chain and layout advantages

The Company has three complete industrial chains of energy-saving glass, electronic glass and display, and solar photovoltaic glass. With the continuous improvement of the technological level of each process of the industrial chains, the Company’s industrial advantage becomes obvious; meanwhile, the Company possesses a complete industry layout, with production bases located in the Pearl River Delta in South China, Beijing-Tianjin-Hebei region in North China, the Yangtze River Delta in East China, the Chengdu-Chongqing region in Southwest China, the Hubei region in Central China, and the Shaanxi-Qinghai region in Northwest China.

4. Talent team advantages

The Company’s advantage in talent teams is mainly reflected in two aspects: On the one hand, the Company has established a strong R&D team and a powerful R&D system. Through the construction of the core technical team, continuous R&D investment, and abundant technical reserves, it has constituted an important technology and innovation support for the Company’s strategies. Meanwhile, it has established Industry-University-Research cooperation, actively cooperating with domestic colleges and universities which are in advantage in silicate materials industry, to accelerate the transformation of scientific research results, and to strengthen basic research; on the other hand, an excellent and stable management team is one of the most fundamental guarantees for the Company’s rapid and stable development. The Company has formed a good echelon training mechanism for professional managers. At present, the Company’s senior management team has comparative advantages in multiple aspects, such as academic background, professional quality, knowledge base, management philosophy and experience.

5. Green development advantages

With the continuous impetus of the “dual carbon” goals, the Company has taken active actions in various carbon-related fields. For example, the Company has widely conducted professional training on carbon emission management to improve the ability of relevant personnel to better cope with carbon-related affairs. Meanwhile, the Company has promoted product carbon footprint certification as a preparation for downstream market expansion of green and low-carbon products. Furthermore, Hebei CSG Glass Co., Ltd., a subsidiary of the Company and an outstanding and benchmark enterprise in the flat glass industry, recognized as a pilot enterprise for carbon peaking in the construction material industry, has made efforts to explore and implement the action plans and effective routes of carbon peaking in the industry. Relevant subsidiaries of the Company have actively gotten involved in the regional pilot market of carbon transactions to strive for a calculation method of carbon quota matching the real situation of the Company’s production. In 2022, the Company was included in the list of enterprises subject to carbon emission control and the overall quota quantity surpassed the actual emissions. As a pioneer of green development in the industry, the Company has won itself abundant room for development.

IV. Main business analysis

1. Overview

In 2022, in the face of increasing uncertainties in the global economy, continuous increases of the domestic “triple pressure”, impacts of multiple factors beyond expectations, and other complicated situations, the Chinese people made concerted effort to enable the steady progress of the domestic economy, while the 20th National Congress of the Communist Party of China was successfully convened.

According to the data released by the National Bureau of statistics, in 2022, China’s national economy made steady progress. The GDP totalled RMB 121.02 trillion, increasing by 3% year-on-year, the investment in fixed assets (excluding farmers) totalled RMB 57.21 trillion, increasing by 5.1% year-on-year, the investment in real estate development totalled RMB 13.29 trillion, decreasing by 10% year-on-year, and the floor space of buildings completed was 862 million square meters, decreasing by 15.0% year-on-year.

Facing the complicated political and economic environments at home and abroad, as well as the increasing pressure of market competition, CSG, under the correct leadership of the Board of Directors, adopts the goal of becoming a world-class enterprise, and firmly takes the road of high-quality development. By comprehensively improving its capacity of lean production, actively promoting project construction, optimizing its industrial layout, consolidating resource reserves, continuously implementing differentiated operation, and improving the strength in intelligent manufacturing, the Company strengthens its core competitiveness both internally and externally. In 2022, the Company withstood the test of cyclical fluctuations in the industry, and seized the market opportunity of high-purity crystalline silicon. As a result, its annual operating results achieved a relatively large year-on-year growth.

In 2022, the Company’s revenue totalled RMB 15.199 billion, increasing by 11 % year-on-year, and its net profit reached RMB 2.043 billion, increasing by 31% year-on-year; meanwhile, the Company’s net profit attributable to shareholders of the listed company was RMB 2.037 billion, increasing by 33% year-on-year.

I. Operation of each industry of the Group

In recent years, CSG has made a forward-looking layout, firmly promoted the adjustment of its business structure during development, strengthened its competitive advantage in traditional energy-saving construction materials, further adjusted its product structure, increased the percentage of differentiated products, and accelerated the development of its new energy and new material industrial sectors. The Company’s advantage in the diversified industry layout became prominent in 2022, the strong support of its solar energy business and architectural glass business effectively diluting the impact of cyclical fluctuations in traditional businesses

such as float business. In 2022, the Company's revenue and net profit in the glass business (float glass, photovoltaic glass and architectural glass) totalled RMB 10.057 billion and RMB 1.04 billion, respectively.

Float glass: Facing the severe market situation, the Company has laid out arrangements ahead of schedule and firmly followed the route of high-end differentiated products. As the sales and the market share of its ultra-white glass have further increased, and the high-end brand of CSG's ultra-white "Blue Diamond" series becomes mature, the Company has become a leading enterprise in this industrial segment; moreover, the proportion of the Company's high-value-added differentiated products continues to increase, and the market share of the Company in the segment of high-grade float glass stays among the top. Furthermore, the Company enhanced the engagement of new suppliers and coordinated and organized strategic reserve procurement of bulk raw materials to effectively hedge against rising procurement costs; it has established a mineral resource management centre to comprehensively implement the strategic task of expanding mineral resources reserves; and it strengthened the lean control of the entire production process, as the yield continued to rise steadily. In 2022, the Company's revenue and net profit from the business of float glass decreased by 22% and 76% year-on-year, respectively.

Photovoltaic glass: The Company maintained the industry-leading role in terms of production capacity, quality and comprehensive manufacturing yield of ultra-thin photovoltaic glass products below 2mm. In 2022, the global photovoltaic market was generally on the up. The growth of domestic and overseas demand for photovoltaic modules stimulated the demand in the photovoltaic glass market. However, due to the centralized release of the incremental capacity of glass production, signs of supply and demand mismatches in the short term were spotted, limiting the domestic prices of photovoltaic glass to a middle or low level in 2022. Currently, policies have been introduced worldwide to encourage the development of the photovoltaic industry. With the release of the production capacity of silicon materials, the installed photovoltaic capacity is expected to increase continuously in the future. With the gradual achievement of the supply-demand balance of photovoltaic glass, the prices of photovoltaic glass are expected to return to a normal and reasonable level. The Company firmly takes an optimistic attitude toward the long-term development of the photovoltaic new energy industry, and takes multiple measures to increase the market competitiveness of its products. Along with the progress in the new photovoltaic glass projects in Fengyang of Anhui and Beihai of Guangxi, the market share of the Company's photovoltaic glass business is expected to achieve further increases; the Company also tightly follows the latest trends of the market to facilitate the R&D and promotion of new products.

Architectural glass: As the golden brand of CSG, the Company's architectural glass business has been equipped with quality, service and continuous R&D capabilities that match the brand. Focusing on the continuous improvement of the building energy-saving standards and high-rise building safety standards, the Company strengthens brand building and adheres to the customized business strategy integrating technical service, marketing, and R&D and manufacturing, to meet the personalized needs of domestic and foreign customers and construction projects. As the Company's share in the domestic high-end construction market continues to rise, it also maintains a leading position in market scale and profitability in the field of deep processing within the same industry.

In 2022, influenced by domestic and international environments, the pressure on sales and delivery of the Company increased year-on-year, and the pressure on financing and payment collection of domestic real estate companies also increased. These factors, in combination with the strengthened requirements of the Company for risk control and management, resulted in only a slight year-on-year increase in revenue of the architectural glass business. However, by refining the market layout, the Company continued to increase the signing of high-quality projects, which resulted in the drastic year-on-year increase of the order compounding degree. It also increased the proportion of high-quality small and medium-sized orders, such as short-flat-fast orders, and enhanced cooperation in support projects for people's livelihood. Relying on the continuous strategy to "Reduce Costs and Increase Efficiency", lean operation, and the Group's advantage in industrial chains, the architectural glass business achieved a steady growth in its operating

profit. In 2022, The revenue of the architectural glass business was at the same level as that of the previous year and its net profit increased by 408% year-on-year.

Meanwhile, focusing on the future, the Company seizes the historic opportunity of the acceleration of green building construction, accelerates the completion of the layout of production capacity optimization and production expansion for all bases of architectural glass, as well as the construction of new bases, and improves the automation and informatization level of its production lines, continuously improving the efficiency of equipment production. In 2022, the Company's Dongguan Base successfully completed the optimization and restructuring of its production lines and achieved the diversification of its product structure. Meanwhile, relying on the geographical advantage of the Greater Bay Area and the repositioned market goal of high-quality energy-saving glass products, it focused its business on the Guangdong-Hong Kong-Macao region and overseas markets. As CSG's first factory of intelligent production of architectural glass, Zhaoqing Base achieved a steady growth in production capacity in 2022 after two years of infrastructure construction and human-machine running-in. After the synergistic effect between the base and the Dongguan Base was formed, the goal of production capacity expansion and product complementation was achieved. Taking the advantage of the market demand in the Beijing-Tianjin-Hebei region and Northeast China, the Company's Tianjin Base successfully released the production capacity of its production expansion projects in 2022, so as to make up for its insufficient production capacity. Additionally, the project of Xi'an Architectural Glass Base is expected to achieve general completion in 2023. As the projects of new construction and production expansion are gradually completed and put into operation, CSG's production capacity for architectural glass will be further released. This, in combination with the Company's product diversification to conform with the market demand, can lead to the continuous improvement of the market competitiveness and service capability of CSG regarding architectural glass, so as to increase the market share of its architectural glass business.

As the "14th Five-Year Plan" has proposed higher requirements for building energy conservation, CSG actively responded to the requirements of the policy on building energy conservation and building emission reduction by taking the lead in the R&D of energy-saving products. A series of energy-saving products that could meet higher standards for energy conservation were developed, such as the multiple-silver low-E glass series and the thermal insulation products. The Company also actively participated in the formulation and revision of a series of industry or group standards to promote the advancement of the construction industry toward the "dual carbon" goals. Furthermore, these products were widely applied to many buildings at home and abroad, such as in the Middle East, America, Europe, Australia and the Southeast Asia. The applications were seen in venues for Beijing 2022 Winter Olympics, China National Convention Centre, the venue for Canton Fair, the Hong Kong University of Science and Technology (Guangzhou), the Galaxy Albemarle Twin Towers (Shenzhen), Taiping Financial Industry Port (Sanya), One Bangkok (Thailand), New Alamein (Egypt) and Victoria Cross Tower. In the face of the promising development prospects and the current fierce market competition, CSG implemented multiple measures, such as optimizing customer service, improving product quality, enhancing brand promotion and expanding sales channels, for its multi-silver low-E glass business and hit a record high in both the quantity of signed orders and sales in 2022. The development and production of the Company's multi-silver low-E glass series is an innovative and world-leading undertaking, which is of great significance to the facilitation of building energy conservation and the achievement of the "dual carbon" goals. Improving the energy efficiency of buildings is an important route to achieve the "dual carbon" goals. As the national standard *General Code for Energy Conservation and Renewable Energy Application in Buildings* (GB55015-2021) released by the Ministry of Housing and Urban-Rural Development stipulates that the average design level of energy consumption in newly constructed residential buildings and public buildings shall be further reduced by 30% and 20% respectively, and the requirements for the heat transfer coefficient of energy-saving glass shall be further enhanced, the applications of low-E coated glass are expected to draw more attention and broader market demand for CSG's multi-silver low-E coated glass is expected to be seen. The innovation

and R&D of energy-saving products with higher energy efficiency is important to the energy conservation and emission reduction of newly constructed buildings and vital to the energy-conservation-oriented transformation of existing buildings. In order to reduce carbon emissions of buildings, CSG has developed a series of energy-saving products, building heat insulation products and BIPV products with higher energy efficiency. More than 20% of the architectural glass business comes from its new products. In order to meet the market demand for product innovation, CSG will continue to conduct innovation, so as to provide products with higher energy efficiency for the market.

Electronic glass and display: CSG always recognizes R&D as the core of its electronic glass business and unremittingly adopts the development route of product upgrading with the aim of replacing imported products with homemade products. In 2022, four subsidiaries of the Company, namely, Hebei Panel, Yichang Photoelectric, Qingyuan New Energy-Saving Materials and Xianning Photoelectric, continued to actively implement product upgrading and market upgrading in various application fields, such as intelligent electronic terminals, touch control modules, vehicle window glass, vehicle-mounted displays, industrial automatic control displays & commercial displays, security & protection, and smart home. As a result, the brand influence of the Company's medium- and high-alumina electronic glass products greatly improved and their market share continued to increase. In October 2022, Hebei Panel Glass's production line of ultra-thin electronic glass with a daily melting capacity of 110 tons was ignited. Moreover, the synchronously constructed complementary R&D centre is expected to further bring the Company's strength in the R&D of electronic glass to a higher level.

Committed to building an industrial chain of electronic components for high-end automobiles, the Company continued to increase R&D expenses in the display business and maintained the differentiated strategy of "product quality & technology first" for market competition. In the business field of high-grade AG glass, in 2022, the Company held a leading position in the industry in terms of all product performance indicators. The Company's products were mainly used in high-end vehicle-mounted displays and were mass-produced and supplied to international renowned customers. In the business fields of vehicle-mounted multi-functional 3A cover plates and vehicle-mounted TP sensors, the Company has indirectly supplied to the terminal manufacturers for domestic and international renowned automobile brands through downstream customers. In 2022, the Company's vehicle-mounted cover plate business saw a rapid growth as the production and sales volume drastically increased. As a result, the business became a new growth point of the Company.

In 2022, electronic glass and display business achieved a revenue of RMB 1.643 billion, a year-on-year decrease of 14%; and realized a net profit of RMB 170 million, a year-on-year decrease of 28%.

Solar energy and other businesses

The macroscopic background of the global consensus for "Green Development" and the domestic timetable of the "dual carbon" goals jointly promote a new high-speed development period of the photovoltaic industry after the affordable Internet access is comprehensively achieved. On the basis of objective analysis of its own industrial advantages and disadvantages, overall consideration of the market environment, industrial development trend and the Group's overall industrial development plan, the Company plans to implement the project of 50,000 ton high-purity crystalline silicon in Haixi Prefecture, Qinghai Province, to further expand the solar energy business and enhance the Group's overall competitiveness.

At present, the Company's high-purity crystalline silicon adopts two paths of strategic cooperation with downstream cooperators in the industry chain, signing long-term orders and flexible sales to reduce operating risks and ensure stable and sustainable business development. With continuous technique optimization, cost reduction and efficiency increase in production, the Company greatly reduced alkali consumption and waste residue discharge. After a series of technical measure combinations were adopted and production management was upgraded, the production capacity hit a record high. Specifically, Level 3 electronic-grade crystalline

silicon meeting the national standard accounted for nearly 95% of the production capacity, while the unit silicon consumption, the unit comprehensive electricity consumption, and the unit steam consumption all hit a record low. The Company has rapidly developed into a first-tier manufacturer of high-purity crystalline silicon material with its product quality and market reputation. As its high-purity crystalline silicon products have met the requirements of customers for the application to N-type batteries, their market competitiveness became prominent, which brought great confidence to the construction of the Company's project of Qinghai 50,000-ton high-purity crystalline silicon material. In 2022, the project of Qinghai 50,000-ton high-purity crystalline silicon was initiated and other tasks were steadily implemented. Also in 2022, the Company unwaveringly conducted technological transformation of production lines for its high-purity crystalline silicon business in the production recovery. By steadily increasing production capacity and rapidly grasping market trends and demand, the Company recorded a drastic year-on-year increase in the performance of its high-purity crystalline silicon business.

As for the silicon wafer business, on the basis of consolidating the customer base of polycrystalline silicon wafer products, the Company has adopted the strategy of diversified operations to actively switch to the mono-crystalline route and get in line with the mainstream market, as well as give full play to its own advantages and enhance the ability of asset-based benefit creation. In 2022, while ensuring the continuous production of traditional polycrystalline silicon wafers, the Company firmly seized the opportunity of the rapid development of the mono-crystalline industry for its silicon wafer business and rapidly made arrangements to switch to the production of mono-crystalline wafers, which formed a solid foundation for the transformation of its silicon wafer products. Benefited from the successful occupation of the Indian market with its polycrystalline silicon wafer products and the effective preliminary transformation into the production of mono-crystalline wafers and purified mono-crystalline ingots, the Company's silicon wafer business was successfully transformed and was in line with the mainstream market, which was an action in conformity with the Company's long-term development strategy. In terms of market strategy, the Company was successfully recognized as one of the TOP 5 battery manufacturers based on its mono-crystalline silicon wafer business. As for the module business, the Company has completed the construction of a 500MW, high-power, large-size module production line and successfully put it into operation, which has greatly improved its capability of order acquisition. In 2022, the power station business recorded newly added grid-connected power of 7.2MW and cumulative power capacity of 139MW of photovoltaic power stations.

In 2022, the revenue of the Company's solar energy and other businesses totalled RMB 3.889 billion, a year-on-year increase of 257%; and realized a net profit of RMB 974 million.

II. Other management work

In 2022, with the focus on the work guideline of "emphasizing operation, enhancing management and seeking development", the Company opened up a new path in the uncertain environment, so as to vigorously promote the Group's development strategies and ensure the steady implementation of all operation and management tasks. In order to ensure the rapid and healthy development of all its industrial sectors, the Company spared no effort to ensure production safety, continued to promote differentiated operations and the capability of intelligent production, and tightly grasped opportunities in the market. The multiple measures it took were listed below.

1. The Company enhanced efforts to improve management-based benefit creation as the Company's integral system under the dual cycle of "Internal Improvement and External Expansion" with solid foundations could effectively support its operation. Furthermore, the Company continuously conducted cost management in multiple aspects, such as cost reduction and efficiency increase, centralized procurement and engineering construction, enhanced the coordination and co-development of its teams, improved efficiency in service, regulation and decision-making, promoted the Group's informatized management and construction of digital

factories, gave play to the leading role of information innovation in the improvement of the capabilities of management and operation, continued to promote management based on the optimized basic standards, and promoted the construction of the five-star factories. Moreover, the Company made efforts to improve the performance in safety management. Through the implementation of a series of programs, methods and means for internal control, the Company facilitated the achievement of the Company's operation objectives and the response to and remediation of risk incidents in the business processes. Guided by risk control and efficiency/effect improvement and focusing on the Group's strategies of the operation objectives of the current period, the Company promoted the improvement of its management mechanisms and comprehensively improved its capabilities of risk control and business management.

2. The ability to conduct R&D and iteration of technologies, techniques and products is always the key guarantee for the sustainable and healthy development of an enterprise. As the core element of CSG for forming the industrial barrier of high-value-added business lines, the ability helps the Company maintain its industry-leading position. The Company has made its comprehensive layout from six perspectives, namely the organizational structure of its R&D system, intellectual property rights, top-level product design, high-level R&D platforms, senior talent echelons and the demand for the supporting talent resources. Based on the layout, the Company has formulated the Group's R&D strategic plan to guide the Company's technological innovation and its sustainable development of product R&D. The Company has also made continued efforts to promote R&D and innovation, as it has facilitated the industrialization of its new products and the cross-industry application of its products. For example, it has applied its low-E glass and high-alumina silicon electronic glass to automobiles. In 2022, the Company submitted 276 patent applications, including 121 for inventions, and obtained 346 new authorized patents, including 69 authorized invention patents (with two PCT patents).

3. Energy conservation and environmental protection are the lifeline to the survival and development of a glass company and the core features of the social responsibilities of an enterprise in an industry with high energy consumption. The Company has always been at the leading level in the industry in terms of the control of energy consumption and emissions. CSG takes the lead in the industry to realize comprehensive utilization of energy by means of waste heat power generation and distributed photovoltaic power generation. Through comprehensive exhaust gas treatment such as desulfurization, denitrification and dust removal, it achieves ultra-low emission, which is far lower than the national pollutant emission permission value. Under the condition of the same tonnage and the same kiln age, the control of energy consumption and the control of emission per unit of production capacity have always been at the leading level in the industry. Six subsidiaries of CSG, including Wujiang CSG Glass Co., Ltd., Tianjin CSG Energy-Saving Glass Co., Ltd., Xianning CSG Energy-Saving Glass Co., Ltd., Xianning CSG Photovoltaic Glass Co., Ltd., Xianning CSG Glass Co., Ltd. and Yichang CSG Photovoltaic Glass Co., Ltd., were successfully included in the list of "Green Factory" announced by the Ministry of Industry and Information Technology. Meanwhile, Xianning CSG Glass Co., Ltd. was shortlisted as the "Leader" of energy efficiency in key energy consumption industries in 2022.

4. The Company further improved its organisational structure to safeguard the implementation of its strategic projects. Specifically, the Company vigorously promoted organisational talent development, optimized the organisational structure and the corresponding staffing and improved the construction of the human resource system. Moreover, the Company optimized and adjusted the functional organisation of the headquarters to enhance business support, as it specified the functions, posts, and staffing of the three-level structure of the Group's R&D management and continuously promoted the implementation of organisational optimization of R&D at each level. In doing so, the Company encouraged all subsidiaries of the Group to establish their own R&D department in a gradual manner, so as to further improve the R&D system of the Group.

5. The Company promoted brand construction and cultural development and used culture to facilitate ideological unification, bring its teams together and safeguarding CSG's development. By setting up a special office for brand promotion, the Company made its

brand management professional, systematic and continuous. Moreover, the Company established the CSG Group Brand Innovation Showroom to display CSG's unique thinking of "Made in China", the existing industries and its future development with the focus on the exhibition of its corporate philosophy, achievements, layout and influence.

2. Revenue and cost

(1) Constitution of operation revenue

Unit: RMB

	2022		2021		Increase/decrease y-o-y
	Amount	Ratio in operation revenue	Amount	Ratio in operation revenue	
Total of operating income	15,198,706,998	100%	13,672,372,823	100%	11.16%
According to industry					
Glass industry	10,056,739,256	66.18%	11,100,541,798	81.18%	-9.40%
Electronic glass & Display industry	1,643,083,831	10.81%	1,901,651,626	13.91%	-13.60%
Solar energy and other industries	3,888,582,762	25.58%	1,087,852,336	7.96%	257.46%
Undistributed	374,349,561	2.46%	294,865,012	2.16%	26.96%
Inter-segment offsets	-764,048,412	-5.03%	-712,537,949	-5.21%	7.23%
According to product					
Glass products	10,056,739,256	66.18%	11,100,541,798	81.18%	-9.40%
Electronic glass & Display products	1,643,083,831	10.81%	1,901,651,626	13.91%	-13.60%
Solar energy and other products	3,888,582,762	25.58%	1,087,852,336	7.96%	257.46%
Undistributed	374,349,561	2.46%	294,865,012	2.16%	26.96%
Inter-segment offsets	-764,048,412	-5.03%	-712,537,949	-5.21%	7.23%
According to region					
Mainland China	14,031,154,824	92.32%	12,398,831,195	90.69%	13.17%
Overseas	1,167,552,174	7.68%	1,273,541,628	9.31%	-8.32%
According to sales model					
Direct sales	15,198,706,998	100%	13,672,372,823	100%	11.16%

(2) List of the industries, products, regions or sales model exceed 10% of the operating income or operating profits of the Company

√Applicable □ Not applicable

Unit: RMB

	Operating revenue	Operating cost	Gross profit ratio	Increase/decrease of operating revenue y-o-y	Increase/decrease of operating cost y-o-y	Increase/decrease of gross profit ratio y-o-y
According to industry						
Glass industry	10,056,739,256	7,649,392,465	23.94%	-9.40%	7.75%	-12.11%
Electronic glass & Display industry	1,643,083,831	1,245,581,644	24.19%	-13.60%	0.74%	-10.79%
Solar energy and other industries	3,888,582,762	2,504,032,458	35.61%	257.46%	155.95%	25.54%
According to product						
Glass products	10,056,739,256	7,649,392,465	23.94%	-9.40%	7.75%	-12.11%
Electronic glass & Display products	1,643,083,831	1,245,581,644	24.19%	-13.60%	0.74%	-10.79%
Solar energy and other products	3,888,582,762	2,504,032,458	35.61%	257.46%	155.95%	25.54%
According to region						
Mainland China	14,031,154,824	10,079,593,782	28.16%	13.17%	26.63%	-7.64%
According to sales model						
Direct sales	15,198,706,998	11,006,795,373	27.58%	11.16%	23.73%	-7.35%

Under the circumstances that the statistical standards for the Company's main business data adjusted in the report period, the Company's main business data in the recent year is calculated based on adjusted statistical standards at the end of the report period

Applicable Not applicable

(3) Whether the Company's goods selling revenue higher than the service revenue

Yes No

Industry	Item	Unit	2022	2021	Increase/decrease y-o-y (%)
Flat glass	Sales volume	10,000-ton	291	295	-1.36%
	Output	10,000-ton	303	299	1.34%
	Inventory	10,000-ton	23	11	109.09%
Architectural glass	Sales volume	10,000-M ²	3,770	3,950	-4.56%
	Output	10,000-M ²	3,811	3,946	-3.42%
	Inventory	10,000-M ²	153	114	34.21%
Electronic glass	Sales volume	ton	268,874	273,195	-1.58%
	Output	ton	277,954	271,871	2.24%
	Inventory	ton	26,538	18,166	46.09%
High-purity crystalline silicon	Sales volume	ton	8,454	-	-
	Output	ton	8,957	-	-
	Inventory	ton	254	-	-

Silicon wafer	Sales volume	10,000-piece	23,946	24,712	-3.10%
	Output	10,000-piece	23,020	24,316	-5.33%
	Inventory	10,000-piece	372	424	-12.26%
Solar cell	Sales volume	MW	540	422	27.96%
	Output	MW	536	457	17.29%
	Inventory	MW	7	15	-53.33%

Reasons for major changes (over 30% year-on-year) in relevant data

Applicable Not applicable

1. Flat glass: The increase in inventory was mainly due to the establishment of new production lines in some subsidiaries.
2. Architectural glass: The increase in inventory was mainly because the newly established production lines were put into operation and the production and sales rhythm of some subsidiaries were adjusted.
3. Electronic glass: The increase in inventory was mainly because the production and sales rhythm of some subsidiaries were adjusted.
4. High-purity crystalline silicon: The increases in production volume, sales volume and inventory were due to the resumption of the silicon material business.
5. Solar Cells: The decrease in inventory was mainly because the production and sales rhythm of some subsidiaries were adjusted.

(4) Fulfilment of significant sales contracts and procurement contracts signed by the Company up to the report period

Applicable Not applicable

Fulfilment of significant sales contracts signed by the Company up to the report period

Applicable Not applicable

Unit: RMB 0,000

Subject matter	Name of the other party	Total contract amount	Total amount fulfilled	Amount performed during the report period	Amount to be performed	Normally performed or not	Description of the contract not being performed normally
Photovoltaic glass	LONGi Solar Technology Ltd., Zhejiang LONGi Solar Technology Ltd., Taizhou LONGi Solar Technology Ltd., Yinchuan LONGi Solar Technology Ltd., Chuzhou LONGi Solar Technology Ltd., Datong LONGi Solar Technology Ltd., LONGi (H.K.) Trading Limited, LONGi (KUCHING) SDN. BHD., Xianyang LONGi Solar Technology Ltd., Jiangsu LONGi Solar Technology Ltd., Jiaying LONGi Solar Technology Ltd., Xi'an LONGi Green Building Technology Ltd.	650,000 (Including tax)	66,311	21,222	583,689	Yes	Not applicable

High-purity silicon materials	Trina Solar Co., Ltd.	2,121,000 (Including tax)			2,121,000	Yes	Not applicable
Solar-grade raw polycrystalline silicon materials	Customer 1 and Customer 2	999,900 (Including tax)			999,900	Yes	Not applicable

Fulfillment of significant procurement contracts signed by the Company up to the report period

Applicable Not applicable

(5) Constitution of operation cost

Industry and product classification

Unit: RMB

Industry	Item	2022		2021		Increase/decrease y-o-y
		Amount	Ratio in operating costs	Amount	Ratio in operating costs	
Glass industry	Materials, Labor wages, Costs	7,649,392,465	69.49%	7,099,324,243	79.80%	7.75%
Electronic glass & Display industry	Materials, Labor wages, Costs	1,245,581,644	11.32%	1,236,483,704	13.90%	0.74%
Solar energy and other industries	Materials, Labor wages, Costs	2,504,032,458	22.75%	978,314,345	11.00%	155.95%
undistributed	Materials, Labor wages, Costs	371,837,218	3.38%	294,564,451	3.31%	26.23%
Inter-segment offsets	Materials, Labor wages, Costs	-764,048,412	-6.94%	-712,537,949	-8.01%	7.23%

Unit: RMB

Product	Item	2022		2021		Increase/decrease y-o-y
		Amount	Ratio in operating costs	Amount	Ratio in operating costs	
Glass products	Materials, Labor wages, Costs	7,649,392,465	69.49%	7,099,324,243	79.80%	7.75%
Electronic glass & Display products	Materials, Labor wages, Costs	1,245,581,644	11.32%	1,236,483,704	13.90%	0.74%
Solar energy and other products	Materials, Labor wages, Costs	2,504,032,458	22.75%	978,314,345	11.00%	155.95%
undistributed	Materials, Labor wages, Costs	371,837,218	3.38%	294,564,451	3.31%	26.23%
Inter-segment offsets	Materials, Labor wages, Costs	-764,048,412	-6.94%	-712,537,949	-8.01%	7.23%

Note: The main components of operating costs include materials, labor, depreciation, etc. In order to avoid the disclosure of business secrets and damage the interests of the listed company and investors, the operating costs are only separated and disclosed according to the business sector and product classification of the Company.

(6) Whether the consolidated scope has changed during the report period

Yes No

On 14 February 2022, the Group set up a subsidiary, Yichang CSG New Energy Materials Technology Co., Ltd. (referred to as “Yichang New Energy Materials Company”). As of 31 December 2022, the Group has invested RMB 1.2 million. The Group owns 100% of its equity.

On 1 July 2022, the Group set up a subsidiary, Dongguan CSG Intelligent Equipment Manufacturing Co., Ltd. (referred to as “Dongguan Intelligent Equipment Company”). As of 31 December 2022, the Group has invested RMB 2.5 million. The Group owns 100% of its equity.

On 14 July 2022, the Group set up a subsidiary, Anhui CSG Photovoltaic Energy Co., Ltd. (referred to as “Anhui Photovoltaic Energy Company”). As of 31 December 2022, the Group has not invested yet. The Group owns 100% of its equity.

On 14 July 2022, the Group set up a subsidiary, Shenzhen CSG Quartz Material Industry Co., Ltd. (referred to as “Shenzhen Quartz Company”). As of 31 December 2022, the Group has invested RMB 3 million. The Group owns 100% of its equity.

On 4 August 2022, the Group set up a subsidiary, Guangxi CSG Quartz Material Co., Ltd. (referred to as “Guangxi Quartz Company”). As of 31 December 2022, the Group has invested RMB 2.995 million. The Group owns 100% of its equity.

(7) Major changes or adjustment in business, product or service of the Company in the report period

Applicable Not applicable

(8) Major customers and major suppliers

Major customers of the Company

Total sales to the top five customers (RMB)	2,391,061,740
Proportion in total annual sales volume for top five customers	15.73%
Proportion of related party sales in total annual sales volume for top five customers	0%

Information of the top five customers of the Company

Serial	Name of customer	Sales volume (RMB)	Proportion in total annual sales
1	Customer A	764,668,195	5.03%
2	Customer B	466,423,328	3.07%
3	Customer C	431,898,750	2.84%
4	Customer D	421,862,056	2.78%
5	Customer E	306,209,411	2.01%
Total	--	2,391,061,740	15.73%

Other statement of main customers

Applicable Not applicable

Major suppliers of the Company

Total purchase amount from the top five suppliers (RMB)	2,666,850,370
Proportion in total annual purchase amount from the top five suppliers	19.41%
Proportion of related party sales in total purchase amount from the top five suppliers	0%

Information of the top five suppliers of the Company

Serial	Name of supplier	Purchase amount (RMB)	Proportion in total annual purchase
1	Supplier A	820,026,198	5.97%
2	Supplier B	619,819,922	4.51%
3	Supplier C	435,623,605	3.17%
4	Supplier D	410,955,135	2.99%
5	Supplier E	380,425,510	2.77%
Total	--	2,666,850,370	19.41%

Other statement of major suppliers

Applicable Not applicable

3. Expenses

Unit: RMB

	2022	2021	Increase/decrease y-o-y	Note of major changes
Sales expense	313,754,976	270,695,433	15.91%	
Management expense	718,938,905	752,605,507	-4.47%	
Financial expense	148,212,982	151,182,191	-1.96%	
R&D expenses	644,146,614	511,738,848	25.87%	

4. R&D expenses

Applicable Not applicable

Name of the major R&D project	Purpose	Progress	Target	Expected impact on the Company's future development
R&D of the multi-silver-layer low-E series	The project is aimed at responding to the national strategic guidelines for the "dual carbon" goals and conducting R&D of high-performance building energy-saving materials, so as to meet higher standards for building energy conservation and building emission reduction as well as improving building energy conservation.	A series of the multi-silver-layer low-E products have been developed and introduced to the market. The serial products can meet higher standards for carbon emission reduction in buildings.	The Company aims to provide products with higher energy efficiency for the market. After the products are applied to newly constructed buildings and the renovation of existing buildings, carbon emissions in the operating phase can be further reduced.	In view of the enormous carbon emissions in the field of construction, energy conservation and emission reduction in the construction industry is an important approach to the achievement of the "dual carbon" goals. In terms of the architectural glass business, CSG will focus on the development of low-carbon and energy-saving glass products for the operating phase of buildings. Moreover, it will make efforts to develop a series of energy-saving products and building heat insulation products

				with higher energy efficiency and supply them to the market.
Development of transparent glass-ceramic cover plates	This project is aimed at developing a low-cost transparent glass-ceramic product with no or less lithium that can be applied to the field of cover plates, so as to enrich CSG's inventory of electronic glass products, promote CSG's upgrading of glass-ceramic products, improve customer stickiness and open up a path to the field of high-end applications.	The interim target formula has been developed and subject to material validation by customers in the field of mobile communication terminals. The performance of the formulated product in scratch resistance, hardness and transmittance has been recognized by customers.	The formulated product not only has a lower cost but also excels in scratch resistance and impact resistance. Meanwhile, the product can be mass-produced and applied to the customer side.	Breakthroughs can be achieved in the field of glass-ceramic cover plates through independent R&D for CSG, so as to promote the upgrading of CSG's electronic glass products and endow CSG with world-leading technological strength in high-end glass for cover plates.
R&D and industrialization of high-alumina electronic glass	To develop AEC-qualified automobile-grade glass products with independent intellectual property rights through the optimization of the composition of KK3 glass and achieving product industrialization through the float process.	The R&D of the AEC-qualified automobile-grade glass formula has been completed, the formulated product has passed customer validation and the applications of the relevant invention patents have been submitted. Currently, the formulated product has been mass-produced with a relative high level of comprehensive yield after the industrialization.	The Company expects to obtain authorized patents of the AEC-qualified automobile-grade glass product (as a demonstration of the possession of the relevant intellectual property rights), see that the formulated product can pass required customer validation tests and continuously improve the monthly yield after the industrialization.	With the completion of the project, the Company is expected to be able to respond to the market demand by conducting product upgrading through independent R&D, so as to break the technological monopoly of foreign peers in the field of vehicle-mounted and windshield glass, expand the applicable scope of high-alumina glass, and increase product competitiveness.

R&D staff of the Company

	2022	2021	Ratio of change
Number of R&D staff (person)	216	173	24.86%
The proportion of the number of R&D staff	1.51%	1.45%	0.06%
Educational structure of R&D staff			
Below undergraduate	19	14	35.71%
Undergraduate	146	115	26.96%
Master	44	39	12.82%
Doctor	7	5	40.00%
Age composition of R&D staff			
Under 30 years old	52	30	73.33%

30~40 years old	110	104	5.77%
Over 40 years old	54	39	38.46%

R&D investment of the Company

	2022	2021	Ratio of change
Amount of R&D investment (RMB)	691,969,726	551,196,983	25.54%
Ratio of the R&D investment to the operating income	4.55%	4.03%	0.52%
Amount of the capitalized R&D investment (RMB)	47,823,112	39,458,135	21.20%
Ratio of the capitalized R&D investment to the R&D investment	6.91%	7.16%	-0.25%

Reasons and effects of major changes in the composition of the company's R&D staff

 Applicable Not applicable

Reason of remarkable changes over the previous year of the ratio of the total R&D investment amount to the operating income

 Applicable Not applicable

Reason of substantial change of the ratio of the R&D investment capitalization and its reasonable explanation

 Applicable Not applicable**5. Cash flow**

Unit: RMB

Item	2022	2021	Increase/decrease y-o-y
Subtotal of cash inflow from operating activities	15,830,876,858	15,500,896,330	2.13%
Subtotal of cash outflow from operating activities	13,873,753,627	11,601,248,300	19.59%
Net cash flow from operating activities (1)	1,957,123,231	3,899,648,030	-49.81%
Subtotal of cash inflow from investment activities	3,808,707,836	4,466,761,504	-14.73%
Subtotal of cash outflow from investment activities	6,115,102,337	7,369,401,243	-17.02%
Net cash flow from investment activity	-2,306,394,501	-2,902,639,739	-20.54%
Subtotal of cash inflow from financing activity(2)	4,401,690,981	1,839,354,868	139.31%
Subtotal of cash outflow from financing activity	2,222,287,291	2,202,107,070	0.92%
Net cash flow from financing activity (3)	2,179,403,690	-362,752,202	
Net increased amount of cash and cash equivalent (4)	1,837,540,679	632,449,376	190.54%

Statement on the main factors in the major changes of relevant data

 Applicable Not applicable

(1) It was mainly due to the increase in cash paid for purchasing goods and accepting labour services.

(2) It was mainly due to the increase in cash received from loan acquisition.

(3) It was mainly due to the increase in cash received from loan acquisition.

(4) It was mainly due to the increase in cash inflow from financing activities.

Statement of the reasons for significant differences between the net cash flow from operating activities and the net profit of the year during the report period

 Applicable Not applicable

V. Non-main business analysis

√ Applicable □ Not applicable

Unit: RMB

	Amount	Percentage to total profits	Explanation of the reason	Whether sustainable or not
Income from investment	31,567,854	1.39%	Mainly income from structured deposits and fixed deposits	No
Impairment of assets	155,563,090	6.83%	Mainly impairment loss of goodwill	No
Non-operating income	22,692,272	1%	Mainly payments that cannot be made, insurance compensation, etc.	No
Non-operating expenditure	7,067,178	0.31%	Mainly compensation expenditure, etc.	No

VI. Asset and liability analysis

1. Significant changes in asset composition

Unit: RMB

	End of 2022		Beginning of 2022		Increase or decrease in proportion	Explanation of significant changes
	Amount	Percentage to total assets	Amount	Percentage to total assets		
Monetary funds	4,604,607,779	17.78%	2,765,925,906	13.87%	3.91%	Mainly due to the increase in deposits and maturity of structural deposits
Tradable financial assets			999,600,000	5.01%	-5.01%	Mainly due to the maturity of structural deposits
Notes receivable	156,943,437	0.61%	19,220,984	0.10%	0.51%	Mainly due to the pledge of notes receivable
Accounts receivable	1,179,992,784	4.56%	730,525,687	3.66%	0.90%	Mainly due to the increase in sales revenue from photovoltaic glass
Receivables financing	1,095,412,643	4.23%	297,046,123	1.49%	2.74%	Mainly due to the increase in sales revenue from the silicon material business and from photovoltaic glass
Prepayments	183,629,823	0.71%	76,097,276	0.38%	0.33%	Mainly due to the increase in prepayments for materials by some subsidiaries
Inventory	1,783,941,982	6.89%	1,093,805,525	5.49%	1.40%	Mainly due to the operation of new production lines and resumption of the silicon material business
Investment real estate	290,368,105	1.12%	383,084,500	1.92%	-0.80%	
Non-current assets due within one year	20,000,000	0.08%			0.08%	Mainly due to the maturity of large-amount certificate of deposit
Fixed assets	11,243,236,175	43.40%	8,566,299,970	42.97%	0.43%	Mainly due to the increase in the transfer of projects under construction of some subsidiaries into fixed assets upon completion
Construction in process	2,520,362,291	9.73%	2,457,982,178	12.33%	-2.60%	
Right of use assets	9,908,413	0.04%	9,911,935	0.05%	-0.01%	

Development expenditure	46,755,816	0.18%	72,019,362	0.36%	-0.18%	Mainly due to the increase in the carry-over of R&D projects of some subsidiaries into intangible assets upon completion
Goodwill	7,897,352	0.03%	130,147,859	0.65%	-0.62%	Mainly due to the accrual of provision for goodwill impairment
Deferred tax assets	161,489,749	0.62%	255,045,066	1.28%	-0.66%	Mainly due to the recovery of losses in the prior year by some subsidiaries
Other non-current assets	856,620,485	3.31%	584,162,622	2.93%	0.38%	Mainly due to the prepayment for mining concession for the current period
Short-term loans	345,000,000	1.33%	180,770,000	0.91%	0.42%	Mainly due to the increase in borrowings of the Company and some subsidiaries
Contract liabilities	418,051,975	1.61%	335,188,642	1.68%	-0.07%	
Notes payable	994,557,496	3.84%	400,662,713	2.01%	1.83%	Mainly due to the increase in business entailing self-issued notes of some subsidiaries
Accounts payable	2,033,542,627	7.85%	1,428,851,312	7.17%	0.68%	Mainly due to the increase in engineering and equipment payables
Other payables	537,065,184	2.07%	289,440,477	1.45%	0.62%	Mainly due to the increase in deposits collected
Non-current liabilities due within one year	2,481,433,006	9.58%	503,820,548	2.53%	7.05%	Mainly due to the transfer of bonds payable to non-current liabilities due within one year
Long-term loans	4,353,589,980	16.81%	1,469,059,824	7.37%	9.44%	Mainly due to the increase in loans for the projects
Bonds payable			1,996,587,330	10.02%	-10.02%	Mainly due to the transfer of bonds payable to non-current liabilities due within one year
Lease liabilities	3,564,330	0.01%	220,138	0.00%	0.01%	Mainly due to the leasing business of subsidiaries
Special reserve	731,580	0.00%	7,296,397	0.04%	-0.04%	Mainly due to the change(s) in special reserves

The proportion of overseas assets was relatively high

Applicable Not applicable

2. Assets and liabilities measured at fair value

Applicable Not applicable

Unit: RMB

Item	Opening balance	Profit and loss from changes in fair value in the current period	Cumulative changes in fair value included in equity	Impairment accrued in the current period	Purchase amount for this period	Amount sold in this period	Other changes	Closing balance
financial assets								
1. Trading financial assets (excluding derivative financial assets)	999,600,000				2,698,160,000	3,697,760,000		

2. Receivables financing	297,046,123						798,366,520	1,095,412,643
3. Investment real estate	383,084,500						-92,716,395	290,368,105
Total of the above	1,679,730,623				2,698,160,000	3,697,760,000	705,650,125	1,385,780,748

Other changes: nil

During the report period, whether the company's main asset measurement attributes changed significantly or not

Yes No

3. Limited asset rights as of the end of the report period

Unit: RMB

Item	Limited amount	Limited reason
Monetary funds	10,589,528	Restricted circulation of deposits, freezes, etc
Notes receivable	156,943,437	Restricted pledge
Fix assets	132,370,370	Limited finance lease
Total	299,903,335	

VII. Investment

1. Overall situation

Applicable Not applicable

Investment in the report period (RMB)	Investment in the same period of the previous year (RMB)	Changes
6,115,102,337	7,369,401,243	-17.02%

2. The major equity investment obtained in the report period

Applicable Not applicable

3. The major ongoing non-equity investment in the report period

√ Applicable □ Not applicable

Unit: RMB

Project name	Way of investment	Fixed asset investment or not	Industry involved	Amount invested during the report period	Accumulative amount actually invested by the end of the report period	Source of funds	Progress of project	Expected revenue	Accumulative revenue achieved by the end of the report period	Reasons for not achieving the planned progress and the expected revenue	Date of disclosure (if applicable)	Index of disclosure (if applicable)
Zhaoqing CSG High-grade Energy-Saving Glass Production Line Project	Self-built	Yes	Manufacturing industry	37,410,296	350,760,329	Own funds and loans from financial institutions	CSG plans to invest in the construction of energy-saving glass production project in Zhaoqing. After the project is put into operation, the Company will be able to produce 2.5 million square meters of energy-saving insulating glass and 3.5 million square meters of coated energy-saving products annually. The project has been put into operation.	69,880,000		The project has been completed, and the revenue thereof has been reflected in profits.	13 December 2019	Notice number: 2019-077
Zhaoqing CSG High-grade Automotive Glass Production Line Project	Self-built	Yes	Manufacturing industry	64,633,762	92,575,690	Own funds and loans from financial institutions	CSG plans to invest in the construction of high-grade automotive glass production line in Zhaoqing. The plant of the project is under capital construction.	58,000,000		No revenue as the project is still in the construction period.	13 December 2019	Notice number: 2019-077
Anhui Fengyang Quartz Sand Project	Self-built	Yes	Manufacturing industry	83,482,656	140,139,139	Own funds and loans from financial institutions	CSG plans to build a new production base of low iron (ultra-white) quartz sand with an annual output of 600,000 tons in Fengyang, Anhui Province, and obtain the mining concession of the raw ore of quartz sand. The processing plant of the project has been put into operation.	82,380,000		Part of the project has been completed, and the revenue thereof has been reflected in profits.	6 March 2020	Notice number: 2020-010

