福萊特玻璃集團股份有限公司

Flat Glass Group Co., Ltd.

(a joint stock limited company incorporated in the People's Republic of China)

Stock Code: 6865

Interim Report 2019

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Corporate Information

DIRECTORS

Executive directors
Mr. Ruan Hongliang
(Chairman of the Board of Directors)
Ms. Jiang Jinhua
Mr. Wei Yezhong
Mr. Shen Qifu

Independent non-executive directors
Mr. Cui Xiaozhong
Ms. Hua Fulan
Mr. Ng Ki Hung

SUPERVISORS

Mr. Zheng Wenrong
(Chairman of the Board of Supervisors)
Mr. Shen Fuquan
Mr. Zhu Quanming
Ms. Zhang Hongming
Mr. Meng Lizhong

AUDIT COMMITTEE

Mr. Cui Xiaozhong *(Chairman)*
Ms. Hua Fulan
Mr. Ng Ki Hung

REMUNERATION COMMITTEE

Mr. Cui Xiaozhong *(Chairman)*
Mr. Ruan Hongliang
Ms. Hua Fulan

NOMINATION COMMITTEE

Mr. Ruan Hongliang *(Chairman)*
Mr. Cui Xiaozhong
Mr. Ng Ki Hung

STRATEGIC DEVELOPMENT COMMITTEE

Mr. Ruan Hongliang *(Chairman)*
Mr. Wei Yezhong
Mr. Cui Xiaozhong

RISK MANAGEMENT COMMITTEE

Mr. Ruan Hongliang *(Chairman)*
Ms. Jiang Jinhua
Mr. Cui Xiaozhong

COMPANY SECRETARY

Ms. Ruan Zeyun
Ms. Leung Wing Han Sharon
(resignation effective on 1 March 2019)

AUTHORISED REPRESENTATIVES

Mr. Ruan Hongliang
Ms. Ruan Zeyun

REGISTERED OFFICE, HEADQUARTERS AND PRINCIPAL PLACE OF BUSINESS IN THE PRC

No. 1999 Yunhe Road
Xiuzhou District
Jiaxing
Zhejiang Province
People's Republic of China ("PRC")

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Room C, 2/F, Capital Trade Centre,
62 Tsun Yip Street, Kwun Tong, Kowloon,
Hong Kong Special Administrative Region of PRC
(effective from 15 August 2019)

CORPORATE WEBSITE

www.flatgroup.com.cn

LEGAL ADVISERS AS TO HONG KONG LAW

Luk & Partners

AUDITORS

Deloitte Touche Tohmatsu
Certified Public Accountants LLP

PRINCIPAL BANKERS

Bank of China Limited, Jiaxing Branch
China CITIC Bank Corporation Limited,
Jiaxing Branch
Industrial and Commercial Bank of
China Limited, Jiaxing Branch
Bank of China (Hong Kong) Limited
Citibank, N.A., Hong Kong Branch

H SHARE REGISTRAR

Tricor Investor Services Limited
Level 54, Hopewell Centre
183 Queen's Road East
Hong Kong Special Administrative Region of PRC
(effective from 11 July 2019)

Financial Summary

	Six months ended 30 June	
	2019	2018
	RMB'000	RMB'000
	(Unaudited)	(Unaudited)
Revenue	**2,034,636**	1,462,412
Cost of sales	**1,461,799**	1,044,138
Gross profit	**572,837**	418,274
Profit before tax	**310,407**	247,605
Income tax expense	**48,987**	34,720
Total comprehensive income for the period	**259,203**	213,996

	As at	As at
	30 June 2019	31 December 2018
	RMB'000	RMB'000
	(Unaudited)	(Audited)
Non-current assets	**4,205,144**	3,906,307
Current assets	**3,843,496**	3,047,242
Current liabilities	**2,997,486**	2,236,879
Net current (liabilities) assets	**846,010**	810,363
Total assets less current liabilities	**5,051,154**	4,716,670
Net assets	**4,095,988**	3,668,654
Share capital	**487,500**	450,000
Reserves	**3,608,488**	3,218,654
Total equity	**4,095,988**	3,668,654

Management Discussion and Analysis

LATEST BUSINESS DEVELOPMENT

During the reporting period, the Group expanded and optimized its operations in China and overseas. The latest business development of Flat Glass Group Co., Ltd. (the "Company") and its subsidiaries (together with the Company, the "Group") as at 30 June 2019 is sets out below.