Anhui Fengyang Lightweight & High-permeability Panel for Solar Energy Equipment Manufacturing Base Project	Self-built	Yes	Manufacturing industry	1,819,630,548	2,584,801,075	Own funds and loans from financial institutions	CSG plans to invest in the lightweight & high-permeability panel for solar energy equipment manufacturing base project in Anhui. Part of the project has been put into operation.	435,660,000		Part of the project has been completed, and the revenue thereof has been reflected in profits.	6 March 2020	Notice number: 2020-010
Tianjin Energy-saving Coating Production Line Purchase and Upgrade Project	Self-built	Yes	Manufacturing industry	5,636,400	100,861,437	Own funds and loans from financial institutions	CSG intends to invest in a new coating production line in Tianjin CSG, and at the same time upgrade and transform the existing coating lines B and C. The project plans to increase the annual production capacity by 2.76 million square meters through the purchase of coating lines and the upgrading and transformation of existing production lines. The project has been put into operation.	16,400,000		The project has been completed, and the revenue thereof has been reflected in profits.	30 April 2020	Notice number: 2020-023
Wujiang CSG Architectural New Architectural Glass Intelligent Manufacturing Plant Construction Project	Self-built	Yes	Manufacturing industry	27,404,705	79,170,687	Own funds and loans from financial institutions	CSG plans to build a full-process flexible automated production line covering cutting, edging, tempering, insulating and other processes in Wujiang CSG East China Architectural Glass Co., Ltd., using the reserved industrial land in the factory area. The new factory building area is 31,968 square meters, and the new intelligent manufacturing production line has an annual output of 1.2 million square meters of Low-E energy-saving insulating glass. The project is under construction.	50,490,000		No revenue as the project is still in the construction period.	24 June 2020	Notice number: 2020-051

Wujiang Float Lightweight and High-efficiency Double-glass Processing Production Line Construction Project	Self-built	Yes	Manufacturing industry	91,603,119	132,005,367	Own funds and loans from financial institutions	CSG plans to build two lightweight and high-efficiency double-glass processing production lines in Wujiang Float. After the production line is completed, it is expected to increase the monthly double-glass production capacity by 2 million square meters, bringing the annual production capacity to 24 million square meters. After the project is completed, it will give full play to Wujiang Float's technical advantages of double-glass, enhance market competitiveness, and expand the scale of the Company's benefits. The project was put into commercial operation in 2022 after completion.	47,850,000		The project has been completed, and the revenue thereof has been reflected in profits.	24 August 2020	Notice number:2020-061
Xi'an CSG Energy-saving Glass Production Line Project	Self-built	Yes	Manufacturing industry	41,356,682	41,694,021	Own funds and loans from financial institutions	CSG plans to invest in Xi'an, Shanxi Province for building a high-grade energy-saving glass production line with an annual output of 2.1 million square meters of insulating energy-saving glass, and 3.5 million square meters of coated energy-saving glass. The project is under construction.	42,220,000		No revenue as the project is still in the construction period.	7 November 2020	Notice number:2020-070
Hebei Panel Glass Ultrathin Electronic Glass Line Construction Project	Self-built	Yes	Manufacturing industry	232,913,263	257,317,613	Own funds and loans from financial institutions	CSG plans to build an ultrathin electronic glass production line with a daily melting capacity of 110 tons and a complementary R&D centre in Hebei Panel Glass. The project is under debugging.	46,710,000		No revenue as the project is still under debugging.	27 March 2021	Notice number:2021-008

Xianning CSG 1200T/D Photovoltaic Packaging Material Production Line Project	Self-built	Yes	Manufacturing industry	660,547,276	726,996,365	Own funds and loans from financial institutions	CSG plans to build a photovoltaic kiln with a daily melting capacity of 1,200 tons and supporting deep processing lines in Xianning CSG. The project is under debugging.	128,350,000		No revenue as the project is still under debugging.	27 March 2021	Notice number:2021-008
Dongguan CSG Solar Double-glass Calendering Line Technical Transformation and Upgrade Project	Self-built	Yes	Manufacturing industry	155,171,204	157,561,075	Own funds and loans from financial institutions	CSG plans to carry out cold repair and technical transformation of the 650T/D line ultra-white solar kiln in Dongguan Solar Phase III, and start the technical transformation and upgrade project of double-glass calendering line. After the project is completed, it will ensure that the product quality, output efficiency, energy consumption level and cost advantage are at the leading level in China. The project was put into commercial operation in 2022 after completion.	60,670,000		The project has been completed, and the revenue thereof has been reflected in profits.	8 June 2021	Notice number: 2021-025
CSG East China Headquarters Building	Self-built	Yes	Manufacturing industry	2,736,181	2,736,181	Own funds and loans from financial institutions	CSG plans to invest in the construction of CSG East China Headquarters Building in Wujiang District, Suzhou City, Jiangsu Province, as the R&D, marketing, exhibition, office and cooperation centre of upstream and downstream enterprises in the industry chain in East China, so as to meet the needs of CSG's expanding business scale and increasing personnel in East China in the future.			The project is in the construction period.	27 August 2021	Notice number: 2021-039

CSG Guangxi Beihai Photovoltaic Green Energy Industrial Park Project (Phase I)	Self-built	Yes	Manufacturing industry	32,830,756	33,213,753	Own funds and loans from financial institutions	CSG plans to invest in the construction of CSG Guangxi Beihai Photovoltaic Green Energy Industrial Park project in Beihai Tieshan Donggang Industrial Park, Longgang New District, Guangxi Zhuang Autonomous Region. Phase I of the project includes two 1,200t/d one-kiln five-line photovoltaic rolled glass production lines and complementary photovoltaic glass processing and production line, as well as complementary R&D centre, 2.5GW photovoltaic module production line, one 700 t/d one-kiln two-line production line for electronic glass and photoelectric glass, and complementary quartz sand ore and silica sand purification processing line. The project is under construction.	557,640,000		No revenue as the project is still in the construction period.	10 September 2021	Notice number: 2021-041
Hefei CSG Energy-saving Glass Intelligent Manufacturing Industry Base Project	Self-built	Yes	Manufacturing industry	2,008,238	2,008,238	Own funds and loans from financial institutions	CSG plans to invest in the construction of a CSG energy-saving glass intelligent manufacturing industrial base in Hefei City, Anhui Province, and adopts the new generation of intelligent manufacturing technologies and processes to build an energy-saving glass processing centre, and to further expand the market layout of CSG in central China, thus better serving the market and customers, and serving the national “dual carbon” goal. The project is in the preparatory	46,660,000		No revenue as the project is still in the preparatory period.	15 October 2021	Notice number: 2021-043

							stage.					
Xianning CSG Energy-saving Glass Co., Ltd. Production Line Reconstruction and Expansion Construction Project	Self-built	Yes	Manufacturing industry	5,539,915	5,686,498	Own funds and loans from financial institutions	CSG plans to use the surplus land in the park to implement the production line reconstruction and expansion project in Xianning CSG Energy-Saving Glass Co., Ltd., mainly for purpose of technical transformation and upgrade for existing coating equipment, expansion of workshop, supplement of complementary processing equipment, and synchronous implementation of full intelligent connection. After the completion of the project, it is expected that the Company's annual production capacity of insulating glass will increase by 1.2 million square meters, and that of coated glass will increase by 2.42 million square meters. The project is under construction.	27,130,000		No revenue as the project is still in the construction period.	3 December 2021	Notice number: 2021-051
Qingyuan CSG Energy-saving New Materials Co., Ltd. Phase I Upgrading and Technical Transformation Project	Self-built	Yes	Manufacturing industry	8,683,859	24,294,968	Own funds and loans from financial institutions	CSG plans to carry out technical transformation of phase I production line of Qingyuan CSG Energy-saving New Material Co., Ltd., and achieves furnace and hardware upgrade through technological innovation, to further promote the Group's technical innovation in the field of electronic glass. The project is under construction.	60,210,000		No revenue as the project is still in the construction period.	25 December 2021	Notice number: 2021-053

Dongguan Solar G6/G7 Line Process and Equipment Upgrading Project	Self-built	Yes	Manufacturing industry	18,765,600	18,765,600	Own funds and loans from financial institutions	CSG plans to upgrade the process and equipment of the two existing glass deep-processing production lines (G6/G7 lines) of Dongguan CSG Solar Glass Co., Ltd. to meet the production needs of large-size glass and double-plated products. After the project is completed, it will give full play to the double glass technical advantages of Dongguan CSG Solar to improve the Company's market competitiveness and expand its benefit scale. The project is under construction.	41,560,000		No revenue as the project is still in the construction period.	29 March 2022	Notice number: 2022-006
High-purity crystalline silicon project with an annual output of 50,000 tons in Haixi Prefecture, Qinghai Province	Self-built	Yes	Manufacturing industry	10,319,009	10,319,009	Convertible bonds, own funds and loans from financial institutions	CSG plans to build a new high-purity crystalline silicon production line with an annual output of 50,000 tons in Haixi Prefecture, Qinghai Province. Qinghai is not only rich in green power resources, but also one of the regions with the greatest development potential for clean energy, especially photovoltaic power generation in the future. Therefore, the deployment of high-purity crystalline silicon production lines in Qinghai Province is of great strategic significance to the development of CSG's new energy industry. The project is under construction.	863,280,000		No revenue as the project is still in the construction period.	23 June 2022	Notice number: 2022-024
Xianning Float No. 2 Production Line (700	Self-built	Yes	Manufacturing industry			Own funds and loans from financial	CSG plans to upgrade the No. 2 production line of Xianning Float with a production capacity of 700	38,350,000		The project is in the preparatory stage.	9 November 2022	Notice number: 2022-061

tons/day) Technology Upgrade and Transformation Project						institutions	tons/day into a professional and high-quality ultra-white float glass production line that can produce 4 - 22mm thick ultra-white float glass, so as to increase the thickness coverage of products, reduce the operation cost and energy consumption, and improve the product quality, thus further consolidating the market position of the Company's ultra-white float glass in central China.					
Anhui Fengyang 37.6MW Distributed Photovoltaic Power Generation Project	Self-built	Yes	Manufacturing industry			Own funds and loans from financial institutions	CSG plans to build a new 37.6MW distributed photovoltaic power generation project using the plant roof of Anhui CSG New Energy Material Technology Co., Ltd. The project is sited in Fengyang, Anhui Province, a place with abundant sunlight and an average annual irradiation amount of 1,296kWh/m ² . Meanwhile, considering the large annual consumption of new energy power in Anhui Province, photovoltaic power generation for self-use can bring great economic benefits. In addition to providing obvious economic benefits, the distributed photovoltaic power generation also conforms to the carbon reduction policy advocated by the state.	11,000,000		The project is in the preparatory stage.	9 November 2022	Notice number: 2022-061
Chengdu Float Three Sets of Standby Environmental	Self-built	Yes	Manufacturing industry	608,993	608,993	Own funds and loans from financial	CSG plans to build three sets of standby environmental protection facilities for flue gas			The project is in the construction period.	9 November 2022	Notice number: 2022-061

Protection Facilities for Flue Gas Treatment Construction Project						institutions	treatment in Chengdu CSG Glass Co., Ltd., to further improve and optimize the environmental treatment performance of the three production lines of Chengdu Float, and thus improve treatment efficiency and reduce operating cost. The project is under construction.						
Total	--	--	--	3,301,282,462	4,761,516,038	--	--	2,684,440,000	--	--	--	--	--

4. Financial assets investment

(1) Securities investment

Applicable Not applicable

There was no securities investment during the report period.

(2) Derivative investment

Applicable Not applicable

There was no derivative investment during the report period.

5. Use of raised fund

Applicable Not applicable

There was no use of raised fund during the report period.

VIII. Sales of major assets and equity

1. Sales of major assets

Applicable Not applicable

The Company did not sell major assets during the report period.

2. Sales of major equity

Applicable Not applicable

IX. Analysis of main holding companies and joint -stock companies

Applicable Not applicable

Particular about main subsidiaries and joint -stock companies which have influence on the Company's net profit by over 10%

Unit: RMB

Name of company	Type	Main business	Registered capital	Total assets	Net Assets	Operating revenue	Operating profit	Net profit
Yichang CSG Polysilicon Co., Ltd.	Subsidiary	Production and sales of high-purity silicon material products	1,467.98 million	2,626,557,526	1,061,166,090	3,005,985,683	1,042,010,116	946,379,491
Qingyuan CSG Energy Saving New Materials Co., Ltd	Subsidiary	Production and sales of various ultra-thin electronic glass	1,055 million	1,551,310,104	1,063,882,240	687,274,158	192,771,867	180,298,561
Chengdu CSG Glass Co., Ltd.	Subsidiary	Development, manufacture and sales of various special glass	260 million	1,041,796,806	575,022,400	1,331,592,907	186,383,612	167,500,971

Hebei CSG Glass Co., Ltd.	Subsidiary	Manufacture and sales of various special glass	USD 48.06 million	1,211,996,608	993,353,729	1,090,740,721	161,787,654	141,584,355
Wujiang CSG Glass Co., Ltd.	Subsidiary	Manufacture and sales of various special glass	565.04 million	2,344,122,487	1,630,512,073	1,779,767,345	127,145,403	114,572,068
Dongguan CSG Architectural Glass Co., Ltd	Subsidiary	Deep processing of glass	240 million	920,805,811	483,890,399	1,155,213,039	115,803,010	102,114,453

Particulars about subsidiaries obtained or disposed in report period

Applicable Not applicable

Description of main holding and shareholding companies:

In 2022, the performance of Yichang CSG Polysilicon Co., Ltd. greatly increased under the driving by the resumption of the silicon production line; the performance of Qingyuan CSG Energy-Saving New Materials Co., Ltd. increased year on year mainly due to the accrual of provision for asset impairment in the previous period; the performance Chengdu CSG Glass Co., Ltd., Hebei CSG Glass Co., Ltd. and Wujiang CSG Glass Co., Ltd. decreased year on year mainly due to the decline of product price and the rise of raw fuel price; the performance of Dongguan CSG Architectural Glass Co., Ltd. increased greatly year on year thanks to the improvement of operation management level and the decline of the price of main raw materials.

X. Structured main bodies controlled by the Company

Applicable Not applicable

XI. Outlook of the Company's future development

1. Tendency of development of the industries the Company engages

Please refer to the relevant content of "I. Particulars about the industry the Company engages in during the report period".

2. The Company's development strategy

The Group will formulate strategic development goals and implement strategic development plans under the guidance the national strategic goals of "dual carbon", with a focus on "low carbon and energy saving, green and environmental protection, scientific and technological innovation, and intelligent manufacturing". The Company plans to form the three industrial clusters of energy-saving glass, electronic glass and photovoltaic materials, and create the three high-grade products of multi-silver Low-E glass, high-grade electronic glass and "Blue Diamond" ultra-white glass. The Company will continue to enhance its core competitiveness, occupy a dominant position in the industry, strengthen the advantage of raw material resources, improve technology and R&D strength, expand market share and market influence, integrate industrial resources, comprehensively improve the credibility and influence of the CSG brand, plan the layout of the CSG industry from a global and macro perspective, accelerate the development of new industries and consolidate the Company's capability to resist cyclical risks, and build CSG into an internationally influential enterprise group that is related to both the upstream and downstream portions of the glass industry and the energy industry.

3. Business plan of the Company in 2023

① Strengthen the capability of group operation and management, improve the level of fine management and professional management, and promote the implementation of such measures as cost reduction and efficiency increase management, supply

chain management and lean management to ensure the completion of the Company's operation and construction objectives in 2023;

- ② Build an informatization platform for R&D management, and improve the qualification of the R&D innovation platform of CSG;
- ③ Enhance talent management, establish a remuneration incentive system that links remuneration with performance, improve the Company's incentive mechanism, strengthen employee training, select and cultivate reserve cadres, introduce high-quality talents, and intensify the building of talents echelon.
- ④ Rationally plan the level of asset-liability ratio, and ensure the control over financial risks;
- ⑤ Comprehensively boost cost management to improve market competitiveness;
- ⑥ Steadily promote the safe construction and operation of projects under construction, and prepare and reserve new projects centring around the Group's core industries and new development opportunities;
- ⑦ Build a safety, environmental protection and duty performance capability management platform, inspire all employees to proactively perform their duties, and establish an informatization management platform for safety and environmental protection to improve the Company's safety management.

4. Fund demand, use plan and fund source

In 2023, the Company's capital expenditure is expected to be approximately RMB 7,661 million, which is mainly used for construction of the project of lightweight & high-permeability panel for solar energy equipment and complementary sand ore projects, construction of the Qinghai high-purity crystalline silicon project, technical upgrade and transformation in all relevant industries, capacity expansion, etc. The main sources of funds are own funds and loans from financial institutions.

5. Risk factors and countermeasures

In 2023, in the face of severe international and domestic political and economic development and the task of building a "Century CSG", the Company will face the following risks and challenges:

- ① The international political environment still faces many uncertainties.

Affected by the complicated international political environment, domestic economy still faces many challenges and uncertainties. In 2023, the Company will continue to strengthen its attention to the market, timely adjust operation strategy according to market changes, and strive to achieve the annual core work objectives through steady operation.

- ② The glass industry faces fierce competition among similar products, and pressure from rising price of raw materials and fuels such as heavy alkali and natural gas and increasingly high labour cost; the float glass industry faces the risk of declining demand in the downstream architectural glass market; the photovoltaic glass industry faces the risk that the price game between the upstream silicon materials, silicon wafers and cells of photovoltaic modules may affect the market demand for photovoltaic glass, and the excessively rapid capacity expansion may lead to phased overcapacity; the electronic glass and display industry faces the risk of accelerated material technology upgrade due to the continuous rapid iterative upgrade of technology requirements in downstream application scenarios; the solar energy industry faces the challenge of an imbalance in the supply chain that leads to rapid price increase in some production processes; with the continuous release of the production capacity of high-purity crystalline silicon, the price of high-purity crystalline silicon fluctuates downward, which may aggravate the risk of price decline, leading to a sharp decline in the price of upstream business and a general price reduction in downstream business. To cope with aforesaid risks, the Company will take the following measures:

A. In the float glass sector, the Company will continue to promote differentiated operation, optimize product structure, and increase

the sales proportion of high value-added products to strengthen its competitiveness.

B. In the photovoltaic glass sector, the Company will quickly respond to market changes in combination with industry characteristics; pay close attention to the trend of raw material price, and timely and strategically prepare materials as demanded to reduce the impact of the price fluctuation of raw materials on the Company's business performance; optimize product structure in alignment of market demand, and continuously promote lean management and differentiated operation to improve profitability and enhance industry competitiveness.

C. In the architectural glass sector, the Company will accelerate the pace of digital, networked and intelligent transformation of the manufacturing industry to reduce the consumption of manpower, materials and energy. The Company will strengthen the development of high-end market and overseas market, actively respond to market changes, continuously deepen market exploitation, refine market layout, increase the application of new products and new technologies, improve service capability, give full play to quality, technology and brand advantages, and at the same time, maintain the advantageous position of the Company through market-oriented extension of industrial chain.

D. In the electronic glass and display sector, the Company will further strengthen the R&D of new technologies, new products and new applications, constantly narrow the gap from international peers, maintain technical leading advantage in China, and at the same time, further intensify efforts to explore new market applications, broaden industry development direction and expand market space.

E. In the solar energy sector, the Company will strengthen the integration of resources across the industry chain, pay attention to the price trend, supply-demand relationship and terminal demands in upstream and downstream procurement and sales, increase R&D investment, strengthen operation management, and maintain corporate competitiveness in market segments; keep an eye on market changes, vigorously carry out cost reduction and efficiency increase activities, implement energy saving and consumption reduction measures, and timely upgrade and replace the equipment to improve production efficiency and ensure the Company's benefits; expand industry scale and increase market share by investing in new production lines.

③ Risk of fluctuation of foreign exchange rate: At present, nearly 7.81% of the sales revenue of the Company is from overseas, and in the future, the Company will further develop overseas business. Therefore, the fluctuation of exchange rate will bring certain risk to the operation of the Company. To cope with such risk, the Company will settle exchange in a timely manner, and use safe and effective risk evading instrument and product to relatively lock exchange rate, thus reducing the risk caused by fluctuation of exchange rate.

XII. Reception of research, communication and interview

√Applicable □ Not applicable

Reception time	Reception location	Reception method	Reception object type	Reception object	The main content of the discussion and the information provided	Index of the basic situation of the survey
April 29, 2022	CSG Headquarters conference room and other telephone conference parties are located in different locations	Telephone communication	institution	Shenwan Hongyuan Research, Changjiang Securities, China Asset Management, China Merchants Fund and other institutions	The Company communicated with investors on the Company's periodical reports, the Company's performance and the operation and development of businesses, etc.; no material was provided.	For details, please refer to the Record of Investor Relations Activities disclosed on Juchao website (www.cninfo.com.cn) on April 29, 2022

Section IV. Corporate Governance

1. Basic Situation of Corporate Governance

In strict compliance with the requirements of the relevant laws and regulation including The Company Law, Securities Law and Rule of Governance for Listed Company, the Company has been putting efforts in improving the corporate governance, strengthening management of information disclosure, regulating operation activities and establishing a modern corporate system. At present, the system for corporate governance of the Company is basically sound, operation is regulated, corporate governance is consummated, which accord with the requirements of relevant documents on corporate governance of listed company issued by CSRC.

According to the "Company Law" and other relevant laws and regulations and the "Articles of Association", the Company has established and improved a relatively standardized corporate governance structure, and formed a decision-making and operation management system with the shareholders' meeting, the board of directors, the board of supervisors and the Company's management as the main structure. The power organs, decision-making bodies, supervision bodies and managers have clear rights and responsibilities, perform their respective duties and effectively monitor and balance, and perform various duties stipulated in the "Company Law" and "Articles of Association" in accordance with the law. According to the "Articles of Association" and other relevant corporate governance regulations, the Company has formulated the "Procedure Rules for Shareholders' Meeting", "Procedure Rules for the Board of Directors", "Procedure Rules for the Supervisory Committee", "General Manager's Work Rules" and other relevant systems, which provides an institutional guarantee for the standardized operation of the corporate governance structure of the Company.

The Company's "Three Committees" (General Meeting of Shareholders, Board of Directors and Board of Supervisors) operate in a standardized manner, and the procedures for convening and convening meetings comply with relevant regulations. The current directors, supervisors, and senior management are able to actively and effectively fulfill relevant responsibilities and obligations. Independent directors have put forward opinions or suggestions on the company's development decisions. The company respects and listens to the opinions and suggestions of independent directors, and implements them in accordance with the final resolutions of the board of directors and the shareholders' meeting, playing a positive role in safeguarding the interests of the company and small and medium-sized shareholders. At the same time, the company also provides sufficient protection for the performance of independent directors and supervisors. The Board of Directors has established four special committees, namely, the Strategy Committee, the Audit Committee, the Nomination Committee, and the Remuneration and Evaluation Committee, to assist the Board of Directors in performing relevant functions and provide professional suggestions and opinions for the Board of Directors' decision-making. The Board of Directors and the Board of Supervisors of the Company report to the General Meeting of Shareholders on the performance of their duties by directors and supervisors, and the independent directors make a debriefing report to the General Meeting of Shareholders. The senior management personnel have a clear division of labor, clear responsibilities and authorities, and operate in compliance with laws and regulations.

In strict accordance with the requirements of the Listing Rules of Shenzhen Stock Exchange and other relevant laws and regulations, the company earnestly performs the obligation of information disclosure to ensure the authenticity, accuracy, integrity and timeliness of information disclosure. The company earnestly fulfills its information disclosure obligations in strict accordance with the requirements of the Shenzhen Stock Exchange Listing Rules and other relevant laws and regulations to ensure the truthfulness, accuracy, completeness and timeliness of information disclosure. Shanghai Securities News, Securities Daily, Hong Kong Commercial Daily and Juchao Website (www.cninfo.com.cn) are designated media for the Company's information disclosure to ensure that all shareholders of the Company have equal access to the Company's business information. The Company

has established the Information Disclosure Management System and promptly improved it in accordance with newly issued laws and regulations, clarified the standards of insider information, and established inside information insider registration system and record management system. In order to further strengthen the Company's internal information disclosure control, enhance the disclosure consciousness of relevant personnel, and improve the quality of corporate information disclosure, in 2016, the Company set up information Disclosure Committee, and formulate Rules for the implementation of the information disclosure Committee. During the report period, the Company disclosed information with facticity, completeness, timeliness and fairness, strictly fulfilled the responsibilities and obligations of information disclosure of listed companies to ensure that investors are able to keep abreast of the Company's operation and development strategies. There was no regulatory punishment caused by information disclosure in the report period. Meanwhile, the Company delivered the Inside Information Insider Table to Shenzhen Stock Exchange when submitting periodic reports.

The Company has seriously implemented the requirements of the relevant regulatory to cash dividends. The Company formulated the Return plan for Shareholders of CSG Holding Co., Ltd. in the Next Three Years (2022-2024) according to relevant regulations of the Notice of Further Implementation of Cash Dividends of the Listed Companies (ZJF No.: [2012] 37) and the Regulatory Guidelines of Listed Companies No. 3-Cash Dividends of Listed Companies(Revised in 2022) issued by China Securities Regulatory Commission, further improved the Company's decision-making and supervision mechanism for distribution of profits, and protected the interests of investors.

During the report period, it did not exist that the Company provided the undisclosed information to the largest shareholder. And it did not exist that non-operating fund of listed Company was occupied by the largest shareholder and its affiliated enterprises.

Whether the actual condition of corporate governance is materially different from the laws, administrative regulations and the provisions on the governance of listed companies issued by the CSRC Yes No

II. Independency of the Company relative to the largest shareholder in aspect of businesses, personnel, assets, organization and finance

During the report period, the Company has been absolutely independent in business, personnel, assets, organization and finance from its largest shareholder. The Company has an independent and complete business system and independent management capability.

1. In terms of business: The Company owns independent purchase and supply system of the raw resources, complete production systems, independent sale system and customers. The Company is completely independent from the largest shareholder in business. The largest shareholder and its subsidiaries do not engage any identical business or similar business as the Company.

2. In terms of personnel: The Company established integrated management system of labor, personnel, salaries and the social security, which were absolutely independent from its holding shareholder's. Personnel of the managers, person in charge of the financial and other executive managers are obtained remuneration from the Company since on duty in the Company, and never received remuneration or take part-time jobs in the largest shareholder's company and other enterprises controlled by the largest shareholder. The recruitment and dismissal of Directors are conducted through legal procedure since the Company was listed and the manager has been appointed or dismissed by Board of Directors. The Board of Directors and the Shareholders' General Meeting have not received any interference of decisions on personnel appointment and removal from the largest shareholder.

3. In terms of asset: the Company is able to operate business independently and enjoys full control over the production system, auxiliary production system and facilities, land use right, industry property and non-patent technology owned or used by the Company. The investments to the Company from largest shareholder are monetary assets, and the largest shareholder has never occupied, damaged or intervened to operation on these assets.

4. In terms of organization: The Company possessed sound corporate governance structure, established Shareholders' General Meeting, Board of Directors, Supervisory Board, appointed general manager, and fixed related function departments. The Company had been totally independent from its largest shareholder in organization structure. The Company has its own office and

production sites that are different from those of the largest shareholder. The largest shareholder have not in any way affected the independence of the Company's operations and management.

5. In terms of finance: The Company has set up independent financial department, established independent accounting calculation system and financial management system (included management system of its subsidiaries). The financial personnel of the Company didn't take part-time jobs in units of largest shareholder or its subordinate units. The Company had independent bank accounts, separated from the largest shareholder. The Company is independent taxpayer, paid taxes independently according the laws and didn't pay mixed taxes with the largest shareholder. The financial decision-making of the Company was independent, and the use and management of funds were independent. The Company never offered guarantee to their largest shareholder and its subordinate units and other related party. The largest shareholder and its related have never occupied or disguisedly occupied the capital of the Company.

III. Horizontal competition

Applicable Not applicable

IV. Information on the annual general meeting and extraordinary general meeting held during the report period

1. The General Meeting of Shareholders during the report period

Session of meeting	Type	Ratio of investor participation	Meeting date	Date of disclosure	Meeting resolution
The First Extraordinary General Meeting of 2022	Extraordinary General Meeting	29.04%	16 February 2022	17 February 2022	Announcement on Resolutions of the First Extraordinary General Meeting of 2022 (Announcement No.: 2022-004)
Annual General Meeting of 2021	Annual General Meeting	27.69%	16 May 2022	17 May 2022	Announcement on Resolutions of Annual General Meeting of 2021 (Announcement No.: 2022-020)
The Second Extraordinary General Meeting of 2022	Extraordinary General Meeting	28.44%	11 July 2022	12 July 2022	Announcement on Resolutions of the Second Extraordinary General Meeting of 2022 (Announcement No.: 2022-034)
The Third Extraordinary General Meeting of 2022	Extraordinary General Meeting	28.34%	3 August 2022	4 August 2022	Announcement on Resolutions of the Third Extraordinary General Meeting of 2022 (Announcement No.: 2022-048)
The Fourth Extraordinary General Meeting of 2022	Extraordinary General Meeting	25.75%	25 November 2022	26 November 2022	Announcement on Resolutions of the Fourth Extraordinary General Meeting of 2022 (Announcement No.: 2022-065)

2. The preference shareholders whose voting rights have been restored request the convening of an extraordinary general meeting

Applicable Not applicable

V. Directors, supervisors and senior executives

1. Basic information

Name	Title	Working status	Sex	Age	Start dated of office term	End date of office term	Shares held at period-begin (Share)	Amount of shares increased in this period (Share)	Amount of shares decreased in this period (Share)	Other changes (share)	Shares held at period-end (Share)	Reason for increase or decrease of shares
Chen Lin	Chairman of the Board	Currently in office	Female	51	2016/11/19	2023/05/21	1,623,065				1,623,065	
Shen Chengfang	Director	Currently in office	Male	57	2022/08/03	2023/05/21						
Zhu Qianyu	Independent Director	Currently in office	Female	48	2019/04/10	2023/05/21						
Zhang Min	Independent Director	Currently in office	Male	46	2022/11/25	2023/05/21						
Shen Yunqiao	Independent Director	Currently in office	Male	47	2023/03/16	2023/05/21						
Cheng Jinggang	Director	Currently in office	Male	42	2020/05/21	2023/05/21						
Yao Zhuanghe	Director	Currently in office	Male	64	2020/05/21	2023/05/21						
Cheng Xibao	Director	Currently in office	Female	41	2016/01/21	2023/05/21						
Li Jianghua	Chairman of the Supervisory Board, Employee Supervisor	Currently in office	Male	46	2019/03/27	2023/05/21						
Meng Lili	Supervisor	Currently in office	Female	45	2020/05/21	2023/05/21						
Dai Pingsheng	Employee Supervisor	Currently in office	Male	41	2021/07/08	2023/05/21						
He Jin	Secretary of the Party Committee, Executive Vice President	Currently in office	Male	51	2022/05/16	2023/05/21	897,600				897,600	
	Acting CEO				2022/08/15	2023/05/21						
Wang Wenxin	Vice President, Chief	Currently in office	Female	45	2022/05/16	2023/05/21	154,600				154,600	

	Financial Officer											
	Acting Secretary of the Board of Directors	Leaving office			2022/07/08	2022/09/26						
Chen Chunyan	Secretary of the Board	Currently in office	Female	41	2022/09/26	2023/5/21	49,271				49,271	
Zhang Jinshun	Director	Leaving office	Male	58	2017/05/02	2022/06/28						
Wang Jian	Director	Leaving office	Male	59	2016/01/21	2022/08/03	1,012,000				1,012,000	
	CEO	Leaving office			2016/01/21	2022/08/15						
Xu Nianhang	Independent Director	Leaving office	Male	45	2020/05/21	2022/11/25						
Zhu Guilong	Independent Director	Leaving office	Male	59	2017/05/02	2023/03/16						
Yang Xinyu	Secretary of the Board	Leaving office	Male	43	2017/05/02	2022/07/02	1,159,332				1,159,332	
Total	--	--	--	--	--	--	4,895,868	0	0	0	4,895,868	--

During the report period, whether there was any resignation of directors and supervisors and dismissal of senior executives during their terms of office

Yes No

The Board of Directors of the Company received a written resignation report submitted by Director Mr. Zhang Jinshun on 28 June 2022. Mr. Zhang Jinshun resigned as the Company's Director due to personal reasons.

The Board of Directors of the Company received a written resignation report submitted by Mr. Yang Xinyu, Secretary of the Board of Directors, on 2 July 2022. Mr. Yang Xinyu resigned as the Secretary of the Board of Directors due to personal reasons.

The Company convened the Third Extraordinary General Meeting of 2022 on 3 August 2022, at which Proposal to Remove Mr. Wang Jian from His Office as Director of the Ninth Board of Directors of CSG was deliberated on and approved. Therefore, Mr. Wang Jian was removed from his office as Director.

The Company convened an interim meeting of the Ninth Board of Directors on 15 August 2022, at which Proposal to Remove Mr. Wang Jian from His Office as Chief Executive Officer and Authorize Mr. He Jin, Executive Vice President, to Act as Chief Executive Officer was reviewed and approved. Therefore, Mr. Wang Jian was removed from his office as Chief Executive Officer.

The Board of Directors of the Company received a written resignation report submitted by Independent Director Mr. Xu Nianhang on 5 September 2022. Mr. Xu Nianhang resigned as the Company's Independent Director due to relevant regulations of his unit and personal career reasons. Mr. Xu Nianhang's resignation report took effect on 25 November 2022.

The Board of Directors of the Company received a written resignation report submitted by Independent Director Mr. Zhu Guilong on 23 December 2022. Mr. Zhu Guilong resigned as the Company's Independent Director due to personal career reasons. Mr. Zhu Guilong's resignation report took effect on 16 March 2023.

Changes in directors, supervisors and senior executives of the company

√Applicable □ Not applicable

Name	Position	Type	Date	Reason
Shen Chengfang	Director	Be elected	2022-08-03	By election of Director
Zhang Min	Independent Director	Be elected	2022-11-25	By election of Independent Director
Shen Yunqiao	Independent Director	Be elected	2023-03-16	By election of Independent Director
He Jin	Executive Vice President	Appointment	2022-05-16	Appointment of Executive Vice President
	Acting CEO	Appointment	2022-08-15	The Chief Executive Officer is vacant, and Mr. He Jin, Executive Vice President, temporarily acts as the Chief Executive Officer
Wang Wenxin	Vice President and Chief Financial Officer	Appointment	2022-05-16	Appointment of Vice President and Chief Financial Officer
	Acting Secretary of the Board of Directors	Appointment	2022-07-08	During the vacancy of the Secretary of the Board of Directors, Ms. Wang Wenxin, Vice President and Chief Financial Officer, temporarily acted as the Secretary of the Board of Directors
	Acting Secretary of the Board of Directors	Resignation upon expiration of term	2022-09-26	Expiration of the term for acting as the Secretary of the Board of Directors
Chen Chunyan	Secretary of the Board	Appointment	2022-09-26	Appointment of Secretary of the Board of Directors
Zhang Jinshun	Director	Post leaving	2022-06-28	Resignation voluntarily
Wang Jian	Director	Post leaving	2022-08-03	Be dismissed
	CEO	Dismissed	2022-08-15	Be dismissed
Xu Nianhang	Independent Director	Post leaving	2022-11-25	Resignation voluntarily
Zhu Guilong	Independent Director	Post leaving	2023-03-16	Resignation voluntarily
Yang Xinyu	Secretary of the Board	Dismissed	2022-07-02	Resignation voluntarily

2. Post-holding

Major professional backgrounds and working experience of directors, supervisors and senior executives and their major responsibilities in the Company at present

Chen Lin: At present, she is Chairman of the Supervisory Committee of Foresea Life Insurance Co., Ltd. and Chairman of the Board of the Company.

Shen Chengfang: He took the posts of Chief Actuary of Ping An Life Insurance Company of China, Ltd. and Chief Actuary and Deputy General Manager of Foresea Life Insurance Co., Ltd. He is now General Manager and Executive Director of Foresea Life Insurance Co., Ltd. Concurrently, he is Director of the Company.

Zhu Qianyu: She is now an associate professor and a supervisor of masters at the Renmin University of China and a researcher at

the Institute for Rural Economy and Finance, Institute for National Development and Strategies, and Institute for Carbon Peak and Neutrality of the Renmin University of China. She has undertaken more than ten research projects funded by the National Natural Science Foundation of China, the National Social Science Fund of China, the Social Science Fund of Beijing, the National Development and Reform Commission, the Ministry of Science and Technology of the People's Republic of China, and the Ministry of Industry and Information Technology of the People's Republic of China, and had over 50 papers published by foreign SSCI and SCI journals and domestic journals. Additionally, her scientific research achievements won the first, second, and third prizes for social science research achievements from the National Ethnic Affairs Commission of the People's Republic of China, the third prize for excellent results from the National Bureau of Statistics, the second prize in the 13th Beijing Outstanding Achievement Award in Philosophy and Social Science, and the third prize in the Award for Excellent Achievements in Scientific Research in Institutes of Higher Education of the Ministry of Education (Humanities and Social Science). She is serving as a project training and evaluation expert at the World Bank, the National Rural Revitalization Administration, and the Head Office of Agricultural Bank of China, and a reviewer of the National Natural Science Foundation of China. She is also Independent Director of Kingfa SCI.&TECH. Co., Ltd., Chongqing Brewery Co., Ltd., and the Company.

Zhang Min: He served as a lecturer, an associate professor, a supervisor of doctors, and Deputy Director of the Department of Accounting of Renmin Business School at the Renmin University of China. He is now a professor, a supervisor of doctors, and Director of the Department of Accounting of Renmin Business School at the Renmin University of China. Concurrently, he is Independent Director of SDIC Capital Co., Ltd., Beijing SPC Environment Protection Tech Co., Ltd., BYD Co., Ltd., and the Company.

Shen Yunqiao: He served as an assistant professor at the Faculty of Law, Macau University of Science and Technology, and a legal adviser for Guangzhou Nansha New Zone and the China (Guangdong) Pilot Free Trade Zone Nansha Area. He is now an associate professor and a supervisor of doctors at the Faculty of Law and Director of the Research Centre for Arbitration and Dispute Resolution, Macau University of Science and Technology. He is also Independent Director of the Company. Concurrently, he is Independent Director of Guangdong Delian Group Co., Ltd. and Shenzhen Utimes Automation Equipment Company Limited, Director of the Commercial Law Institute of China Law Society and Legislative Council Institute of China Law Society, an off-campus supervisor of postgraduates and a researcher of the Asia-Pacific Institute of Law, Renmin University of China, Deputy Director of the Asia-Pacific Arbitration Research Committee of the Asia-Pacific Institute of Law, Renmin University of China, an overseas expert of Benchmark Chambers International & Benchmark International Mediation Centre, Deputy Secretary General of the Law Committee of the Council for the Promotion of Guangdong-Hong Kong-Macao Cooperation, a member of the 100-Member Group of the Shandong Foreign Arbitration Service of the Department of Justice, Shandong, Executive Director and Deputy Secretary General of Macau Association for Legal Professionals, an arbitrator of the Consumer Mediation and Arbitration Centre, Macao SAR Government Consumer Council, and Vice Chairman of Renmin University of China Alumni Association of Macao. Moreover, he is an arbitrator of more than 20 arbitration institutions, including the China International Economic and Trade Arbitration Commission, Beijing Arbitration Commission, Shanghai International Arbitration Centre, Shanghai Arbitration Commission, Shenzhen Court of International Arbitration, Guangzhou Arbitration Commission, Zhuhai Court of International Arbitration, Foshan Arbitration Commission, Hainan International Arbitration Court, Nanjing Arbitration Commission, Qingdao Arbitration Commission, and Xi'an Arbitration Commission.

Cheng Jinggang: He took the posts of Senior Credit Analyst of the Fixed Income Department of Funde Sino Life Insurance Co., Ltd. and Senior Manager of the Credit Evaluation Department of Sino Life Asset Management Co., Ltd. At present, he is Deputy Director of the Asset Management Centre of Foresea Life Insurance Co., Ltd. and Director of the Company.

Yao Zhuanghe: He took the posts of Deputy Director of the Department of Food Science and Engineering at South China University of Technology, Deputy General Manager and General Manager of Guangdong United Food Enterprise Centre, Director of Guangdong Yuehua International Trade Group, Deputy General Manager of Guangdong Guangye Economic Development Group, Director and General Manager of Guangdong Guangye Investment Consulting Co., Ltd., Director and Deputy Party Committee Secretary of Guangdong Guangye Environmental Construction Group (former Guangdong Guangye Real Estate Group). He is now Director of the Company.

Cheng Xibao: She took the posts of Manager, Vice President, and Executive Vice President of the Financial Department and President Assistant, Vice President, and Senior Vice President of Shenzhen Baoneng Investment Group Co., Ltd., Director of Foresea Life Insurance Co., Ltd., Supervisor of Guizhou Baoneng Automobile Co., Ltd., and Executive Vice President of Baoneng City Development and Construction Group Co., Ltd. At present, she is Senior Vice President of Shenzhen Baoneng Investment Group Co., Ltd., Vice President of Baoneng Motor Group Co., Ltd., Supervisor of Xinjiang Qianhai United Property & Casualty Insurance Co., Ltd., and Director of Baoneng Motor Group Co., Ltd., Qoros Automobile Co., Ltd., Shenzhen Baoneng Travel Co., Ltd., and the Company.

Li Jianghua: He took the posts of Assistant General Manager of the Operation Service Department and Deputy General Manager of the Public Development Department of the Information Management Centre of Foresea Life Insurance Co., Ltd., Deputy General Manager of the IT Department of Xinjiang Qianhai United Property & Casualty Insurance Co., Ltd., and General Manager of the Integrated Financial Development Department of the Information Management Centre of Foresea Life Insurance Co., Ltd. At present, he is Chairman of the Supervisory Committee and Director of the Information Management Department of the Company.

Meng Lili: At present, she is Deputy Director of the Human Resources Centre, General Manager of the Office of the Board of Directors and Employee Supervisor of Foresea Life Insurance Co., Ltd., and Supervisor of the Company.

Dai Pingsheng: He took the posts of Financial Manager of Dongguan CSG Solar Glass Co., Ltd., Deputy Manager, Assistant Director and Deputy Director of the Financial Management Department of CSG, and Vice President of the Architectural Glass Division of CSG. At present, he is Assistant President, Director of the Strategic Investment Department, and Employee Supervisor of the Company.

He Jin: He took the posts of General Manager of Shenzhen CSG Float Glass Co., Ltd., Vice President of Float Glass Division, General Manager of Dongguan CSG Solar Glass Co., Ltd., General Manager of Chengdu CSG Glass Co., Ltd., General Manager of Qingyuan CSG Energy Saving New Materials Co., Ltd., Assistant President of the Company and President of Flat Glass Division, and Vice President of the Company. He is Secretary of the Party Committee, Acting Chief Executive Officer, Executive Vice President, and Chairman of the Management Committee of the Company.

Wang Wenxin: She took the posts of Assistant President, Director of the Financial Management Department, and Executive Vice President of CSG. She is Vice President and Chief Financial Officer of the Company.

Chen Chunyan: She took the posts of Director of the Stock Affairs Department, Stock Affairs Manager, and Assistant Director of the Office of the Board of Directors of CSG. She is Secretary of the Board of Directors and Director of the Office of the Board of Directors of the Company.

Post-holding in shareholder's unit

Applicable Not applicable

Name	Name of shareholder's unit	Position in shareholder's unit	Start dated of	End date of	Received remuneration from
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			office term	office term	shareholder's unit or not
Chen Lin	Foresea Life Insurance Co., Ltd.	Chairman of Supervisory Board	April 2012		Yes
Shen Chengfang	Foresea Life Insurance Co., Ltd.	General Manager	August 2018		Yes
		Executive Director	July 2019		
Cheng Jinggang	Foresea Life Insurance Co., Ltd.	Deputy Director of the Asset Management Center	April 2012		Yes
Meng Lili	Foresea Life Insurance Co., Ltd.	Deputy Director of Human Resources Center, General Manager of the Office of the Board of Directors, Employee Supervisor	June 2013		Yes
Note of post-holding in shareholder's unit	N/A				

Post-holding in other units

 Applicable Not applicable

Name	Unit name	Positions in other units	Date of commencement of office term	Date of termination of office term	Receive remuneration from other units or not
Zhu Qianyu	Renmin University of China	Associate Professor	March 2010		Yes
	Kingfa SCI.&TECH. Co., Ltd.	Independent Director	January 2021		Yes
	Chongqing Brewery Co., Ltd.	Independent Director	May 2022		Yes
Zhang Min	Renmin University of China	Professor	June 2010		Yes
	BYD Co., Ltd.	Independent Director	September 2020		Yes
	SDIC Capital Co., Ltd.	Independent Director	September 2019		Yes
	Beijing SPC Environment Protection Tech Co., Ltd.	Independent Director	October 2019		Yes
Shen Yunqiao	Macau University of Science and Technology	Associate Professor	July 2015		Yes
	Guangdong Delian Group Co., Ltd.	Independent Director	May 2021		Yes
	Shenzhen Utimes Automation Equipment Company Limited	Independent Director	January 2022		Yes
Cheng Xibao	Shenzhen Baoneng Investment Group Co., Ltd.	Senior Vice President	November 2020		Yes
	Baoneng Motor Group Co., Ltd.	Director	March 2017		No
		Vice President	September 2022		No
	Xinjiang Qianhai United Property & Casualty Insurance Co., Ltd.	Supervisor	September 2016		No
	Qoros Automobile Co., Ltd.	Director	December 2017		No
Shenzhen Baoneng Travel Co., LTD.	Director	September 2019		No	

	Baoneng City Development and Construction Group Co., Ltd.	Executive Vice President	October 2018	August 2022	No
Note of post-holding in other units	N/A				

Punishment of securities regulatory authority in the last three years to the Company's current and retired directors, supervisors and senior management during the report period

Applicable Not applicable

3. Remuneration of directors, supervisors and senior executives

Decision-making procedures, recognition basis and payment for directors, supervisors and senior executives

1. Decision-making procedures: The allowances for independent directors, external directors from non-shareholder's unit are planned and proposed by the Remuneration & Assessment Committee of the Board and approved by the Shareholders' General Meeting after deliberation of the Board. Remuneration for senior executives is proposed by the Remuneration & Assessment Committee of the Board and decided by the Board after discussion.
2. Confirmation basis of remuneration: The allowances for independent directors and external directors are confirmed based on industry standards and real situation of the Company. The remuneration for senior executives implements floating reward mechanism with reference to basic salary and business performance. Bonus for performance rewards is withdrawal by proportion quarterly according to return on equity and based on the total net profit after taxation.
3. Actual remuneration payment: The allowances for each of the Company's independent directors, external director from non-shareholder's unit are RMB 0.3 million per year, paid by actual month of service. The total remuneration for directors, supervisor and senior executives in the report period was RMB 25.7764 million.

Remuneration of directors, supervisors and senior executives of the company during the report period

Unit: RMB 0,000

Name	Title	Sex	Age	Post-holding status	Total remuneration obtained from the Company before taxation	Received remuneration from related party of the Company or not
Chen Lin	Chairman of the Board	Female	51	Currently in office		Yes
Shen Chengfang	Director	Male	57	Currently in office		Yes
Zhu Qianyu	Independent Director	Female	48	Currently in office	30	No
Zhang Min	Independent Director	Male	46	Currently in office	2.5	No
Shen Yunqiao	Independent Director	Male	47	Currently in office		No
Cheng Jinggang	Director	Male	42	Currently in office		Yes
Yao Zhuanghe	Director	Male	64	Currently in office	30	No
Cheng Xibao	Director	Female	41	Currently in office		Yes
Li Jianghua	Chairman of the Supervisory Board, Employee Supervisor	Male	46	Currently in office	166.12	No
Meng Lili	Supervisor	Female	45	Currently in office		Yes
Dai Pingsheng	Employee Supervisor	Male	41	Currently in office	132.44	No

He Jin	Secretary of the Party Committee, Vice president, executive vice president	Male	51	Currently in office	864.82	No
Wang Wenxin	Vice President, Chief Financial Officer	Female	45	Currently in office	563.68	No
Chen Chunyan	Secretary of the Board	Female	41	Currently in office	44.7	No
Zhang Jinshun	Director	Male	58	Leaving office		
Wang Jian	Director, CEO	Male	59	Leaving office	419.7	No
Xu Nianhang	Independent Director	Male	45	Leaving office	27.5	No
Zhu Guilong	Independent Director	Male	59	Leaving office	30	No
Yang Xinyu	Secretary of the Board	Male	43	Leaving office	266.18	No
Total	--	--	--	--	2,577.64	--

VI. Directors' performance of duties during the report period

1. Board of directors in the report period

Session	Meeting date	Date of disclosure	Resolution of the meeting
The Interim Meeting of the Ninth Board of Directors	January 28, 2022	January 29, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors" (Announcement No.: 2022-001)
The Interim Meeting of the Ninth Board of Directors	March 28, 2022	March 29, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors" (Announcement No.: 2022-006)
The Eighth Meeting of the Ninth Board of Directors	April 21, 2022	April 25, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of The Eighth Meeting of the Ninth Board of Directors" (Announcement No.: 2022-008)
The Ninth Meeting of the Ninth Board of Directors	April 28, 2022	April 29, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of The Ninth Meeting of the Ninth Board of Directors" (Announcement No.: 2022-016)
The Interim Meeting of the Ninth Board of Directors	May 16, 2022	May 18, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors" (Announcement No.: 2022-021)
The Interim Meeting of the Ninth Board of Directors	June 22, 2022	June 23, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors" (Announcement No.: 2022-024)
The Interim Meeting of the Ninth Board of Directors	June 28, 2022	--	The Proposal on Adjusting the Investment Quota of Anhui Fengyang Low iron (Ultra white) quartz sand Production Base Project was reviewed and passed
The Interim Meeting of the Ninth Board of Directors	July 8, 2022	July 12, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): "Announcement on Resolution of the Interim Meeting of the Ninth Board of

			Directors”(Announcement No.: 2022-033)
The Interim Meeting of the Ninth Board of Directors	July 16, 2022	July 18, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors”(Announcement No.: 2022-038)
The Interim Meeting of the Ninth Board of Directors	August 15, 2022	August 16, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors”(Announcement No.: 2022-049)
The tenth Meeting of the Ninth Board of Directors	August 29, 2022	August 31, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of The tenth Meeting of the Ninth Board of Directors” (Announcement No.: 2022-050)
The Interim Meeting of the Ninth Board of Directors	September 1, 2022	--	The Proposal on Donation Matters was reviewed and approved
The Interim Meeting of the Ninth Board of Directors	September 9, 2022	September 14, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors”(Announcement No.: 2022-053)
The Interim Meeting of the Ninth Board of Directors	September 26, 2022	September 27, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors”(Announcement No.: 2022-055)
The Interim Meeting of the Ninth Board of Directors	October 23, 2022	October 25, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors”(Announcement No.: 2022-057)
The Interim Meeting of the Ninth Board of Directors	November 8, 2022	November 9, 2022	For details, please refer to Juchao Website (www.cninfo.com.cn): “Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors”(Announcement No.: 2022-061)

2. Attendance of directors at the board of directors and shareholders' meeting

Attendance of directors at the board of directors and shareholders' meeting							
Name of director	Number of board meetings that should be attended in this report period	Number of Spot Attendances	Number of Meetings Attended by Communication	Number of attendances of board meeting by proxy	Number of absence	Failure to personally attend board meetings successively twice	Number of attendance of General Meeting
Chen Lin	16	1	15	0	0	No	5
Shen Chengfang	7	0	7	0	0	No	1
Zhu Qianyu	16	0	16	0	0	No	5
Zhang Min	0	0	0	0	0	No	1
Zhu Guilong	16	0	16	0	0	No	4

Cheng Jinggang	16	1	15	0	0	No	5
Yao Zhuanghe	16	0	16	0	0	No	5
Cheng Xibao	16	0	16	0	0	No	5
Zhang Jinshun	7	0	7	0	0	No	1
Wang Jian	9	1	8	0	0	No	3
Xu Nianhang	16	0	16	0	0	No	5

Note to failure to attend the board meeting successively twice

Not applicable

3. Objections raised by directors on matters related to the Company

Whether directors raised any objection to the relevant matters of the Company

Yes No

Name of the director	Matter to which the director objected	Details of the objection
Cheng Xibao	Proposal for the By-election of Director(s) for the Ninth Board of Directors of the Company, Proposal to Convene the Third Extraordinary General Meeting of 2022, and Proposal to Authorize Wang Wenxin, Vice President and Financial Director of the Company, to Act as the Secretary of the Board of Directors reviewed at the interim meeting of the Ninth Board of Directors on 8 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-033) dated 12 July 2022 at http://www.cninfo.com.cn .
Yao Zhuanghe	Proposal for the By-election of Director(s) for the Ninth Board of Directors of the Company and Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 8 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-033) dated 12 July 2022 at http://www.cninfo.com.cn .
Wang Jian	Proposal for the By-election of Director(s) for the Ninth Board of Directors of the Company and Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 8 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-033) dated 12 July 2022 at http://www.cninfo.com.cn .
Zhu Guilong	Proposal for the By-election of Director(s) for the Ninth Board of Directors of the Company and Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 8 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-033) dated 12 July 2022 at http://www.cninfo.com.cn .
Cheng Xibao	Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 16 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-038) dated 18 July 2022 at http://www.cninfo.com.cn .
Yao Zhuanghe	Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 16 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-038) dated 18 July 2022 at http://www.cninfo.com.cn .

Wang Jian	Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 16 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-038) dated 18 July 2022 at http://www.cninfo.com.cn .
Zhu Guilong	Proposal to Convene the Third Extraordinary General Meeting of 2022 reviewed at the interim meeting of the Ninth Board of Directors on 16 July 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-038) dated 18 July 2022 at http://www.cninfo.com.cn .
Cheng Xibao	Proposal to Remove Mr. Wang Jian from His Office as Chief Executive Officer and Authorize Mr. He Jin, Executive Vice President, to Act as Chief Executive Officer reviewed at the interim meeting of the Ninth Board of Directors on 15 August 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-049) dated 16 August 2022 at http://www.cninfo.com.cn .
Cheng Xibao	Proposal for the By-election of Member(s) of the Special Committees under the Ninth Board of Directors reviewed at the interim meeting of the Ninth Board of Directors on 9 September 2022.	A negative vote was cast. For reasons, please refer to the Announcement on Resolution of the Interim Meeting of the Ninth Board of Directors (Announcement No.: 2022-053) dated 14 September 2022 at http://www.cninfo.com.cn .
Explanations of the directors for their objections	For details, please refer to the announcements disclosed by the Company at http://www.cninfo.com.cn .	

4. Other notes to duty performance of directors

Whether the directors' suggestions on the Company have been adopted

Yes No

Notes to the adoption of or a failure to adopt directors' suggestions on the Company

During the report period, the current directors of the Company strictly followed the Company Law, Securities Law, Shenzhen Stock Exchange Listing Rules, Guidelines for Self-discipline and Supervision of Listed Companies No. 1-Standardized Operation of Listed Companies on the Main Board, Rules for the Independent Directors of Listed Companies and other laws and regulations, as well as the Articles of Association and other relevant systems, to attend the Board of Directors and General Meeting of Shareholders of the Company, conscientiously perform duties, and provide comments or suggestions on decisions for the Company's development. The Company respected and listened to directors' comments and suggestions and implemented them according to the final resolutions of the Board of Directors and the General Meeting of Shareholders.

VII. Duty performance of special committees under the Board of Directors in the report period

Name of the Committee	About the members	Number of meetings held	Meeting date	Meeting content	Important comments and suggestions proposed	Other duty performance	Specific objections (if any)
Strategy Committee	Chairman of the Committee: Chen Lin. Committee	5	25 March 2022	The proposal Matters on the Dongguan Solar G6/G7 Line Process and Equipment Upgrading	Approved.		

	members: Wang Jian, Cheng Jिंगgang, Zhu Guilong, and Zhu Qianyu.			Project was reviewed and approved.			
			11 April 2022	The proposals Proposal on Withdrawing Provisions for Asset Impairment, Proposal on Profit Distribution for 2021, Proposal on the Development of Asset Pool Business in 2022, and Proposal for the 2022 Guarantee Plan were reviewed and approved.	Approved.		
			13 May 2022	The proposal Matters on Using Self-owned Funds for Investment and Wealth Management was reviewed and approved.	Approved.		
			19 June 2022	The proposal Matters on Build a New High-purity Crystalline Silicon Project with an Annual Output of 50,000 Tons in Haixi Prefecture, Qinghai Province was reviewed and approved.	Approved.		
	Chairman of the Committee: Chen Lin. Committee members: Shen Chengfang, Cheng Jिंगgang, Zhu Guilong, and Zhu Qianyu.	7 November 2022	The proposals Matters on the Xianning Float No. 2 Production Line (700 tons/day) Technology Upgrade and Transformation Project, Matters on the Anhui Fengyang 37.6MW Distributed Photovoltaic Power Generation Project, Matters on the Chengdu Float Three Sets of Standby Environmental Protection Facilities for Flue Gas Treatment Construction Project, and Matters on Increasing Capital Injected to Wholly-Owned Subsidiaries were reviewed and approved.	Approved.			
Audit Committee	Chairman of the committee: Xu Nianhang. Committee members: Zhu Guilong, Zhu Qianyu, Chen Lin, and Cheng Xibao.	4	11 April 2022	The reports Financial Final Report 2021 and Internal Control Evaluation Report 2021 were reviewed and approved.	Approved.		
			18 April 2022	Matters on the Changes in Accounting Policies and Matters on the First Quarter Report 2022 were reviewed and approved.	Approved.		

			22 August 2022	Matters on the Semi-annual Financial Report 2022 was reviewed and approved.	Approved.		
			22 October 2022	Matters on the Third Quarter Report 2022 and Matters on the Renewal of the Appointment of the Audit Institution of 2022 were reviewed and approved.	Approved.		
Remuneration and Assessment Committee	Chairman of the committee: Zhu Guilong. Committee members: Xu Nianhang, Zhu Qianyu, Chen Lin, and Cheng Jinggang.	2	25 January 2022	The proposal Proposal for Allowances for External Directors (except for Those Serving in Shareholders' Units) was reviewed and approved.	Approved.		
			11 April 2022	The Matters on Auditing the Remuneration of Directors, Supervisors and Senior Executives of CSG in 2021 was reviewed and approved.	Approved.		
Nomination Committee	Chairman of the committee: Zhu Qianyu Committee members: Zhu Guilong, Xu Nianhang, Chen Li, and Wang Jian	3	11 April 2022	Work of Directors in 2021 was reviewed and approved.	Approved.		
			5 July 2022	Matters on the By-election of Director(s) for the Ninth Board of Directors of the Company was reviewed and approved.	Approved.		
			7 November 2022	Matters on the By-election of Independent Director(s) for the Ninth Board of Directors of the Company was reviewed and approved.	Approved.		
	Chairman of the committee: Zhu Qianyu Committee members: Zhu Guilong, Xu Nianhang, Chen Lin, and Shen Chengfang.						

VIII. Work Summary of the Supervisory Committee

Did the Supervisory Committee find any risk involved in performing the supervision activities in the report period

Yes No

The Supervisory Committee had no objection to the supervision matters during the report period.

IX. Employees

1. Number, Professional Composition and Education Background of Employees

Number of employees in the parent company (person)	487 ^(Note)
Number of employees in major subsidiaries of the Company	13,772

(person)	
Total number of employees (person)	14,259
Total number of employees received salaries in the period (person)	14,259
Number of retired employees whose costs borne by the parent company and its main subsidiaries (person)	0
Professional composition	
Category of profession composition	Number of profession composition (person)
Production personnel	9,879
Salesman	826
Technician	2,284
Financial personnel	150
Administrative personnel	1,120
Total	14,259
Education background	
Category of education background	Number (person)
Doctor	8
Master	168
Undergraduate	3,138
Junior college	2,717
Degree below junior college	8,228
Doctor	14,259

Note: Among them, there are 304 employees sent by the headquarters to the subsidiaries.

2. Staff remuneration policy

In 2022, the Company continue to emphasize the principle of “Performance Orientation” in compensation management, through strengthening the concept of organizational performance and strengthening the application of performance results, we advocate that salary incentives should be inclined to high-performing organizations and high-performing individuals, to improve the work enthusiasm of employees, and then improve the overall performance of the organization, to achieve the business objectives.

3. Staff training plan

The Company has always attached great importance to the talent team construction and staff training and development. Every year, the Company sets up a special fund for the employees’ skills training, capacity development and quality improvement. The Company has established a comprehensive training and development system for all kinds of employees, and developed personalized training and development systems for senior, middle and grass-roots employees, so as to stimulate the drive of employees, enhance the competitiveness of the enterprise, and provide a strong guarantee for the development of CSG Group. Based on the strategy of sustainable development of human resources, the Company will continue to deepen the scientific and systematic operation of training and development, so as to energize,

promote management and increase benefits, and achieve a win-win situation for the growth of employees and the development of the enterprise.

4. Labor outsourcing

Applicable Not applicable

X. Profit Distribution and Reserve Capitalization

Preparation, implementation or adjustment of the policy for profit distribution, especially the policy for cash dividend distribution in the report period

Applicable Not applicable

The profit distribution plan for 2021 was approved by Annual General Shareholders' Meeting of 2021 held on 16 May 2022 which distributed distributing cash dividend of RMB 2 (tax included) for every 10 shares to all shareholders. Notice of the distribution was published on China Securities Journal, Securities Times, Shanghai Securities News and Hong Kong Commercial Daily on 16 June 2022, and the profit had been distributed.

Special explanation on cash dividend policy	
Satisfy regulations of General Meeting or requirement of Article of Association (Yes/No)	Satisfy regulations of General Meeting or requirement of Article of Association (Yes/No)
Well-defined and clearly dividend standards and proportion (Yes/No)	Well-defined and clearly dividend standards and proportion (Yes/No)
Completed relevant decision-making process and mechanism (Yes/No)	Completed relevant decision-making process and mechanism (Yes/No)
Independent directors perform duties completely and play a proper role (Yes/No)	Independent directors perform duties completely and play a proper role (Yes/No)
Minority shareholders have ample opportunities and their legitimate rights and interests are effectively protected (Yes/No)	Minority shareholders have ample opportunities and their legitimate rights and interests are effectively protected (Yes/No)
Condition and procedures are compliance and transparent while the cash bonus policy adjusted or changed (Yes/No)	Condition and procedures are compliance and transparent while the cash bonus policy adjusted or changed (Yes/No)

The Company gains profits in the report period and the retained profit of parent company is positive but no plan of cash dividend proposed

Applicable Not applicable

Proposal of profit distribution preplan or share conversion from capital public reserve in the report period

Applicable Not applicable

Distributing bonus shares for every 10 shares (share)	0
Distributing cash dividend for every 10 shares (tax included) (RMB)	1.5
Shares added for every 10-share base (Share)	0
Equity base for distribution preplan (share)	3,070,692,107
Total amount distribution in cash (RMB) (tax included)	460,603,816
Cash dividend amount in other ways (such as repurchasing shares) (RMB)	0
Total cash dividends (including other methods) (RMB)	460,603,816
Profit available for distribution (RMB)	1,904,753,271
Cash distributing accounted for the proportion of the total amount of profit distribution (including other methods)	100%

Particular about cash dividend in the period
<p>If the Company's development stage is not easy to distinguish but there are major capital expenditure arrangements, when the profit is distributed, the proportion of cash dividends in this profit distribution should be at least 20%.</p>
Details of proposal of profit distribution preplan or share conversion from capital public reserve
<p>According to the financial report audited by Asia Pacific (Group) CPAs (special general partnership), the net profit attributable to equity holders of the Company in consolidated statement was RMB 2,037,202,500 in 2022, and the net profit of the parent company's financial statements was RMB 837,464,913.</p> <p>Since cash dividend distribution bases on the distributable profit of parent company, the Company took 10% of the net profit as stationary surplus reserve which was RMB 83,746,491 based on the net profit RMB837,464,913 of parent company statement 2022. The allocation for Shareholders in 2022 was RMB 1,904,753,271.</p> <p>The deliberated and approved plan of profit distribution in the Board Meeting is distributing cash dividend of RMB 1.5 yuan (tax included) for every 10 shares to all shareholders based on 3,070,692,107 shares of the total currently share capital, and the total amount distribution is RMB 460,603,816 (including tax). The actual amount of the cash dividend distributed will be determined according to the total share capital on the registration date of the Company's implementation of the profit distribution plan.</p> <p>The profit distribution plan complies with the "Company Law", "Listed Company Supervision Guidelines No. 3-Cash Dividends for Listed Companies"(Revised in 2022), the "Articles of Association""and the Company's shareholder return plan, and other relevant regulations. It is in line with the Company's actual situation and future development plans, as well as taking into account the interests of shareholders.</p> <p>The above profit distribution proposal must be submitted to the 2022 Annual General Meeting of Shareholders.</p>

XI. Implementation of the Company's Equity Incentive Plan, Employee Stock Ownership Plan or Other Employee Incentive Measures

Applicable Not applicable

During the report period, the Company had no equity incentive plan, employee stock ownership plan or other employee incentive measures and the implementation.

XII. Construction and Implementation of the Internal Control System during the Reporting Period

1. Construction and Implementation of the Internal Control System

During the report period, the Company established a sound and complete internal control management system in accordance with the requirements of the Company Law, the Securities Law, the Basic Norms for Enterprise Internal Control and other internal control regulatory rules, oriented by risk management, and operated it effectively. It strengthened and standardized its internal control which ensured the standardized operation of the Company and improved the management level and efficiency of the Company, promoting the sustainable development of the Company and protecting the legitimate rights and interests of investors.

2. Particular case found involving material defects in the internal control during the reporting period

Yes No

XIII. Management and Control of the Subsidiaries during the Report Period

During the report period, by establishing an effective internal control mechanism and implementing the internal control management plan, the internal operation supervision of subsidiaries was strengthened; by establishing a sound internal control system of subsidiaries, the implementation and continuous improvement was promoted; by carrying out process monitoring and special evaluation, the process risk management of subsidiaries was strengthened; by organizing the internal control publicity and training of subsidiaries, a good internal control environment was created; by supervising the key businesses of subsidiaries, the legal compliance, reliability of financial reports, asset safety and operation efficiency of subsidiaries was reasonable guaranteed.

XIV. Internal Control Self-assessment Report or Internal Control Audit Report¹. Particulars about significant defects found in the internal control during the report period

1. Self-assessment Report of the Internal Control

Disclosure date of full text of self-appraisal report of internal control	April 26, 2023	
Disclosure index of full text of self-appraisal report of internal control	More details found in “Report of Internal Control of CSG for year of 2022” published on Juchao Website (www.cninfo.com.cn)	
The ratio of the total assets of the units included in the scope of evaluation to the total assets of the Company’s consolidated financial statements		93%
The ratio of the operating income of the units included in the scope of evaluation to the operating income of the Company’s consolidated financial statements		97%
Standards of Defects Evaluation		
Category	Financial Reports	Non-financial Reports
Qualitative criteria	<p>Major defects:</p> <p>A. Fraud of directors, supervisors and senior management;</p> <p>B. Ineffective control environment;</p> <p>C. Invalid internal supervision;</p> <p>D. Major internal control defects found and reported to the management but haven’t been corrected after a reasonable time;</p> <p>E. Material misstatements are found by the external audit but haven’t been found in the process of internal control;</p> <p>F. Financial reports submitted during the reporting period completely cannot meet the needs and are severely punished by regulatory agencies;</p> <p>G. Other major defects that may affect</p>	<p>Major defects:</p> <p>A. Major decision-making mistakes caused by decision-making process of key business;</p> <p>B. Serious violation of state laws and regulations;</p> <p>C. Serious brain drain of senior and middle management and or personnel at key technological posts;</p> <p>D. Major or significant defects found in the internal control evaluation have not been rectified and reformed;</p> <p>E. The company’s major negative news frequently appears on media;</p> <p>Significant defects:</p> <p>A. Big deviation of execution caused by executive routine of key business;</p>

	<p>the report users' correct judgment.</p> <p>Significant defects:</p> <p>A. Defects or invalidation of important financial control procedures;</p> <p>B. Significant misstatements are found by the external audit but haven't been found in the process of internal control;</p> <p>C. Financial reports submitted during the reporting period have mistakes frequently;</p> <p>D. Other significant defects that may affect the report users' correct judgment.</p> <p>Common defects: Other control defects except for major defects and significant defects.</p>	<p>B. Regulatory authorities impose large amount of fines because the violation of laws and regulations;</p> <p>C. Defects or invalidation of important business' internal control procedures;</p> <p>Common defects: Other control defects except for major defects and significant defects.</p>
Quantitative standard	<p>Major defects:</p> <p>A. Amount of net profit affected by misstatements (based on consolidated statements): amount affected by misstatements is equal to or greater than 3% of net profit and the absolute amount is no less than 30 million yuan;</p> <p>B. Amount of assets and liabilities affected by misstatements (based on consolidated statements): amount affected by misstatements is equal to or greater than 1% of total assets.</p> <p>Significant defects:</p> <p>A. Amount of net profit affected by misstatements (based on consolidated statements): not belong to major defects and amount affected by misstatements is equal to or greater than 2% of net profit and the absolute amount is no less than 20 million yuan;</p> <p>B. Amount of assets and liabilities affected by misstatements (based on consolidated statements): amount affected by misstatements is equal to or greater than 0.5% of total assets but less than 1% of total assets.</p> <p>Common defects: Defects except for major and significant defects.</p>	<p>Major defects:</p> <p>A. Amount of direct property loss: the direct loss amount is equal to or greater than 30 million yuan;</p> <p>B. Group's reputation: major negative news spreads in numerous business areas or is widely reported by national media and causes significant damages to the corporate reputation which takes more than six months to be restored.</p> <p>Significant defects:</p> <p>A. Amount of direct property loss: the direct loss amount is equal to or greater than 20 million yuan but less than 30 million yuan;</p> <p>B. Group's reputation: negative news spreads inside the industry or is reported or focused by local media and causes certain damages to the corporate reputation which takes more than three months but less than six months to be restored.</p> <p>Common defects:</p> <p>A. Amount of direct property loss: defects except for major and significant defects.</p> <p>B. Group's reputation: negative news spreads within the group and causes minor damages to the corporate reputation which takes less than three months to be restored.</p>
Amount of significant defects in financial reports		0
Amount of significant defects in non-financial reports		0
Amount of important defects in financial reports		0
Amount of important defects in non-financial reports		0

2. Audit report of internal control

Applicable Not applicable

Deliberations in Internal Control Audit Report	
According to Guidelines of Enterprise Internal Control Audit and the relevant requirements of CICPA auditing standards, Asia Pacific (Group) CPAs (special general partnership) (hereinafter referred to as AP) audited the effectiveness of internal control over financial statements of the Company up to 31 December 2022, issued AP Ya-Kuai- A-Zhuan-Zi (2023) 01110007 Internal Control Audit Report and made the following opinions: AP thought that CSG Holding Co., Ltd. maintained effective internal control over financial statements in all major aspects according to the Fundamental Norms of Enterprise Internal Control and relevant rules on December 31, 2022.	
Disclosure of internal control audit report	Disclosure
Date of disclosing the internal control audit reports	April 26, 2023
Disclosure index of internal control audit report	More details can be found in 2022 Internal Control Audit Report of CSG released on Juchao Website (www.cninfo.com.cn)
Type of the auditor's opinion	Standard unqualified opinion
Whether there are major flaws in the non-financial report or not	No

Whether the CPAs firm issued an Audit Report on Internal Control with non-standard opinion or not

Yes No

Whether the Audit Report on Internal Control from the CPAs firm is in consistent with the Self-appraisal Report from the Board or not

Yes No

XV. Rectification of the Problems Found in the Self-inspection during the Special Campaign to Improve the Governance of Listed Companies

Not Applicable

Section V. Environment and Social Responsibility

I. Major environmental issues

Whether the listed company and its subsidiaries belong to the key pollutant discharge units announced by the environmental protection department

Yes No

Environmental protection related policies and industry standards

The Company implemented the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Air Pollution, the Law of the People's Republic of China on the Prevention and Control of Water Pollution, the Law of the People's Republic of China on the Prevention and Control of Noise Pollution, the Environmental Protection Tax Law of the People's Republic of China and other relevant environmental protection laws and regulations, and implemented the Emission Standard of Air Pollutants for Flat Glass Industry, the Electronic Glass Working Air Pollutant Emission Standard, the Integrated Emission Standard of Air Pollutants, the Sewage Integrated Emission Standards, the Environmental Noise Emission Standards at the Boundary of Industrial Enterprises and other national, industry and local pollutant discharge standards.

Administrative license for environmental protection

The construction projects of each subsidiary carried out environmental impact assessment work and obtain EIA approval in strict accordance with the requirements of the Environment Impact Assessment Law of the People's Republic of China and the Catalogue of Classified Management of Environmental Impact Assessment of Construction Projects. During the construction of the project, the construction of pollution prevention and control facilities shall be carried out in strict accordance with the requirements of the project "Three Simultaneous" and put into production and use at the same time as the main project. During the trial production period, the inspection and acceptance shall be organized in accordance with the relevant regulations on environmental protection acceptance of the completion of the construction project in order to ensure that the construction project completes the inspection and acceptance work before it is officially put into operation.

All subsidiaries have obtained the pollutant discharge permit within the validity period, and regularly submitted the implementation report of pollutant discharge permit.

Industry emission standards and specific conditions of pollutant emission involved in production and operation activities

Name of company or subsidiary	Type of main pollutants and characteristic pollutants	Name of main pollutants and characteristic pollutants	Way of emission	Number of exhaust vent	Exhaust vent distribution	Emission concentration / intensity	Emission standard of pollutants	Total emission	Approved total emission	Excessive emission
Xianning CSG Glass Co., Ltd.	Air pollutants	Dust	Continuous/intermittent	16	Production plant area	$\leq 30\text{mg}/\text{m}^3$	Emission Standard of Air Pollutants for Flat Glass Industry (GB26453-2011)	Particulates: 20.49t	Particulates: 96.82t/a	N/A
		Soot				$\leq 25\text{mg}/\text{m}^3$		Particulates: 20.49t	Particulates: 96.82t/a	
		SO ₂				$\leq 200\text{mg}/\text{m}^3$		181.61t	636.5t/a	
		NO _x				$\leq 350\text{mg}/\text{m}^3$		403.36t	1113.89t/a	
Chengdu	Air	Dust	Contin	15	Production	$\leq 20\text{mg}/\text{m}^3$	Emission Standard of Air	Particulates	Particulates:	N/A

CSG Glass Co., Ltd.	pollutants		uous/i ntermit tent		plant area		Pollutants for Flat Glass Industry (GB26453-2011)	14.69t	142.114t/a	
		Soot				$\leq 20\text{mg}/\text{m}^3$		Particulates: 14.69t	Particulates: 142.114t/a	
		SO ₂				$\leq 200\text{mg}/\text{m}^3$		117.79t	1136.917t/a	
		NO _x				$\leq 350\text{mg}/\text{m}^3$		464.58t	1989.609t/a	
Hebei CSG Glass Co., Ltd.	Air pollutants	Dust	Contin uous/i ntermit tent	16	Production plant area	$\leq 10\text{mg}/\text{m}^3$	Ultra Low Emission Standard of Air Pollutants for Flat Glass Industry (DB13/2168-2020)	Particulates: 4.23t	Particulates: 19.92t/a	N/A
		Soot				$\leq 10\text{mg}/\text{m}^3$		Particulates: 4.23t	Particulates: 19.92t/a	
		SO ₂				$\leq 50\text{mg}/\text{m}^3$		32.470t	99.63t/a	
		NO _x				$\leq 200\text{mg}/\text{m}^3$		148.671t	398.55t/a	
Wujiang CSG Glass Co., Ltd.	Air pollutants	Dust	Contin uous/i ntermit tent	39	Production plant area	$\leq 15\text{mg}/\text{m}^3$	Emission Standard of Air Pollutants for Flat Glass Industry (GB26453-2011)	Particulates: 10.15t	Particulates: 76.91t/a	N/A
		Soot				$\leq 15\text{mg}/\text{m}^3$		Particulates: 10.15t	Particulates: 76.91t/a	
		SO ₂				$\leq 50\text{mg}/\text{m}^3$		30.60t	238.28t/a	
		NO _x				$\leq 150\text{mg}/\text{m}^3$		296.60t	818.04t/a	
Dongguan CSG Solar Glass Co., Ltd.	Air pollutants	Dust	Contin uous/i ntermit tent	22	Production plant area	$\leq 20\text{mg}/\text{m}^3$	Emission Standard of Air Pollutants for Flat Glass Industry (DB44-2159-2019)	Particulates: 3.38t	Particulates: 34.85t/a	N/A
		Soot				$\leq 30\text{mg}/\text{m}^3$		Particulates: 3.38t	Particulates: 34.85t/a	
		SO ₂				$\leq 400\text{mg}/\text{m}^3$		90.81t	300.99t/a	
		NO _x				$\leq 550\text{mg}/\text{m}^3$		140.43t	535.67t/a	
Hebei Panel Glass Co., Ltd.	Air pollutants	Dust	Contin uous/i ntermit tent	5	Production plant area	$\leq 30\text{mg}/\text{m}^3$	Emission Standard of Air Pollutants for Electronic Glass Industry (GB29495-2013)	Particulates: 0.206t	Particulates: 16.4225t/a	N/A
		Soot				$\leq 10\text{mg}/\text{m}^3$		Particulates: 0.206t	Particulates: 16.4225t/a	
		SO ₂				$\leq 50\text{mg}/\text{m}^3$		1.66t	87.7t/a	
		NO _x				$\leq 200\text{mg}/\text{m}^3$		6.53t	105.1t/a	
Xianning CSG Photovoltaic Glass Co., Ltd.	Air pollutants	Dust	Contin uous/i ntermit tent	6	Production plant area	$\leq 20\text{mg}/\text{m}^3$	Emission Standard of Air Pollutants for Electronic Glass Industry (GB29495-2013)	Particulates: 2.014t	Particulates: 17.656t/a	N/A
		Soot				$\leq 15\text{mg}/\text{m}^3$		Particulates: 2.014t	Particulates: 17.656t/a	
		SO ₂				$\leq 10\text{mg}/\text{m}^3$		0.121t	65.6t/a	
		NO _x				$\leq 330\text{mg}/\text{m}^3$		55.145t	163.81t/a	
Dongguan CSG Architectural Glass Co., Ltd.	Water pollutants	pH	Inter mittent	1	Sewage vent	6~9	Guangdong Province Water Pollutant Emission Limit (DB44/26-2001)	/	/	N/A
		COD				27mg/L		5.4t	5.4t/a	
		Ammonia nitrogen				0.244mg/L		0.24t	0.6t/a	
Tianjin CSG Energy-Saving Glass Co., Ltd.	Water pollutants	pH	Inter mittent	2	Sewage vent	6~9	Sewage Integrated Emission Standards (Level 3 Standard DB12/356-2018)	/	/	N/A
		COD				24mg/L		1.882t	500t/a	
		Ammonia nitrogen				0.293mg/L		0.023t	45t/a	
Wujiang CSG East China	Water pollutants	pH	Inter mittent	1	Sewage vent	6~9	Sewage Integrated Emission Standards (GB8978-1996)	/	/	N/A
		COD				$\leq 500\text{mg}/\text{L}$		23.138t	40.59t/a	

Architectural Glass Co., Ltd.		Ammonia nitrogen				≤45mg/L		0.889t	0.1444t/a	
Dongguan CSG PV-tech Co., Ltd.	Water pollutants	COD	Intermittent	20	Sewage vent: Production plant area	≤70mg/L	Guangdong Province Water Pollutant Emission Limit (DB44/26-2001)	1.021t	2.44t/a	N/A
		NOx				≤30mg/m ³	Pollutant Emission Standard for Battery Industry (GB30484-2013)	4.46t	33.15t/a	
	Air pollutants	VOCs				VOCs≤30mg/m ³	VOC Emission Standard for Furniture Manufacturing Industry (DB44/814-2010)	1.231t	1.93t/a	
Yichang CSG Polysilicon Co., Ltd.	Water pollutants	COD	Intermittent	8	Sewage vent: Production plant area	≤70mg/L	Sewage Integrated Emission Standards (GB8978-1996), Integrated	28.63t	375.17t/a	N/A
		pH				6~9				
	Air pollutants	NOx				≤240mg/m ³	Emission Standard of Air Pollutants (GB16297-1996)	0.813t	38.28t/a	
		Particulates				≤240mg/m ³				

Treatment of pollutants

All subsidiaries have built pollution prevention and control facilities in accordance with the environmental impact assessment documents of construction projects and relevant specifications, and adopted air pollution control process such as electrostatic precipitator + SCR denitrification + semi-dry desulfurization + bag dust removal, ceramic filter cartridge desulfurization, denitrification and dust removal integration, bag dust removal and water treatment process such as neutralization + precipitation, fluidized bed, and biological oxidation, for which the technologies used were all in line with the requirements of the “Guidelines for Feasible Technologies for Pollution Prevention and Control in Glass Manufacturing Industry” and other documents. In 2022, the pollution control facilities were in good operation and the pollutants were discharged stably up to the standard. The air pollutant emission concentrations of most of the subsidiaries were lower than 50% of the emission standard and enjoyed the preferential policy of halving environmental tax. The pollutant emissions of many subsidiaries reached and implemented local ultra-low emission standards.

Emergency response plan system of environment incident

In accordance with the national requirements, all subsidiaries prepared environmental emergency response plans, organized expert evaluation and filed with the local environmental protection department as required, and conducted the emergency drill against environmental emergency as planned. No major environmental emergency occurred in 2022.

Environmental self-monitoring scheme

The subsidiaries have built and operated on-line monitoring devices for waste water and exhaust gas in accordance with national laws and regulations, environmental impact assessment documents of construction projects and the requirements of their replies, regularly carried out comparison and review of the effectiveness of on-line monitoring facilities, and entrusted a third-party unit to carry out manual environmental monitoring to comprehensively monitor the pollutant discharge. The monitoring frequency is implemented in accordance with relevant monitoring technical guidelines or pollutant discharge permits.

Investment in environmental governance and protection and payment of environmental protection tax

All subsidiaries have built pollution control facilities in accordance with the requirements of environmental impact assessment, and maintained the stable operation of these facilities to ensure their simultaneous operation with production equipment. Considerable energy and funds are invested in pollution control every year to ensure the stable discharge of pollutants up to the standard, and reduce pollution emission as much as possible. Many subsidiaries have reached ultra-low emission standards. All subsidiaries have made regular emission declarations and paid environmental taxes to the local tax authorities in full and on time in accordance with the requirements of the Environmental Protection Tax Law.

Measures taken to reduce carbon emissions during the report period and their effects

Applicable Not applicable

The Company has continuously strengthened the comprehensive utilization and management of resources and energy, actively fulfilled the corporate social responsibility, taken various measures to save energy and reduce carbon emissions, making our own contributions to the national goal of “Carbon Peaking” and “Carbon Neutrality”. The Group’s Operation Department has specially established an energy management team, which was responsible for supervising the energy consumption management of various subsidiaries, and promoted the energy consumption per unit product and carbon emission per unit product of the Group’s various products to reach the advanced level in the industry. At present, the energy consumption level of most glass melting furnaces in the flat glass business of CSG has reached the advanced level stipulated by the national standard. At the same time, CSG has always paid attention to the utilization of waste heat in flat glass factories, and each production base has built waste heat boilers and waste heat power stations; CSG has also been actively developing photovoltaic power plants, most of which have photovoltaic power stations on the roofs of factories. In 2022, CSG Group’s waste heat power generation and photovoltaic power generation totalled about 390 million kWh, equivalent to reducing carbon dioxide emissions by more than 220,000 tons.

Administrative penalties caused by environmental protection issues during the report period

Nil

Other environmental information that should be disclosed

Nil

Other relevant environmental protection information

Nil

Environmental incidents in the listed company

In 2022, no environmental incidents occurred.

II. Social responsibility

The 2022 Annual Social Responsibilities Report of CSG is the 15th social responsibility report released by the Company consecutively. Focusing on the year of 2022, the report systemically described the concrete actions of the Company to actively perform its social responsibilities and its efforts to implement the “Scientific Development Perspective”, build up a harmonious society, and advance the sustainable development of economy and society. See the full report on www.cninfo.com.cn.

III. Consolidate and expand the achievements of poverty alleviation and rural revitalization

During the report period, the Company and its subsidiaries actively carried out social welfare and poverty alleviation activities. For details, see the 2022 Annual Social Responsibilities Report of CSG disclosed on www.cninfo.com.cn.

Section VI. Important Events

I. Implementation of commitment

1. Commitments completed by the actual controllers, the shareholders, the related parties, the purchasers, the Company or the other related parties during the report period and those hadn't been completed execution by the end of the report period

√Applicable □ Not applicable

Commitments	Promisee	Type of commitments	Content of commitments	Commitment date	Commitment term	Implementation
Commitments for Share Merger Reform	Not Applicable					
Commitments in report of acquisition or equity change	Foresea Life Insurance Co., Ltd, Shenzhen Jushenghua Co., Ltd. and Chengtai Group Co., Ltd.	Commitment of horizontal competition, affiliate Transaction and capital occupation	Foresea Life Insurance Co., Ltd., Shenzhen Jushenghua Co., Ltd. and Chengtai Group Co., Ltd. issued detailed report of equity change on 29 June 2015, in which, they undertook to keep independent from CSG in aspects of personnel, assets, finance, organization set-up and business as long as Foresea Life Insurance remained the largest shareholder of CSG. Meanwhile, they made commitment on regularizing related transaction and avoiding industry competition.	2015-6-29	During the period when Foresea Life remains the largest shareholder of the Company	By the end of the report period, the above shareholders of the Company had strictly carried out their promises.
Commitments in assets reorganization	Not Applicable					
Commitments in initial public offering or re-financing	Not Applicable					
Equity incentive commitment	Not Applicable					
Other commitments for medium and small shareholders	Not Applicable					
Other commitments	Not Applicable					
Completed on time(Yes/No)	Yes					
If the commitments is not fulfilled on time, explain the reasons and the next work plan	Not applicable					

Note : Shenzhen Jushenghua Co., Ltd. transferred its 86,633,447 unrestricted tradable A shares of CSG Group to its wholly-owned

sub-subsidiary Zhongshan Runtian Investment Co., Ltd. through agreement transfer on March 16, 2020. Zhongshan Runtian Investment Co., Ltd. is obliged to continue to fulfill the commitments made by Shenzhen Jushenghua Co., Ltd. As of the end of the report period, the above-mentioned shareholders had strictly fulfilled the relevant commitments.

2. If there are assets or projects of the Company, which has profit forecast and the report period is still in forecasting period, the Company should explain reasons why they reach the original profit forecast

Applicable Not applicable

II. Particulars about non-operating fund of listed company which is occupied by controlling shareholder and its affiliated enterprises

Applicable Not applicable

III. Illegal external guarantee

Applicable Not applicable

The Company had no illegal external guarantee during the report period.

IV. Explanation from the Board of Directors for the latest “Non-standard audit report”

Applicable Not applicable

V. Explanation from Board of Directors, Supervisory Committee and Independent Directors (if applicable) for “Non-standard audit report” of the period that issued by CPA

Applicable Not applicable

VI. Explanation of changes in accounting policies, accounting estimates or correction of significant accounting errors compared with the financial report of the previous year

Applicable Not applicable

The content and reason of accounting policy change	Approval procedures
<p>On 31 December 2021, the Ministry of Finance issued the Notice by the Ministry of Finance of Issuing the Interpretation No. 15 of the Accounting Standards for Business Enterprises (C.K. [2021] No. 35) (hereinafter referred to as “Standard Interpretation No. 15”), which clarified the accounting treatment of external sales of products or by-product produced by the enterprise before the fixed assets reach the intended usable state or during the research and development process and judgement on loss-making contracts. Contents of “accounting treatment of external sales of products or by-product produced by the enterprise before the fixed assets reach the intended usable state or during the research and development process” and “judgment on loss-making contracts” of Standard Interpretation No. 15 came into force on 1 January 2022. The change has no material impact on the Company’s financial condition and operation results during the report period.</p>	<p>On 28 April 2022, the Board of Directors of the Company reviewed and passed the Proposal on Accounting Policy Changes.</p>

<p>On 30 November 2022, the Ministry of Finance issued the Notice by the Ministry of Finance of Issuing the Interpretation No. 16 of Accounting Standards for Business Enterprises (C.K. [2022] No. 31) (hereinafter referred to as “Standard Interpretation No. 16”). The contents of “accounting treatment of the income tax effect of financial instrument related dividend whose issuer is classified as equity instrument” and “accounting treatment of share-based payment in cash settlement modified into share-based payment in equity settlement by the enterprise” were required to come into force on the issuance date. And the regulations of “accounting treatment for deferred income tax relating to assets and liabilities arising from a single transaction that is not subject to the initial recognition exemption” came into force on 1 January 2023. The change has no material impact on the Company’s financial condition and operation results during the report period.</p>	<p>On 24 April 2023, the Board of Directors of the Company reviewed and passed the Proposal on Accounting Policy Changes.</p>
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VII. Description of changes in consolidation statement’s scope compared with the financial report of the previous year

Applicable Not applicable

On 14 February 2022, the Group set up a subsidiary, Yichang CSG New Energy Materials Technology Co., Ltd. (referred to as “Yichang New Energy Materials Company”). As of 31 December 2022, the Group has invested RMB 1,200,000. The Group owns 100% of its equity.