Domestic expansion in Anhui Province, PRC

For the Group's expansion in Anhui Province, the PRC for the establishment of photovoltaic ("PV") glass production base with an annual processing capacity of 900,000 tons of PV glass, relevant works progressed well. The first and the second of the PV glass furnace with a daily melting capacity of 1,000 tons were ignited and put into operation successfully at the end of 2017 and in the first half of 2018, respectively. The third PV glass furnace with a daily melting capacity of 1,000 tons were ignited and put into operation in the first half of 2019. As such, the Group's first expansion in Anhui Province by establishing the Group's first Anhui Production base ("First Anhui Production Base") was completed.

As at the date of this report, all the new PV glass products from the Group's First Anhui Production Base have been sold normally as they are produced. As the demand for the Group's products from its downstream customers still exceeds the Group's existing production capacity (including the new capacity for the Group's First Anhui Production Base), the Company planned to invest in the establishment of a new PV glass production base with an annual production capacity of 750,000 tons of PV glass, which will be used for PV modules covers, in Fengning Modern Industrial Park located in Fengyang County, Chuzhou City, Anhui Province, PRC. This new PV glass production base will become the Group's second Anhui Production base. The project includes two lines, namely a PV raw glass production line with a daily melting capacity of 1,200 tons and a supporting processing production line, which is expect to be put into commercial production in 2021. As disclosed in the circular of the Company dated 9 May 2019, the Company plans to issue convertible bonds and the proceeds of which will be to fund this expansion. For details, please refer to the said circular.

Cold repair and reconstruction of the existing furnaces

In order to further increase the production efficiency, the Group has started the cold repaired and reconstruction of two of the older PV furnaces at its Jiaxing Production base with a daily melting capacity 300-ton. The cold repair is expected to be completed in the second half of 2019.

Overseas expansion of Haiphong Vietnam

As for the construction of PV glass production in Haiphong, Vietnam, the Group has (i) completed ground leveling work; and (ii) reserved key production equipment with suppliers. Two PV glass furnaces in Haiphong Vietnam with a daily melting capacity of 1,000 tons will be expected to be ignited and put into operation in 2020.

Business overview

The Group is principally engaged in manufacturing and sales of various glass products, including PV glass, float glass, architectural glass and household glass. The production facilities of the Group are strategically located in Jiaxing Zhejiang Province and Chuzhou Anhui Province, in the PRC. The Group mainly sells glass products to customers in China, Singapore, Korea, Japan, Malaysia, India, Vietnam and Mexico.

China's PV industry undergoes adjustment

During the reporting period, some regions in China have primarily met the conditions for achieving grid parity. In order to take a decisive role of the market in resource allocation and further promote technological progress and cost reduction through commercialization, the National Energy Administration of the PRC issued the "Notice concerning the Construction of Wind Power and Photovoltaic Power Generation Projects in 2019" (the "Notice") on 30 May 2019. The Notice proposed four general requirements for the construction of wind power and PV power generation projects in 2019. Firstly, to promote the construction of projects to achieve grid parity actively. In terms of work prioritization, a number of grid parity projects will be built first, and then for competitive allocation of project requiring state subsidy. Secondly, to strictly standardize the competitive allocation of those subsidized projects through stringent selection process with emphasis on feed-in tariff, and those projects with lower subsidy or higher degree of subsidy reduction will be considered first. Thirdly, to fully implement the power transmission and conditions for consumption. New construction projects must be based on the grid's capacity in absorbing, prioritize the power supply and consumption conditions for grid parity under the same conditions, so as to prevent the reoccurrence of the issue of abandoning wind power and photovoltaic power. Fourthly, to improve the investment, construction and business environment, and verification of reducing non-technical cost arising from land use of proposed project is required from provincial energy authorities, and tighten the supervision of related matters by the energy regulatory authority. With the implementation of the new Notice issued by the National Energy Administration, China's PV industry underwent a critical adjustment period in 2019, entering into a new stage in which the market allocation is determined by market mechanism.