On 1 July 2022, the Group set up a subsidiary, Dongguan CSG Intelligent Equipment Manufacturing Co., Ltd. (referred to as “Dongguan Intelligent Equipment Company”). As of 31 December 2022, the Group has invested RMB 2.5 million. The Group owns 100% of its equity.

On 14 July 2022, the Group set up a subsidiary, Anhui CSG Photovoltaic Energy Co., Ltd. (referred to as “Anhui Photovoltaic Energy Company”). As of 31 December 2022, the Group has not invested yet. The Group owns 100% of its equity.

On 14 July 2022, the Group set up a subsidiary, Shenzhen CSG Quartz Material Industry Co., Ltd. (referred to as “Shenzhen Quartz Company”). As of 31 December 2022, the Group has invested RMB 3 million. The Group owns 100% of its equity.

On 4 August 2022, the Group set up a subsidiary, Guangxi CSG Quartz Material Co., Ltd. (referred to as “Guangxi Quartz Company”). As of 31 December 2022, the Group has invested RMB 2,995,000. The Group owns 100% of its equity.

VIII. Engaging and dismissing of CPA firm

CPA firm engaged

Name of domestic CPA firm	Asia Pacific (Group) CPAs (special general partnership)
Remuneration for domestic CPA firm (RMB 0,000)	270
Continuous life of auditing service for domestic CPA firm	5
Name of domestic CPA	Wang Donglan, Wei Jian
Continuous life of auditing service for domestic CPA	Wang Donglan (1 year), Wei Jian (1 year)

Whether changed accounting firms in this period or not

Yes No

Appointment of internal control auditing accounting firm, financial consultant or sponsor

Applicable Not applicable

Asia Pacific (Group) CPAs (special general partnership) was engaged as audit institute of internal control for the Company in the report period, and contracted charges was RMB 0.30 million (cost of business trips and accommodation at its own expense).

IX. Delisting after the disclosure of the annual report

Applicable Not applicable

X. Issues related to bankruptcy and reorganization

Applicable Not applicable

There were no bankruptcy or restructuring related matters during the reporting period of the company.

XI. Significant lawsuits and arbitrations

Applicable Not applicable

Basic information	Amount involved (RMB 0,000)	Recognised as estimated liabilities or not	Progress	Result and impact	Judgement execution	Date of disclosure	Index of disclosure
Plaintiff: Zhongshan Runtian Investment Co., Ltd. Defendant: China South Glass Group Co., Ltd. Case overview: The plaintiff filed a lawsuit with the court to confirm the resolutions of the General Meeting of Shareholders as invalid.	0	No	First instance	On 10 February 2023, Shenzhen Nanshan District People's Court had opened a court session for the case, and the Group is waiting for judgement.	Nil	1 October 2022	Announcements on Company Involved Lawsuits on http://www.cninfo.com.cn (Announcement No.: 2022-056)

XII. Penalty and rectification

Applicable Not applicable

There were no penalties or rectifications during the report period of the Company.

XIII. Integrity of the Company and its controlling shareholders and actual controllers

Applicable Not applicable

The Company has no controlling shareholder and actual controller. According to the disclosure requirements, the Company's largest shareholder Foresea Life Insurance Co., Ltd., shareholder Zhongshan Runtian Investment Co., Ltd. and shareholder Chengtai Group Co., Ltd. shall disclose the corresponding information. The details are as follows:

i. Integrity of the Company

During the report period, it did not exist that the Company failed to perform the effective judgment of the court or owed comparatively large amount of debt which was overdue. The Company's integrity was good.

ii. The integrity of the Company's shareholders

1. According to the reply of the Company's largest shareholder, Foresea Life Insurance Co., Ltd.: As of 31 December 2022, it did not exist that Foresea Life Insurance Co., Ltd. failed to perform the effective judgment of the court or owed comparatively large amount of debt which was overdue.

2. According to the reply of the shareholder Zhongshan Runtian Investment Co., Ltd., the original content is as follows:

As of 31 December 2022, the cases executed by Zhongshan Runtian Investment Co., Ltd. (hereinafter referred to as "Zhongshan Runtian") are as follows:

(1) Due to the case of execution of notarising creditor's rights documents between Great Wall Guoxing Financial Leasing Co., Ltd. and 16 companies including Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Baoneng Real Estate Co., Ltd. and Zhongshan Runtian Investment Co., Ltd., Great Wall Guoxing Financial Leasing Co., Ltd. applied to the court for compulsory execution. As the guarantor of the debt of RMB164 million, Zhongshan Runtian was jointly and severally liable for the debt, and its 5.57 million shares of Jonjee High-tech were used as collateral. At present, Great Wall Guoxing Financial Leasing Co., Ltd. has applied for compulsory execution and has frozen 5.57 million shares of Jonjee High-tech.

(2) Due to the case of notarising creditor's rights documents between Chongqing Xinyu Financial Leasing Co., Ltd. and the defendants Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Baoneng Automobile Co., Ltd., and Zhongshan Runtian, Chongqing Xinyu Financial Leasing Co., Ltd. applied to the court for compulsory execution. As the guarantor of the debt of RMB260 million, Zhongshan Runtian used its 67.65 million A shares of CSG as collateral. As of 29 June 2022, it has disposed of 55,628,900 A shares of CSG, with a total amount of RMB319,999,300.

(3) Due to the case of notarising creditor's rights documents between Guangdong Finance Trust Co., Ltd. and Zhongshan Runtian, Shenzhen Jushenghua Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Baoneng Holdings (China) Co., Ltd., and Mr. Yao Zhenhua, Finance Trust applied to the court for compulsory execution. The 26,550,000 shares of Jonjee High-tech held by Zhongshan Runtian Investment Co., Ltd. have been sold on 13 September 2022, and the amount credited into the account was RMB793,755,369.22, which was approximately RMB90 million different from the debt amount of RMB882,199,570.79 submitted to the court by the execution applicant. As a result, the case remained unsettled.

(4) Due to the dispute over the financial loan contract between AVIC Trust Co., Ltd. and Zhongshan Runtian, Zhongshan Runtian, as the borrower of the debt principal of RMB1.05 billion, and Hefei Baohui Real Estate Co., Ltd., Hefei Baoneng Real Estate Development Co., Ltd., Shenzhen Jushenghua Co., Ltd., Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Chia Tai (Shenzhen) Development Co., Ltd. and Mr. Yao Zhenhua were jointly and severally liable for the debt. As of 16 November 2022, it has disposed of 8,056,410 shares of Jonjee High-tech, with 20.87 million shares remaining.

(5) Due to the case of execution of notarising creditor's rights documents between Chongqing International Trust Co., Ltd. and Shenzhen Jushenghua Co., Ltd., Zhongshan Runtian, Shenzhen Baoneng Investment Group Co., Ltd. and Mr. Yao Zhenhua, the court ruled to seal up and freeze the property of RMB541 million of Jushenghua, Baoneng Group and Yao Zhenhua, and to freeze the 22 million shares of Jonjee High-tech pledged by Zhongshan Runtian to Chongqing Trust. At present, Chongqing Trust has applied for compulsory execution. As of 2 February 2023, it has disposed of 21,025,100 shares of Jonjee High-tech, with a total amount of RMB617,383,579.06.

As of 31 December 2022, the details of Zhongshan Runtian's comparatively large amount of debt which was overdue are as follows:

Serial number	Borrower	Financial institution	Loan amount (RMB 0,000)	Credit enhancement plan	Start date of loan	Maturity date of loan
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1	Zhongshan Runtian Investment Co., Ltd.	Essence Securities	32,923.86	Guarantee+Pledge	2018/12/27	2021/12/26
2	Zhongshan Runtian Investment Co., Ltd.	AVIC Trust	91,633.71	Guarantee+Pledge	2019/9/25	2021/10/31
3	Zhongshan Runtian Investment Co., Ltd.	Baotai Honghua Investment	90,500	Guarantee	2021/3/15	2021/12/31
Total			215,057.57			

As of 31 December 2022, Mr. Yao Zhenhua's personal execution cases are as follows:

- (1) Due to the case of dispute over notarising creditor's rights documents between Ping An Trust Co., Ltd. and Shaoxing Baorui Real Estate Co., Ltd., Baoneng City Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Baoneng Real Estate Co., Ltd., Shanghai Kaiyue Investment Co., Ltd. and Mr. Yao Zhenhua, which was applied for compulsory execution by Ping An Trust, Mr. Yao Zhenhua was jointly and severally liable for the principal and interest of the debt of RMB420 million.
- (2) Due to the trust loan dispute between the National Trust and Shenzhen Xinao Trading Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Mr. Yao Zhenhua and others signed relevant guarantee contracts, ordering Shenzhen Xinao Trading Co., Ltd. to repay the loan principal of RMB290 million and related interest and lawsuit costs. Shenzhen Baoneng Investment Group Co., Ltd., Mr. Yao Zhenhua and others were jointly and severally liable for the debt.
- (3) Due to the financial borrowing between Zhongrong International Trust Co., Ltd. and Baoneng Automobile Co., Ltd., it applied to the Beijing Third Intermediate People's Court for compulsory execution for notarisation on the matter. Since Mr. Yao Zhenhua provided a guarantee for this loan business and signed the relevant notarised documents, he was jointly and severally liable for the debt of RMB1048 million.
- (4) As Kunlun Trust Co., Ltd. applied to the court for compulsory execution of the notarising creditor's rights documents with Shum Yip Logistics Group Co., Ltd., Baoneng Century Co., Ltd., Chia Tai (Shenzhen) Development Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Baoneng Holdings (China) Co., Ltd., and Mr. Yao Zhenhua, Mr. Yao Zhenhua assumed joint and several guarantee liabilities for the debt of RMB1.31 billion.
- (5) Due to the case of notarising creditor's rights documents between Guangzhou Xinhua City Development Industry Investment Enterprise (Limited Partnership) and the defendants Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd. and Mr. Yao Zhenhua, Mr. Yao Zhenhua, as the guarantor, signed the relevant notarial documents and assumed joint and several liabilities for the principal and interest of the creditor's rights of RMB600 million.
- (6) Due to the dispute over the loan contract between Fuzhou Branch of Xiamen International Bank Co., Ltd. and Shenzhen Jushenghua Co., Ltd., Fuzhou Branch of Xiamen International Bank Co., Ltd. applied to Shenzhen Intermediate People's Court for compulsory execution. Mr. Yao Zhenhua, as the guarantor of the loan principal of RMB2.16 billion, signed the corresponding Guarantee Contract and assumed joint and several liabilities for the debt.
- (7) Due to the financial loan dispute between Guangdong Finance Trust Co., Ltd. and Zhongshan Runtian, Guangdong Finance Trust Co., Ltd. applied to Shenzhen Intermediate People's Court for compulsory execution. Mr. Yao Zhenhua, as the guarantor of the loan, signed the corresponding Guarantee Contract and was jointly and severally liable for the debt of RMB720 million.
- (8) Due to the financial debt dispute between China Railway Trust Co., Ltd. and Baoneng Automobile Group Co., Ltd. and Kunming Baojun Real Estate Co., Ltd., it applied to Chengdu Intermediate People's Court of Sichuan Province for compulsory execution. As the guarantor of the debt, Mr. Yao Zhenhua signed the corresponding Guarantee Contract and was jointly and severally liable for the debt of RMB2,063 million.

(9) Due to the financial debt dispute between China Railway Trust Co., Ltd. and Baoneng Automobile Group Co., Ltd. and Kunming Jianpeng Real Estate Development Co., Ltd., it applied to Chengdu Intermediate People's Court of Sichuan Province for compulsory execution. Mr. Yao Zhenhua, as the guarantor of the debt, signed the corresponding Guarantee Contract and was jointly and severally liable for the debt of RMB836 million.

(10) Due to the case of notarising creditor's rights documents between Changan International Trust Co., Ltd. and Shenzhen Baoneng Investment Group Co., Ltd., Wuxi Baoneng Real Estate Co., Ltd., Baoneng Holdings (China) Co., Ltd., Shenzhen Jushenghua Co., Ltd., and Mr. Yao Zhenhua, Changan Trust applied for compulsory execution. Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB925 million.

(11) Due to the case of notarising creditor's rights documents between Changan International Trust Co., Ltd. and Shenzhen Baoneng Investment Group Co., Ltd., Wuxi Baoneng Real Estate Co., Ltd., Baoneng Holdings (China) Co., Ltd., Shenzhen Jushenghua Co., Ltd., and Mr. Yao Zhenhua, Changan Trust applied for compulsory execution. Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB1,117 million.

(12) Due to the case of notarising creditor's rights documents between China Minsheng Trust Co., Ltd. and the defendants Shenzhen Baoneng Investment Group Co., Ltd., Hefei Baohui Real Estate Co., Ltd., Shenzhen Baoneng Enterprise Management Co., Ltd., Anhui Baoneng Land Co., Ltd., and Mr. Yao Zhenhua, Minsheng Trust applied for compulsory execution. As the guarantor of the debt, Mr. Yao Zhenhua was jointly and severally liable for the debt of RMB4,207 million.

(13) Due to the case of notarising creditor's rights documents between Shanghai Aijian Trust Co., Ltd. and Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Chia Tai (Shenzhen) Development Co., Ltd., Hefei Baohui Real Estate Co., Ltd., Hefei Baoneng Real Estate Development Co., Ltd., Shenzhen Jushenghua Co., Ltd., and Mr. Yao Zhenhua, Aijian Trust applied to the court for compulsory execution. As the guarantor of the debt, Mr. Yao Zhenhua was jointly and severally liable for the debt of RMB417 million.

(14) Due to the dispute over the loan contract with Baoneng Automobile Group Co., Ltd., Chongqing International Trust applied to the court for compulsory execution, and Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB2,186 million.

(15) Due to the case of notarising creditor's rights documents between China Minsheng Trust Co., Ltd. and Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd., and Mr. Yao Zhenhua, Minsheng Trust applied to the court for compulsory execution, and Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB496 million.

(16) Due to the case of China Minsheng Trust Co., Ltd., Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd. and Mr. Yao Zhenhua, Minsheng Trust applied to the court for compulsory execution, and Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB2,238 million.

(17) Due to the financial loan contract dispute between AVIC Trust Co., Ltd. and Shenzhen Lingdao Auto Life Service Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd., Shenzhen Shum Yip Logistics Group Co., Ltd., Tengchong Baoneng Real Estate Co., Ltd., Zhejiang Jintian Real Estate Development Co., Ltd., Tengchong Beihai Wetland Ecotourism Investment Co., Ltd., and Mr. Yao Zhenhua, AVIC Trust applied to the court for compulsory execution, and Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB984 million.

(18) Due to the financial loan contract dispute between AVIC Trust Co., Ltd. and Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd., Baoneng Real Estate Co., Ltd., and Wuhu

Baoneng Real Estate Co., Ltd., Baoneng City Co., Ltd., Tengchong Beihai Wetland Eco-Tourism Investment Co., Ltd., and Mr. Yao Zhenhua, AVIC Trust applied to the court for execution. Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB563 million.

(19) Due to the loan contract dispute between Shenzhen Branch of Ping An Bank Co., Ltd. and Shenzhen Shum Yip Logistics Group Co., Ltd., Shenzhen Jushenghua Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Baoneng Real Estate Co., Ltd., Shenzhen First Space Operation Management Co., Ltd., Mr. Yao Zhenhua and Baoneng City Co., Ltd., Shenzhen Branch applied to the court for execution. Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB3,433 million.

(20) Due to the execution of lawsuit costs of the loan contract dispute between Shenzhen Branch of Ping An Bank Co., Ltd. and Baoneng City Co., Ltd., Baoneng Real Estate Co., Ltd., Baoneng Holdings (China) Co., Ltd., Mr. Yao Zhenhua and Shenzhen Liujin Investment Co., Ltd., the Higher People's Court of Guangdong Province appointed Shenzhen Intermediate People's Court of Guangdong Province to execute the case. Mr. Yao Zhenhua, as the guarantor of the loan contract dispute, was jointly and severally liable for the lawsuit costs of RMB13,920,800 arising from the loan contract dispute.

(21) Due to the loan contract dispute between Shenzhen Branch of Ping An Bank Co., Ltd. and Baoneng City Co., Ltd., Baoneng Real Estate Co., Ltd., Baoneng Holdings (China) Co., Ltd., Mr. Yao Zhenhua and Shenzhen Liujin Investment Co., Ltd., Shenzhen Branch of Ping An Bank Co., Ltd. applied to the court for execution. Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB5,562 million.

(22) Due to the case of execution of notarising creditor's rights documents between Chongqing International Trust Co., Ltd. and Shenzhen Jushenghua Co., Ltd., Zhongshan Runtian, Shenzhen Baoneng Investment Group Co., Ltd., and Mr. Yao Zhenhua, Chongqing International Trust Co., Ltd. applied to the court for execution, and Mr. Yao Zhenhua, as the guarantor of the debt, was jointly and severally liable for the debt of RMB541 million.

(23) Due to the case that Tibet Bank Co., Ltd. sued Lhasa Baochuang Automobile Sales Co., Ltd., Mr. Yao Zhenhua, Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd., and Shenzhen Shum Yip Logistics Group Co., Ltd. were jointly and severally liable for the lawsuit costs of the loan contract dispute, which was executed by the Lhasa Intermediate People's Court of the Tibet Autonomous Region, Mr. Yao Zhenhua, as the guarantor of the loan contract dispute, was jointly and severally liable for the lawsuit costs of RMB4,186,700 arising from the loan contract dispute.

(24) Due to the case that Tibet Bank Co., Ltd. sued Lhasa Baochuang Automobile Sales Co., Ltd., Mr. Yao Zhenhua, Shenzhen Baoneng Investment Group Co., Ltd., Shenzhen Jushenghua Co., Ltd. and Shenzhen Shum Yip Logistics Group Co., Ltd. were jointly and severally liable for the debts arising from the loan contract dispute and were executed by Lhasa Intermediate People's Court of the Tibet Autonomous Region. Mr. Yao Zhenhua, as the guarantor of the loan contract dispute, was jointly and severally liable for the debt of RMB829 million arising from the loan contract dispute, which has been paid off.

(25) Due to the case that Chongqing International Trust Co., Ltd. sued Baoneng Automobile Group Co., Ltd., Nanjing Baoneng Urban Development Co., Ltd., Shenzhen Baoneng Investment Group Co., Ltd., Baoneng Holdings (China) Co., Ltd. and Yao Zhenhua, as the guarantor of the debt, Mr. Yao Zhenhua was executed by the Chongqing No. 5 Intermediate People's Court, and he was jointly and severally liable for the debt of RMB2,121 million. Mr. Yao Zhenhua had no debt with comparatively large amount that had not been paid when due.

3. According to the reply of the shareholder Chengtai Group Co., Ltd.: As of 31 December 2022, Chengtai Group Co., Ltd. has not received relevant information on share freezing and lawsuit, and it had no debt with comparatively large amount that had not been paid when due.

XIV. Major related transaction

1. Related transaction with routine operation concerned

Applicable Not applicable

There were no related transactions related to daily operations during the report period of the Company.

2. Related transaction with acquisition of assets or equity, sales of assets or equity concerned

Applicable Not applicable

There were no related party transactions related to asset or equity acquisitions or sales during the report period of the Company.

3. Related transaction with jointly external investment concerned

Applicable Not applicable

During the report period, the Company did not engage in any related party transactions related to joint external investment.

4. Credits and liabilities with related parties

Applicable Not applicable

There were no related debt or debt transactions during the report period of the Company.

5. Transactions with related financial companies

Applicable Not applicable

There was no deposit, loan, credit or other financial business between the Company and its affiliated financial companies and related parties.

6. Transactions between financial companies controlled by the company and related parties

Applicable Not applicable

There was no deposit, loan, credit or other financial business between the financial company controlled by the Company and its affiliated parties.

7. Other major related transaction

Applicable Not applicable

There were no other significant related party transactions during the report period of the Company.

XV. Significant contracts and their implementation

1. Trusteeship, contracting and leasing

(1) Trusteeship

Applicable Not applicable

There was no custody situation during the report period of the Company.

(2) Contract

Applicable Not applicable

There was no contracting situation during the Company's report period.

(3) Leasing

Applicable Not applicable

There was no leasing situation during the report period of the Company.

2. Major guarantees

Applicable Not applicable

Unit: RMB 0,000

External guarantees of the Company and its subsidiaries (excluding the guarantees for subsidiaries)										
Name of guarantee object	Date of disclosure of related announcement on guarantee amount	Guarantee amount	Actual date of guarantee	Actual amount of guarantee	Guarantee type	Collateral (if any)	Counter guarantee circumstance (if any)	Guaranty period	Complete implementation or not	Guarantee for related party or not
Total amount of approved external guarantees during the report period (A1)				0	Total actual amount of external guarantees during the report period (A2)					0
Total amount of approved external guarantees at the end of the report period (A3)				0	Total balance of actual external guarantees at the end of the report period (A4)					0
Guarantees of the Company for its subsidiaries										
Name of guarantee object	Date of disclosure of related announcement on	Guarantee amount	Actual date of guarantee	Actual amount of guarantee	Guarantee type	Collateral (if any)	Counter guarantee circumstance (if any)	Guaranty period	Complete implementation or not	Guarantee for related party or not

	guarantee amount									
Xianning CSG Photovoltaic Glass Co., Ltd.	25 April 2022	6,000	26 May 2022	2,946	Joint liability guarantee	None	None	1 year	No	No
Xianning CSG Photovoltaic Glass Co., Ltd.	25 April 2022	5,000	25 November 2022	0	Joint liability guarantee	None	None	1 year	No	No
Xianning CSG Energy-Saving Glass Co., Ltd.	25 April 2022	5,000	27 May 2022	3,480	Joint liability guarantee	None	None	1 year	No	No
Xianning CSG Energy-Saving Glass Co., Ltd.	25 April 2022	5,000	25 May 2022	0	Joint liability guarantee	None	None	1 year	No	No
Yichang CSG Photovoltaic Glass Co., Ltd.	19 February 2021	1,824	19 March 2021	1,200	Joint liability guarantee	None	None	1 year	Yes	No
Yichang CSG Photovoltaic Glass Co., Ltd.	25 April 2022	608	4 July 2022	600	Joint liability guarantee	None	None	1 year	No	No
Yichang CSG Photovoltaic Glass Co., Ltd.	10 August 2021	1,824	17 December 2021	1,000	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG PV-tech Co., Ltd.	10 August 2021	3,000	29 November 2021	2,957	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG PV-tech Co., Ltd.	10 August 2021	10,000	13 August 2021	923	Joint liability guarantee	None	None	1 year	Yes	No
Hebei Panel Glass Co., Ltd.	19 February 2021	3,000		0	Joint liability guarantee	None	None	1 year	Yes	No
Hebei Panel Glass Co., Ltd.	25 April 2022	5,000	8 June 2022	512	Joint liability guarantee	None	None	1 year	No	No
Hebei Panel Glass Co., Ltd.	25 April 2022	2,500	16 May 2022	0	Joint liability guarantee	None	None	3 years	No	No
Hebei Panel Glass Co., Ltd.	30 October 2021	16,500	17 December 2021	11,118	Joint liability guarantee	None	None	5 years	No	No
Hebei CSG Glass Co., Ltd.	19 February 2021	5,000		0	Joint liability guarantee	None	None	1 year	Yes	No
Hebei CSG Glass Co., Ltd.	25 April 2022	16,000	8 June 2022	6,801	Joint liability guarantee	None	None	1 year	No	No
Hebei CSG Glass Co., Ltd.	25 April 2022	2,500	16 May 2022	0	Joint liability guarantee	None	None	3 years	No	No
Dongguan CSG Architectural Glass Co., Ltd.	29 June 2021	5,000	13 September 2021	196	Joint liability guarantee	None	None	2 years	No	No
Dongguan CSG Architectural Glass Co., Ltd.	25 April 2022	10,000	17 May 2022	1,000	Joint liability guarantee	None	None	1 year	No	No

Dongguan CSG Architectural Glass Co., Ltd.	30 October 2021	10,000	18 May 2021	1,631	Joint liability guarantee	None	None	1 year	Yes	No
Xianning CSG Glass Co., Ltd.	25 April 2022	7,000	27 May 2022	4,455	Joint liability guarantee	None	None	1 year	No	No
Xianning CSG Glass Co., Ltd.	25 December 2021	15,000	1 March 2022	9,000	Joint liability guarantee	None	None	7 years	No	No
Xianning CSG Glass Co., Ltd.	25 December 2021	50,000	9 March 2022	27,476	Joint liability guarantee	None	None	7 years	No	No
Xianning CSG Glass Co., Ltd.	29 June 2021	20,000	7 July 2021	16,814	Joint liability guarantee	None	None	5 years	No	No
Chengdu CSG Glass Co., Ltd.	25 December 2021	5,000	17 February 2022	3,000	Joint liability guarantee	None	None	1 year	No	No
Chengdu CSG Glass Co., Ltd.	25 April 2022	10,000	16 November 2022	0	Joint liability guarantee	None	None	1 year	No	No
Chengdu CSG Glass Co., Ltd.	25 April 2022	5,000	25 November 2022	3,000	Joint liability guarantee	None	None	1 year	No	No
Chengdu CSG Glass Co., Ltd.	25 April 2022	5,000	25 November 2022	0	Joint liability guarantee	None	None	3 years	No	No
Chengdu CSG Glass Co., Ltd.	19 February 2021	5,000	8 March 2021	0	Joint liability guarantee	None	None	1 year	Yes	No
Sichuan CSG Energy Conservation Glass Co., Ltd.	25 December 2021	8,000	15 April 2022	4,200	Joint liability guarantee	None	None	1 year	No	No
Sichuan CSG Energy Conservation Glass Co., Ltd.	25 April 2022	10,000	6 June 2022	5,000	Joint liability guarantee	None	None	1 year	No	No
Sichuan CSG Energy Conservation Glass Co., Ltd.	8 June 2021	5,000	24 August 2021	0	Joint liability guarantee	None	None	1 year	Yes	No
Wujiang CSG Glass Co., Ltd.	19 February 2021	10,000	12 March 2021	8,634	Joint liability guarantee	None	None	4 years	No	No
Wujiang CSG Glass Co., Ltd.	25 April 2022	10,000	18 May 2022	8,166	Joint liability guarantee	None	None	1 year	No	No
Wujiang CSG Glass Co., Ltd.	25 December 2021	10,000	17 February 2022	747	Joint liability guarantee	None	None	1 year	Yes	No
Wujiang CSG Glass Co., Ltd.	19 February 2021	5,000	8 March 2021	0	Joint liability guarantee	None	None	1 year	Yes	No
Wujiang CSG Glass Co., Ltd.	8 June 2021	5,000	26 September 2021	1,000	Joint liability guarantee	None	None	1 year	No	No
Wujiang CSG Glass Co., Ltd.	19 February 2021	10,000	26 March 2021	0	Joint liability guarantee	None	None	1 year	Yes	No

Wujiang CSG East China Architectural Glass Co., Ltd.	5 December 2020	10,000	9 December 2020	0	Joint liability guarantee	None	None	1 year	Yes	No
Wujiang CSG East China Architectural Glass Co., Ltd.	25 April 2022	7,000	18 May 2022	807	Joint liability guarantee	None	None	1 year	No	No
Wujiang CSG East China Architectural Glass Co., Ltd.	19 February 2021	12,400	19 May 2021	2,572	Joint liability guarantee	None	None	5 years	Yes	No
Wujiang CSG East China Architectural Glass Co., Ltd.	25 April 2022	12,400	26 May 2022	3,369	Joint liability guarantee	None	None	5 years	No	No
Wujiang CSG East China Architectural Glass Co., Ltd.	25 December 2021	3,000		0	Joint liability guarantee	None	None	2 years	No	No
Dongguan CSG Solar Glass Co., Ltd.	10 August 2021	10,000	13 September 2021	3,460	Joint liability guarantee	None	None	1 year	Yes	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022	5,000	21 July 2022	4,986	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022	4,000	21 July 2022	523	Joint liability guarantee	None	None	5 years	No	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022	10,000	17 May 2022	5,000	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG Solar Glass Co., Ltd.	30 October 2021	20,000	25 December 2020	2,000	Joint liability guarantee	None	None	1 year	Yes	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022	8,000	7 June 2022	0	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022	9,000	31 May 2022	2,371	Joint liability guarantee	None	None	4 years	No	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022	6,000	11 August 2022	0	Joint liability guarantee	None	None	1 year	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	25 April 2022	6,330	18 October 2022	230	Joint liability guarantee	None	None	1 year	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	10 August 2021	4,500	7 September 2021	0	Joint liability guarantee	None	None	1 year	Yes	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	25 April 2022	10,000	17 May 2022	3,000	Joint liability guarantee	None	None	1 year	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	25 December 2021	5,000	2 December 2022	0	Joint liability guarantee	None	None	1 year	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	25 April 2022	37,400	04 August 2022	0	Joint liability guarantee	None	None	5 years	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	10 December 2019	5,000	26 April 2020	0	Joint liability guarantee	None	None	1 year	Yes	No

Qingyuan CSG Energy-Saving New Materials Co., Ltd.	25 April 2022	5,000	14 September 2022	4,400	Joint liability guarantee	None	None	1 year	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	10 December 2019	50,000	26 April 2020	10,524	Joint liability guarantee	None	None	5 years	Yes	No
Yichang CSG Display Co., Ltd.	30 October 2021	3,000	1 December 2021	2,943	Joint liability guarantee	None	None	1 year	No	No
Yichang CSG Display Co., Ltd.	25 April 2022	3,000	24 June 2022	2,750	Joint liability guarantee	None	None	1 year	No	No
Tianjin CSG Energy-Saving Glass Co., Ltd.	25 April 2022	3,000	31 May 2022	2,990	Joint liability guarantee	None	None	1 year	No	No
Tianjin CSG Energy-Saving Glass Co., Ltd.	25 April 2022	5,000	21 June 2022	3,317	Joint liability guarantee	None	None	1 year	No	No
Tianjin CSG Energy-Saving Glass Co., Ltd.	19 February 2021	7,000	23 March 2021	5,817	Joint liability guarantee	None	None	4 years	No	No
Tianjin CSG Energy-Saving Glass Co., Ltd.	29 June 2021	2,000	26 November 2021	1,124	Joint liability guarantee	None	None	1 year	No	No
Anhui CSG New Energy Material Technology Co., Ltd.	10 August 2021	70,000	19 October 2021	37,822	Joint liability guarantee	None	None	6 years	No	No
Anhui CSG New Energy Material Technology Co., Ltd.	10 August 2021	180,000	28 August 2021	101,639	Joint liability guarantee	None	None	7 years	No	No
Anhui CSG New Energy Material Technology Co., Ltd.	25 April 2022	35,000	26 July 2022	15,536	Joint liability guarantee	None	None	1 year	No	No
Anhui CSG New Energy Material Technology Co., Ltd.	25 December 2021	50,000	30 March 2022	23,752	Joint liability guarantee	None	None	9 years	No	No
Anhui CSG Silicon Valley Mingdu Mining Development Co., Ltd.	25 April 2022	24,000	21 July 2022	24,000	Joint liability guarantee	None	None	10 years	No	No
Anhui CSG Quartz Materials Co., Ltd.	29 June 2021	9,000	13 September 2021	7,196	Joint liability guarantee	None	None	5 years	No	No
Guangxi CSG New Energy Materials Tech Co., Ltd.	25 April 2022	30,000	11 June 2022	0	Joint liability guarantee	None	None	3 years	No	No
Guangxi CSG New Energy Materials Tech Co., Ltd.	25 April 2022	80,000	26 July 2022	5,748	Joint liability guarantee	None	None	7 years	No	No
Zhaoqing CSG Energy-Saving Glass Co., Ltd.	25 April 2022	5,000	30 May 2022	1,000	Joint liability guarantee	None	None	3 years	No	No
Zhaoqing CSG Energy-Saving Glass Co., Ltd.	22 September 2020	34,000	25 September 2020	24,059	Joint liability guarantee	None	None	5 years	No	No

Dongguan CSG Architectural Glass Co., Ltd.	25 April 2022	48,000	22 June 2022	2,256	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG Solar Glass Co., Ltd.	25 April 2022		22 June 2022	2,073	Joint liability guarantee	None	None	1 year	No	No
Dongguan CSG PV-tech Co., Ltd.	25 April 2022		22 June 2022	1,121	Joint liability guarantee	None	None	1 year	No	No
Qingyuan CSG Energy-Saving New Materials Co., Ltd.	29 June 2021		1 July 2021	0	Joint liability guarantee	None	None	1 year	Yes	No
Anhui CSG New Energy Material Technology Co., Ltd.	25 April 2022		22 June 2022	2,595	Joint liability guarantee	None	None	1 year	No	No
Wujiang CSG Glass Co., Ltd.	25 April 2022		22 June 2022	426	Joint liability guarantee	None	None	1 year	No	No
Chengdu CSG Glass Co., Ltd.	25 April 2022		22 June 2022	900	Joint liability guarantee	None	None	1 year	No	No
Sichuan CSG Energy Conservation Glass Co., Ltd.	25 April 2022		22 June 2022	309	Joint liability guarantee	None	None	1 year	No	No
Xianning CSG Glass Co., Ltd.	25 April 2022		22 June 2022	2,424	Joint liability guarantee	None	None	1 year	No	No
Xianning CSG Energy-Saving Glass Co., Ltd.	25 April 2022		22 June 2022	197	Joint liability guarantee	None	None	1 year	No	No
Wujiang CSG East China Architectural Glass Co., Ltd.	25 April 2022		22 June 2022	1,668	Joint liability guarantee	None	None	1 year	No	No
Tianjin CSG Energy-Saving Glass Co., Ltd.	25 April 2022		22 June 2022	462	Joint liability guarantee	None	None	1 year	No	No
Hebei Panel Glass Co., Ltd.	24 June 2020				Joint liability guarantee	None	None	1 year	Yes	No
Dongguan CSG Jingyu New Materials Co., Ltd.	25 February 2020				Joint liability guarantee	None	None	1 year	Yes	No
Zhaoqing CSG Energy-Saving Glass Co., Ltd.	25 April 2022		22 August 2022	305	Joint liability guarantee	None	None	1 year	No	No
Total amount of approved guarantees for subsidiaries during the report period (B1)			457,738	Total actual amount of guarantees for subsidiaries during the report period (B2)						198,151
Total amount of approved guarantees for subsidiaries at the end of the report period (B3)			960,062	Total balance of actual guarantees for subsidiaries at the end of the report period (B4)						420,470

Guarantees of subsidiaries for their subsidiaries										
Name of guarantee object	Date of disclosure of related announcement on guarantee amount	Guarantee amount	Actual date of guarantee	Actual amount of guarantee	Guarantee type	Collateral (if any)	Counter guarantee circumstance (if any)	Guaranty period	Complete implementation or not	Guarantee for related party or not
Total amount of approved guarantees for subsidiaries during the report period (C1)				Total actual amount of guarantees for subsidiaries during the report period (C2)						0
Total amount of approved guarantees for subsidiaries at the end of the report period (C3)				Total balance of actual guarantees for subsidiaries at the end of the report period (C4)						0
Total amount of the Company's guarantees (i.e., the sum of the first three items)										
Total amount of approved guarantees during the report period (A1+B1+C1)			457,738	Total actual amount of guarantees during the report period (A2+B2+C2)						198,151
Total amount of approved guarantees at the end of the report period (A3+B3+C3)			960,062	Total actual balance of guarantees at the end of the report period (A4+B4+C4)						420,470
The proportion of total actual amount of guarantees ((i.e., A4+B4+C4) in the net assets of the Company										32.71%
Including:										
Balance of guarantees provided for shareholders, actual controllers and its related parties (D)										0
Balance of debt guarantees provided directly or indirectly for guaranteed objects with an asset-liability ratio exceeding 70% (E)										29,442
The amount of guarantees exceeding 50% of the net assets (F)										0
Total guarantee amount of the above three items (D+E+F)										29,442
Explanation on guarantee responsibility incurred in the report period or evidence showing the description of the possible joint and several liabilities for repayment for the guarantee contracts not yet due (if any)				Nil						
Explanation on providing external guarantees in violation of prescribed procedures (if any)				Nil						

Note: The 2021 Annual General Meeting of the Company reviewed and passed the *Proposal for the 2022 Guarantee Plan*, and agreed to provide a total amount of not exceeding RMB16,268 million (including the effective and unexpired amount) for the 2022 credit line from financial institutions to subsidiaries at all levels within the scope of consolidated statements (hereinafter referred to as “all subsidiaries”). Among them, the total amount of guarantee for all subsidiaries with an asset-liability ratio below 70% shall not exceed the equivalent amount of RMB15,018 million (including the effective and unexpired amount), and the total amount of guarantee for all subsidiaries with an asset-liability ratio of 70% or above shall not exceed the equivalent amount of RMB1,250 million (including the effective and unexpired amount).

The Company’s external guarantees are all provided for subsidiaries within the scope of consolidated statement. As of 31 December 2022, the actual guarantee balance was RMB4,204.70 million (of which the actual guarantee balance with an asset liability ratio of 70% or above was RMB294.42 million), accounting for 32.71% of the parent company’s net assets of RMB12,854.88 million at the end of 2022, and 16.23% of the net assets of RMB25,904.01 million. The Company has no overdue guarantee.

The Company’s 2021 Annual General Meeting reviewed and passed the *Proposal on the Development of Asset Pool Business in 2022*. In order to achieve the overall management of the Company’s assets such as bills and letters of credit, the General Meeting of Shareholders approved the Company and its subsidiaries to conduct asset pool business of no more than RMB800 million. Under the premise of controllable risks, various guarantee methods such as maximum pledge, general pledge, deposit certificate pledge, bill pledge, and margin pledge can be adopted for business development. As of 30 December 2022, the actual pledge amount of the asset pool business was RMB157,569,200, and the financial balance was RMB156,276,000.

Explanation on compound guarantees

Nil

3. Entrust others to manage cash assets

(1) Entrusted Financing

Applicable Not applicable

Overview of entrusted financing during the report period

Unit: RMB 0,000

Type	Source of funds for entrusted financing	Amount of entrusted financing	Outstanding balance	Amount not collected after the due date	Amount of impairment accrued for overdue uncollected entrusted financing
Structured deposit	Own funds	132,816	0	0	0
Total			0	0	0

Details of high-risk entrusted financing with significant single amount or low security and poor liquidity

Applicable Not applicable

Entrusted financing expected to be unable to recover the principal or other circumstances that may lead to impairment

Applicable Not applicable

(2) Entrusted loans

Applicable Not applicable

The Company had no entrusted loans in the report period.

4. Other material contracts

Applicable Not applicable

There were no other significant contracts during the reporting period of the company.

XVI. Statement on other important matters

Applicable Not applicable

1. Ultra-short-term financing bills

On June 15, 2020, the Third Extraordinary Shareholders' General Meeting 2020 of CSG deliberated and approved the proposal on application for registration and issuance of ultra-short-term financing bills and medium-term notes, which agreed that the Company should register and issue ultra-short-term financing bills with a registered amount not exceeding 1.5 billion yuan (the limit is not subject to the limit of 40% of net assets). With the period of validity of the quota not longer than two years, such ultra-short-term financing bills will be issued by installments in accordance with the actual capital needs of the Company and the situation of inter-bank market funds. On September 4, 2020, the NAFMII held its 102nd registration meeting in 2020 and decided to accept the registration of ultra-short-term financing bills with a total of 1.5 billion yuan and a validity period of two years. On May 16, 2022, the Company's 2021 annual general meeting reviewed and approved the "Proposal on Application for Registration and Issuance of Medium-Term Notes and Ultra-short-term Financing Bills", which agreed that the Company would register and issue ultra-short-term financing bills with a registered amount of not more than 1 billion yuan, The Company can issue one or more times within the validity period of the registration according to the actual capital needs and the capital situation of the inter-bank market.

2. Medium-term notes

On June 15, 2020, the Third Extraordinary Shareholders' General Meeting 2020 of CSG deliberated and approved the proposal on application for registration and issuance of ultra-short-term financing bills and medium-term notes, which agreed that the Company should register and issue medium-term notes with a registered amount not exceeding 1.5 billion yuan. With the period of validity of the quota not longer than two years, such ultra-short-term financing bills will be issued by installments in accordance with the actual capital needs of the Company and the situation of inter-bank market funds. On September 4, 2020, the NAFMII held the 102nd registration meeting in 2020 and decided to accept the company's registration of medium-term notes with a total of 1.5 billion yuan and a validity period of two years. On May 16, 2022, the Company's 2021 annual general meeting reviewed and approved the "Proposal on Application for Registration and Issuance of Medium-term Notes and Ultra-short-term Financing Bills", which agreed that the Company would register and issue medium-term notes with a registered amount of not more than 2 billion yuan. Actual capital needs and inter-bank market capital status, can be issued one or more times within the validity period of registration.

3. Public issuance of corporate bonds

On March 2, 2017, the 2nd Extraordinary General Meeting of Shareholders in 2017 reviewed and approved "the Proposal on the Public Issuance of Corporate Bonds for Qualified Investors". On February 27, 2019, the First Extraordinary General Meeting of Shareholders in 2019 The "Proposal on Extending the Validity Period of the

Shareholders' Meeting for the Public Offering of Corporate Bonds to Qualified Investors” agreed to issue corporate bonds with a total issue of no more than RMB 2 billion and a term of no more than 10 years. On June 26, 2019, the Company received the “Approval of Approving CSG Holding Co., Ltd. to Issue Corporate Bonds to Qualified Investors” issued by China Securities Regulatory Commission (ZJXX [2019] No. 1140). On March 24, 2020 and March 25, 2020, the Company issued the first batch of corporate bonds with total amount of RMB 2 billion and valid term of 3 years at the issuance rate of 6%, and completed the redemption and delisting on March 27, 2023 (the original redemption date for this bond was March 25, 2023, but due to a statutory rest day, it was postponed to the first trading day thereafter).

4. Public issuance of A-share convertible corporate bonds

On July 11, 2022, the Company's 2nd Extraordinary General Meeting of Shareholders in 2022 reviewed and approved relevant proposals on the Company's public issuance of A-share convertible corporate bonds, and agreed to issue A-share convertible corporate bonds. The total amount of funds raised would not exceed RMB 2,800,000,000 (including RMB 2,800,000,000), with a term of 6 years from the date of issuance.

5. Passive reduction of Southern Glass A shares held by Zhongshan Runtian Investment Co., Ltd.

On July 12, 2022, the Company received the "Notice Letter" from Chongqing Xinyu Financial Leasing Co., Ltd. (hereinafter referred to as "Chongqing Xinyu"). According to the "Notice Letter", the Shenzhen Intermediate Court ruled to sell 67.65 million "Southern Glass A" shares (stock code: 000012) held by Zhongshan Runtian Investment Co., Ltd. (hereinafter referred to as "Zhongshan Runtian"). On July 27 and July 28, 2022, Chongqing Xinyu forcibly sold 36.5289 million shares of Southern Glass A held by Zhongshan Runtian through block trade, accounting for 1.19% of the Company's total share capital. On December 8, 2022, the Company received a letter from shareholder Zhongshan Runtian regarding the reduction of shares. It was learned that Zhongshan Runtian's "Southern Glass A" shares had accumulated a reduction of 31.1211 million shares from July 29, 2022 to December 7, 2022, accounting for 1.01% of the Company's total share capital. After the passive reduction of the aforementioned shares, the number of shares held by Zhongshan Runtian decreased from 86,633,447 shares to 18,983,447 shares, and the shareholding ratio decreased from 2.82% to 0.62%.

6. Lawsuits

(1) Regarding the special fund of RMB 171 million for talent introduction, the Company filed an infringement compensation lawsuit against Zeng Nan and others and Yichang Hongtai Real Estate Co., Ltd. on December 15, 2021, and Shenzhen Intermediate People's Court officially accepted it on January 28, 2022. The first trial of the case was completed in Shenzhen Intermediate People's Court on June 21, 2022, and is currently awaiting judgment.

(2) In September 2022, the Company received a civil lawsuit from the Nanshan District People's Court in Shenzhen. Zhongshan Runtian Investment Co., Ltd. filed a lawsuit with the court regarding the dispute over the effectiveness of the resolution of the Company's Second Extraordinary Shareholders' Meeting in 2022. For specific details, please refer to the "Announcement on Lawsuit Involved by the Company" (Announcement No. 2022-056) disclosed by the Company on CNINFO. The first trial of the case was held on February 10, 2023 in the Nanshan District Court of Shenzhen and is awaiting judgment.

XVII. Significant events of subsidiaries of the Company

Applicable Not applicable

Section VII. Changes in Shares and Particulars about Shareholders

I. Changes in Share Capital

1. Changes in Share Capital

Unit: Share

	Before the Change		Increase/Decrease in the Change (+, -)					After the Change	
	Amount	Proportion	New shares issued	Bonus shares	Capitalization of public reserve	Others	Subtotal	Amount	Proportion
I. Restricted shares	4,736,796	0.15%				101,453	101,453	4,838,249	0.16%
1. State-owned shares									
2. State-owned legal person's shares									
3. Other domestic shares	4,736,796	0.15%				101,453	101,453	4,838,249	0.16%
Including: Domestic legal person's shares									
Domestic natural person's shares	4,736,796	0.15%				101,453	101,453	4,838,249	0.16%
4. Foreign shares									
Including: Foreign legal person's shares									
Foreign natural person's shares									
II. Unrestricted shares	3,065,955,311	99.85%				-101,453	-101,453	3,065,853,858	99.84%
1. RMB Ordinary shares	1,956,586,251	63.72%				-101,453	-101,453	1,956,484,798	63.71%
2. Domestically listed foreign shares	1,109,369,060	36.13%						1,109,369,060	36.13%
3. Overseas listed foreign shares									
4. Others									
III. Total shares	3,070,692,107	100%				0	0	3,070,692,107	100%

Reason for equity changes

√Applicable □Not applicable

During the report period, China Securities Depository and Clearing Corporation Limited adjusted the locked-up shares of senior management in accordance with regulations, and the Company's restricted shares and unrestricted shares changed accordingly.

Approval on equity changes

Applicable Not applicable

Transfer of ownership of changes in shares

Applicable Not applicable

Influence on the basic EPS and diluted EPS as well as other financial indexes of net assets per share attributable to common shareholders of Company in the latest year and period

Applicable Not applicable

Other information necessary to be disclosed or need to be disclosed under requirement from security regulators

Applicable Not applicable

2. Changes of restricted shares

Applicable Not applicable

Unit: Share

Shareholders' name	Number of restricted shares at the beginning of the period	Number of shares increased in the Period	Number of restricted shares released in the Period	Number of shares restricted at the end of the Period	Reason for restriction	Released date
Chen Lin	1,217,299			1,217,299	Executive lockup stocks shares	Releasing of executive lockup stocks will be implemented according to relevant policies.
He Jin	673,200			673,200	Executive lockup stocks shares	Releasing of executive lockup stocks will be implemented according to relevant policies.
Wang Wenxin	0	115,950		115,950	Executive lockup stocks shares	Releasing of executive lockup stocks will be implemented according to relevant policies.
Chen Chunyan	0	36,953		36,953	Executive lockup stocks shares	Releasing of executive lockup stocks will be implemented according to relevant policies.
Wang Jian	759,000	253,000		1,012,000	Locked in shares after the departure of directors and executives	Releasing of director and executive lockup stocks will be implemented according to relevant policies.
Gao Changkun	500		125	375	Locked in shares after the departure of supervisors	Releasing of supervisor lockup stocks will be implemented according to relevant policies.
Lu Wenhui	1,217,298		304,325	912,973	Locked in shares after the departure of executives	Releasing of executive lockup stocks will be implemented according to relevant policies.
Yang Xinyu	869,499			869,499	Locked in shares after the departure of executives	Releasing of executive lockup stocks will be implemented according to relevant policies.

total	4,736,796	405,903	304,450	4,838,249	--	--
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II. Issuance and listing of Securities

1. Security issued (excluding preferred stock) in the report period

Applicable Not applicable

2. Particulars about changes of total shares and shareholder structure as well as changes of assets and liability structure

Applicable Not applicable

3. Existing internal staff shares

Applicable Not applicable

III. Particulars about shareholder and actual controller of the Company

1. Amount of shareholders of the Company and particulars about shares holding

Unit: Share

Total shareholders at the end of the report period	164,489	Total shareholders at the end of the month before this annual report disclosed	164,653	Total preference shareholders with voting rights recovered at end of report period (if applicable)	0	Total preference shareholders with voting rights recovered at end of the month before this annual report disclosed (if applicable)	0	
Shareholder with above 5% shares hold or top 10 shareholders								
Full name of Shareholders	Nature of shareholder	Proportion of shares held	Total shares held at the end of report period	Changes in report period	Amount of restricted shares held	Amount of unrestricted shares held	Number of share pledged, marked or frozen	
							Share status	Amount
Foresea Life Insurance Co., Ltd. – HailiNiannian	Domestic non state-owned legal person	15.19%	466,386,874			466,386,874		
Foresea Life Insurance Co., Ltd. – Universal Insurance Products	Domestic non state-owned legal person	3.86%	118,425,007			118,425,007		
Foresea Life Insurance Co., Ltd. – Own Fund	Domestic non state-owned legal person	2.11%	64,765,161			64,765,161		

China Galaxy International Securities (Hong Kong) Co., Limited	Foreign legal person	1.34%	41,209,978	-9,800	41,209,978		
China Merchants Securities (Hong Kong) Limited	Foreign legal person	1.21%	37,303,991	-5,064,997	37,303,991		
China Life Insurance Co., Ltd. - Traditional - General Insurance Products - 0051-ct001 Shen	Other	1.01%	31,084,559	1,248,291	31,084,559		
Hong Kong Securities Clearing Co., Ltd.	Foreign legal person	0.70%	21,634,045	-35,042,250	21,634,045		
VANGUARD EMERGING MARKETS STOCK INDEX FUND	Foreign legal person	0.63%	19,365,573	-1,965,024	19,365,573		
Zhongshan Runtian Investment Co., Ltd.	Domestic non state-owned legal person	0.62%	18,983,447	-67,650,000	18,983,447	Pledged	18,980,000
						Marked	18,980,000
						Frozen	3,447
#He Xinhai	Domestic natural person	0.59%	17,971,302	17,971,302	17,971,302		
Strategic investors or general legal person becomes top 10 shareholders due to shares issued (if applicable)	N/A						
Explanation on associated relationship among the aforesaid shareholders	As of the end of the report period, among shareholders as listed above, Foresea Life Insurance Co., Ltd.-HailiNiannian, Foresea Life Insurance Co., Ltd.-Universal Insurance Products, Foresea Life Insurance Co., Ltd.-Own Fund are all held by Foresea Life Insurance Co., Ltd. Shenzhen Jushenghua Co., Ltd., which holds 51% equity of Foresea Life Insurance Co., Ltd., holds 100% equity of Zhongshan Runtian Investment Co.,Ltd and Chengtai Group Co. Ltd., through Shenzhen Hualitong Investment Co., Ltd. Chengtai Group Co., Ltd. holds 40,187,904 shares through China Galaxy International Securities (Hong Kong) Co., Limited.						
Explanation of the above-mentioned shareholders involving entrusted/entrusted voting rights and abstention from voting right	N/A						
Special instructions on the existence of special repurchase account among the top 10 shareholders (if any)	N/A						
Particular about top ten shareholders with unrestricted shares held							
Shareholders' name			Amount of unrestricted shares held at			Type of shares	

	year-end	Type	Amount
Foresea Life Insurance Co., Ltd. – HailiNiannian	466,386,874	RMB ordinary shares	466,386,874
Foresea Life Insurance Co., Ltd. – Universal Insurance Products	118,425,007	RMB ordinary shares	118,425,007
Foresea Life Insurance Co., Ltd. – Own Fund	64,765,161	RMB ordinary shares	64,765,161
China Galaxy International Securities (Hong Kong) Co., Limited	41,209,978	Domestically listed foreign shares	41,209,978
China Merchants Securities (Hong Kong) Limited	37,303,991	Domestically listed foreign shares	37,303,991
China Life Insurance Co., Ltd. - Traditional - General Insurance Products - 0051-ct001 Shen	31,084,559	RMB ordinary shares	31,084,559
Hong Kong Securities Clearing Co., Ltd.	21,634,045	RMB ordinary shares	21,634,045
VANGUARD EMERGING MARKETS STOCK INDEX FUND	19,365,573	Domestically listed foreign shares	19,365,573
Zhongshan Runtian Investment Co., Ltd.	18,983,447	RMB ordinary shares	18,983,447
#He Xinhai	17,971,302	RMB ordinary shares	17,971,302
Statement on associated relationship or consistent action among the above shareholders:	As of the end of the report period, among shareholders as listed above, Foresea Life Insurance Co., Ltd.-HailiNiannian, Foresea Life Insurance Co., Ltd.-Universal Insurance Products, Foresea Life Insurance Co., Ltd.-Own Fund are all held by Foresea Life Insurance Co., Ltd. Shenzhen Jushenghua Co., Ltd., which holds 51% equity of Foresea Life Insurance Co., Ltd., holds 100% equity of Zhongshan Runtian Investment Co.,Ltd and Chengtai Group Co. Ltd., through Shenzhen Hualitong Investment Co., Ltd. Chengtai Group Co., Ltd. holds 40,187,904 shares through China Galaxy International Securities (Hong Kong) Co., Limited.		
Explanation on shareholders involving margin business (if applicable)	Shareholder He Xinhai holds 0 shares of the Company through an ordinary account, and 17,971,302 shares of the Company through the customer credit transaction guarantee securities account of Guangfa Securities Co., Ltd., totaling 17,971,302 shares of the Company.		

Special note: On July 11, 2022, at the Company's Second Extraordinary General Meeting in 2022, Foresea Life Insurance Co., Ltd. voted in favor of all proposals, and Zhongshan Runtian Investment Co., Ltd. voted against all proposals, Chengtai Group Co., Ltd. voted against all the proposals with the shares held by China Galaxy International Securities (Hong Kong) Co., Limited; on August 3, 2022, at the Company's Third Extraordinary General Meeting in 2022, Foresea Life Insurance Co., Ltd. voted in favor of all proposals, and Zhongshan Runtian Investment Co., Ltd. voted against all proposals.

Whether the company's top 10 common shareholders and the top 10 shareholders of ordinary shares subject to unlimited sales have agreed to buy back transactions during the report period

Yes No

The top 10 shareholders of ordinary shares and the top 10 shareholders of ordinary shares with unrestricted sales conditions did not engage in any agreed repurchase transactions during the reporting period.

2. Controlling shareholder of the Company

The nature of controlling shareholders: No holding body

The type of controlling shareholder: Not exist

Explanation on the Company without controlling shareholder

Currently the Company has no controlling shareholder. Foresea Life Insurance Co., Ltd. is the Company's largest shareholder that has totally held 657,577,954 shares of the Company via Foresea Life Insurance Co., Ltd.–Haili Niannian, Foresea Life Insurance Co., Ltd.–universal insurance products, Foresea Life Insurance Co., Ltd.–own fund, Foresea Life Insurance Co., Ltd.–a combination of its own funds together with Huatai till the end of the report period, which accounts for 21.41% of the Company's total shares; its person acting in concert Zhongshan Runtian Investment Co., Ltd. held 18,983,447 shares, which accounts for 0.62% of the Company's total shares; its person acting in concert Chengtai Group Co., Ltd. held 51,709,088 shares of B-share via China Galaxy International Securities (Hong Kong) Co., Ltd and Guosen Securities (Hong Kong) Brokerage Co., Limited, which accounts for 1.68% of the Company's total shares. Foresea Life Insurance and its persons acting in concert totally held 23.72% of the Company's total shares, which is less than 30%, meanwhile, the number of directors recommended by Foresea Life Insurance and its persons acting in concert was no more than half of total number of the Company's Board of Directors.

Other shareholders of the Company hold less than 5% of the shares.

Changes of controlling shareholders in the report period

Applicable Not applicable

3. Actual controller of the Company and its concerted actors

The nature of actual controller: no actual controller

The type of actual controller: Not exist

Explanation on the Company without actual controller

Currently the Company has no controlling shareholder. Foresea Life Insurance Co., Ltd. is the Company's largest shareholder that has totally held 657,577,954 shares of the Company via Foresea Life Insurance Co., Ltd.–Haili Niannian, Foresea Life Insurance Co., Ltd.–universal insurance products, Foresea Life Insurance Co., Ltd.–own fund, Foresea Life Insurance Co., Ltd.–a combination of its own funds together with Huatai till the end of the report period, which accounts for 21.41% of the Company's total shares; its person acting in concert Zhongshan Runtian Investment Co., Ltd. held 18,983,447 shares, which accounts for 0.62% of the Company's total shares; its person acting in concert Chengtai Group Co., Ltd. held 51,709,088 shares of B-share via China Galaxy International Securities (Hong Kong) Co., Ltd and Guosen Securities (Hong Kong) Brokerage Co., Limited, which accounts for 1.68% of the Company's total shares. Foresea Life Insurance and its persons acting in concert totally held 23.72% of the Company's total shares, which is less than 30%, meanwhile, the number of directors recommended by Foresea Life Insurance and its persons acting in concert was no more than half of total number of the Company's Board of Directors.

Shareholders with over 10% shares held in ultimate controlling level

Yes No

Legal person Natural person

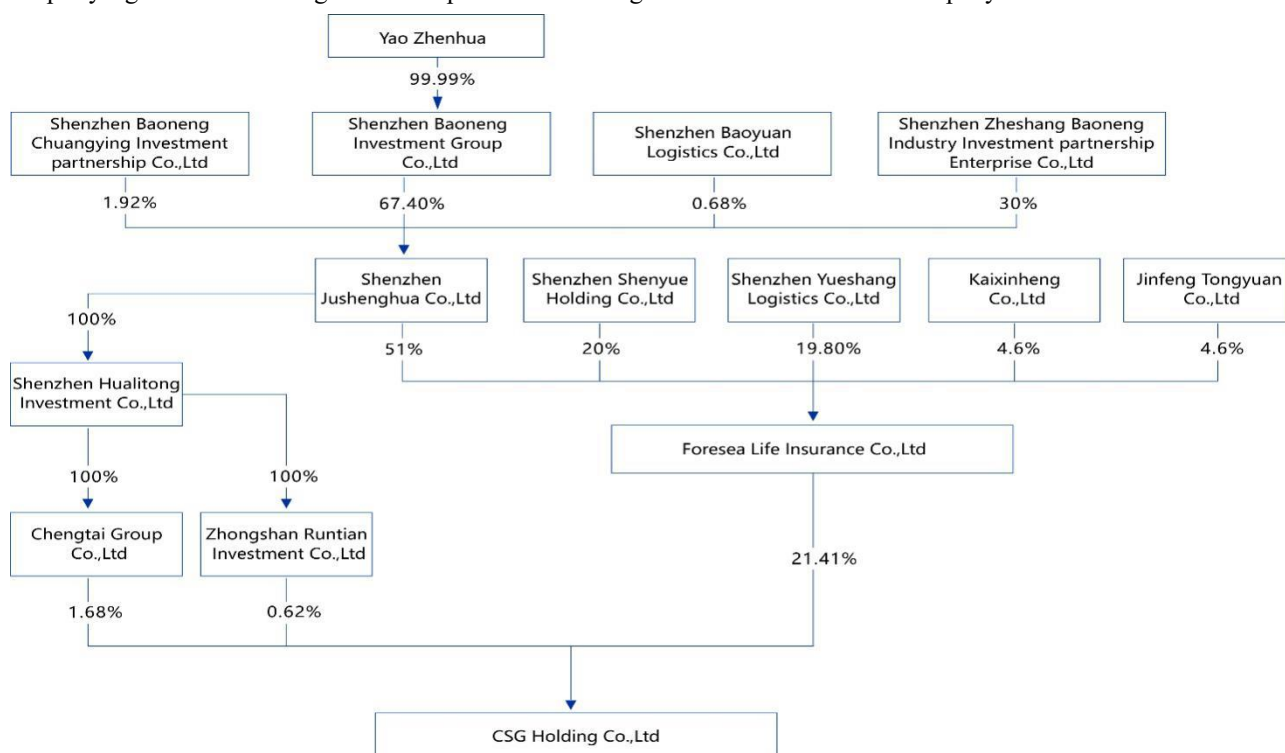
Shares held in ultimate controlling level

Shareholders	Nationality	Whether to obtain the right of abode in other countries or regions
Yao Zhenhua	China	No
Major occupations and duties	Chairman of Shenzhen Baoneng Investment Group Co., Ltd.	
Situation of holding domestic and abroad listed companies over the past 10 years	N/A	

Changes of actual controller in the report period

Applicable Not applicable

Property right and controlling relationship between the largest shareholder and the Company is as follow:



Actual controller controlling of the Company by entrust or other assets management

Applicable Not applicable

4. The company's controlling shareholder or the largest shareholder and its concerted actor's cumulative pledged shares account for 80% of the company's shares held by them

Applicable Not applicable

5. Particulars about other legal person shareholders holding over 10% of the company's shares

Applicable Not applicable

6. Limitation on share reduction of controlling shareholders, actual controllers, recombination party and other commitment subjects

Applicable Not applicable

IV. Specific implementation of share repurchase in the report period

Implementation progress of share repurchase

Applicable Not applicable

Implementation progress of reducing share repurchased by centralized bidding

Applicable Not applicable

Section VIII. Preferred shares

Applicable Not applicable

There were no preferred shares in the Company during the report period

Section IX. Bonds

Applicable Not applicable

On the approval date of this report, the Company does not have any existing bonds.

Section X. Financial Report

I. Report of the Auditors

Type of Auditor's Opinion	Standard and unqualified
Issue date of Report of the Auditors	April 24, 2023
Name of Auditor's organization	Asia Pacific (Group) CPAs (special general partnership)
Reference number of Report of the Auditors	Ya-Kuai-Shen-Zi (2023) No. 01110174 号
Name of CPA	Wang Donglan、Wei Jian

Auditor's Report

Ya-Kuai- Shen-Zi (2023) No. 01110174

To the shareholders of CSG Holding Co., Ltd.:

I、 OPINION

We have audited the accompanying financial statements of CSG Holding Co., Ltd. (hereinafter "the Company"), which comprise the Separate/Consolidated Statements of Financial Position as at 31 December 2022, and the Separate/Consolidated Statements of profit or loss, the Separate/Consolidated Statements of changes in equity and the Separate/Consolidated Statements of cash flows for the year then ended, and the notes to the financial statements.

In our opinion, the financial statements attached were prepared in line with the regulations of Accounting Standards for Business Enterprises in all significant aspects which gave a true and fair view of the consolidated and parent financial position of the Company as at Dec. 31, 2022 and the consolidated and parent business performance and cash flow of the Company for 2022.

II、 BASIS OF OPINION

We conducted our audit in accordance with Standards on Auditing for Certified Public Accountants. Our responsibility is to express an opinion on these financial statements based on our audit. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. we are independent of CSG and fulfill other responsibilities in professional ethics

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

III、 KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit

of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. We determine the followings are key audit matters in need of communication in our report

Recognition of Operating income

1、Matter description

As disclosed in the income statements, during 2022, operating income of CSG mainly comes from providing flat glass, engineering glass, solar energy related products, electronic glass and displays to customers. Operating income is recognized when control of the related goods is transferred to customers. In the consolidated financial statements of CSG for the year ended December 31, 2022, sales revenue was RMB 15,198.71 million.

According to the notes to the financial statements, for domestic sales, CSG delivers products to the agreed delivery location based on the contract and recognizes revenue after confirmation of acceptance by the buyer. For export sales, revenue is recognized after export customs clearance procedures are completed according to the terms specified in the sales contract, and the goods are loaded onto the ship or delivered to the designated delivery location.

As revenue is one of the key performance indicators of CSG, revenue recognition has a significant impact on the financial statements. Therefore, we have identified the recognition of revenue as a key audit matter.

2、Countermeasures of Audit

① Understand and evaluate the key internal controls related to the recognition of revenue. Assess the effectiveness of the design of these controls by performing walkthrough and control testing, and determine whether relevant internal controls are executed and effective.

② Examine significant sales contracts with key customer for sampling, identified contract terms and conditions related to the control transfer point of the products, and assessed whether the company's revenue recognition policies comply with the accounting standards for business enterprises.

③ Select samples and performed substantive testing on sales revenue for the current year. Reviewe sales contracts and checked supporting documents (including orders, receipts, customs declarations, invoices, etc.) related to revenue recognition and confirm the authenticity and accuracy of revenue in conjunction with the customer's sales receipts.

④ Implement substantive analytical procedures on revenue and gross profit margin by month, product, customer, etc.,and identify significant or abnormal fluctuations, and analyzed the reasons for the fluctuations.

⑤ Perform cutoff tests for revenue recognized before and after the balance sheet date, obtain relevant supporting documents, check the key timing points of revenue recognition, and evaluat whether revenue was recognized in the appropriate period and whether there was any cross-period recognition.

⑥ Select customers for the annual transaction volume and accounts receivable balance through sampling and performed strict control measures on the confirmation procedures to confirm the authenticity and accuracy of the transactions.

⑦ Check whether CSG's accounting treatment, presentation and disclosure of the matter were appropriate.

We have determined that there are no other key audit matters that require communication in our audit report.

IV、 OTHER INFORMATION

The management layer of the Company shall be responsible for other information, but excludes financial statements and our audit report.

Our audit opinion on financial statements does not include other information; we will not make the authentication conclusion on other information in any form.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

V、 RESPONSIBILITIES OF MANAGEMENT GOVERNANCE FOR FINANCIAL STATEMENTS

Management of the Company is responsible for the preparation and fair presentation of these financial statements in accordance with the requirements of the Accounting Standards for Business Enterprises, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing financial statements, the management layer is responsible for assessing the company's sustained business capability, disclosing matters related to continue operating, using the going-concern assumption unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The governance layer is responsible for supervising the financial reporting process of the company.

VI、 AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance as to whether there are no major misstatements due to fraud or errors in the overall financial statements, and to issue an audit report containing audit opinions. Reasonable assurance is the high-level assurance, but it can't assure that a certain major misstatement can be always found when auditing according to the audit standard. The misstatement may be caused by malpractices or error. If the misstatements within the rational expectations may affect the economic decision of the financial statement user according to the financial statement, it shall be deemed that the misstatement is significant.

During the process of conducting the audit work according to audit standards, we apply professional judgment and keep professional skepticism. Meanwhile, we also perform the following tasks:

(1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

(2) Understand the internal control related to audit, so as to design appropriate audit procedures.

(3) Estimate the appropriateness of the accounting policies selected by the management layer, and the rationality of making accounting estimate and relevant disclosures.

(4) Draw a conclusion on the appropriateness of the going concern assumption used by the management layer. Meanwhile, according to the obtained audit evidence, it may cause to come to the conclusion that there are substantial doubtful events or major uncertainty for the sustainable operation ability of the Company. In case that we come to the conclusion that there is a significant uncertainty, the audit standards require us to remind the users of the statements to pay attention to relevant disclosures in the financial statements in the audit report; In case of any insufficient disclosure, we shall give modified opinions. Our conclusion is based on the available information up to the audit report day. However, the future events or circumstances may cause the Company cannot continue to operate.

(5) Estimate the overall presentation, structure and content (disclosure included) of the financial statements, and Estimate whether the financial statements fairly reflect relevant transactions and matters.

(6) Acquire adequate and appropriate audit evidences on the financial information of the entity or business activities of the Company, and give audit opinions on the consolidated financial statements. We are responsible for guiding, supervising and executing the audit of the Group, and take all responsibilities for the audit opinions.

We communicate with the governance layer about the audit scope, schedule, significant audit findings and other matters within the plan, including the noteworthy internal control defects recognized by us during the audit.

We also provide statements to the governance layer on the compliance with the professional ethics requirement related to the independence, and communicate with the governance layer on all relationships and other matters that may reasonably be considered to affect our independence, as well as relevant preventive measures.

From the matters that we have communicated with the governance layer, we confirm the most important matters for the audit of the current financial statements, and thus constitute the key audit matters. We describe these matters in our audit report, unless laws and regulations prohibit the public disclosure of these matters, or in rare cases, if it is reasonably expected that the negative consequences of communicating a matter in the audit report will surpass the benefits in the public interests, we confirm that the matter shall not be communicated in the audit report.

Asia-Pacific (Group) Certified
Public Accountants (special
general partnership)

Certified Public Accountant of
China:
(Engagement Partner)

Certified Public Accountant
of China:

Beijing, China

24 April 2023

Financial statements

1、 Consolidated balance sheet

Prepared by:CSG Holding Co.,LTD

31 December 2022

Unit: Yuan

Items	Notes (V)	31 December 2022	1 January 2022
Current assets:			
Cash at bank and on hand	1	4,604,607,779	2,765,925,906
Financial assets held for trading	2		999,600,000
Notes receivable	3	156,943,437	19,220,984
Accounts receivable	4	1,179,992,784	730,525,687
Receivables Financing	5	1,095,412,643	297,046,123
Advances to suppliers	6	183,629,823	76,097,276
Other receivables	7	193,847,322	183,696,711
Inventories	8	1,783,941,982	1,093,805,525
Non-current assets due within one year	9	20,000,000	
Other current assets	10	108,248,545	140,705,298
Total current assets		9,326,624,315	6,306,623,510
Non-current assets:			
Investment properties	11	290,368,105	383,084,500
Fixed assets	12	11,243,236,175	8,566,299,970
Construction in progress	13	2,520,362,291	2,457,982,178
Right-of-use assets	14	9,908,413	9,911,935
Intangible assets	15	1,438,102,666	1,167,611,402
Development expenditure	16	46,755,816	72,019,362
Goodwill	17	7,897,352	130,147,859
Long-term prepaid expenses	18	2,647,939	3,013,721
Deferred tax assets	19	161,489,749	255,045,066
Other non-current assets	20	856,620,485	584,162,622
Total non-current assets		16,577,388,991	13,629,278,615
TOTAL ASSETS		25,904,013,306	19,935,902,125
Current liabilities:			
Short-term borrowings	21	345,000,000	180,770,000
Notes payable	22	994,557,496	400,662,713
Accounts payable	23	2,033,542,627	1,428,851,312
Contract liabilities	24	418,051,975	335,188,642
Employee benefits payable	25	473,616,428	426,212,979
Taxes payable	26	161,134,638	184,868,824
Other payables	27	537,065,184	289,440,477
Including: interest payable	27	99,945,325	95,001,362

1、Consolidated balance sheet (Continued)

Prepared by: CSG Holding Co., LTD

31 December 2022

Unit: Yuan

Items	Notes (V)	31 December 2022	1 January 2022
Current portion of non-current liabilities	28	2,481,433,006	503,820,548
Other current liabilities	29	50,407,240	40,099,309
Total current liabilities		7,494,808,594	3,789,914,804
Non-current liabilities:			
Long-term borrowings	30	4,353,589,980	1,469,059,824
Debentures payable	31		1,996,587,330
Lease liabilities	32	3,564,330	220,138
Long-term payables	33	129,236,878	168,258,062
Deferred income	34	449,875,380	564,129,128
Deferred tax liabilities	19	97,266,841	84,405,434
Total non-current liabilities		5,033,533,409	4,282,659,916
Total liabilities		12,528,342,003	8,072,574,720
Shareholders' equity:			
Share capital	35	3,070,692,107	3,070,692,107
Capital surplus	36	596,997,085	596,997,085
Other comprehensive income	37	170,860,478	159,200,530
Special reserve	38	731,580	7,296,397
Surplus reserve	39	1,228,634,001	1,144,887,510
Undistributed profits	40	7,786,968,455	6,447,650,867
Total equity attributable to shareholders of parent company		12,854,883,706	11,426,724,496
Minority interests		520,787,597	436,602,909
Total shareholders' equity		13,375,671,303	11,863,327,405
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		25,904,013,306	19,935,902,125

Legal representative: Chen Lin
department: Wang Wenxin

Principal in charge of accounting: Wang Wenxin

Head of accounting

2、Balance sheet of the parent company

Prepared by:CSG Holding Co.,LTD

31 December 2022

Unit: Yuan

Items	Notes (XV)	31 December 2022	1 January 2022
Current assets:			
Cash at bank and on hand		2,598,503,883	1,961,406,035
Financial assets held for trading			999,600,000
Notes receivable		49,194,385	
Accounts receivable	1	23,994,936	
Receivables Financing		123,469,960	
Advances to suppliers		1,571,283	639,164
Other receivables	2	2,369,431,782	2,899,091,405
Including: Dividends receivable	2	375,057,800	250,000,000
Non-current assets due within one year		20,000,000	
Total current assets		5,186,166,229	5,860,736,604
Non-current assets:			
Long-term equity investments	3	7,838,487,027	6,262,391,694
Fixed assets		7,876,626	11,509,029
Intangible assets		5,946,174	2,102,548
Long-term prepaid expenses		189,806	
Other non-current assets		83,297,124	104,109,111
Total non-current assets		7,935,796,757	6,380,112,382
TOTAL ASSETS		13,121,962,986	12,240,848,986
Current liabilities:			
Short-term borrowings		200,000,000	100,000,000
Notes payable		19,496,400	
Accounts payable		661,058	315,684
Contract liabilities		3,097	
Employee benefits payable		63,906,834	68,534,315
Taxes payable		15,374,554	8,316,132
Other payables		2,126,409,980	2,067,472,879
Including: interest payable		95,445,534	93,596,328
Current portion of non-current liabilities		2,332,402,522	400,000,000
Other current liabilities		403	
Total current liabilities		4,758,254,848	2,644,639,010
Non-current liabilities:			
Long-term borrowings		1,231,134,000	690,000,000
Debentures payable			1,996,587,330
Deferred income		172,125,000	172,500,000
Total non-current liabilities		1,403,259,000	2,859,087,330
Total liabilities		6,161,513,848	5,503,726,340

2、 Balance sheet of the parent company (Continued)

Prepared by:CSG Holding Co.,LTD

31 December 2022

Unit: Yuan

Items	Notes (XV)	31 December 2022	1 January 2022
Shareholders' equity:			
Share capital		3,070,692,107	3,070,692,107
Capital surplus		741,824,399	741,824,399
Surplus reserve		1,243,179,361	1,159,432,870
Undistributed profits		1,904,753,271	1,765,173,270
Total shareholders' equity		6,960,449,138	6,737,122,646
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		13,121,962,986	12,240,848,986

3、 Consolidated income statement

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	Notes	2022	2021
I.Total business income	41	15,198,706,998	13,672,372,823
Including: operating income	41	15,198,706,998	13,672,372,823
II.Total operating costs		12,967,322,642	10,731,026,191
Including: operating costs	41	11,006,795,373	8,896,148,794
Taxes and surcharges	42	135,473,792	148,655,418
Selling and distribution expenses	43	313,754,976	270,695,433
General and administrative expenses	44	718,938,905	752,605,507
Research and development expenses	45	644,146,614	511,738,848
Financial expenses	46	148,212,982	151,182,191
Including: interest expenses	46	212,724,263	188,858,163
Interest income	46	71,751,429	42,702,029
Add: Other Income	47	188,367,781	106,465,817
Investment income (Loss is listed with "-")	48	31,567,854	16,847,647
Credit impairment loss (Loss is listed with "-")	49	-47,720,107	-153,894,437
Asset impairment loss (Loss is listed with "-")	50	-155,563,090	-981,665,546
Income on disposal assets (Loss is listed with "-")	51	15,213,059	-1,493,248
III.Operating profit (Loss is listed with "-")		2,263,249,853	1,927,606,865
Add: Non-operating revenue	52	22,692,272	12,604,534
Less: Non-operating expenses	53	7,067,178	26,130,744
IV.Total profit (Loss is listed with "-")		2,278,874,947	1,914,080,655
Less: Income tax expenses	54	235,487,759	355,979,031
V.Net profit (Net loss is listed with "-")		2,043,387,188	1,558,101,624
(1) Classified by continuous operation:			
1. Net income from continuing operations (Net loss is listed with "-")		2,043,387,188	1,558,101,624
(2) Classified by equity ownership:			
1. Attributable to shareholders of parent company		2,037,202,500	1,526,392,754
2. Minority interests		6,184,688	31,708,870
VI.Other comprehensive income net after tax	37	11,659,948	-2,616,289
Other comprehensive income net after tax attributable to shareholders of parent company	37	11,659,948	-2,616,289
(1) Other comprehensive income to be reclassified into profit and loss	37	11,659,948	-2,616,289
1. Translation differences arising on translation of foreign currency financial statement	37	11,659,948	-2,616,289
VII.Total comprehensive income		2,055,047,136	1,555,485,335
Total comprehensive income attributable to shareholders of the parent company		2,048,862,448	1,523,776,465
Total comprehensive income attributable to minority shareholders minority interests		6,184,688	31,708,870
VIII.Earnings per share			
(1) Basic earnings per share		0.66	0.50
(2) Diluted earnings per share		0.66	0.50

Legal representative: Chen Lin
department: Wang Wenxin

Principal in charge of accounting: Wang Wenxin

Head of accounting

4、Profit Statement of Parent Company

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	Notes (XV)	2022	2021
I.Operating income	4	373,707,646	294,247,989
Less: operating costs			
Taxes and surcharges		2,586,831	2,560,152
Selling and distribution expenses		6,568,389	
General and administrative expenses		298,654,806	297,252,293
Research and development expenses		519,153	2,631,501
Financial expenses		109,425,364	138,319,862
Including: interest expenses		178,327,937	177,942,376
Interest income		66,711,595	39,200,530
Add: Other Income		8,621,910	3,162,514
Investment income (Loss is listed with "-")	5	872,638,711	1,279,006,799
Credit impairment loss (Loss is listed with "-")		-530,945	-48,513,009
Income on disposal assets (Loss is listed with "-")		2,485,755	6,893,580
II.Operating profit (Loss is listed with "-")		839,168,534	1,094,034,065
Add: Non-operating revenue		11,000	383,646
Less: Non-operating expenses		1,714,621	15,026,836
III.Total profit (Loss is listed with "-")		837,464,913	1,079,390,875
Less: Income tax expenses			
IV.Net profit (Net loss is listed with "-")		837,464,913	1,079,390,875
(1) Net income from continuing operations (Net loss is listed with "-")		837,464,913	1,079,390,875
(2) Net income from discontinued operations (Net loss is listed with "-")			
V.Total comprehensive income		837,464,913	1,079,390,875
VI.Earnings per share			

5、Consolidated statement of cash flows

Prepared by: CSG Holding Co., LTD

Unit: Yuan

Items	Notes (V)	2022	2021
I. Cash flows from operating activities:			
Cash received from sales of goods or rendering of services		15,302,707,449	15,186,533,367
Refund of taxes and surcharges		342,195,840	53,331,689
Cash received relating to other operating activities	56 (1)	185,973,569	261,031,274
Sub-total of cash inflows		15,830,876,858	15,500,896,330
Cash paid for goods and services		10,747,860,256	8,300,217,465
Cash paid to and on behalf of employees		1,859,857,713	1,645,581,548
Payments of taxes and surcharges		897,972,107	1,214,512,667
Cash paid relating to other operating activities	56 (2)	368,063,551	440,936,620
Sub-total of cash outflows		13,873,753,627	11,601,248,300
Net cash flows from/(used in) operating activities		1,957,123,231	3,899,648,030
II. Cash flows from investing activities:			
Cash received from returns on investments		3,697,760,000	4,424,000,000
Cash received from returns on invest income		29,929,395	16,163,055
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		51,091,120	4,916,078
Cash received relating to other investing activities	56 (3)	29,927,321	21,682,371
Sub-total of cash inflows		3,808,707,836	4,466,761,504
Cash paid to acquire fixed assets, intangible assets and other long-term asset		3,416,942,337	1,821,801,243
Cash paid to acquire investments		2,698,160,000	5,523,600,000
Cash paid relating to other investing activities	56 (4)		24,000,000
Sub-total of cash outflows		6,115,102,337	7,369,401,243
Net cash flows (used in)/from investing activities		-2,306,394,501	-2,902,639,739
III. Cash flows from financing activities:			
Cash received from investors		78,000,000	2,000,000
Including: Cash received from absorbing minority shareholders' investment by subsidiaries		78,000,000	2,000,000
Cash received from borrowings		4,323,690,981	1,637,354,868
Cash received relating to other financing activities	56 (5)		200,000,000
Sub-total of cash inflows		4,401,690,981	1,839,354,868
Cash repayments of borrowings		1,297,812,888	1,655,022,054
Cash payments for interest expenses and distribution of dividends or profits		878,428,889	547,085,016
Cash payments relating to other financing activities	56 (6)	46,045,514	
Sub-total of cash outflows		2,222,287,291	2,202,107,070
Net cash flows (used in)/from financing activities		2,179,403,690	-362,752,202
IV. Effect of foreign exchange rate changes on cash		7,408,259	-1,806,713
V. Net increase/(decrease) in cash and cash equivalents		1,837,540,679	632,449,376
Add: Cash and cash equivalents at beginning of year		2,756,477,572	2,124,028,196
VI. Cash and cash equivalents at end of year		4,594,018,251	2,756,477,572

Legal representative: Chen Lin

Principal in charge of accounting: Wang Wenxin

Head of

accounting department: Wang Wenxin

6、Statement of cash flows of the parent company

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	2022	2021
I.Cash flows from operating activities:		
Cash received from sales of goods or rendering of services	459,100,809	312,321,151
Cash received relating to other operating activities	74,072,939	44,045,856
Sub-total of cash inflows	533,173,748	356,367,007
Cash paid for goods and services	64,147,484	
Cash paid to and on behalf of employees	259,934,484	232,793,262
Payments of taxes and surcharges	17,212,621	20,131,229
Cash paid relating to other operating activities	38,421,982	51,990,613
Sub-total of cash outflows	379,716,571	304,915,104
Net cash flows from/(used in) operating activities	153,457,177	51,451,903
II.Cash flows from investing activities:		
Cash received from returns on investments	3,697,760,000	4,360,335,176
Cash received from returns on invest income	745,942,452	1,277,124,439
Net cash received from disposal of fixed assets, intangible assets and other long-term assets	2,488,521	2,663,907
Sub-total of cash inflows	4,446,190,973	5,640,123,522
Cash paid to acquire fixed assets, intangible assets and other long-term assets	7,649,720	5,406,991
Cash paid to acquire investments	4,274,255,333	5,877,819,000
Sub-total of cash outflows	4,281,905,053	5,883,225,991
Net cash flows (used in)/from investing activities	164,285,920	-243,102,469
III.Cash flows from financing activities:		
Cash received from borrowings	1,571,720,000	814,000,000
Cash received relating to other financing activities	528,709,901	1,960,258,923
Sub-total of cash inflows	2,100,429,901	2,774,258,923
Cash repayments of borrowings	997,500,000	1,173,800,000
Cash payments for interest expenses and distribution of dividends or profits	787,887,961	520,361,295
Sub-total of cash outflows	1,785,387,961	1,694,161,295
Net cash flows (used in)/from financing activities	315,041,940	1,080,097,628
IV.Effect of foreign exchange rate changes on cash	1,823,319	748,101
V.Net increase/(decrease) in cash and cash equivalents	634,608,356	889,195,163
Add: Cash and cash equivalents at beginning of year	1,960,395,527	1,071,200,364
VI.Cash and cash equivalents at end of year	2,595,003,883	1,960,395,527

7、 Consolidated statement of changes in owner's equity

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	2022								
	Attributable to shareholders of parent company							Minority interests	Total shareholders' equity
	Share capital	Capital surplus	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profits	Sub-total		
I.Balance at the end of the last year (Restated)	3,070,692,107	596,997,085	159,200,530	7,296,397	1,144,887,510	6,447,650,867	11,426,724,496	436,602,909	11,863,327,405
II.Balance at 1 January 2022	3,070,692,107	596,997,085	159,200,530	7,296,397	1,144,887,510	6,447,650,867	11,426,724,496	436,602,909	11,863,327,405
III.Movements for the year ended 31 December 2022 (Decrease is listed with “-”)			11,659,948	-6,564,817	83,746,491	1,339,317,588	1,428,159,210	84,184,688	1,512,343,898
(1) Total comprehensive income			11,659,948			2,037,202,500	2,048,862,448	6,184,688	2,055,047,136
(2) Capital increase or decrease from shareholder								78,000,000	78,000,000
1. Ordinary shares contributed by the owner								78,000,000	78,000,000
(3) Profit distribution					83,746,491	-697,884,912	-614,138,421		-614,138,421
1、 Appropriation to surplus reserve					83,746,491	-83,746,491			
2. Distribution to the shareholders						-614,138,421	-614,138,421		-614,138,421
(4) Special reserve				-6,564,817			-6,564,817		-6,564,817
1. Special reserve appropriate				8,605,776			8,605,776		8,605,776

2. Special reserve used				15,170,593			15,170,593		15,170,593
IV.Balance at 31 December 2022	3,070,692,107	596,997,085	170,860,478	731,580	1,228,634,001	7,786,968,455	12,854,883,706	520,787,597	13,375,671,303

7、 Consolidated statement of changes in owner's equity (Continued)

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	2021								
	Attributable to shareholders of parent company							Minority interests	Total shareholders' equity
	Share capital	Capital surplus	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profits	Sub-total		
I.Balance at the end of the last year	3,070,692,107	596,997,085	161,816,819	10,269,002	1,036,948,422	5,336,266,412	10,212,989,847	402,894,039	10,615,883,886
II.Balance at 1 January 2021	3,070,692,107	596,997,085	161,816,819	10,269,002	1,036,948,422	5,336,266,412	10,212,989,847	402,894,039	10,615,883,886
III.Movements for the year ended 31 December 2021 (Decrease is listed with “-”)			-2,616,289	-2,972,605	107,939,088	1,111,384,455	1,213,734,649	33,708,870	1,247,443,519
(1) Total comprehensive income			-2,616,289			1,526,392,754	1,523,776,465	31,708,870	1,555,485,335
(2) Capital increase or decrease from shareholder								2,000,000	2,000,000
1. Ordinary shares contributed by the owner								2,000,000	2,000,000
(3) Profit distribution					107,939,088	-415,008,299	-307,069,211		-307,069,211
1. Appropriation to surplus reserve					107,939,088	-107,939,088			
2. Distribution to the shareholders						-307,069,211	-307,069,211		-307,069,211
(4) Special reserve				-2,972,605			-2,972,605		-2,972,605
1. Special reserve used				2,972,605			2,972,605		2,972,605
IV.Balance at 31 December 2021	3,070,692,107	596,997,085	159,200,530	7,296,397	1,144,887,510	6,447,650,867	11,426,724,496	436,602,909	11,863,327,405

Legal representative: Chen Lin

Principal in charge of accounting: Wang Wenxin

Head of accounting department: Wang Wenxin

8、Statement of changes in owners' equity of the parent company

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	2022				
	Share capital	Capital surplus	Surplus reserve	Undistributed profits	Total shareholders' equity
I.Balance at the end of the last year	3,070,692,107	741,824,399	1,159,432,870	1,765,173,270	6,737,122,646
II.Balance at 1 January 2022	3,070,692,107	741,824,399	1,159,432,870	1,765,173,270	6,737,122,646
III.Movements for the year ended 31 December 2022 (Decrease is listed with “-”)			83,746,491	139,580,001	223,326,492
(1) Total comprehensive income				837,464,913	837,464,913
(2) Capital increase or decrease from shareholder					
(3) Profit distribution			83,746,491	-697,884,912	-614,138,421
1. Appropriation to surplus reserve			83,746,491	-83,746,491	
2. Distribution to the shareholders				-614,138,421	-614,138,421
(4) Internal carry-forward of owners' equity					
(5) Special reserve					
(6) Others					
IV.Balance at 31 December 2022	3,070,692,107	741,824,399	1,243,179,361	1,904,753,271	6,960,449,138

8、Statement of changes in owners' equity of the parent company (Continued)

Prepared by:CSG Holding Co.,LTD

Unit: Yuan

Items	2021				
	Share capital	Capital surplus	Surplus reserve	Undistributed profits	Total shareholders' equity
I、 Balance at the end of the last year	3,070,692,107	741,824,399	1,051,493,782	1,100,790,694	5,964,800,982
II、 Balance at 1 January 2021	3,070,692,107	741,824,399	1,051,493,782	1,100,790,694	5,964,800,982
III、 Movements for the year ended 31 December 2021 (Decrease is listed with “-”)			107,939,088	664,382,576	772,321,664
(1) Total comprehensive income				1,079,390,875	1,079,390,875
(2) Capital increase or decrease from shareholder					
(3) Profit distribution			107,939,088	-415,008,299	-307,069,211
1. Appropriation to surplus reserve			107,939,088	-107,939,088	
2. Distribution to the shareholders				-307,069,211	-307,069,211
(4) Internal carry-forward of owners' equity					
(5) Special reserve					
(6) Others					
IV、 Balance at 31 December 2021	3,070,692,107	741,824,399	1,159,432,870	1,765,173,270	6,737,122,646

CSG HOLDING CO.,LTD

NOTES TO FINANCIAL STATEMENTS

(Unless otherwise specified, the monetary unit shall be RMB)

I、GENERAL INFORMATION

CSG Holding Co.,LTD (the “Company”) was incorporated in September 1984, known as China South Glass Company, as a joint venture enterprise by Hong Kong China Merchants Shipping Co.,LTD (香港招商局轮船股份有限公司), Shenzhen Building Materials Industry Corporation (深圳建筑材料工业集团公司), China North Industries Corporation (中国北方工业深圳公司) and Guangdong International Trust and Investment Corporation (广东国际信托投资公司). The Company was registered in Shenzhen, Guangdong Province of the People's Republic of China and its headquarters is located in Shenzhen, Guangdong Province of the People's Republic of China. The Company issued RMB-denominated ordinary shares (“A-share”) and foreign shares (“B-share”) publicly in October 1991 and January 1992 respectively, and was listed on Shenzhen Stock Exchange on February 1992. As at 31 December 2022, the registered capital was RMB3,070,692,107, with nominal value of RMB1 per share.