Bidding projects are just part of the installation in 2019 coupled with the previous arrangement of completed projects of household PV, PV poverty alleviation, parity demonstration, pilot bases and delivery of extra-high-voltage power, therefore the installed capacity of grid connection will be estimated at around 35GW to 45GW during the year, based on the Notice on Bidding Results of National Subsidy for Photovoltaic Power Generation Projects in 2019 issued by the Comprehensive Department of the National Energy Administration. According to statistics from China Photovoltaic Industry Association, China's new PV installations were less than 12GW in the first half of 2019, which indicates there will be approximately 23GW to 33GW of grid connection gradually conducted in the second half of the year. Therefore, the domestic market may show rapid growth in the second half of the year.

Overseas market continues in diversified development

Due to the rapid decline in the cost of PV power generation, overseas markets will grow without exception in 2019, the European market will recover rapidly, and the demand of the North American market will rebound substantially from last year. Southeast Asia, Latin America, the Middle East and other countries and regions will all stage remarkable growth momentum. For example, Ukraine installed 1.25GW in the first half of 2019, accounting for 90% of the total installed capacity in the previous year, and hence, it is expected that Ukraine's installed capacity for 2019 will be substantially higher than 2018. In other markets such as South East Asia, Vietnam, for example, has accumulated 4.3GW of installed PV as of June 2019 and became China's main export market in first half of 2019. From this point of view, the PV market is moving from traditional markets driving the growth to drivers coming from new emerging PV markets.

Business outlook and prospects

Due to the impact of China's 531 Policy, accelerated price reduction in the domestic PV industry chain caused a continuous fall in the price of PV modules and an accelerated corresponding decline in PV generation costs. With the technological improvement and efficiency enhancement of the PV industry in the first half of 2019, PV generation costs constantly declined, which accelerated the upcoming era of grid parity. Currently, PV energy became the cheapest energy in certain areas, such as Germany, Brazil, Greece and India. According to statistics from China Photovoltaic Industry Association, the global newly installed capacity was approximately 47GW in the first half of 2019. The "Global Solar PV Market Outlook 2019-2023" issued by Intersolar, Global Solar Council and Solar Power Europe anticipates that new PV installation with capacity of 128GW will be added in 2019, representing a year-on-year increase of 25%. In addition, outlook for the global PV market is optimistic in the coming four years, the demand will be increased by 12% to 144GW in 2020, by 10% to 158GW in 2021, by 7% to 169GW in 2022 and by 6% to 180GW in 2023.

In recent years, China has always been a leader in the PV industry. With the continuous innovation and application of technology, further reduction in cost and improved efficiency, some regions have achieved grid parity. The Chinese PV industry is heading for high-quality and sustainable growth direction.

As a leading manufacturer of PV glass, the Group continues to aim at improving quality and efficiency, strengthening corporate management, optimizing product quality and expanding market share. The Group's three PV glass melting furnaces with a daily melting capacity of 1,000 tons have been put into operation in Fengyang, Anhui Province. In addition, two PV glass melting furnaces with a daily melting capacity of 1,000 tons in Haiphong, Vietnam are expected to be put into production in 2020. Another two PV glass melting furnaces with a daily melting capacity of 1,200 tons in Fengyang, Anhui Province are expected to be put into production in 2021. These expansions will allow the Company to capture the growth in terms of geographically and in satisfying demands.

FINANCIAL REVIEW

For the six months ended 30 June 2019, the amounts of revenue and net profit of the Group were RMB2,034.6 million and RMB261.4 million, respectively, which increased by 39.13% and 22.78%, respectively, as compared to the same period of the year of 2018 of RMB1,462.4 million and RMB212.9 million.