The Company and its subsidiaries (collectively referred to as the “Group”) are mainly engaged in the manufacture and sales of flat glass, specialised glass, engineering glass, energy saving glass, silicon related materials, polycrystalline silicon and solar components and electronic-grade display device glass and the construction and operation of photovoltaic plant etc.

The financial statements were authorised for issue by the Board of Directors on 24 April 2023.

Details on the majors subsidiaries included in the consolidated scope in current year were stated in Note .

II、BASIS OF PREPARATION OF FINANCIAL STATEMENTS

1、Basis of preparation of financial statements

The financial statements are prepared in accordance with the Accounting Standards for Business Enterprises - Basic Standard, and the specific accounting standards and other relevant regulations issued by the Ministry of Finance on 15 February 2006 and in subsequent periods (hereafter collectively referred to as “the Accounting Standard for Business Enterprises” or “CAS”), and Information Disclosure Rule No. 15 for Companies with Public Traded Securities - Financial Reporting General Provision issued by China Security Regulatory Commission.

2、Going concern

The present financial report has been prepared on the basis of going concern assumptions.

III、SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

The Group determines its specific accounting policies and accounting estimates to manufacturing and operation feature. It mainly reflected in expected credit impairment losses of receivables was measured, inventory costing method, Depreciation of fixed assets and amortization of intangible assets, criteria for determining capitalised development expenditure, and timing for revenue recognition.

Please see the key judgements adopted by the Group in applying important accounting policies.

1、Statement of compliance with the Accounting Standards for Business Enterprises

The financial statements of the Company for the year ended 31 December 2022 are in compliance with the Accounting Standards for Business Enterprises, and truly and completely present the financial position of the consolidated and the Company as at 31 December 2022 and their financial performance, cash flows for the year then ended.

2、Accounting year

The Company's accounting year starts on 1 January and ends on 31 December.

3、Operating cycle

The Company's operating cycle starts on 1 January and ends on 31 December.

4、Recording currency

The recording currency is Renminbi (RMB).

5、Accounting treatment of business combinations under the common control and under non- common control

(a) Business combinations involving enterprises under common control

The consideration paid and net assets obtained by the absorbing party in a business combination are measured at book value. If the merged party was acquired by the ultimate controlling party from a third party in the previous year, the assets and liabilities of the merged party (including the goodwill formed by the ultimate controlling party's acquisition of the merged party). The difference between book value of the net assets obtained from the combination and book value of the consideration paid for the combination is treated as an adjustment to capital surplus (share premium). If the capital surplus (share premium) is not sufficient to absorb the difference, the remaining balance is adjusted against retained earnings. Costs directly attributable to the combination are included in profit or loss in the period in which they are incurred. Transaction costs associated with the issue of equity or debt securities for the business combination are included in the initially recognised amounts of the equity or debt securities.

(b) Business combinations involving enterprises under non-common control

The cost of combination and identifiable net assets obtained by the acquirer in a business combination are measured at fair value at the acquisition date. Where the cost of the combination exceeds the acquirer's interest in the fair value

of the acquiree's identifiable net assets, the difference is recognised as goodwill; where the cost of combination is lower than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised in profit or loss for the current period. Costs directly attributable to the combination are included in profit or loss in the period in which they are incurred. Transaction costs associated with the issue of equity or debt securities for the business combination are included in the initially recognised amounts of the equity or debt securities.

6. Methodology for the preparation of consolidated financial statement

The consolidated financial statements comprise the financial statements of the Company and all of its subsidiaries.

Subsidiaries are consolidated from the date on which the Group obtains control and are de-consolidated from the date that such control ceases. For a subsidiary that is acquired in a business combination involving enterprises under common control, it is included in the consolidated financial statements from the date when it, together with the Company, comes under common control of the ultimate controlling party. The portion of the net profits realised before the combination date is presented separately in the consolidated income statement.

In preparing the consolidated financial statements, where the accounting policies and the accounting periods of the Company and subsidiaries are inconsistent, the financial statements of the subsidiaries are adjusted in accordance with the accounting policies and the accounting period of the Company. For subsidiaries acquired from business combinations involving enterprises not under common control, the individual financial statements of the subsidiaries are adjusted based on the fair value of the identifiable net assets at the acquisition date.

All significant intra-group balances, transactions and unrealised profits are eliminated in the consolidated financial statements. The portion of subsidiaries' equity and the portion of a subsidiaries' net profits and losses and comprehensive incomes for the period not attributable to Company are recognised as minority interests and presented separately in the consolidated financial statements under equity, net profits and total comprehensive income respectively. Unrealised profits and losses resulting from the sales of assets by the Company to its subsidiaries are fully eliminated against net profit attributable to shareholders of the parent company. Unrealised profits and losses resulting from the sales of assets by a subsidiary to the Company are eliminated and allocated between net profit attributable to shareholders of the parent company and non-controlling interests in accordance with the allocation proportion of the parent company in the subsidiary. Unrealised profits and losses resulting from the sales of assets by one subsidiary to another are eliminated and allocated between net profit attributable to shareholders of the parent company and non-controlling interests in accordance with the allocation proportion of the parent in the subsidiary.

After the control over the subsidiary has been gained, whole or partial minority equities of the subsidiary owned by minority shareholders are acquired from the subsidiary's minority shareholders. In the consolidated financial statements, the subsidiary's assets and liabilities are reflected with amount based on continuous calculation starting from the acquisition date or consolidation date. Capital surplus is adjusted according to the difference between newly increased long-term equity investment arising from acquisition of minority equity and the share of net assets calculated based on current shareholding ratio that the parent company is entitled to. The share is subject to continuous calculation starting from the acquisition date or consolidation date. If the capital surplus (capital premium or share capital premium) is not sufficient to absorb the difference, the remaining balance is adjusted against retained earnings.

If the accounting treatment of a transaction which considers the Group as an accounting entity is different from that considers the Company or its subsidiaries as an accounting entity, it is adjusted from the perspective of the Group.

7、Standards for determining cash and cash equivalents

Cash and cash equivalents refer to cash in hand, deposits that can be used for payment at any time, and investments with short holding periods, strong liquidity, easy conversion into known amounts of cash, and low risk of value changes.

8、Foreign currency transactions and translation of foreign currency statement

(a) Foreign currency transaction

Foreign currency transactions are translated into RMB using the exchange rates prevailing at the dates of the transactions.

On the balance sheet date, monetary items denominated in foreign currencies are translated into RMB using the spot exchange rates on the balance sheet date. Exchange differences arising from these translations are recognised in profit or loss or other comprehensive income for the current period, except for those attributable to foreign currency borrowings that have been taken out specifically for the acquisition or construction of qualifying assets, which are capitalised as part of the cost of those assets. Non-monetary items denominated in foreign currencies that are measured at historical costs are translated at the balance sheet date using the spot exchange rates at the date of the transactions. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

(b) Translation of foreign currency financial statements

The asset and liability items in the balance sheets for overseas operations are translated at the spot exchange rates on the balance sheet date. Among the shareholders' equity items, the items other than "undistributed profits" are translated at the spot exchange rates of the transaction dates. The income and expense items in the income statements of overseas operations are translated at the spot exchange rates of the transaction dates. The differences arising from the above translation are presented separately in other comprehensive income items in the shareholders' equity. The cash flows of overseas operations are translated at the spot exchange rates on the dates of the cash flows. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

9、Financial instrument

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. A financial asset or a financial liability is recognised when the Group becomes a party to the contractual provisions of the instrument.

(a) Financial assets

(i) Classification and measurement

Based on the business model for managing the financial assets and the contractual cash flow characteristics of the financial assets, financial assets are classified as: (1) financial assets at amortised cost; (2) financial assets at fair value through other comprehensive income; (3) financial assets at fair value through profit or loss.

The financial assets are measured at fair value at initial recognition. Related transaction costs that are attributable to the acquisition of the financial assets are included in the initially recognised amounts, except for the financial assets at fair value through profit or loss, the related transaction costs of which are recognised directly

in profit or loss for the current period. Accounts receivable or notes receivable arising from sales of products or rendering of services (excluding or without regard to significant financing components) are initially recognised at the consideration that is entitled to be charged by the Group as expected.

Debt instruments

The debt instruments held by the Group refer to the instruments that meet the definition of financial liabilities from the perspective of the issuer, and are measured in the following ways.

Measured at amortised cost

The objective of the Group's business model is to hold the financial assets to collect the contractual cash flows, and the contractual cash flow characteristics are consistent with a basic lending arrangement, which gives rise on specified dates to the contractual cash flows that are solely payments of principal and interest on the principal amount outstanding. The interest income of such financial assets is recognised using the effective interest method. Such financial assets mainly include cash at bank and on hand, accounts receivable, other receivables, debt investments and long-term receivables. The Group presents debt investments and long-term receivables maturing within one year (inclusive) from the balance sheet date as non-current assets maturing within one year; Debt investments with a maturity of one year (inclusive) at the time of acquisition are listed as other current assets.

Financial assets at fair value through other comprehensive income:

The objective of the Group's business model is to hold the financial assets to collect the contractual cash flows and selling as target, and the contractual cash flow characteristics are consistent with a basic lending arrangement. Such financial assets are measured at fair value and their changes are included in other comprehensive income, but impairment losses or gains, exchange gains and losses, and interest income calculated by the effective interest rate method are all included in the current profit and loss. Such financial assets mainly comprise receivable financing and other financial debt investment. Other financial debt investment that are due within one year (inclusive) as from the balance sheet date are included in the current portion as other current assets.

Measured at fair value through profit or loss:

Debt instruments held by the Group that are not divided into those at amortised cost, or those measured at fair value through other comprehensive income, are measured at fair value through profit or loss and included in financial assets held for trading. At initial recognition, the Group designates a portion of financial assets as at fair value through profit or loss to eliminate or significantly reduce an accounting mismatch. Financial assets that are due within one year (inclusive) as from the balance sheet date and are expected to be held over one year are included in other non-current financial assets.

Equity instruments

Investments in equity instruments, over which the Group has no control, joint control or significant influence, are measured at fair value through profit or loss under financial assets held for trading; investments in equity

instruments expected to be held over one year as from the balance sheet date are included in other non-current financial assets.

In addition, a portion of certain investments in equity instruments not held for trading are designated as financial assets at fair value through other comprehensive income under other investments in equity instruments. The relevant dividend income of such financial assets is recognised in profit or loss for the current period.

(ii) Impairment

The Group confirms the loss provision based on expected credit losses for financial assets measured at amortised cost, debt instrument investments at fair value through other comprehensive income, and financial guarantee contracts, based on expected credit losses (ECL) and recognizes allowances for losses .

Giving consideration to reasonable and supportable information on past events, current conditions and forecasts of future economic conditions, as well as the default risk weight , the expected credit loss was confirmed.

On each balance sheet date, the expected credit losses of financial instruments at different stages are measured respectively. 12-month ECL provision is recognised for financial instruments in Stage 1 that have not had a significant increase in credit risk since initial recognition; lifetime ECL provision is recognised for financial instruments in Stage 2 that have had a significant increase in credit risk yet without credit impairment since initial recognition; and lifetime ECL provision is recognised for financial instruments in Stage 3 that have had credit impairment since initial recognition.

For the financial instruments with lower credit risk on the balance sheet date, the Group assumes there is no significant increase in credit risk since initial recognition and recognises the 12-month ECL provision.

For the financial instruments in Stage 1, Stage 2 and with lower credit risk, the Group calculates the interest income by applying the effective interest rate to the gross carrying amount (before deduction of the impairment provision). For the financial instrument in Stage 3, the interest income is calculated by applying the effective interest rate to the amortised cost (after deduction of the impairment provision from the gross carrying amount).

For notes and accounts receivables and factoring receivables arising from daily business activities such as selling commodities and providing labor services, the Group recognises the lifetime expected credit loss provision regardless of whether there exists a significant financing component.

In case the expected credit losses of an individually assessed financial asset cannot be evaluated with reasonable cost, the Group divides the receivables into certain groupings based on credit risk characteristics, and calculates the expected credit losses for the groupings. Basis for determined groupings and method for provision are as follows:

Class	Item	Method
Notes receivables Portfolio 1	Bank acceptance Notes	Expected credit loss method
Notes receivables Portfolio 2	Trade acceptance Notes	Expected credit loss method
Accounts receivables Portfolio 1	Receivables non-related third party	Expected credit loss method
Accounts receivables Portfolio 2	Receivables related party	Expected credit loss method
Receivables Financing Portfolio 1	Bank acceptance Notes	Expected credit loss method

Other receivables Portfolio 1	Receivables non-related third party	Expected credit loss method
Other receivables Portfolio 2	Receivables related party	Expected credit loss method

For notes and accounts receivables and receivable financing arising from daily business activities such as selling commodities and providing labor services, the Group refers to historical credit loss experience, combined with current conditions and predictions of future economic conditions. In addition to notes receivable, factoring receivables and other receivables classified as a combination, the Group refers to historical credit loss experience, combines current conditions and predictions of future economic conditions, and passes default risk exposure and future 12 The expected credit loss rate within a month or the entire duration is calculated as the expected credit loss.

The Group recognises the loss provision made or reversed into profit or loss for the current period. For debt instruments that are held at fair value and whose changes are included in other comprehensive income, the Group adjusts other comprehensive income while accounting for impairment losses or gains in the current profit or loss.

(iii) Derecognition

A financial asset is derecognised when any of the below criteria is met: (1) the contractual rights to receive the cash flows from the financial asset expire; (2) the financial asset has been transferred and the Group transfers substantially all the risks and rewards of ownership of the financial asset to the transferee; or (3) the financial asset has been transferred and the Group has not retained control of the financial asset, although the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset.

(b) Financial liabilities

Financial liabilities are classified as financial liabilities at amortised cost and financial liabilities at fair value through profit or loss at initial recognition.

The Group's financial liabilities are mainly comprise financial liabilities at amortised cost, including bills payable, accounts payable, and other payables. This type of financial liability is initially measured at its fair value after deducting transaction costs, and is subsequently measured using the actual interest rate method. If the maturity is less than one year (including one year), it is listed as current liabilities; Those with a maturity of less than one year (including one year) are listed as current liabilities; those with a maturity of more than one year but due within one year (including one year) from the balance sheet date are listed as non-current liabilities due within one year. The rest are listed as non-current liabilities.

A financial liability is derecognised or partly derecognised when the underlying present obligation is discharged or partly discharged. The difference between the carrying amount of the derecognised part of the financial liability and the consideration paid is recognised in profit or loss for the current period.

(c) Determination of fair value of financial instruments

The fair value of a financial instrument that is traded in an active market is determined at the quoted price in the active market. The fair value of a financial instrument that is not traded in an active market is determined by using a valuation technique. In valuation, the Group adopts valuation techniques applicable in the current situation and supported by adequate available data and other information, selects inputs with the same characteristics as those of assets or liabilities considered in relevant transactions of assets or liabilities by market participants, and gives priority to the use of relevant observable inputs. When relevant observable inputs are not available or feasible, unobservable inputs are adopted.

10、 Inventories

(a) Classification

Inventories refer to manufacturing sector, including raw materials, work in progress, finished goods and turnover materials, and are measured at the lower of cost and net realisable value.

(b) Issued Inventory costing method

Cost is determined using the weighted average method. The cost of finished goods and work in progress comprise raw materials, direct labour and systematically allocated production overhead based on the normal production capacity.

(c) Amortisation methods of low value consumables and packaging materials

Turnover materials include low value consumables and packaging materials, which are expensed when issued.

(d) The determination of net realisable value and the method of provision for decline in the value of inventories

Provision for decline in the value of inventories is determined at the excess amount of book values of the inventories over their net realisable value. Net realisable value is determined based on the estimated selling price in the ordinary course of business, less the estimated costs to completion and estimated costs necessary to make the sale and related taxes.

(e) The Group adopts the perpetual inventory system.

11、 Assets classified as held for sale

A non-current asset or a disposal group is classified as held for sale when all of the following conditions are satisfied:

(1) the non-current asset or the disposal group is available for immediate sale in its present condition subject to terms that are traditionally and customary for sales; (2) the Group has made a resolution and obtained appropriate approval for disposal of the non-current asset or the disposal group, and the transfer is to be completed within one year.

Non-current assets (except for financial assets, investment properties at fair value and deferred tax assets) that meet the recognition criteria for held for sale are recognised at the amount equal to the lower of the fair value less costs to sell and book value. The difference between fair value less costs to sell and carrying amount, should be presented as impairment loss.

Such non-current assets and assets included in disposal groups as classified as held for sale are accounted for as current assets; while liabilities included in disposal groups classified as held for sale are accounted for as current liabilities, and are presented separately in the balance sheet.

A discontinued operation is a component of the Group that either has been disposed of or is classified as held for sale, and is separately identifiable operationally and for financial reporting purposes, and satisfies one of the following conditions: (1) represents a separate major line of business or geographical area of operations; (2) is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; and (3) is a subsidiary acquired exclusively with a view to resale.

The discontinued operation profits on income statement presentation have included the profits and loss of operation and disposal.

12、 Long-term equity investments

Long-term equity investments comprise the Company's long-term equity investments in its subsidiaries, and the Group's long-term equity investments in its associates.

Subsidiaries are the investees over which the Company is able to exercise control. Associates are the investees that the Group has significant influence on their financial and operating policies.

Investments in subsidiaries are measured using the cost method in the Company's financial statements, and adjusted by using the equity method when preparing the consolidated financial statements. Investments in associates are accounted for using the equity method.

(a) Initial recognition of investment cost

For long-term equity investments formed in business combination: when obtained from business combinations involving entities under common control, the long-term equity investment is stated at carrying amount of equity for the combined parties at the time of merger; when the long-term equity investment obtained from business combinations involving entities not under common control, the investment is measured at combination cost.

For long-term equity investments not formed in business combination: the one paid by cash is initially measured at actual purchase price; the long-term investment obtained by issuing equity securities is stated at fair value of equity securities as initial investment cost.

(b) Subsequent measurement and recognition of related profit or loss

For long-term equity investments accounted for using the cost method, they are measured at the initial investment costs, and cash dividends or profit distribution declared by the investees are recognised as investment income in profit or loss.

For long-term equity investments accounted for using the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's share of the fair value of the investee's identifiable net assets at the acquisition date, the long-term equity investment is measured at the initial investment cost; where the initial investment cost is less than the Group's share of the fair value of the investee's identifiable net assets at the acquisition date, the difference is included in profit or loss and the cost of the long-term equity investment is adjusted upwards accordingly.

Under the equity method, the Group recognises the investment income according to its share of net profit or loss of the investee. The Group discontinues recognising its share of the net losses of an investee after book values of the long-term equity investment together with any long-term interests that in substance form part of the investor's net investment in the investee are reduced to zero. However, if the Group has obligations for additional losses and the criteria with respect to recognition of provisions under the accounting standards on contingencies are satisfied, the Group continues recognising the investment losses and the provisions. For changes in owners' equity of the investee other than those arising from its net profit or loss, its proportionate share is directly recorded into capital surplus, provided that the proportion of the shareholding of the Group in the investee remains unchanged. Book value of the

investment is reduced by the Group's share of the profit distribution or cash dividends declared by an investee. The unrealised profits or losses arising from the intra-group transactions amongst the Group and its investees are eliminated in proportion to the Group's equity interest in the investees, and then based on which the investment gains or losses are recognised. Any losses resulting from transactions between the Group and its investees attributable to asset impairment losses are not eliminated.

(c) Basis for determining existence of control, jointly control or significant influence over investees

The term "control" refers to the power in the investees, to obtain variable returns by participating in the related business activities of the investees, and the ability to affect the returns by exercising its power over the investees.

The term "significant influence" refers to the power to participate in the formulation of financial and operating policies of an enterprise, but not the power to control, or jointly control, the formulation of such policies with other parties.

(d) Impairment of long-term equity investments

Book value of long-term equity investments in subsidiaries and associates is reduced to the recoverable amount when the recoverable amount is less than book value.

13. Investment property

Investment property includes leased land use rights, land use rights held and provided for to transfer after appreciation and leased building and construction.

Investment properties are initially measured at acquisition cost. The cost of outsourcing Investment property includes the purchase price, relevant taxes and other expenditures that can be directly attributable to the asset; the cost of self-built Investment property is determined by the construction of the asset. The composition of the necessary expenditures incurred before the usable state.

Investment property adopts the fair value model for subsequent measurement without depreciation or amortization. On the balance sheet date, the book value of the investment properties are initially measured at acquisition cost is adjusted based on the fair value of the investment properties are initially measured at acquisition cost. The difference between the fair value and the original book value will be calculated into the current profit and loss.

When the use of an Investment property is changed to self-use, the investment property is converted into fixed assets or intangible assets from the date of change, and the book value and fair value of the fixed assets and intangible assets are determined based on the fair value of the investment property on the conversion date. The difference with the original book value of the investment property is included in the current profit and loss. When the purpose of self-use real estate is changed to earning rent or capital appreciation, from the date of change, the fixed assets or intangible assets are converted into investment properties are initially measured at acquisition cost, and the fair value on the day of conversion is used as the book value of the investment properties are initially measured at acquisition cost, and the fair value on the day of conversion. If the value is less than the original book value of fixed assets and intangible assets, the difference is included in the current profit and loss. If the fair value on the day of conversion is greater than the original book value of fixed assets and intangible assets, the difference is included in other comprehensive income.

When an investment property is disposed of or permanently withdrawn from use and it is expected that no economic benefits can be obtained from its disposal, the confirmation of the investment real estate shall be terminated. The disposal income from the sale, transfer, scrapping or destruction of investment real estate shall deduct its book value and relevant taxes and shall be included in the current profits and losses. If there is an amount included in other comprehensive income on the original conversion date, it will also be carried forward and included in the current profit and loss.

14、Fixed assets

(1) Recognition and initial measurement

Fixed assets comprise buildings, machinery and equipment, motor vehicles and others.

Fixed assets are recognised when it is probable that the related economic benefits will probably flow to the Group and the costs can be reliably measured. Fixed assets purchased or constructed by the Group are initially measured at cost at the acquisition date.

Subsequent expenditures incurred for a fixed asset are included in the cost of the fixed asset when it is probable that the associated economic benefits will flow to the Group and the related cost can be reliably measured. Book value of the replaced part is derecognised. All the other subsequent expenditures are recognised in profit or loss in the period in which they are incurred.

(2) Depreciation methods

Fixed assets are depreciated using the life average method to allocate the cost of the assets to their estimated residual values over their estimated useful lives. For the fixed assets that have been provided for impairment loss, the related depreciation charge is prospectively determined based upon the adjusted carrying amounts over their remaining useful lives.

The estimated useful lives, the estimated net residual values expressed as a percentage of cost and the annual depreciation rates of fixed assets are as follows:

Type	Depreciation methods	Estimated useful lives	Estimated net residual value	Annual depreciation rate
Buildings	the life average method	20 to 35 years	5%	2.71% to 4.75%
Machinery and equipment	the life average method	8 to 20 years	5%	4.75% to 11.88%
Transportation and others	the life average method	5 to 8 years	0%	12.50% to 20%

The estimated useful life, the estimated net residual value of a fixed asset and the depreciation method applied to the asset are reviewed, and adjusted as appropriate at each year-end.

(3) Book value of a fixed asset is reduced to the recoverable amount when the recoverable amount is below book value.

(4) Disposal

A fixed asset is derecognised on disposal or when no future economic benefits are expected from its use or disposal. The amount of proceeds from disposals on sale, transfer, retirement or damage of a fixed asset net of its carrying amount and related taxes and expenses is recognised in profit or loss for the current period.

15. Construction in progress

Construction in progress is recorded at actual cost. Actual cost comprises construction cost, installation cost, borrowing costs eligible for capitalised condition and necessary expenditures incurred for its intended use. Actual cost also includes net of trial production cost and trial production income before construction in progress is put into production.

Construction in progress is transferred to fixed assets when the assets are ready for their intended use, and depreciation begins from the following month.

Book value of construction in progress is reduced to the recoverable amount when the recoverable amount is below book value.

16. Borrowing costs

The borrowing costs that are directly attributable to the acquisition and construction of an asset that needs a substantially long period of time for its intended use commence to be capitalised and recorded as part of the cost of the asset when expenditures for the asset and borrowing costs have been incurred, and the activities relating to the acquisition and construction that are necessary to prepare the asset for its intended use have commenced. The capitalisation of borrowing costs ceases when the asset under acquisition or construction becomes ready for its intended use and the borrowing costs incurred thereafter are recognised in profit or loss for the current period. Capitalisation of borrowing costs is suspended during periods in which the acquisition or construction of a fixed asset is interrupted abnormally and the interruption lasts for more than 3 months, until the acquisition or construction is resumed.

For the specific borrowings obtained for the acquisition or construction of an asset qualifying for capitalisation, the amount of borrowing costs eligible for capitalisation is determined by deducting any interest income earned from depositing the unused specific borrowings in the banks or any investment income arising on the temporary investment of those borrowings during the capitalisation period.

For the general borrowings obtained for the acquisition or construction of an asset qualifying for capitalisation, the amount of borrowing costs eligible for capitalisation is determined by applying the weighted average effective interest rate of general borrowings, to the weighted average of the excess amount of cumulative expenditures on the asset over the amount of specific borrowings. The effective interest rate is the rate at which the estimated future cash flows during the period of expected duration of the borrowings or applicable shorter period are discounted to the initial amount of the borrowings.

17、 Intangible assets

(1) Valuation method, service life, impairment test

Intangible assets, mainly including land use rights, patents and proprietary technologies, exploitation rights and others, are measured at cost.

(a) Land use rights

Land use rights are amortised on the straight-line basis over their approved use period of 30 to 70 years. If the acquisition costs of the land use rights and the buildings located thereon cannot be reasonably allocated between the land use rights and the buildings, all of the acquisition costs are recognised as fixed assets.

(b) Patents and proprietary technologies

Patents are amortised on a straight-line basis over the estimated use life.

(c) Exploitation rights

Exploitation rights are amortised on a straight-line basis over permitted exploitation periods on the exploitation certificate.

(d) Periodical review of useful life and amortisation method

For an intangible asset with a finite useful life, review of its useful life and amortisation method is performed at each year-end, with adjustment made as appropriate.

(e) Impairment of intangible assets

Book value of intangible assets is reduced to the recoverable amount when the recoverable amount is below book value.

(2) Internal Research and development expenditure accounting policy

The expenditure on an internal research and development project is classified into expenditure on the research phase and expenditure on the development phase based on its nature and whether there is material uncertainty that the research and development activities can form an intangible asset at end of the project.

Expenditure on the research phase related to planned survey, evaluation and selection for research on manufacturing technique is recognised in profit or loss in the period in which it is incurred. Prior to mass production, expenditure on the development phase related to the design and testing phase in regards to the final application of manufacturing technique is capitalised only if all of the following conditions are satisfied:

- the development of manufacturing technique has been fully demonstrated by technical team;
- management has approved the budget for the development of manufacturing technique;
- there are research and analysis of pre-market research explaining that products manufactured with such technique are capable of marketing;
- There is sufficient technique and capital to support the development of manufacturing technology and subsequent mass production; and the expenditure on manufacturing technology development can be reliably gathered.

Other development expenditures that do not meet the conditions above are recognised in profit or loss in the period in which they are incurred. Development costs previously recognised as expenses are not recognised as an asset in a

subsequent period. Capitalised expenditure on the development phase is presented as development costs in the balance sheet and transferred to intangible assets at the date that the asset is ready for its intended use.

18、 Impairment of long-term assets

Fixed assets, construction in progress, intangible assets with finite useful lives and long-term equity investments in joint ventures and associates are tested for impairment if there is any indication that the assets may be impaired on the balance sheet date; intangible assets not ready for their intended use are tested at least annually for impairment, irrespective of whether there is any indication that they may be impaired. If the result of the impairment test indicates that the recoverable amount of an asset is less than its carrying amount, a provision for impairment and an impairment loss are recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset. Provision for asset impairment is determined and recognised on the individual asset basis. If it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of a group of assets to which the asset belongs is determined. A group of assets is the smallest group of assets that is able to generate independent cash inflows.

Goodwill that is separately presented in the financial statements is tested at least annually for impairment, irrespective of whether there is any indication that it may be impaired. In conducting the test, book value of goodwill is allocated to the related asset groups or groups of asset groups which are expected to benefit from the synergies of the business combination. If the result of the test indicates that the recoverable amount of an asset group or group of asset groups, including the allocated goodwill, is lower than its book value, the corresponding impairment loss is recognised. The impairment loss is first deducted from book value of goodwill that is allocated to the asset group or group of asset groups, and then deducted from book values of other assets within the asset groups or groups of asset groups in proportion to book values of assets other than goodwill.

Once the above asset impairment loss is recognised, it will not be reversed for the value recovered in the subsequent periods.

19、 Long-term prepaid expenses

Long-term prepaid expenses include the expenditures that have been incurred but should be recognised as expenses over more than one year in the current and subsequent periods. Long-term prepaid expenses are amortised on the straight-line basis over the expected beneficial period and are presented at actual expenditure net of accumulated amortisation.

20、 Employee benefits

Employee benefits include short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits provided in various forms of consideration in exchange for service rendered by employees or compensations for the termination of employment relationship.

(1) Short-term employee benefits

Short-term employee benefits include wages or salaries, bonuses, allowances and subsidies, staff welfare, medical care, work injury insurance, maternity insurance, housing funds, labour union funds, employee education funds and paid short-term leave, etc. The employee benefit liabilities are recognised in the accounting period in which the service is rendered by the employees, with a corresponding charge to the profit or loss for the current period or the cost of relevant assets. Employee benefits which are non-monetary benefits shall be measured at fair value.

(2) Post-employment benefits

The Group classifies post-employment benefit plans as either defined contribution plans or defined benefit plans. Defined contribution plans are post-employment benefit plans under which the Group pays fixed contributions into a separate fund and will have no obligation to pay further contributions; and defined benefit plans are post-employment benefit plans other than defined contribution plans. During the reporting period, the Group's post-employment benefits mainly include basic pensions and unemployment insurance, both of which belong to the defined contribution plans.

(3) Basic pensions

The Group's employees participate in the basic pension plan set up and administered by local authorities of Ministry of Human Resource and Social Security. Monthly payments of premiums on the basic pensions are calculated according to prescribed bases and percentage by the relevant local authorities. When employees retire, local labour and social security institutions have a duty to pay the basic pension insurance to them. The amounts based on the above calculations are recognised as liabilities in the accounting period in which the service has been rendered by the employees, with a corresponding charge to the profit or loss for the current period or the cost of relevant assets.

(4) Termination benefits

The Group provides compensation for terminating the employment relationship with employees before the end of the employment contracts or as an offer to encourage employees to accept voluntary redundancy before the end of the employment contracts. The Group recognises a liability arising from compensation for termination of the employment relationship with employees, with a corresponding charge to profit or loss at the earlier of the following dates: 1) when the Group cannot unilaterally withdraw the offer of termination benefits because of an employment termination plan or a curtailment proposal; 2) when the Group recognises costs or expenses related to the restructuring that involves the payment of termination benefits.

The termination benefits expected to be paid within one year since the balance sheet date are classified as current liabilities.

21、Provisions

Business restructuring, provisions for product warranties, loss contracts etc. are recognised when the Group has a present obligation, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

A provision is initially measured at the best estimate of the expenditure required to settle the related present obligation. Factors surrounding a contingency, such as the risks, uncertainties and the time value of money, are taken into account as a whole in reaching the best estimate of a provision. Where the effect of the time value of money is material, the best estimate is determined by discounting the related future cash outflows. The increase in the discounted amount of the provision arising from passage of time is recognised as interest expense.

Book value of provision is reviewed at each balance sheet date and adjusted to reflect the current best estimate.

The provisions expected to be paid within one year since the balance sheet date are classified as current liabilities.

22、 Share-based payments

Share-based payments are divided into equity-settled and cash-settled payments. The term "equity-settled share-based payment" refers to a transaction in which an enterprise grants shares or other equity instruments as a consideration in return for services.

Equity-settled share-based payment The Group's stock option stock option plan is the equity-settled share-based payment in exchange of employees' services and is measured at the fair value of the equity instruments at grant date. The equity instruments are exercisable after services in vesting period are completed or specified performance conditions are met. In the vesting period, the services obtained in current period are included in relevant cost and expenses at the fair value of the equity instruments at grant date based on the best estimate of the number of exercisable equity instruments, and capital surplus is increased accordingly. The Group makes the best estimate of the number of vesting equity instruments based on the latest obtained changes in the number of vested employees, whether the required performance conditions are met, and other follow-up information. If the subsequent information indicates the number of exercisable equity instruments differs from the previous estimate, an adjustment is made and, on the exercise date, the estimate is revised to equal the number of actual vested equity instruments.

In the period at which performance conditions and term of service are met, the relevant cost and expenses of equity-settled payment should be recognized, and capital surplus is increased accordingly. Before the exercise date, the accruing amounts of equity-settled payments on balance sheet date reflect the part of expired waiting period and optimal estimation for the number of the Company final vested equity instruments.

If the non-market conditions and term of service are not met so that share-based payment fail to exercise, the costs and expenses on this portion should not be recognized. If the share-based payment agreement sets out the market conditions and term of non-vesting, as long as performance conditions and term of service are met, it should be regard as exercisable right, no matter the market conditions and non-vesting conditions are meet or not.

If the terms of equity-settled payment are modified, at least the service is confirmed in accordance with the unmodified terms. In addition, the increase of the fair value of the authorized equity instruments, or the beneficial changes to the employees on the modification date, the increase of service are confirmed. If the equity-settled payment is cancelled, the cancellation date shall be deemed as an expedited exercise, and the unconfirmed amount shall be confirmed immediately. If the employee or other party is able to choose to meet the non-vesting conditions but not satisfied in the waiting period, equity-settled payment should be cancelled. But if a new equity instrument is granted, and the new equity instrument is confirm to replace the old equity instrument which is canceled in the

authorization date of the new equity instrument, the new equity instrument should be disposed by using the same conditions and terms of the old equity instrument for modifications.

23、 Revenue

The Group recognises revenue at the consideration that the Group is entitled to charge as expected when the Group has fulfilled the performance obligations in the contract, that is, the customer obtains control over relevant goods or services.

a. Sales of goods

The Group mainly sells flat and engineering glass, products related to solar energy, and electronic glass and displays. For domestic sales, the Group delivers the products to a certain place specified in the contract. When the buyer takes over the goods, the Group recognises revenue. For export sales, the Group recognises the revenue when it finished clearing goods for export and deliver the goods on board the vessel, or when the goods are delivered to a certain place specified in the contract. The credit period granted by the Group to customers is determined based on the customer's credit risk characteristics, consistent with industry practices, and there is no major financing component. The Group's obligation to transfer goods to customers for consideration received or receivable from customers is listed as contract liabilities.

Revenue is presented as the net amount after deducting sales discounts and sales returns.

b. Rendering of services

The Group provides external consulting, loading, unloading, transportation and processing labor services, and recognizes revenue within a period of time based on the progress of the completed labor. The progress of the completed labor is determined according to the proportion of the cost incurred to the estimated total cost. On the balance sheet date, the Group re-estimates the progress of completed labor services so that it can reflect changes in contract performance.

When the Group recognizes revenue based on the performance progress of the completed labor services, the portion for which the Group has obtained the unconditional right to receive payments is recognized as accounts receivable, and the remaining portion is recognized as contract assets, and the Company measures the loss reserve of accounts receivable and contract assets. according to the expected credit loss; If the contract price received or receivable by the Group exceeds the completed progress, the excess is recognized as contract liabilities. The Group presents the contract assets and contract liabilities under the same contract as a net amount.

24、 Government grants

Government grants are transfers of monetary or non-monetary assets from the government to the Group at nil consideration, including tax refund and financial subsidies, etc.

A government grant is recognised when there is a reasonable assurance that the grants will be received and the Group will comply with all attached conditions. Monetary government grants are measured at the amounts received or receivable. Non-monetary government grant are measured at fair value, if the fair value cannot be reliably obtained, it is measured at nominal amount.

The government grants related to assets refer to government grant obtained by enterprises and used for purchase and construction of long-term assets or formation of long-term asset in other ways. The government grants related to income refer to grants other than those related to assets.

For government grants related to income, where the grant is a compensation for related expenses or losses to be incurred by the Group in the subsequent periods, the grant is recognised as deferred income, and included in profit or loss over the periods in which the related costs are recognised; where the grant is a compensation for related expenses or losses already incurred by the Group, the grant is recognised immediately in profit or loss for the current period. The company use the same method of presentation for similar government grants.

The ordinary activity government grants should be counted into operating profits; the government grants which not belong ordinary activities should be counted into non-operating income.

25、Deferred tax assets and deferred tax liabilities

Deferred tax assets and deferred tax liabilities are calculated and recognised based on the differences arising between the tax bases of assets and liabilities and their carrying amounts (temporary differences). Deferred tax asset is recognised for the deductible losses that can be carried forward to subsequent years for deduction of the taxable profit in accordance with the tax laws. No deferred tax liability is recognised for a temporary difference arising from the initial recognition of goodwill. No deferred tax asset or deferred tax liability is recognised for the temporary differences resulting from the initial recognition of assets or liabilities due to a transaction other than a business combination, which affects neither accounting profit nor taxable profit (or deductible loss). At the balance sheet date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled.

Deferred tax assets are only recognised for deductible temporary differences, deductible losses and tax credits to the extent that it is probable that taxable profit will be available in the future against which the deductible temporary differences, deductible losses and tax credits can be utilised.

Deferred tax liabilities are recognised for temporary differences arising from investments in subsidiaries and associates, except where the Group is able to control the timing of reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. When it is probable that the temporary differences arising from investments in subsidiaries and associates will be reversed in the foreseeable future and that the taxable profit will be available in the future against which the temporary differences can be utilised, the corresponding deferred tax assets are recognised.

Deferred tax assets and liabilities that meet the following conditions at the same time are listed as the net amount after offset:

- Deferred income tax assets and deferred income tax liabilities are related to the same tax payer within the Group and the same taxation authority; and,
- That tax entity within the Group has a legally enforceable right to offset current tax assets against current tax liabilities.

26、 Leases

A leasing is a contract in which the lessor cedes the right to use an asset to the lessee for a certain period of time in return for consideration.

(a) The Group acts as the lessee

The Company recognizes the right-of-use assets on the commencement date of the lease term and recognizes the lease liabilities at the present value of the outstanding lease payments. The lease payments include fixed payments, as well as payments where there is reasonable certainty that a purchase option will be exercised or a lease option will be terminated. The variable rent determined based on a certain percentage of sales is not included in the lease payment, and is included in the current profit and loss when it actually occurs. The Group will list the lease liabilities paid within one year (inclusive) from the balance sheet date as non-current liabilities due within one year

On the commencement date, the Company shall initially measure the right-of-use asset at cost. The cost of the right-of-use asset shall comprise the amount of the initial measurement of the lease liability and any lease payments made at or before the commencement date, and any initial direct costs incurred by the lessee etc, less any lease incentives received, If ownership of the leased asset transfers to the Group at the end of the lease term, depreciation is calculated using the estimated useful life of the asset. Otherwise, the right-of-use assets are depreciated over the shorter of the lease term and the estimated useful lives of the assets. Where the carrying amount of an asset or a cash generating unit exceeds its recoverable amount, the asset or cash generating unit is considered impaired and is written down to its recoverable amount.

A short-term lease is a lease that, at the commencement date, has a lease term of 12 months or less, and has a low-value asset leases. The Group does not recognize the right-of-use assets and lease liabilities. The Group recognizes lease payments on short-term leases and leases of low-value assets in the related asset costs or profit or loss on a straight-line basis over the lease term.

The Group accounts for a lease modification as a separate lease if both:(1) the modification increases the scope of the lease by adding the right to use one or more underlying assets; (2) the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, at the effective date of the lease modification the Group remeasures the lease liability by discounting the revised lease payments using a revised discount rate. Decreasing the carrying amount of the right-of-use asset to reflect the partial or full termination of the lease for lease modifications that decrease the scope of the lease. The Group recognizes in profit or loss any gain or loss relating to the partial or full termination of the lease. Other lease modifications will remeasure lease liabilities, and the group will make a corresponding adjustment to the right-of-use asset book value.

(b) The Group acts as the lessor

A lease that transfers substantially all the risks and rewards associated with the ownership of the leased asset is a finance lease. Other leases are operating leases.

(i) Operating lease

When the Company operates leased buildings, machinery and equipment, and means of transport, the rental income from operating leases shall be recognized in accordance with the straight-line method during the lease term. The Company will include variable rent determined based on a percentage of sales in rental income when it actually incurs. For any modification to an operating lease, the Group treats it as a new lease from the effective date of the modification, and the received or receivable lease payments related to the lease prior to the modification are treated as lease payments of the new lease.

(ii) Finance lease

On the beginning date of the lease term, the Company recognizes the finance lease receivables for finance leases and derecognizes related assets. The Company presents the finance lease receivables as long-term receivables, and the finance lease receivables received within one year (including one year) from the balance sheet date are presented as non-current assets due within one year.

27、 Critical accounting policies and accounting estimates

The Group continually Estimates the critical accounting estimates and key assumptions applied based on historical experience and other factors, including expectations of future events that are believed to be reasonable.

The critical accounting estimates and key assumptions that have a significant risk of possibly causing a material adjustment to book values of assets and liabilities within the next accounting year are outlined below:

(a) Income tax

The Group is subject to Income tax in numerous jurisdictions. There are some transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgement is required from the Group in determining the provision for Income tax in each of these jurisdictions. Where the final identified outcome of these tax matters is different from the initially-recorded amount, such difference will impact the income tax expenses and deferred income tax in the period in which such determination is finally made.

(b) Deferred income tax

Estimates on deferred tax assets are based on estimates on amount of taxable income and applicable tax rate for every year. Realisation of deferred income tax are subject to sufficient taxable income that are possible to be obtained by the Group in the future. Change of the future tax rate as well as the reversed time of temporary difference might have effects on tax expense (income) and the balance of deferred tax assets or liabilities. Those estimates may also cause significant adjustment on deferred tax.

(c) Impairment of long-term assets (excluding goodwill)

Long-term assets on the balance sheet date should be subject to impairment testing if there are any indications of impairment. Management determines whether the long-term assets impaired or not by evaluating and analysing following aspects: (1) whether the event affecting assets impairment occurs; (2) whether the expected obtainable present value of future cash flows is lower than the asset's carrying amount by continually using the assets or disposal; and (3) whether the assumptions used in expected obtainable present value of future cash flows are appropriate.

Various assumptions, including the discount rate and growth rate applied in the method of present value of future cash flow, are required in evaluating the recoverable amount of assets. If these assumptions cannot be conformed, the recoverable amount should be modified, and the long-term assets may be impaired accordingly.

(d) The useful life of fixed assets

Management estimates the useful life of fixed assets, based on historical experiences on using fixed assets that have similar properties and functions. When there are differences between actually useful life and previously estimation, management will adjust estimation to useful life of fixed assets. The fixed assets would be written off or written down when fixed assets been disposed or became redundant. Thus, the estimated result based on existing experience may be different from the actual result of the next accounting period, which may cause major adjustment to book value of fixed assets on balance sheet.

(e) Goodwill impairment

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units ("CGUs"), or groups of CGUs, and future cash flow from each CGU or CGUs is forecasted and discounted with appropriate discount rate.

28. Significant changes in accounting policies and accounting estimates**(1) Significant changes in accounting policies**

Contents and reasons of changes in accounting estimates	Approval procedure	Remark
On December 30, 2021, the Ministry of Finance issued " Interpretation No. 15 of the Accounting Standards for Business Enterprises " (Finance and Accounting [2021] No. 35) (hereinafter referred to as "Interpretation No. 15"), which regulates the accounting treatment for external sales of products or by-products produced by enterprises before their fixed assets reach their intended usable state or during the research and development process, and t and "judgment on loss-making contracts". Interpretation No. 15 stipulates that if an enterprise sells products or by-products produced before the fixed assets reach their intended usable status or during the research and development process, as well as the judgment on loss contracts,	It was reviewed and approved the "Proposal on Changes in Accounting Policies" by the board of directors on April 28, 2022.	The adoption of Interpretation No. 15 did not have a significant impact on the financial condition and operating results of the company.

was adopted from January 1, 2022		
On November 30, 2022, the Ministry of Finance issued " Interpretation No. 16 of the Accounting Standards for Business Enterprises " (Finance and Accounting [2021] No. 31) (hereinafter referred to as "Interpretation No. 16"), which regulates the accounting treatment for the income tax impact of dividends related to financial instruments classified as equity instruments by the issuer and the accounting treatment for the modification of cash settled share-based payments to equity settled share-based payments by enterprises shall be implemented from the date of promulgation; The accounting treatment for deferred income tax related to assets and liabilities arising from individual transactions that are not exempt from initial recognition will be implemented from January 1, 2023.	It was reviewed and approved the "Proposal on Changes in Accounting Policies" by the board of directors on April 24, 2023.	The adoption of Interpretation No. 16 did not have a significant impact on the financial condition and operating results of the company.

The impact of Interpretation No. 15 of the Company's Executive Standards on various items of the consolidated balance sheet, income statement, and cash flow statement is summarized as follows:

Unit: Yuan

Consolidated balance sheet items	31 December 2021	The amounts of adjustments	1 January 2022
Fixed assets	8,566,515,026	-215,056	8,566,299,970
Construction in progress	2,461,088,650	-3,106,472	2,457,982,178
Deferred tax assets	255,185,923	-140,857	255,045,066
Taxes payable	185,009,681	-140,857	184,868,824
Deferred tax liabilities	84,580,132	-174,698	84,405,434
Undistributed profits	6,450,587,417	-2,936,550	6,447,650,867
Minority interests	436,813,189	-210,280	436,602,909

Unit: Yuan

Consolidated income statement items	Before adjustments in 2021	The amounts of adjustments	After adjustments in 2021
Total business income	13,629,033,650	43,339,173	13,672,372,823
Total operating costs	8,849,488,093	46,660,701	8,896,148,794
Income tax expenses	356,153,729	-174,698	355,979,031
Net profit	1,561,248,454	-3,146,830	1,558,101,624
Attributable to shareholders of parent company	1,529,329,304	-2,936,550	1,526,392,754
Minority interests	31,919,150	-210,280	31,708,870

Unit: Yuan

Consolidated cash flow statement Items	Before adjustments in 2021	The amounts of adjustments	After adjustments in 2021
Cash received from sales of goods or rendering of services	15,127,773,082	58,760,285	15,186,533,367

Cash paid for goods and services	8,246,043,888	54,173,577	8,300,217,465
Cash paid to and on behalf of employees	1,638,657,553	6,923,995	1,645,581,548
Cash paid relating to other operating activities	440,837,552	99,068	440,936,620
Cash received relating to other investing activities	80,944,683	-59,262,312	21,682,371
Cash paid to acquire fixed assets, intangible assets and other long-term assets	1,827,187,640	-5,386,397	1,821,801,243
Cash paid relating to other investing activities	80,312,270	-56,312,270	24,000,000

(2) Significant changes in accounting estimates

None

29、Others

(1) Safety production costs

According to relevant regulations of the Ministry of Finance and National Administration of Work Safety, a subsidiary of the Group which is engaged in producing and selling polysilicon appropriates safety production costs on following basis:

- (a) 4.5% for revenue below RMB10 million (inclusive) of the year;
- (b) 2.25% for the revenue between RMB10 million to RMB100 million (inclusive) of the year;
- (c) 0.55% for the revenue between RMB100 million to RMB1 billion (inclusive) of the year;
- (d) 0.2% for the revenue above RMB1 billion of the year.

The safety production costs is mainly used for the overhaul, renewal and maintenance of safety facilities. The safety production costs are charged to costs of related products or profit or loss when appropriated, and safety production costs in equity account are credited correspondingly. When using the special reserve, if the expenditures are expenses in nature, the expenses incurred are offset against the special reserve directly when incurred. If the expenditures are capital expenditures, when projects are completed and transferred to fixed assets, the special reserve should be offset against the cost of fixed assets, and a corresponding accumulated depreciation are recognised. The fixed assets are no longer be depreciated in future.

(2) Segment information

The Group identifies operating segments based on the internal organisation structure, management requirements and internal reporting system, and discloses segment information of reportable segments which is determined on the basis of operating segments.

An operating segment is a component of the Group that satisfies all of the following conditions: (1) the component is able to earn revenue and incur expenses from its ordinary activities; (2) whose operating results are regularly reviewed by the Group's management to make decisions about resources to be allocated to the segment and to assess its performance, and (3) for which the information on financial position, operating results and cash flows is available

to the Group. If two or more operating segments have similar economic characteristics and satisfy certain conditions, they are aggregated into one single operating segment.

IV、TAXATION

1、The main categories and rates of taxes applicable to the Group are set out below:

Category	Taxable basis	Tax rate
Enterprise income tax	Taxable income	0%-25%
Value-added tax ("VAT")	Taxable value-added amount (Tax payable is calculated using the taxable sales amount multiplied by the applicable tax rate less deductible VAT input of the current period)	3%-13%
City maintenance and construction tax	VAT paid	1%-7%
Educational surcharge	VAT paid	5%

2、Tax incentives

The main tax incentives the Group is entitled to are as follows:

Tianjin CSG Energy-Saving Glass Co., Ltd. ("Tianjin Energy Conservation") passed review on a high and new tech enterprise in 2021 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2021.

Dongguan CSG Architectural Glass Co., Ltd. ("Dongguan CSG") passed review on a high and new tech enterprise in 2022 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2022.

Wujiang CSG East China Architectural Glass Co., Ltd. ("Wujiang CSG Engineering") passed review on a high and new tech enterprise in 2020 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2020.

Dongguan CSG Solar Glass Co., Ltd. ("Dongguan CSG Solar") passed review on a high and new tech enterprise in 2020 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2020.

Yichang CSG Polysilicon Co., Ltd. ("Yichang CSG Polysilicon") passed review on a high and new tech enterprise in 2020 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2020.

Dongguan CSG PV-tech Co., Ltd. ("Dongguan CSG PV-tech") passed review on a high and new tech enterprise in 2022 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2022.

Hebei Shichuang Glass Co., Ltd. ("Hebei Shichuang") passed review on a high and new tech enterprise in 2022 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2022.

Wujiang CSG Glass Co., Ltd. (“Wujiang CSG”) passed review on a high and new tech enterprise in 2020, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2020.

Xianning CSG Glass Co Ltd. (“Xianning CSG”) passed review on a high and new tech enterprise in 2020, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2020.

Xianning CSG Energy-Saving Glass Co., Ltd. (“Xianning CSG Energy-Saving”) passed review on a high and new tech enterprise in 2021, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2021.

Yichang CSG Photoelectric Glass Co., Ltd. (“Yichang CSG Photoelectric”) passed review on a high and new tech enterprise in 2021, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2021.

Yichang CSG Display Co., Ltd (“Yichang CSG Display”) passed review on a high and new tech enterprise in 2021, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2021.

Qingyuan CSG New Energy-Saving Materials Co., Ltd. (“Qingyuan CSG Energy-Saving”) passed review on a high and new tech enterprise in 2022, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2022.

Hebei CSG Glass Co Ltd. (“Hebei CSG”) passed review on a high and new tech enterprise in 2021, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2021.

Shenzhen CSG Applied Technology Co Ltd. (“Shenzhen Technology”) passed review on a high and new tech enterprise in 2021, and obtained the Certificate of High and New Tech Enterprise, and the period of validity was three years. It applies to 15% tax rate for three years since 2021.

Xianning CSG Photoelectric Glass Co., Ltd. (“Xianning Photoelectric”) passed review on a high and new tech enterprise in 2022 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2022.

Dongguan CSG Crystal Yuxin Materials Co., Ltd. (“Dongguan Jing Yu Company”) passed review on a high and new tech enterprise in 2021 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2021.

Zhaoqing CSG Energy Saving Glass Co., Ltd. (hereinafter referred to as “Zhaoqing Energy Saving Company”) passed review on a high and new tech enterprise in 2022 and obtained the Certificate of High and New Tech Enterprise, the period of validity is three years. It applies to 15% tax rate for three years since 2022.

Sichuan CSG Energy Conservation Glass Co., Ltd. (“Sichuan CSG Energy Conservation”) obtains enterprise income tax preferential treatment for Western Development, and temporarily calculates enterprise income tax at a tax rate of 15% for current year.

Chengdu CSG Glass Co., Ltd. (“Chengdu CSG”) obtains enterprise income tax preferential treatment for Western Development, and temporarily calculates enterprise income tax at a tax rate of 15% for current year.

Xi'an CSG Energy Saving Glass Technology Co., Ltd. (hereinafter referred to as "Xi'an Energy Saving Company") obtains enterprise income tax preferential treatment for Western Development, and temporarily calculates enterprise income tax at a tax rate of 15% for current year.

Guangxi CSG New Energy Materials Technology Co., Ltd. (hereinafter referred to as "Guangxi New Energy Materials Company") obtains enterprise income tax preferential treatment for Western Development, and temporarily calculates enterprise income tax at a tax rate of 15% for current year.

Qinghai CSG Risheng New Energy Technology Co., Ltd. (hereinafter referred to as "Qinghai New Energy Company") obtains enterprise income tax preferential treatment for Western Development, and temporarily calculates enterprise income tax at a tax rate of 15% for current year.

Zhaoqing CSG New Energy Technology Co., Ltd. (hereinafter referred to as "Zhaoqing New Energy Company"), Zhangzhou CSG Kibing PV Energy Co., Ltd. (“Zhangzhou CSG PV Energy”), Heyuang CSG Kibing PV Energy Co., Ltd. (“Heyang CSG”), and Shaoxing CSG Kibing New Energy Co., Ltd. (“Shaoxing CSG New Energy”), Xianning CSG PV Energy Co., Ltd. (“Xianning PV Energy”), Zhanjiang CSG New Energy Co., Ltd. (“Zhanjiang PV Energy”), are public infrastructure project specially supported by the state in accordance with the Article 87 in Implementing Regulations of the Law of the People's Republic of China on Enterprise Income Tax, and can enjoy the tax preferential policy of “three-year exemptions and three-year halves”, that is, starting from the tax year when the first revenue from production and operation occurs, the enterprise income tax is exempted from the first to the third year, while half of the enterprise income tax is collected for the following three years.

3、Others

Some subsidiaries of the Group have used the “exempt, credit, refund” method on goods exported and the refund rate is 0%-13%.

V、NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1、Cash at bank and on hand

Unit: Yuan

Item	31 December 2022	1 January 2022
Cash at bank	3,242,318,251	2,453,477,573
Other Currency Funds	1,362,289,528	312,448,333
Total	4,604,607,779	2,765,925,906
Including: Total overseas deposits	52,079,105	8,906,359
The total amount of cash and cash	10,589,528	9,448,334

equivalents that are restricted to use due to mortgage, pledge or freezing etc.		
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2、Financial assets held for trading

Unit: Yuan

Item	31 December 2022	1 January 2022
Financial assets at fair value through profit or loss- Structural deposits		999,600,000
Total		999,600,000

3、Notes receivable

(1) Notes receivable listed by category

Unit: Yuan

Item	31 December 2022	1 January 2022
Bank acceptance	156,943,437	
Commercial acceptance		19,220,984
Total	156,943,437	19,220,984

Unit: Yuan

Category	31 December 2022				Book value	1 January 2022				Book value
	Carrying amount		Provision for bad debts			Carrying amount		Provision for bad debts		
	Amount	Proportion	Amount	Proportion		Amount	Proportion	Amount	Proportion	
Credit loss provision accrued by item						28,438,249	71%	20,778,806	73%	7,659,443
Credit loss provision accrued by portfolio	156,943,437	100%			156,943,437	11,561,541	29%			11,561,541
Total	156,943,437	100%			156,943,437	39,999,790	100%	20,778,806	52%	19,220,984

(2) Bad debt provision made, returned or recovered in the period

Provision for bad debts in current year:

Unit: Yuan

Category	1 January 2022	Amount of change this year				31 December 2022
		Accrual	Recovery or reversal	Write-off	Transfer to accounts receivable	
Credit loss provision accrued by item	20,778,806				20,778,806	

Total	20,778,806				20,778,806	
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(3) Notes receivables that the Company has pledged at the end of the period

Unit: Yuan

Item	Pledged amount
Bank acceptance	156,943,437
Total	156,943,437

(4) Endorsed or discounted notes receivable have not yet matured on the balance sheet

None

(5) Notes transferred to accounts receivable due to default of the issue at the end of period

Unit: Yuan

Item	Amount transferred to accounts receivable at the end of the period
Commercial acceptance	29,811,343
Total	29,811,343

4、Accounts receivable**(1) Details on categories**

Unit: Yuan

Category	31 December 2022					1 January 2022				
	Carrying amount		Provision for bad debts		Book value	Carrying amount		Provision for bad debts		Book value
	Amount	Proportion	Amount	Provision Proportion		Amount	Proportion	Amount	Provision Proportion	
Separate provision for bad debts	196,468,864	14%	157,019,809	80%	39,449,055	159,936,493	19%	103,566,693	65%	56,369,800
Portfolio provision for bad debts	1,163,820,132	86%	23,276,403	2%	1,140,543,729	687,914,171	81%	13,758,284	2%	674,155,887
Total	1,360,288,996	100%	180,296,212	13%	1,179,992,784	847,850,664	100%	117,324,977	14%	730,525,687

Provision for bad debts made on an individual basis:

Unit: Yuan

Name	31 December 2022			
	Carrying amount	Provision for	Provision	Reason for provision

		bad debts	Proportion	
Separate provision for bad debts	196,468,864	157,019,809	80%	Mainly due to the inability to honor commercial acceptance bills issued by Evergrande and its subsidiaries that have been endorsed by customers, and the transfer of accounts receivable from bills receivable, as well as partial or full provision for bad debt reserves due to business disputes or deterioration of customer operations.
Total	196,468,864	157,019,809	80%	

Provision for bad debts made on the basis of portfolio:

Unit: Yuan

Type(s)	31 December 2022		
	Carrying amount	Provision for bad debts	Proportion (%)
Portfolio 1	1,163,820,132	23,276,403	2%
Total	1,163,820,132	23,276,403	2%

Disclosure by ages

Unit: Yuan

Aging	31 December 2022
Within 1 year (including 1 year)	1,092,590,056
1 to 2 years	167,876,479
2 to 3 years	51,281,059
Over 3 years	48,541,402
Total	1,360,288,996

(2) Provisions made, collected or reversed in current period

Provision for bad debts made in current period:

Unit: Yuan

Type(s)	1 January 2022	Amount of change this year				31 December 2022
		Accrual	Transfer from notes receivable	Recovery or reversal	Write-off	
Provision for bad debts for accounts receivable	117,324,977	57,816,645	20,778,806	13,315,052	2,309,164	180,296,212
Total	117,324,977	57,816,645	20,778,806	13,315,052	2,309,164	180,296,212

(3) Accounts receivable actually written off in current period

Unit: Yuan

Item	Written-off amount
Accounts receivable	2,309,164

(4) Accounts receivable details of the top 5 closing balances by debtors

Unit: Yuan

Name	Accounts receivable closing balance	Percentage in total accounts receivable balance	Provision for bad debts closing balance
Total balances for the five largest accounts receivable	465,461,318	34%	9,309,226
Total	465,461,318	34%	9,309,226

5、Receivables Financing

Unit: Yuan

Item	31 December 2022	1 January 2022
Bank acceptance measured at fair value	1,095,412,643	297,046,123
Total	1,095,412,643	297,046,123

6、Advances to suppliers**(1) Listing by ages**

Unit: Yuan

Aging	31 December 2022		1 January 2022	
	Amount	Proportion	Amount	Proportion
Within 1 year (including 1 year)	182,578,314	100%	74,971,763	98%
1 to 2 years	377,211		486,849	1%
2 to 3 years	153,800		520,498	1%
Over 3 years	520,498		118,166	
Total	183,629,823	100%	76,097,276	100%

(2) Advance payment of the top 5 closing balances by prepayment objects

Unit: Yuan

Item	Advance payment closing balance	Percentage in total advances to suppliers balance
Total balances for the five largest advances to suppliers	100,453,656	55%

7、Other receivables

Unit: Yuan

Item	31 December 2022	1 January 2022
Other receivables	193,847,322	183,696,711
Total	193,847,322	183,696,711

(1) Other receivables**1) Other receivables categorized by nature**

Unit: Yuan

Item	31 December 2022	1 January 2022
Receivables from special fund for talent	171,000,000	171,000,000
Payments made on behalf of other parties	49,075,321	47,686,819
Advances to suppliers(i)	10,366,164	10,366,164
Refundable deposits	16,456,690	9,191,412
Petty cash	963,222	497,273
Others	12,091,519	8,110,638
Total	259,952,916	246,852,306

(i) The subsidiaries of Yingde CBM Mining Co., Ltd. mainly prepaid to supplier for materials and the prepayments accounts are transferred to other receivables.

2) Provision for bad debts

Unit: Yuan

Provision for bad debt	Stage 1	Stage 2	Stage 3	Total
	Expected credit loss in the next 12 months	Expected credit loss for the whole period (no credit impairment)	Expected credit loss for the whole period (with credit impairment)	
Amount on 1st January 2022	1,166,526		61,989,069	63,155,595
Carrying amount on 1st January 2022 that in this period:				
Provision for the period	666,124		2,785,170	3,451,294
Reverse for the period	232,780			232,780
Write off for the period	268,515			268,515
Amount on 31st December 2022	1,331,355		64,774,239	66,105,594

3) Disclosure by ages

Unit: Yuan

Aging	31 December 2022
Within 1 year (including 1 year)	27,945,528
1 to 2 years	31,332,255
2 to 3 years	1,421,606
Over 3 years	199,253,527
3 to 4 years	563,830
4 to 5 years	2,066,855

Over 5 years	196,622,842
Total	259,952,916

4) Provisions made, collected or reversed in current period

Provision for bad debts made in current period:

Unit: Yuan

Type	1 January 2022	Movement in current year				31 December 2022
		Accrual	Withdrawal or reversal	Write-off	Others	
Bad debt provision	63,155,595	3,451,294	232,780	268,515		66,105,594
Total	63,155,595	3,451,294	232,780	268,515		66,105,594

5) Other receivable actually written off in current period

Unit: Yuan

Item	Write-off amount
Other receivables	268,515

6) Other receivables details of the top 5 closing balances by debtors

Unit: Yuan

Name	Nature of business	31 December 2022	Ageing	Percentage in total other receivables balance	Provision for bad debts
Company A	Independent third party	171,000,000	Over 5 years	66%	51,300,000
Governmental department B	Independent third party	24,000,000	1 to 2 years	9%	480,000
Governmental department C	Independent third party	11,556,004	Over 5 years	4%	231,120
Company D	Independent third party	10,366,164	Over 5 years	4%	10,366,164
Governmental department E	Independent third party	10,000,000	Within 1 year	4%	200,000
Total		226,922,168		87%	62,577,284

8、Inventories

(1) Inventory classification

Unit: Yuan

Item	31 December 2022			1 January 2022		
	Carrying amount	Provision for decline in the value of inventories	Book value	Carrying amount	Provision for decline in the value of inventories	Book value

Raw materials	646,622,778	9,065,792	637,556,986	389,937,319	1,002,085	388,935,234
Work in progress	31,745,770		31,745,770	22,801,437		22,801,437
Finished goods	1,067,004,894	20,645,880	1,046,359,014	632,814,981	5,829,059	626,985,922
Turnover materials	68,702,610	422,398	68,280,212	55,480,764	397,832	55,082,932
Total	1,814,076,052	30,134,070	1,783,941,982	1,101,034,501	7,228,976	1,093,805,525

(2) Provision for inventories

Unit: Yuan

Item	1 January 2022	Increase in current year		Decrease in current year		31 December 2022
		Provision	Others	Reversal or write-off	Others	
Raw materials	1,002,085	8,114,149		50,442		9,065,792
Finished goods	5,829,059	19,939,274		5,122,453		20,645,880
Turnover materials	397,832	262,068		237,502		422,398
Total	7,228,976	28,315,491		5,410,397		30,134,070

9、Non-current assets due within one year

Unit: Yuan

Item	31 December 2022	1 January 2022
Fixed-term deposit in bank due within one year	20,000,000	
Total	20,000,000	

10、Other current assets

Unit: Yuan

Item	31 December 2022	1 January 2022
VAT to be offset	45,198,116	128,033,622
Enterprise income tax prepaid	30,407,477	3,771,709
VAT input to be recognised	32,642,483	8,888,295
Others	469	11,672
Total	108,248,545	140,705,298

11、Investment properties

(1) Investment properties measured using the Fair value model

Unit: Yuan

Item	House, building and related land use rights
I.1 January 2022	383,084,500

II.Movemnet in the Current Period	-92,716,395
III.31 December 2022	290,368,105

Notes: In 2022, the investment real estate held by the group was transferred out to fixed assets of RMB 49,199,084 yuan and intangible assets of RMB 43,517,311 yuan, mainly due to the transfer of this part of investment real estate from external leasing to self use. From the date of change of purpose, the group converted this investment real estate into fixed assets and intangible assets, and determined the book value of fixed assets and intangible assets based on the fair value of the investment real estate on the date of conversion.

12、Fixed assets

Unit: Yuan

Item	31 December 2022	1 January 2022
Fixed assets	11,243,236,175	8,566,299,970
Total	11,243,236,175	8,566,299,970

(1) List of fixed assets

Unit: Yuan

Item	Buildings	Machinery and equipment	Motor vehicles and others	Total
I. Original book value:				
1. 31 December 2021	4,175,491,233	12,040,091,415	257,186,014	16,472,768,662
2. Increase in current year	1,345,509,099	3,450,230,394	52,792,356	4,848,531,849
(1) Acquisition	5,066,207	39,448,097	22,342,388	66,856,692
(2) Transfers from construction in progress	1,290,236,878	3,407,521,111	28,793,157	4,726,551,146
(3) Others	50,206,014	3,261,186	1,656,811	55,124,011
3. Decrease in current year	215,294,604	1,207,222,532	15,953,817	1,438,470,953
(1) Disposal or retirement	27,750,045	693,463,962	15,018,347	736,232,354
(2) Transfer to construction in progress	183,920,987	504,217,090	600,382	688,738,459
(3) Others	3,623,572	9,541,480	335,088	13,500,140
4. 31 December 2022	5,305,705,728	14,283,099,277	294,024,553	19,882,829,558
II.Accumulative depreciation				
1. 31 December 2021	1,129,349,070	5,532,791,435	230,711,343	6,892,851,848
2. Increase in current year	139,437,453	765,058,714	28,661,275	933,157,442
(1) Provision	139,295,939	764,183,928	28,028,195	931,508,062
(2) Others	141,514	874,786	633,080	1,649,380
3. Decrease in current year	54,006,016	312,643,023	14,043,321	380,692,360
(1) Disposal or retirement	5,653,306	26,332,381	13,678,033	45,663,720
(2) Transfer to construction in progress	47,589,170	285,671,695	358,735	333,619,600
(3) Others	763,540	638,947	6,553	1,409,040
4. 31 December 2022	1,214,780,507	5,985,207,126	245,329,297	7,445,316,930
III.Impairment provision				

Item	Buildings	Machinery and equipment	Motor vehicles and others	Total
1. 31 December 2021	59,901,148	953,451,046	264,650	1,013,616,844
2. Increase in current year	113,127,910	758,083,952	528,767	871,740,629
(1) Provision		4,997,092		4,997,092
(2) Transfers from construction in progress	113,127,910	753,086,860	528,767	866,743,537
3. Decrease in current year	20,189,071	670,890,456	1,493	691,081,020
(1) Disposal or retirement	20,189,071	636,021,100	1,493	656,211,664
(2) Transfer to construction in progress		34,869,356		34,869,356
4. 31 December 2022	152,839,987	1,040,644,542	791,924	1,194,276,453
IV. Book value				
1. 31 December 2022	3,938,085,234	7,257,247,609	47,903,332	11,243,236,175
2. 31 December 2021	2,986,241,015	5,553,848,934	26,210,021	8,566,299,970

(2) Fixed assets without ownership certificate

Unit: Yuan

Item	Carrying amount	Reasons for not yet obtaining certificates of title
Buildings	1,375,506,149	Have submitted the required documents and are in the process of application, or the related land use right certificate pending

13. Construction in progress

Unit: Yuan

Item	31 December 2022	1 January 2022
Construction in progress	2,520,362,291	2,457,982,178
Total	2,520,362,291	2,457,982,178

(1) Details of construction in progress

Unit: Yuan

Item	31 December 2022			1 January 2022		
	Carrying amount	Provision for impairment loss	Book value	Carrying amount	Provision for impairment loss	Book value
Anhui Fengyang Solar Equipment Lightweight High Tongue Plate Manufacturing Base Project	917,798,737		917,798,737	765,170,527		765,170,527
Xianning Nanblass	721,820,302		721,820,302	66,449,089		66,449,089

Item	31 December 2022			1 January 2022		
	Carrying amount	Provision for impairment loss	Book value	Carrying amount	Provision for impairment loss	Book value
1200T / D Ton Photovoltaic Packaging Material Production Line Project						
Hebei window ultra-thin electronic glass second line construction project	256,034,845		256,034,845	24,393,421		24,393,421
Qingyuan South Blass Technology Reform Project	225,748,578	94,897,536	130,851,042	297,932,280	174,675,600	123,256,680
450MWPERC Battery Technology Upgrade Project	186,866,743	184,998,076	1,868,667	186,866,743	184,998,076	1,868,667
Wujiang Project New Engineering Glass Intelligent Manufacturing Factory Construction Project	72,885,336		72,885,336	51,766,295		51,766,295
Xi'an South Glass Energy Saving Glass Production Line Project	41,694,021		41,694,021	337,339		337,339
Zhaoqing CSG high-end automobile glass production line project	40,439,362		40,439,362	27,941,928		27,941,928
Dongguan Solar G6/G7 Line Process and Equipment Upgrading and Renovation Project	37,794,114		37,794,114			

(1) Details of construction in progress (Continued)

Unit: Yuan

Item	31 December 2022			1 January 2022		
	Carrying amount	Provision for impairment	Book value	Carrying amount	Provision for impairment loss	Book value
Guangxi beihai Photovoltaic Green Energy Industry Park (Phase I) Project	33,213,753		33,213,753	382,997		382,997
Zhaoqing CSG high-end energy-saving glass production line project	14,799,352		14,799,352	279,138,811		279,138,811
New 50000 ton/year high-purity crystalline silicon project in Haixi Prefecture, Qinghai Province	10,319,009		10,319,009			
Anhui Fengyang Shiyang Sand Construction Project	403,753		403,753	56,656,483		56,656,483
Wujiang float light-quality high-efficiency double glass processing production line construction project	53,098		53,098	39,032,912		39,032,912
Yichang South Glass Crystalline Silicon Reform Project				1,535,368,156	857,890,185	677,477,971
Dongguan Solar Double Glass Calendering Line Technical Transformation and Upgrading Project				2,389,871		2,389,871
Others	307,676,667	67,289,767	240,386,900	400,433,199	58,714,012	341,719,187
Total	2,867,547,670	347,185,379	2,520,362,291	3,734,260,051	1,276,277,873	2,457,982,178

(2) Movement of significant projects of construction in progress

Unit: Yuan

Project name	Budget	1 January 2022	Increase in current year	Transfer to fixed assets in current year	Other decreases in current year	31 December 2022	Proportion between engineering input and budget	Engineering progress	Amount of borrowing costs capitalised	Including: Amount of borrowing costs capitalised in 2022	Capitalisation rate for in current year	Source of fund
Anhui Fengyang Solar Energy Equipment Manufacturing Base Project	3,739,020,000	765,170,527	1,819,630,548	1,667,002,338		917,798,737	69%	88%	33,884,513	31,439,015	3.64%	Internal fund and bank loan
Xianning Nanbliss 1200T / D Ton Photovoltaic Packaging Material Production Line Project	858,090,000	66,449,089	660,547,276	5,176,063		721,820,302	85%	85%	20,450,743	15,327,576	4.08%	Internal fund and bank loan
Hebei window ultra-thin electronic glass second line construction project	284,964,800	24,393,421	232,913,263	1,271,839		256,034,845	90%	90%	2,480,896	2,480,517	4.20%	Internal fund and bank loan
Qingyuan CSG Phase I Technological Transformation Project	534,870,000	297,932,280	8,683,859	363,834	80,503,727	225,748,578	4%	4%				Internal fund and bank loan
Dongguan Photovoltaic	100,990,000	186,866,743				186,866,743	1%	3%				Internal fund and

Project name	Budget	1 January 2022	Increase in current year	Transfer to fixed assets in current year	Other decreases in current year	31 December 2022	Proportion between engineering input and budget	Engineering progress	Amount of borrowing costs capitalised	Including: Amount of borrowing costs capitalised in 2022	Capitalisation rate for in current year	Source of fund
Building B 450MWPERC Battery Technology Upgrade Project												bank loan
Wujiang Project New Engineering Glass Intelligent Manufacturing Factory Construction Project	179,140,610	51,766,295	27,404,705	6,285,664		72,885,336	44%	57%	1,455,152	1,134,058	3.85%	Internal fund and bank loan
Xi'an South Glass Energy Saving Glass Production Line Project	494,000,000	337,339	41,356,682			41,694,021	8%	8%				Internal fund and bank loan
Zhaoqing CSG High-end Automobile Glass Production Line Project	609,830,000	27,941,928	64,633,762	52,136,328		40,439,362	15%	15%				Internal fund and bank loan
Dongguan Solar G6/G7 Line Process and Equipment Upgrading and Renovation Project	61,330,000		37,794,114			37,794,114	32%	32%	59,828	59,828	3.90%	Internal fund and bank loan
Guangxi beihai Photovoltaic	4,942,051,800	382,997	32,830,756			33,213,753	1%	2%	52,366	52,366	1.98%	Internal fund and

Project name	Budget	1 January 2022	Increase in current year	Transfer to fixed assets in current year	Other decreases in current year	31 December 2022	Proportion between engineering input and budget	Engineering progress	Amount of borrowing costs capitalised	Including: Amount of borrowing costs capitalised in 2022	Capitalisation rate for in current year	Source of fund
Green Energy Industry Park (Phase I) Project												bank loan
Zhaoqing CSG high-end energy-saving glass production line project	500,000,000	279,138,811	37,410,296	301,749,755		14,799,352	86%	100%	5,728,195	1,573,270	3.80%	Internal fund and bank loan
New 50000 ton/year high-purity crystalline silicon project in Haixi Prefecture, Qinghai Province	4,490,920,000		10,319,009			10,319,009						Convertible bonds, Internal fund and bank loan
Anhui Fengyangnian Quartz Sand Construction Project	1,029,300,000	56,656,483	83,482,656	139,735,386		403,753	14%	56%	1,144,949	1,026,584	4.55%	Internal fund and bank loan
Wujiang Float Processing Production Line Project	158,850,000	39,032,912	91,603,119	130,582,933		53,098	82%	82%	1,360,214	972,258	4.00%	Internal fund and bank loan
Yichang CSG Polysilicon Technical Transformation Project	49,520,000	1,535,368,156		1,511,107,324	24,260,832		100%	100%				Internal fund
Dongguan Solar Double Glass	143,490,000	2,389,871	357,427,025	359,816,896			100%	100%	1,016,458	1,016,458	3.80%	Internal fund and

Project name	Budget	1 January 2022	Increase in current year	Transfer to fixed assets in current year	Other decreases in current year	31 December 2022	Proportion between engineering input and budget	Engineering progress	Amount of borrowing costs capitalised	Including: Amount of borrowing costs capitalised in 2022	Capitalisation rate for in current year	Source of fund
Calendering Line Technical Transformation and Upgrading Project												bank loan
Others	1,701,362,682	400,433,199	466,819,098	551,322,786	8,252,844	307,676,667			7,648,177	1,428,238		Internal fund and bank loan
Total	19,877,729,892	3,734,260,051	3,972,856,168	4,726,551,146	113,017,403	2,867,547,670			75,281,491	56,510,168		

14、 Right-use of assets

Unit: Yuan

Item	Land	Buildings	Total
I.Original book value:			
1. 1 January 2021	9,770,358	1,897,983	11,668,341
2. Increased in current year	2,493,686		2,493,686
3. Decreased in current year	473,610	1,897,983	2,371,593
4. 31 December 2022	11,790,434		11,790,434
II.Accumulative depreciation			
1. 1 January 2021	942,985	813,421	1,756,406
2. Increased in current year	1,412,646	610,066	2,022,712
3. Decreased in current year	473,610	1,423,487	1,897,097
4. 31 December 2022	1,882,021		1,882,021
III.Impairment Provisions			
IV.Carrying amount			
1. 31 December 2022	9,908,413		9,908,413
2. 1 January 2021	8,827,373	1,084,562	9,911,935

15、 Intangible assets**(1) Details of intangible assets**

Unit: Yuan

Item	Land use rights	Patents and proprietary technologies	Exploitation rights	Others	Total
I. Original book value:					
1. 1 January 2021	1,169,898,169	428,988,220	5,651,751	46,713,240	1,651,251,380
2. Increased in current year	255,533,473	73,086,658		8,125,815	336,745,946
(1) Acquisition in current year	212,016,162			7,293,468	219,309,630
(2) Transfers from development expenditure in current year		73,086,658			73,086,658
(3) Others	43,517,311			832,347	44,349,658
3. Decreased in current year			300,000	259,999	559,999
(1) Others			300,000	259,999	559,999
4. 31 December 2022	1,425,431,642	502,074,878	5,351,751	54,579,056	1,987,437,327
II. Accumulative amortization					

Item	Land use rights	Patents and proprietary technologies	Exploitation rights	Others	Total
1. 1 January 2021	230,710,042	194,971,917	4,591,610	40,155,929	470,429,498
2. Increased in current year	27,483,295	32,356,789	183,457	5,762,143	65,785,684
(1) Provision in current year	27,483,295	32,356,789	183,457	5,762,143	65,785,684
3. Decreased in current year				91,001	91,001
(1) Others				91,001	91,001
4. 31 December 2022	258,193,337	227,328,706	4,775,067	45,827,071	536,124,181
III.Provision for impairment					
1. 1 January 2021		13,201,347		9,133	13,210,480
2. Increased in current year					
3. Decreased in current year					
4. 31 December 2022		13,201,347		9,133	13,210,480
IV.Book value					
1. 31 December 2022	1,167,238,305	261,544,825	576,684	8,742,852	1,438,102,666
2. 1 January 2021	939,188,127	220,814,956	1,060,141	6,548,178	1,167,611,402

At the end of this period, the proportion of intangible assets formed through internal research and development of the company to the balance of intangible assets is 20.69%.

(2) Land use rights without ownership certificate

Unit: Yuan

Item	Carrying amount	Reasons for not yet obtaining certificates of title
Land use rights	4,190,693	The management of our company believes that there is no substantive legal obstacle to obtaining the relevant land use certificate, and it will not have a significant adverse impact on the operation of our group.

16. Development expenditure

Unit: Yuan

Item	1 January 2022	Increase in current year	Decreased in current year		31 December 2022
		Internal development expenditure	Recognised as intangible assets	Recognised as expenses	
Development expenditure	72,019,362	57,620,265	73,086,658	9,797,153	46,755,816
Total	72,019,362	57,620,265	73,086,658	9,797,153	46,755,816

17、 Goodwill

(1) Original carrying amount of goodwill

Unit: Yuan

Name of Invested Unit or Items Forming Goodwill	1 January 2022	Increased in current year	Decreased in current year	31 December 2022
Tianjin CSG Architectural Glass Co., Ltd	3,039,946			3,039,946
Xianning CSG Photoelectric	4,857,406			4,857,406
Shenzhen CSG Display	389,494,804			389,494,804
Total	397,392,156			397,392,156

(2) Provision for impairment of goodwill

Unit: Yuan

Name of invested unit or matters forming goodwill	1 January 2022	Increased in current year	Decreased in current year	31 December 2022
Shenzhen CSG Display(i)	267,244,297	122,250,507		389,494,804
Total	267,244,297	122,250,507		389,494,804

(i) The calculation of the impairment used the higher conclusions of the two future measurement methods of the present value of the expected future cash flow and the fair value minus the disposal expenses. The methods, assumptions, asset groups, etc. of the goodwill impairment test this year was consistent with the date of purchase and the previous year.

Shenzhen CSG Display adopting the method of discounting future cashflow is with the following main hypotheses:

Item	2022	2021
Income growth for the predicted period	2%-24%	1%-15%
Income growth for the stabilized period	0%	0%
Gross profit margin	17%-18%	20%-24%
Discount rate	12%	13%

18、 Long-term prepaid expenses

Unit: Yuan

Item	1 January 2022	Increased amounts in the current Period	Amortized amounts in the current period	Other decreased amounts	31 December 2022
Various prepaid expenses	3,013,721	1,470,002	1,835,784		2,647,939
Total	3,013,721	1,470,002	1,835,784		2,647,939

19、Deferred tax assets and liabilities**(1) Deferred income tax assets before offsetting**

Unit: Yuan

Item	31 December 2022		1 January 2022	
	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets
Provision for asset impairments	740,627,003	112,511,365	1,005,602,209	152,036,386
Deductible losses	362,029,963	65,461,019	621,359,522	106,718,563
Government grants	160,233,122	25,185,546	165,972,475	25,755,549
Accrued expenses	8,584,847	1,287,727	7,908,397	1,186,260
Depreciation of fixed assets ,etc	100,859,773	15,955,296	115,414,875	21,061,453
Total	1,372,334,708	220,400,953	1,916,257,478	306,758,211

(2) Deferred income tax liabilities before offsetting

Unit: Yuan

Item	31 December 2022		1 January 2022	
	Taxable temporary differences	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Depreciation of fixed assets	663,136,097	100,893,303	526,051,177	80,581,722
Changes in the fair value of investment real estate	368,564,944	55,284,742	370,245,713	55,536,857
Total	1,031,701,041	156,178,045	896,296,890	136,118,579

(3) Deferred income tax assets or liabilities presented with net amount after offsetting

Unit: Yuan

Item	Offset amount of deferred tax assets and liabilities	Carrying amount after offsetting between deferred tax assets and liabilities	offset amount of deferred tax assets and liabilities at the end of last period	Carrying amount after offsetting between deferred tax assets and liabilities at the end of last period
Deferred tax assets	58,911,204	161,489,749	51,713,145	255,045,066
Deferred tax liabilities	58,911,204	97,266,841	51,713,145	84,405,434

(4) Detail about unrecognized deferred income tax assets

Unit: Yuan

Item	31 December 2022	1 January 2022
Deductible losses etc	1,713,248,298	2,045,391,888
Total	1,713,248,298	2,045,391,888

(5) Deductible losses of unconfirmed deferred income tax assets shall expire in the following years

Unit: Yuan

Year	31 December 2022	1 January 2022	Notes
2022		83,303,539	
2023	146,238,837	146,238,837	
2024	178,208,832	178,208,832	
2025	745,942,821	939,085,536	
2026	642,332,904	698,555,144	
2027	524,904		
Total	1,713,248,298	2,045,391,888	

20、 Other non-current assets

Unit: Yuan

Item	31 December 2022			1 January 2022		
	Carrying amount	Impairment provision	Book value	Carrying amount	Impairment provision	Book value
Prepayment for equipment and project	194,410,485		194,410,485	469,352,622		469,352,622
Prepayment for lease of land use rights	24,210,000		24,210,000	14,810,000		14,810,000
Fixed deposits	80,000,000		80,000,000	100,000,000		100,000,000
Prepaid mining rights	558,000,000		558,000,000			
Total	856,620,485		856,620,485	584,162,622		584,162,622

21、 Short-term borrowings**(1) Classification of short-term borrowings**

Unit: Yuan

Item	31 December 2022	1 January 2022
Guaranteed loan	144,000,000	80,770,000
Credit loan	201,000,000	100,000,000
Total	345,000,000	180,770,000

22、 Notes payable

Unit: Yuan

Type	31 December 2022	1 January 2022
Trade acceptance	290,779,095	107,571,279
Bank acceptance	703,778,401	293,091,434
Total	994,557,496	400,662,713

23、Accounts payable**(1) Accounts Payable Listed**

Unit: Yuan

Item	31 December 2022	1 January 2022
Materials payable	813,677,642	665,770,883
Equipment payable	483,253,256	268,623,795
Construction expenses payable	576,821,441	372,802,783
Freight payable	88,104,366	68,894,843
Utilities payable	64,738,721	47,260,003
Others	6,947,201	5,499,005
Total	2,033,542,627	1,428,851,312

(2) Significant accounts payable aged more than one year

Unit: Yuan

Item	31 December 2022	Reasons
Engineering and equipment payments, etc	173,226,228	Due to the unfinished final accounts of related projects, they have not been settled yet
Total	173,226,228	

24、Contract liabilities

Unit: Yuan

Item	31 December 2022	1 January 2022
Contract liabilities	418,051,975	335,188,642
Total	418,051,975	335,188,642

25、Employee benefits payable**(1) Presentation of employee benefits payable**

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
I.Short-term employee benefits payable	426,027,259	1,963,114,264	1,924,210,584	464,930,939
II.Defined contribution plans payable	11,722	158,660,060	149,986,293	8,685,489
III.Termination benefits	173,998	3,724,287	3,898,285	
Total	426,212,979	2,125,498,611	2,078,095,162	473,616,428

(2) Presentation of short-term benefits

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
1、Wages and salaries, bonus, allowances and subsidies	402,716,350	1,827,308,377	1,791,601,399	438,423,328
2、Social security contributions	5,808	68,176,447	66,598,983	1,583,272
Including: Medical insurance	5,097	59,967,180	59,014,656	957,621
Work injury insurance	291	5,939,525	5,380,386	559,430
Maternity insurance	420	2,269,742	2,203,941	66,221
3、Housing funds	958,798	48,106,589	48,174,108	891,279
4、Labour union funds and employee education funds	22,346,303	19,522,851	17,836,094	24,033,060
Total	426,027,259	1,963,114,264	1,924,210,584	464,930,939

(3) Defined benefit plans

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
1、Basic pensions	11,644	153,308,409	144,916,151	8,403,902
2、Unemployment insurance	78	5,351,651	5,070,142	281,587
Total	11,722	158,660,060	149,986,293	8,685,489

26、Taxes payable

Unit: Yuan

Item	31 December 2022	1 January 2022
VAT payable	91,809,300	77,539,743
Enterprise income tax payable	38,330,878	81,329,008
Individual income tax payable	7,688,833	4,947,559
City maintenance and construction tax	6,755,889	5,853,393
Educational surcharge payable	4,953,777	4,662,534
Housing property tax payable	4,877,079	4,126,693
Environmental tax payable	1,252,845	1,674,797
Others	5,466,037	4,735,097
Total	161,134,638	184,868,824

27、Other payables

Unit: Yuan

Item	31 December 2022	1 January 2022
Interest payable	99,945,325	95,001,362

Other payables	437,119,859	194,439,115
Total	537,065,184	289,440,477

(1) Interest payable

Unit: Yuan

Item	31 December 2022	1 January 2022
Interest of long-term borrowings with periodic payments of interest and return of principal at maturity	5,754,599	2,558,374
Interest of corporate bonds	92,258,065	92,258,065
Interest of short-term borrowings	1,932,661	184,923
Total	99,945,325	95,001,362

(2) Other payables**1) Disclosure of other payables by nature**

Unit: Yuan

Item	31 December 2022	1 January 2022
Guarantee deposits received from construction contractors	331,974,002	101,467,608
Accrued cost of sales (i)	62,936,670	51,592,989
Payable for contracted labour costs	28,696,828	21,273,645
Temporary receipts for third parties	2,318,135	6,033,599
Others	11,194,224	14,071,274
Total	437,119,859	194,439,115

(i) It represented the payment made to external third parties arising from undertaking the rights of debtor and creditor, comprising water and electricity, professional service fee and travelling expenses etc.

28、 Current portion of non-current liabilities

Unit: Yuan

Item	31 December 2022	1 January 2022
Current portion of long-term borrowings	443,216,290	466,098,352
Current portion of debentures payable	1,999,316,522	
Current portion of long-term account payable	38,900,194	36,865,104
Leases liabilities due within one year		857,092
Total	2,481,433,006	503,820,548

29、 Other current liabilities

Unit: Yuan

Item	31 December 2022	1 January 2022
Output VAT to be transferred	50,107,240	39,799,309

Others	300,000	300,000
Total	50,407,240	40,099,309

30、Long-term borrowings

(1) Types of long-term borrowings

Unit: Yuan

Item	31 December 2022	1 January 2022
Guaranteed loan	3,122,455,980	779,059,824
Credit loan	1,231,134,000	690,000,000
Total	4,353,589,980	1,469,059,824

31、Debentures payable

(1) List of Debentures payable

Unit: Yuan

Item	31 December 2022	1 January 2022
Corporate bonds		1,996,587,330
Total		1,996,587,330

(2) Increase/decrease in bonds payable (excluding other financial instruments such as preference shares and Perpetual Bonds classified as financial liabilities)

Unit: Yuan

Debentures name	Par value	Date of issue	Term	Issue amount	1 January 2022	Issue in current year	Interest accrued at par value	Amortisation of premium/discount	Payment in current year	Reclassified to current portion of non-current liabilities	31 December 2022
20 CSG 01	100	2020-3-24 to 2020-3-25	3 years	2,000,000,000	1,996,587,330		120,000,000	2,729,192		1,999,316,522	
Total				2,000,000,000	1,996,587,330		120,000,000	2,729,192		1,999,316,522	

In March 2020, after approved by the China Securities Regulatory Commission, the company was approved to publicly issue 2020 corporate bonds (first tranche) to qualified investors, with a face value of RMB 100, an issuance amount of RMB 2 billion, and a period of 3 years (annual interest payment, principal repayment at maturity), the coupon rate is 6%; the issuance date is March 24, 2020 to March 25, 2020, and the value date is March 25, 2020. As of the issuance date of this report, the bond has been fully redeemed.

32、Lease liabilities

Unit: Yuan

Item	31 December 2022	1 January 2022
Lease liabilities	3,564,330	220,138
Total	3,564,330	220,138

33、Long-term account payable

Unit: Yuan

Item	31 December 2022	1 January 2022
Long-term account payable	129,236,878	168,258,062
Total	129,236,878	168,258,062

(1) Long-term payable listed by nature of the

Unit: Yuan

Item	31 December 2022	1 January 2022
Finance lease payable	129,236,878	168,258,062

34、Deferred income

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
Government grants	564,129,128	3,306,000	117,559,748	449,875,380
Total	564,129,128	3,306,000	117,559,748	449,875,380

Details of government:

Unit: Yuan

Item	1 January 2022	Increase in current year	Other income in current year	Other decrease in current year	31 December 2022	Assets/Income related
Tianjin energy saving gold solar project	40,217,551		3,374,891		36,842,660	Assets related
Dongguan project gold solar project	32,324,250		2,751,000		29,573,250	Assets related
Hebei South Bolk Sun Project	33,000,000		2,750,000		30,250,000	Assets related
Xianning South Bolt Solar Engineering Project	35,860,917		3,030,500		32,830,417	Assets related
Wu Jiangnan infrastructure compensation	23,462,746		4,041,538		19,421,208	Assets related
Qingyuan energy-saving project	10,909,167		2,470,000		8,439,167	Assets related
Yichang polysilicon project	10,546,875		2,812,500		7,734,375	Assets related
Yichang Nanolate Silicon Molding Project	19,100,966	2,500,000	2,105,290		19,495,676	Assets related
Sichuan energy-saving glass project	3,859,380		1,654,020		2,205,360	Assets related
Group coating laboratory project	1,500,000		375,000		1,125,000	Assets related
Yichang high-purity silicon material project	2,417,619		303,178		2,114,441	Assets related

Item	1 January 2022	Increase in current year	Other income in current year	Other decrease in current year	31 December 2022	Assets/Income related
Yichang semiconductor silicon material project	2,866,666		200,000		2,666,666	Assets related
Yichang Display Company Project	40,565,357		2,667,812		37,897,545	Assets related
Xianning Optoelectronics Project	6,240,000		520,000		5,720,000	Assets related
Shenzhen medical equipment subsidy project	7,178,000		1,164,000		6,014,000	Assets related
Hebei float emission reward	9,355,414		733,758		8,621,656	Assets related
Group Talent Fund Project	171,000,000				171,000,000	Income related
Zhaoqing energy-saving industry to build financial support funds	87,255,711		82,441,384	433,800	4,380,527	Income related
Others	26,468,509	806,000	3,731,077		23,543,432	Assets related
Total	564,129,128	3,306,000	117,125,948	433,800	449,875,380	

35、Share capital

Unit: Yuan

Item	1 January 2022	Movement for the year ended 31 December 2022					31 December 2022
		New issues during the year	Bonus issue	Transfer from capital surplus	Others	Sub-total	
Total number of ordinary shares	3,070,692,107						3,070,692,107

36、Capital surplus

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
Share premium	655,424,260			655,424,260
Other capital surplus	-58,427,175			-58,427,175
Total	596,997,085			596,997,085

37、Other comprehensive income

Unit: Yuan

Item	1 January 2022	Other comprehensive income in Income Statement for the year ended 31 December 2022				31 December 2022
		Actual amount before tax for current year	Less: Income tax expenses	Attributable to parent company after tax	Attributable to minority shareholders after tax	
I.Other comprehensive income items which will be reclassified	159,200,530	11,659,948		11,659,948		170,860,478

subsequently to profit or loss					
Difference on translation of foreign currency financial statements	-4,501,267	11,659,948		11,659,948	7,158,681
Financial rewards for energy-saving technical retrofits	2,550,000				2,550,000
Income generated when self-property and land use rights are converted into investment property	161,151,797				161,151,797
Total	159,200,530	11,659,948		11,659,948	170,860,478

38、Special reserve

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
Safety production costs	7,296,397	8,605,776	15,170,593	731,580
Total	7,296,397	8,605,776	15,170,593	731,580

39、Surplus reserve

Unit: Yuan

Item	1 January 2022	Increase in current year	Decrease in current year	31 December 2022
Statutory surplus reserve	1,017,034,942	83,746,491		1,100,781,433
Discretionary surplus reserve	127,852,568			127,852,568
Total	1,144,887,510	83,746,491		1,228,634,001

40、Undistributed profits

Unit: Yuan

Item	2022	2021 (recapitulation)
Adjustment on undistributed profit at end of last year	6,447,650,867	5,336,266,412
Adjusted undistributed profit at beginning of period	6,447,650,867	5,336,266,412
Add: Net profits attributable to shareholders of	2,037,202,500	1,526,392,754

parent company		
Less: Appropriation for statutory surplus reserve	83,746,491	107,939,088
Ordinary share dividends payable	614,138,421	307,069,211
Undistributed profits at end of year	7,786,968,455	6,447,650,867

Details of undistributed profits at the beginning of the adjustment period:

1)、Due to the retrospective adjustment of the Accounting Standards for Business Enterprises and related new regulations, the undistributed profit at the beginning of the period was affected by RMB -2,936,550 .

41、Operating income and operating costs

Unit: Yuan

Item	2022		2021	
	Revenue	Cost	Revenue	Cost
Principal operation	14,944,821,360	10,882,072,965	13,539,130,112	8,874,190,659
Other operations	253,885,638	124,722,408	133,242,711	21,958,135
Total	15,198,706,998	11,006,795,373	13,672,372,823	8,896,148,794

42、Taxes and surcharges

Unit: Yuan

Item	2022	2021
City maintenance and construction tax	38,620,656	40,516,097
Educational surcharge	31,008,119	35,188,375
Housing property tax	31,807,938	32,643,067
Land use rights	17,451,373	23,513,848
Stamp tax	8,844,793	8,559,125
Environmental tax	4,814,077	6,836,101
Others	2,926,836	1,398,805
Total	135,473,792	148,655,418

43、Selling and distribution expenses

Unit: Yuan

Item	2022	2021
Employee benefits	209,351,728	183,925,526
Entertainment fees	19,052,349	20,359,285
Insurance fees	17,698,899	3,509,247
Rental expenses	9,418,713	7,422,419
Vehicle use fees	9,244,459	8,505,855
Business travel expenses	8,234,864	8,791,046
Freight expenses	5,632,947	8,738,363

Others	35,121,017	29,443,692
Total	313,754,976	270,695,433

44、General and administrative expenses

Unit: Yuan

Item	2022	2021
Employee benefits	434,953,745	441,265,481
Depreciation and amortization	114,878,297	129,485,655
General office expenses	34,156,691	30,570,337
Entertainment fees	19,657,929	19,772,396
Labour union funds	19,320,629	19,409,807
Consulting advisers	12,931,584	21,279,093
Canteen costs	10,448,596	8,389,711
Vehicle use fees	7,592,501	6,399,995
Water and electricity fees	6,987,706	5,551,260
Business travel expenses	6,123,944	7,657,160
Others	51,887,283	62,824,612
Total	718,938,905	752,605,507

45、Research and development expenses

Unit: Yuan

Item	2022	2021
Research and development expenses	644,146,614	511,738,848
Total	644,146,614	511,738,848

46、Financial expenses

Unit: Yuan

Item	2022	2021
Interest on borrowings	269,234,431	202,905,070
Less: Capitalised interest	56,510,168	14,046,907
Interest expenses	212,724,263	188,858,163
Less: Interest income	71,751,429	42,702,029
Exchange losses	3,466,699	2,721,960
Others	3,773,449	2,304,097
Total	148,212,982	151,182,191

47、Other Income

Unit: Yuan

Item	2022	2021
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Government subsidy amortization	117,125,948	40,387,953
Industry support funds	4,843,800	4,315,700
Government incentive funds	45,036,841	31,591,282
Research grants	6,629,170	11,171,171
Others	14,732,022	18,999,711
Total	188,367,781	106,465,817

48、Investment income

Unit: Yuan

Item	2022	2021
Income from structural deposits	27,665,396	14,685,772
Fixed deposit and others	3,902,458	2,161,875
Total	31,567,854	16,847,647

49、Credit impairment loss

Unit: Yuan

Item	2022	2021
Losses on bad debts of notes receivables		-20,778,806
Losses on bad debts of accounts receivable	-44,501,593	-84,095,771
Losses on bad debts of other receivables	-3,218,514	-49,019,860
Total	-47,720,107	-153,894,437

50、Asset impairment loss

Unit: Yuan

Item	2022	2021
Decline in the value of inventories	-28,315,491	-4,444,583
Impairment loss of fixed assets	-4,997,092	-223,891,270
Impairment loss in construction in progress		-650,101,859
Impairment loss in goodwill	-122,250,507	-103,227,834
Total	-155,563,090	-981,665,546

51、Income on disposal assets

Unit: Yuan

Item	2022	2021
Gains on disposal of non-current assets	15,213,059	-1,493,248
Total	15,213,059	-1,493,248

52、Non-operating revenue

Unit: Yuan

Item	2022	2021	Amount of non-recurring gains and losses included in 2022
Compensation income	305,439	2,945,158	305,439
Insurance claims	9,054,400	532,984	9,054,400
Amounts unable to pay	9,954,737	5,229,842	9,954,737
Others	3,377,696	3,896,550	2,496,380
Total	22,692,272	12,604,534	21,810,956

53、Non-operating expenses

Unit: Yuan

Item	2022	2021	Amount booked into current non-recurring profits and losses
Donation	488,577	319,746	488,577
Government subsidy return back	77,171	15,028,336	77,171
Compensation	655,574	256,750	655,574
Others	5,845,856	10,525,912	5,845,856
Total	7,067,178	26,130,744	7,067,178

54、Income tax expenses

(1) Income tax expense details

Unit: Yuan

Item	2022	2021
Current income tax	129,071,035	434,400,038
Deferred income tax	106,416,724	-78,421,007
Total	235,487,759	355,979,031

(2) Adjustment process of accounting profit and income tax expenses

Unit: Yuan

Item	2022
Total profit	2,278,874,947
Income tax expenses calculated at applicable tax rates by company	391,337,658
Effect in the balance of deferred income tax assets/liabilities at the beginning of the period due to tax rate adjustments	3,912,386
Adjustment on effect of income tax in the prior period	-7,776,520
Costs, expenses and losses not deductible for tax purposes	8,735,749
Effect of deductible loss on usage of unconfirmed deferred income tax assets in the prior period	-69,079,756
Effect of deductible temporary difference or deductible loss on unconfirmed deferred income tax in the current period	131,226

Effect of obtaining tax incentives	-91,772,984
Income tax expenses	235,487,759

55、 Other comprehensive income

See Note 37 for details

56、 Notes to the cash flow statement

(1) Cash received relating to other operating activities

Unit: Yuan

Item	2022	2021
Government grants	77,146,968	172,538,864
Interest income	71,751,429	42,702,029
Others	37,075,172	45,790,381
Total	185,973,569	261,031,274

(2) Cash paid relating to other operating activities

Unit: Yuan

Item	2022	2021
General office expenses	45,107,807	42,874,346
Canteen costs	40,379,269	38,269,921
Entertainment fees	38,066,795	40,958,494
Insurance fees	28,837,239	14,037,127
Maintenance fee	28,584,497	25,907,924
Business travel expenses	19,865,565	21,292,700
Rental expenses	19,010,554	23,997,442
Vehicle use fee	18,761,308	15,575,367
Consulting advisers	15,645,923	23,166,436
Bank fees	3,773,449	2,304,097
Government subsidy return back	77,171	15,028,336
Others	109,953,974	177,524,430
Total	368,063,551	440,936,620

(3) Cash received relating to other investing activities

Unit: Yuan

Item	2022	2021
Deposit	29,927,321	21,682,371
Total	29,927,321	21,682,371

(4) Cash paid relating to other investing activities

Unit: Yuan

Item	2022	2021
Advance payment for others		24,000,000
Total		24,000,000

(5) Cash received relating to other financing activities

Unit: Yuan

Item	2022	2021
Income from finance lease		200,000,000
Total		200,000,000

(6) Cash payments relating to other financing activities

Unit: Yuan

Item	2022	2021
Repay financing leases	46,045,514	
Total	46,045,514	

57. Supplementary information to the cash flow statement**(1) Supplement information to the cash flow statement**

Unit: Yuan

Supplement information	2022	2021
1. Reconciliation from net profit to cash flows from operating activities		
Net profit	2,043,387,188	1,558,101,624
Add: Provision for asset impairment	155,563,090	981,665,546
Provision for credit impairment	47,720,107	153,894,437
Depreciation of fixed assets	931,508,062	893,319,936
Depreciation of right-of-use assets	2,022,712	1,756,406
Amortisation of intangible assets	65,785,684	60,490,281
Amortisation of long-term prepaid expenses	1,835,784	430,438
Losses (gains) on disposal of fixed assets, intangible assets and other long-term asset ("-" for gains)	-15,213,059	1,493,248
Financial expenses ("-" for gains)	212,724,263	188,858,163
Investment loss ("-" for gains)	-31,567,854	-16,847,647
Decrease in deferred tax assets ("-" for increase)	93,555,317	-60,065,652
Increase in deferred tax liabilities ("-" for decrease)	12,861,407	-18,214,498
Decrease in inventories ("-" for increase)	-713,041,551	-273,932,796
Decrease/(increase) in operating receivables ("-" for increase)	-1,508,659,625	104,211,540
Increase in operating payables ("-" for decrease)	650,035,930	324,487,004
Others	8,605,776	
Net cash flows from operating activities	1,957,123,231	3,899,648,030
2. Net changes in cash and cash equivalents:		

Cash and cash equivalents at end of year	4,594,018,251	2,756,477,572
Less: Cash and cash equivalents at beginning of year	2,756,477,572	2,124,028,196
Net increase in cash and cash equivalents	1,837,540,679	632,449,376

(2) Cash and cash equivalents composition

Unit: Yuan

Item	31 December 2022	1 January 2022
I.Cash and cash equivalents	4,594,018,251	2,756,477,572
Bank deposits that can be readily drawn on demand	3,242,318,251	2,453,477,573
Other cash balances that can be readily drawn on demand	1,351,700,000	302,999,999
II.Cash and cash equivalents at end of year	4,594,018,251	2,756,477,572

58、The assets with the ownership or use right restricted

Unit: Yuan

Item	Book value at the end of reporting period	Cause of restriction
Monetary funds	10,589,528	Restricted circulation of deposits, freezes, etc
Note receivable	156,943,437	Restricted pledge
Fixed assets	132,370,370	Restricted financing lease
Total	299,903,335	

59、Monetary items denominated in foreign currencies

(1) Foreign currency monetary items

Unit: Yuan

Item	Balances denominated in foreign currencies	Exchange rates	Balances denominated in RMB
Cash at bank and on hand			38,329,755
Including: USD	4,476,030	6.9646	31,173,757
EUR	27,186	7.4229	201,796
HKD	7,772,276	0.8933	6,942,974
SGD	1,265	5.1831	6,556
AUD	797	4.7138	3,759
JPY	17,424	0.0524	913
Accounts receivable			136,364,845
Including: USD	18,502,593	6.9646	128,863,157
EUR	834,785	7.4229	6,196,529
HKD	1,461,053	0.8933	1,305,159
Accounts payable			32,908,539
Including: USD	4,047,582	6.9646	28,189,789

EUR	554,741	7.4229	4,117,790
HKD	263,031	0.8933	234,966
JPY	4,661,832	0.0524	244,280
GBP	14,500	8.3941	121,714

60、Government grants

(1) Basic conditions of government grants

Unit: Yuan

Type	Amount	Presentation account	Amount included in profit or loss for the year
Amortization of government subsidies	117,125,948	Other income	117,125,948
Other government subsidies	77,667,748	Other income、 Financial expenses、 Construction in progress	73,367,748

(2) General information of government subsidies return

Unit: Yuan

Item	Amount	Cause of return
Subsidy for the industrialization research project of Shenzhen float high-strength ultra-thin glass	77,171	
Zhaoqing Energy Conservation Industry Co construction Financial Support Fund	433,800	

VI、THE CHANGES OF CONSOLIDATION SCOPE

1、Changes in scope of consolidation due to other reasons

(1) On February 14, 2022, the Group set up a subsidiary, Yichang Nanbo New Energy Materials Technology Co., Ltd. (referred to as "Yichang New Energy Materials Company") and the Group has invested RMB 1,200,000. The Group owns 100% of its equity.

(2) On July 1, 2022, the Group set up a subsidiary, Dongguan Nanbo Intelligent Equipment Manufacturing Co., Ltd. (referred to as "Dongguan Intelligent Equipment Company") and the Group has invested RMB 2,500,000. The Group owns 100% of its equity.

(3) On July 14, 2022, the Group set up a subsidiary, Anhui Nanbo Photovoltaic Energy Co., Ltd. (referred to as "Anhui Photovoltaic Energy Company") and the Group has not invested. The Group owns 100% of its equity.

(4) On July 14, 2022, the Group set up a subsidiary, Shenzhen Nanbo Quartz Material Industrial Co., Ltd. (referred to as "Shenzhen Quartz Company") and the Group has invested RMB 3,000,000. The Group owns 100% of its equity.

(5) On August 4, 2022, the Group set up a subsidiary, Guangxi Nanbo Quartz Materials Co., Ltd. (referred to as "Guangxi Quartz Company") and the Group has invested RMB 2,995,000. The Group owns 100% of its equity.

VII、EQUIRTY IN OTHER ENTITIES

1、Interest in subsidiaries

(1) Constitution of the Group

Name of Subsidiary	Major business location	Place of registration	Scope of business	Shareholding		Method of acquisition
				Direct	Indirect	
Chengdu CSG	Chengdu, PRC	Chengdu, PRC	Development, production and sales of special glass	75%	25%	Establishment
Sichuan CSG Energy Conservation	Chengdu, PRC	Chengdu, PRC	Development, production and sales of special glass and processing of glass	75%	25%	Separation
Tianjin Energy Conservation	Tianjin, PRC	Tianjin, PRC	Development, production and sales of special glass	75%	25%	Establishment
Dongguan CSG Engineering	Dongguan, PRC	Dongguan, PRC	Intensive processing of glass	75%	25%	Establishment
Dongguan CSG Solar	中 Dongguan, PRC	Dongguan, PRC	Production and sales of solar glass	75%	25%	Establishment
Dongguan CSG PV-tech	Dongguan, PRC	Dongguan, PRC	Production and sales of hi-tech green battery and components	100%		Establishment
Yichang CSG Polysilicon	Yichang, PRC	Yichang, PRC	Production and sales of high-purity silicon materials	75%	25%	Establishment
WujiangCSG Engineering	Wujiang, PRC	Wujiang, PRC	Intensive processing of glass	75%	25%	Establishment
Hebei CSG	Yongqing, PRC	Yongqing, PRC	Production and sales of special glass	75%	25%	Establishment
Wujiang CSG	Wujiang, PRC	Wujiang, PRC	Production and sales of special glass	100%		Establishment
China Southern Glass (Hong Kong) Limited	Hong Kong, PRC	Hong Kong, PRC	Investment holding	100%		Establishment
Xianning CSG	Xianning, PRC	Xianning, PRC	Production and sales of special glass	75%	25%	Establishment
Xianning CSG Energy-Saving	Xianning, PRC	Xianning, PRC	Intensive processing of glass	75%	25%	Separation
Qingyuan CSG Energy-Saving	Qingyuan, PRC	Qingyuan, PRC	Production and sales of ultra-thin electronic glass	100%		Establishment
Shenzhen CSG Financial Leasing Co., Ltd.	Shenzhen, PRC	Shenzhen, PRC	Finance leasing, etc.	75%	25%	Establishment
Jiangyou CSG Mining Development Co. Ltd.	Jiangyou, PRC	Jiangyou, PRC	Production and sales of silica and its by-products	100%		Establishment
Shenzhen CSG Display:	Shenzhen, PRC	Shenzhen, PRC	Production and sales of display component products	60.8%		Acquisition
Zhaoqing Energy Saving Company	Zhaoqing PRC	Zhaoqing PRC	Production and sales of various special glasses	100%		Establishment
Zhaoqing Automobile Company	Zhaoqing PRC	Zhaoqing PRC	Production and sales of various special glasses	100%		Establishment
Anhui Energy Company	Fengyang, PRC	Fengyang, PRC	Production and sales of solar glass products	100%		Establishment
Anhui Quartz Company	Fengyang, PRC	Fengyang, PRC	Production and sales of solar glass products	100%		Establishment
Anhui Silicon Valley	Fengyang, PRC	Fengyang, PRC	Mineral resources	60%		Establishment

Mingdu Mining Company	PRC	PRC	exploitation			ment
Xi'an energy conservation company	Xi'an, PRC	Xi'an, PRC	Production and sales of various special glasses	55%	45%	Establishment
Guangxi New Energy Materials Company	Longgang, PRC	Longgang, PRC	Production and sales of various special glasses	75%	25%	Establishment

(2) Major non-wholly owned subsidiaries

Unit: Yuan

Name of Subsidiary	Shareholding of minority shareholders	Profit or loss attributable to minority shareholders for the year ended 31 December 2022	Dividends distributed to minority shareholders for the year ended 31 December 2022	Minority interests as at 31 December 2022
Shenzhen CSG Display	39.20%	6,409,988		410,609,194

(3) Key financial information of major non-wholly owned subsidiaries

Unit: Yuan

Name of Subsidiary	31 December 2022					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Shenzhen CSG Display	200,627,791	1,323,084,986	1,523,712,777	333,428,174	79,596,855	413,025,029
	1 January 2022					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
	210,979,056	1,378,117,087	1,589,096,143	448,244,735	54,477,833	502,722,568

Unit: Yuan

Name of Subsidiary	2022				2021			
	Revenue	Net profit	Total comprehensive income	Cash flows from operating activities	Revenue	Net profit	Total comprehensive income	Cash flows from operating activities
Shenzhen CSG Display	542,893,990	24,314,174	24,314,174	131,961,156	750,177,561	88,336,632	88,336,632	196,307,039

VIII. RISKS ASSOCIATED WITH FINANCIAL INSTRUMENTS

The Group's activities expose it to a variety of financial risks: market risk (primarily foreign exchange risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial market and seeks to reduce potential adverse effects on the Group's financial performance.

1. Market risk**(1) Foreign exchange risk**

The Group's major operational activities are carried out in Mainland China and a majority of the transactions are denominated in RMB. Some export business, however, is denominated in foreign currencies. In addition, the Group 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 and Hong Kong dollar. The Group monitors the scale of foreign currency transactions, foreign currency assets and liabilities, and adjust settlement currency of export business, to furthest reduce the currency risk.

On 31 December 2022, book values in RMB equivalent of the Group's assets and liabilities denominated in foreign currencies are summarized below:

Unit: Yuan

	31 December 2022			
	USD	HKD	Others	Total
Financial assets denominated in foreign currency				
Cash at bank and on hand	31,173,757	6,942,974	213,024	38,329,755
Receivables	128,863,157	1,305,159	6,196,529	136,364,845
Total	160,036,914	8,248,133	6,409,553	174,694,600
Financial liabilities denominated in foreign currency				
Payables	28,189,789	234,966	4,483,784	32,908,539
Total	28,189,789	234,966	4,483,784	32,908,539

(1) Foreign exchange risk (continued)

Unit: Yuan

Item	1 January 2022			
	USD	HKD	Others	Total
Financial assets denominated in foreign currency				
Cash at bank and on hand	26,509,188	2,379,817	115,374	29,004,379
Receivables	111,133,429	1,732,573	6,026,900	118,892,902
Total	137,642,617	4,112,390	6,142,274	147,897,281
Financial liabilities denominated in foreign currency				
Payables	40,306,973	201,921	2,416,770	42,925,664
Total	40,306,973	201,921	2,416,770	42,925,664

On 31 December 2022, if the currency had strengthened/weakened by 10% against the USD while all other variables had been held constant, the Group's net profit for the year would have been approximately RMB 11,207,006 lower/higher (31 December 2021: approximately RMB 8,273,530 lower/higher) for various financial assets and liabilities denominated in USD.

Other changes in exchange rate had no significant impact on the Group's operating activities except USD dollar.

(2) Interest rate risk

The Group's interest rate risk arises from long-term interest bearing debts including long-term borrowings and bonds payable. Financial liabilities issued at floating rates expose the Group to cash flow interest rate risk. Financial liabilities issued at fixed rates expose the Group to fair value interest rate risk. The Group determines the relative proportions of its fixed rate and floating rate

contracts depending on the prevailing market conditions. As at 31 December 2022, the Group's long-term interest-bearing debts at and fixed rates and floating rates are illustrated below:

Unit: Yuan

Type	31 December 2022	1 January 2022
Contracts at fixed rates	487,260,925	2,404,372,257
Contracts at floating rates	3,866,329,055	1,061,274,897
Total	4,353,589,980	3,465,647,154

The Group continuously monitors the interest rate position of the Group. Increases in interest rates will increase the cost of new borrowing and the interest expenses with respect to the Group's outstanding floating rate borrowings, and therefore could have a material adverse effect on the Group's financial position. The Group makes adjustments timely with reference to the latest market conditions, which includes increasing/decreasing long-term fixed rate debts at the anticipation of increasing/decreasing interest rate.

2、Credit risk

Credit risk is managed on the grouping basis. Credit risk mainly arises from cash at bank, notes receivable, accounts receivable, other receivables.

The Group expects that there is no significant credit risk associated with cash at bank since they are mainly deposited at state-owned banks and other medium or large size listed banks. Management does not expect that there will be any significant losses from non-performance by these counterparties. Furthermore, as the Group's bank acceptance notes receivable are generally accepted by the state-owned banks and other large and medium listed banks, management believes the credit risk should be limited.

In addition, the Group has policies to limit the credit exposure on accounts receivable, other receivables and trade acceptance notes receivable. The Group assesses the credit quality of and sets credit limits on its customers by taking into account their financial position, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, or shorten or cancel credit periods, to ensure the overall credit risk of the Group is limited to a controllable extent.

3、Liquidity risk

Cash flow forecasting is performed by each subsidiary of the Group and aggregated by the Group's finance department in its headquarters. The Group's finance department at its headquarters monitors rolling forecasts of the Group's short-term and long-term liquidity requirements to ensure it has sufficient cash reserve, while maintaining sufficient headroom on its undrawn committed borrowing facilities from major financial institutions so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities to meet the short-term and long-term liquidity requirements.

Management will implement the following measures to ensure the liquidation risk limited to a controllable extent:

- (a) The Group will have steady cash inflows from operating activities;
- (b) The Group will pay the debts that mature and finance the construction projects through the existing bank facilities;

(c) The Group will closely monitoring the payment of construction expenditure in terms of payment time and amount.

The financial liabilities of the Group at the balance sheet date are analyzed by their maturity date below at their undiscounted contractual cash flows:

Unit: Yuan

Item	31 December 2022				
	Within 1 year	1 to 2 years	2 to 5years	Over 5 years	Total
Short-term borrowings	350,149,308				350,149,308
Notes payable	994,557,496				994,557,496
Accounts payable	2,033,542,627				2,033,542,627
Other payables	537,065,184				537,065,184
Other current liabilities	50,407,240				50,407,240
Non-current liabilities due within one year	2,493,836,975				2,493,836,975
Long-term payables		40,906,147	88,330,731		129,236,878
Long-term borrowings	159,922,694	1,158,108,565	2,569,845,854	1,040,196,665	4,928,073,778
Total	6,619,481,524	1,199,014,712	2,658,176,585	1,040,196,665	11,516,869,486

Unit: Yuan

Item	1 January 2022				
	Within 1 year	1 to 2 years	2 to 5years	Over 5 years	Total
Short-term borrowings	182,299,506				182,299,506
Notes payable	400,662,713				400,662,713
Accounts payable	1,428,851,312				1,428,851,312
Other payables	289,440,477				289,440,477
Other current liabilities	40,099,309				40,099,309
Non-current liabilities due within one year	514,569,537				514,569,537
Long-term payables		38,900,194	129,357,868		168,258,062
Long-term borrowings	60,580,998	374,241,583	889,057,539	363,125,181	1,687,005,301
Bonds payable	120,000,000	2,120,000,000			2,240,000,000
Total	3,036,503,852	2,533,141,777	1,018,415,407	363,125,181	6,951,186,217

IX、DISCLOSURE OF FAIR VALUE

1、Closing balance of assets and liabilities measured at fair value

Unit: Yuan

Item	31 December 2022			
	Level 1	Level 2	Level 3	Total
Measured at fair value through other comprehensive income	--	--	--	--
Receivables Financing			1,095,412,643	1,095,412,643
Investment property		290,368,105		290,368,105

Total		290,368,105	1,095,412,643	1,385,780,748
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2、Fair value of financial assets and financial liabilities not measured at fair value

The group's financial assets and financial liabilities measured at amortized cost mainly include: notes receivable, accounts receivable, other receivable, short-term borrowings, accounts payable, lease liabilities, long term borrowings, bonds payable ect. Except for financial liabilities listed below, book value of the other financial assets and liabilities not measured at fair value is a reasonable approximation of their fair value.

Unit: Yuan

Item	31 December 2022		1 January 2022	
	Carrying amount	Fair value	Carrying amount	Fair value
Corporate bonds	1,999,316,522	2,001,520,000	1,996,587,330	2,014,330,000
Total	1,999,316,522	2,001,520,000	1,996,587,330	2,014,330,000

X、RELATED PARTIES AND RELATED PARTY TRANSACTIONS

1、Information of the parent company

The Company regards no entity as the parent company.

2、The subsidiaries

The general information and other related information of the subsidiaries are set out in Note VII(1).

3、General information of the Group's associate

None

4、Other related parties information

Name of Other Related Party	Relationship with the Group
Qianhai Life Insurance Co., Ltd	The largest shareholder of the company
Suzhou Baoqi Logistics Co., Ltd.	Related parties of the company's largest shareholder of taking concerted action
Shenzhen Baoneng Auto Sales & Service Co., Ltd.	Related parties of the company's largest shareholder of taking concerted action
Xinjiang Qianhai United Property & Casualty Insurance Co., Ltd.	Related parties of the company's largest shareholder of taking concerted action
Shantou Chaoshang Urban Comprehensive Management Co., Ltd	Related parties of the company's largest shareholder of taking concerted action

5、Related party transactions

(1) Purchase and sales of goods and rendering and receiving services

Table on purchase of goods/receiving of services

Unit: Yuan

Related parties	Related transaction	2022	2021
Qianhai Life Insurance Co., Ltd	Receive service	7,272,709	5,541,857
Suzhou Baoqi Logistics Co., Ltd	Receive service		6,851,844
Shenzhen Baoneng Automobile Sales and Service Co., Ltd	Purchase of goods		1,171,470
Xinjiang Qianhai United Property Insurance Co., Ltd	Receive service		761,693
Other related parties	Purchase of goods、 Receive service	194,206	620,812
Total		7,466,915	14,947,676

Table on sales of goods/providing of services

Unit: Yuan

Related parties	Related transaction	2022	2021
Shantou Chaoshang Urban Comprehensive Management Co., Ltd	Sales of goods	1,397,807	
Other related parties	Sales of goods	60,280	659,685
Total		1,458,087	659,685

Notes: A large number of companies with scattered amounts are consolidated and presented for other related parties

(2) Related party leases

The Company as lessee:

Unit: Yuan

Name of lessor	Type of leased asset	Rent costs of short-term leases and low-value asset leases with simplified treatment (if applicable)		Variable lease payments not included in the measurement of lease obligation (if applicable)		Rentals		Interest expenses on lease liabilities in the current year		Increase of right-of-use assets	
		2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Other related parties	Building					665,196	886,928	25,871	66,174		

(3) Remuneration of key management staff

Unit: Yuan

Item	2022	2021
Remuneration	25,776,400	25,749,501

6、Receivables from and payables to related parties**(1) Receivables from related parties**

Unit: Yuan

Related parties	31 December 2022		1 January 2022	
	Carrying amount	Provision for bad debts	Carrying amount	Provision for bad debts
Qianhai Life Insurance Co., Ltd	572,995			
Other related parties	36,000	720	242,620	4,819
Total	608,995	720	242,620	4,819

(2) Payables to related parties

Unit: Yuan

Related parties	31 December 2022	1 January 2022
Suzhou Baoqi Logistics Co., Ltd	314,667	2,731,013
Shantou Chaoshang Urban Comprehensive Management Co., Ltd	200,881	
Other related parties	125,408	133,408
Total	640,956	2,864,421

XI、SHARE-BASED PAYMENTS

1、Overall share-based payments

None

2、Equity-settled share-based payments

None

3、Cash-settled share-based payments

None

XII、COMMITMENTS AND CONTINGENCIES

1、Significant commitments

Capital expenditures contracted for by the Group at the balance sheet date but are not yet necessary to be recognized on the balance sheet are as follows:

Unit: Yuan

Item	31 December 2022	1 January 2022
Buildings, machinery and equipment	3,060,099,197	2,994,615,272

XIII、EVENTS AFTER THE BALANCE SHEET

1、Profit distribution information

Unit: Yuan

Proposed distribution of cash dividends	460,603,816
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According to the resolution of the board of directors on April 24, 2023, the board of directors proposed that the company distribute a cash dividend of RMB 460,603,816 to all shareholders. This proposal is approving by the general meeting of shareholders. The cash dividend proposed after the balance sheet date has not been confirmed in this financial statement as a liability.

XIV、 OTHER SIGNIFICANT EVENTS

1、 Segment reporting

(1) Determination basis and accounting policy of report segment

The Group's business activities are classified by product and service as follows:

Glass segment, engaged in production and sales of float glass and engineering glass and the silica for the production thereof, etc.

Solar energy segment, engaged in manufacturing and sales of polycrystalline silicon and solar battery and applications, etc.

Solar and other segment divisions, responsible for the production and sales of polysilicon and solar cell module products, photovoltaic energy development and other products, etc.

The reportable segments of the Group are the business units that provide different products or service. Different businesses require different technologies and marketing strategies. The Group, therefore, separately manages the production and operation of each reportable segment and Estimates their operating results respectively, in order to make decisions about resources to be allocated to these segments and to assess their performance.

Inter-segment transfer prices are measured by reference to selling prices to third parties.

The assets are allocated based on the operations of the segment and the physical location of the asset. The liabilities are allocated based on the operations of the segment. Expenses indirectly attributable to each segment are allocated to the segments based on the proportion of each segment's revenue.

(2) Financial information of reporting segments

Unit: Yuan

Item	Flat glass	Electronic glass and displays	Solar and other industries	Unallocated	Elimination	Total
Revenue from external customers	9,894,002,863	1,470,587,932	3,831,603,860	2,512,343		15,198,706,998
Inter-segment revenue	162,736,393	172,495,899	56,978,902	371,837,218	-764,048,412	
Interest income	3,862,088	595,151	578,167	66,716,023		71,751,429
Interest expenses	26,741,659	7,271,418	383,249	178,327,937		212,724,263
Asset impairment losses	17,229,501		16,083,082	122,250,507		155,563,090
Credit impairment loss	35,368,484	-33,329	11,927,635	457,317		47,720,107
Depreciation and amortisation expenses	613,677,200	230,804,196	150,003,099	6,667,747		1,001,152,242
Total profit/(loss)	1,162,517,806	185,946,481	1,072,267,930	-141,857,270		2,278,874,947

Income tax (expenses)/income	122,509,910	16,248,533	98,356,847	-1,627,531		235,487,759
Net profit/(loss)	1,040,007,896	169,697,948	973,911,083	-140,229,739		2,043,387,188
Total assets	14,816,107,672	3,657,683,773	3,839,214,143	3,591,007,718		25,904,013,306
Total liabilities	6,870,531,882	700,657,854	554,483,116	4,402,669,151		12,528,342,003
Increase in non-current assets	3,377,508,584	309,339,498	307,531,029	8,374,505		4,002,753,616

XV、NOTES TO THE KEY ITEMS IN THE COMPANY'S FINANCIAL STATEMENTS

1、Accounts receivable

(1) Details on categories

Unit: Yuan

Type	31 December 2022					1 January 2022				
	Carrying Amount		Provision for bad debts		Book value	Carrying Amount		Provision for bad debts		Book value
	Amount	Proportion	Amount	Accrual proportion		Amount	Proportion	Amount	Accrual proportion	
Credit loss provision accrued by portfolio	24,484,628	100%	489,692	2%	23,994,936					
Total	24,484,628	100%	489,692	2%	23,994,936					

Provision for bad debts made on the basis of portfolio:

Unit: Yuan

Name	31 December 2022		
	Carrying Amount	Provision for bad debts	Accrual proportion
Portfolio 1	24,484,628	489,692	2%
Total	24,484,628	489,692	2%

Disclosure by ages

Unit: Yuan

Aging	31 December 2022
Within 1 year (including 1 year)	24,484,628
Total	24,484,628

(2) Provisions made, collected or reversed in current period

Provision for bad debts made in current period:

Unit: Yuan

Type	1 January 2022	Movement in current year				31 December 2022
		Accrual	Withdrawal or reversal	Write-off	Others	
Provision for bad debts for accounts receivable		489,692				489,692
Total		489,692				489,692

(3) Accounts receivable details of the top 5 closing balances by debtors

Unit: Yuan

Name	Accounts receivable closing balance	% of total balance	Provision for bad debts
Total balance of the five largest accounts receivables	24,484,628	100%	489,692
Total	24,484,628	100%	489,692

2、Other receivables

Unit: Yuan

Item	31 December 2022	1 January 2022
Dividend receivable	375,057,800	250,000,000
Other receivables	1,994,373,982	2,649,091,405
Total	2,369,431,782	2,899,091,405

(1) Dividends receivable

1) Disclosed by categories

Unit: Yuan

Item	31 December 2022	1 January 2022
Dividends receivable from subsidiaries	375,057,800	250,000,000
Total	375,057,800	250,000,000

(2) Other receivables

1) Other receivables categorized by nature

Unit: Yuan

Nature of receivables	31 December 2022	1 January 2022
Due from Related parties	1,870,622,635	2,526,427,812
Others	175,134,028	174,005,021
Total	2,045,756,663	2,700,432,833

2) Provision for bad debts

Unit: Yuan

Bad debts	Stage 1	Stage 2	Stage 3	Total
	Expected credit losses in the following 12 months (grouping)	Lifetime expected credit losses (credit unimpaired)	Lifetime expected credit losses (credit impaired)	
Amount on 1st January 2022	41,428		51,300,000	51,341,428
Carrying amount on 1st January 2022 that in this period:				
Increase in the current year	41,253			41,253
Amount on 31st December 2022	82,681		51,300,000	51,382,681

3) Disclosure by ages

Unit: Yuan

Ages	31 December 2022
Within 1 year (including 1 year)	1,874,539,007
Over 1 year	171,217,656
Total	2,045,756,663

4) Provisions made, collected or reversed in current period

Provision for bad debts made in current period:

Unit: Yuan

Type	1 January 2022	Movement in current year				31 December 2022
		Accrual	Withdrawal or reversal	Write-off	Others	
Provision for bad debts of other receivables	51,341,428	41,253				51,382,681
Total	51,341,428	41,253				51,382,681

5) Other receivables details of the top 5 closing balances by debtors

Unit: Yuan

Name of entity	Relationship with the Group	Amount	Ageing	% of total balance	Provision for bad debts
Company 1	Subsidiary	562,974,714	Within 1 year	28%	
Company 2	Subsidiary	291,609,908	Within 1 year	14%	
Company 3	Subsidiary	226,938,085	Within 1 year	11%	
Company 4	Subsidiary	218,229,101	Within 1 year	11%	

Company 5	Third party	171,000,000	Over 5 years	8%	51,300,000
Total		1,470,751,808		72%	51,300,000

3、Long-term equity investments

Unit: Yuan

Item	31 December 2022			1 January 2022		
	Carrying amount	Provision for impairment	Book value	Carrying amount	Provision for impairment	Book value
Investment in subsidiaries	7,853,487,027	15,000,000	7,838,487,027	6,277,391,694	15,000,000	6,262,391,694
Total	7,853,487,027	15,000,000	7,838,487,027	6,277,391,694	15,000,000	6,262,391,694

3、Long-term equity investments (Continued)

(1) Investments in subsidiaries

Unit: Yuan

Investee	1 January 2022	Movement in current year				31 December 2022	Closing balance of impairment provision
		Increase in investment	Decrease in investment	Provision for impairment loss	Others		
Chengdu CSG	151,397,763					151,397,763	
Sichuan Energy Conservation Company	119,256,949					119,256,949	
Tianjin Energy Conservation Company	247,833,327					247,833,327	
Dongguan Engineering Company	198,276,242					198,276,242	
Dongguan Solar Energy Company	355,120,247					355,120,247	
Dongguan Photovoltaic Company	382,112,183					382,112,183	
Yichang Silicon Material Company	640,856,170	269,104,000				909,960,170	
Wujiang Engineering Company	254,401,190					254,401,190	
Hebei CSG	266,189,705					266,189,705	
CSG (Hong Kong) Co., Ltd.	87,767,304					87,767,304	
Wujiang CSG	567,645,430					567,645,430	
Jiangyou Sands Company	102,415,096					102,415,096	
Xianning Float Company	181,116,277					181,116,277	
Xianning Energy Saving Company	165,452,035					165,452,035	
Qingyuan Energy Saving Company	885,273,105					885,273,105	
Shenzhen CSG Financial Leasing Co., Ltd.	133,500,000					133,500,000	
Shenzhen Display Company	550,765,474					550,765,474	
Zhaoqing Energy Saving Company	150,000,000					150,000,000	
Zhaoqing CSG Automotive Glass Co., Ltd.	58,121,000	57,926,333				116,047,333	
Anhui Energy Company	455,000,000	845,000,000				1,300,000,000	
Anhui Quartz Company	37,000,000	38,000,000				75,000,000	

Anhui Silicon Valley Mingdu Mining Company	3,000,000	117,000,000				120,000,000	
Shenzhen CSG Medical Company	20,000,000					20,000,000	
Xi'an energy conservation company	1,000,000	40,365,000				41,365,000	
Guangxi New Energy Materials Company	1,000,000	56,000,000				57,000,000	
Nanba (Suzhou) Corporate Headquarters Management Co., Ltd.	9,000,000	21,000,000				30,000,000	
Shenzhen South Glass New Energy Industry Development Co., Ltd		120,000,000				120,000,000	
Others	238,892,197	11,700,000				250,592,197	15,000,000
Total	6,262,391,694	1,576,095,333				7,838,487,027	15,000,000

4、Operating income and operating costs

Unit: Yuan

Item	2022		2021	
	Income	Cost	Income	Cost
Principal operation	2,232,800			
Other operations	371,474,846		294,247,989	
Total	373,707,646		294,247,989	

5、Investment income

Unit: Yuan

Item	2022	2021
Investment income from long-term equity investment under cost method	841,070,857	1,065,649,376
Proceeds from long-term equity transfer		196,665,194
Income from structural deposits	27,665,396	14,245,329
Fixed deposit and others	3,902,458	2,446,900
Total	872,638,711	1,279,006,799

XVI、SUPPLEMENT INFORMATION

1、Statement of non-recurring gains and losses

Unit: Yuan

Item	Amount	Notes
Gains or losses on disposal of non-current assets	15,213,059	
Government grants recognized in profit or loss (except for grants that are closely related to the Company's business and are in amounts and quantities fixed in accordance with the national standard)	188,756,525	
Losses/gains from changes of fair values occurred in holding trading financial assets and trading financial liabilities, and investment income obtaining from the disposal of trading financial assets, trading financial liability and financial assets available-for-sale, excluded effective hedging business relevant with normal operations of the Company	31,567,854	
Reversal of provision for accounts receivable that are tested for credit loss individually	6,389,385	
Other non-operating income or expenses other than above	14,743,778	
Less :Influenced amount of income tax	34,242,061	
Influenced amount of minor shareholders' equity	4,655,298	
Total	217,773,242	--

The specific situation of other profit and loss items that meet the definition of non recurring profit and loss:

The company does not have specific circumstances for other profit and loss items that meet the definition of non recurring profit and loss.

2、Return on net assets and earnings per share

The profit of reporting period	Weighted average return on net assets	Earnings per share	
		Basic earnings per share	Diluted earnings per share
Net profit attributable to ordinary shareholders of the Company	16.78%	0.66	0.66
Net profit attributable to ordinary shareholders of the Company after deducting non-recurring gains and losses	14.99%	0.59	0.59

Board of Directors of
CSG Holding Co., Ltd.
26 April 2023