Revenue

The following table sets out the breakdown of revenue of the Group by product type and geographical location:

Product type	Six months ended 30 June 2019 *RMB'000*	*(%)*	Six months ended 30 June 2018 *RMB'000*	*(%)*
Photovoltaic glass	**1,532,093**	75.3%	1,043,839	71.38%
Float glass	**98,361**	4.8%	38,044	2.60%
Household glass	**163,688**	8.1%	161,510	11.04%
Architectural glass	**202,002**	9.9%	171,772	11.75%
Mineral products (1)	**29,954**	1.5%	32,412	2.22%
Other business (2)	**8,538**	0.4%	14,835	1.01%
Total	**2,034,636**	100.0%	1,462,412	100.0%

Notes:

(1) Mineral products refer to ore mined from the Group's quartz rock mine No. 7 in Lingshan-Mujishan, Fengyang County, Chuzhou City, Anhui Province, the PRC.

(2) Other business refers to rental income and disposal income of waste material.

Location	**Six months ended 30 June 2019** *RMB'000*	Six months ended 30 June 2018 *RMB'000*
PRC	**1,363,738**	990,509
Other overseas countries		
Other countries in Asia (exclude PRC)	**415,289**	322,919
Europe	**100,016**	112,753
North America	**140,772**	24,110
Others	**14,821**	12,121
Total	**2,034,636**	1,462,412

For the six months ended 30 June 2019, revenue of the Group amounted to RMB2,034.6 million, increased by 39.13% as compared to the same period of 2018. Among them, revenue of PV glass increased by 46.77%, benefited from the increase of capacity after the operation of two Anhui PV glass furnaces with a capacity of 1,000 tons each made full period production contribution. The revenue of float glass increased by 158.54% as at the end of 30 June 2019 as compared to the same period of 2018, benefited from the completion of reconstruction and formal operation of one float glass furnace with a capacity of 600 tons in 2019 and that customers' demand for the products absorbed the increase in production.

Cost of Sales

The cost of sales increased by 40.0%, from RMB1,044.1 million for the six months ended 30 June 2018 to RMB1,461.8 million for the six months ended 30 June 2019. The increase in sales primarily drive to the increase of cost of sales.

Gross Profit

The gross profit of the Group for the six months ended 30 June 2019 was RMB572,837 million. The gross profit for the six months ended 30 June 2019 remained basically stable as compared to that for the six months ended 30 June 2018.

The following table sets out gross profit of main products of the Group:

Production type	**Six months ended 30 June 2019** Gross profit *RMB'000*	**Six months ended 30 June 2019** Gross profit margin *(%)*	Six months ended 30 June 2018 Gross profit *RMB'000*	Six months ended 30 June 2018 Gross profit margin *(%)*
PV glass	**440,762**	**28.77%**	314,659	30.14%
Float glass	**17,592**	**17.88%**	7,698	20.23%
Household glass	**45,674**	**27.90%**	35,254	21.83%
Architectural glass	**47,175**	**23.35%**	40,945	23.84%
Mineral products *(Note)*	**17,633**	**58.87%**	11,818	36.46%
Total	**568,836**	**28.08%**	410,374	28.35%

Note: Mineral products refer to ore mined from the Group's quartz rock mine No. 7 in Lingshan-Mujishan, Fengyang County, Chuzhou City, Anhui Province, the PRC.

For the six months ended 30 June 2019, the gross profit margin of the PV glass segment of the Group decreased by 1.37% from 30.14% for the six months ended 30 June 2018 to 28.77% for the six months ended 30 June 2019 mainly due to the lower sales price of PV glass in the first half of 2019 as compared to the same period of 2018.

For the six months ended 30 June 2019, the gross profit margin of the float glass segment of the Group decreased from 20.23% for the six months ended 30 June 2018 to 17.88% for the six months ended 30 June 2019 mainly due to the decrease of the average selling price of the float glass products as compared to the same period of 2018.

For the six months ended 30 June 2019, the gross profit margin of the household glass segment of the Group increased from 21.83% for the six months ended 30 June 2018 to 27.9% for the six months ended 30 June 2019 mainly due to the decrease of some raw material price and slightly increase of selling price.

For the six months ended 30 June 2019, the gross profit margin of the mineral products segment of the Group increased from 36.46% for the six months ended 30 June 2018 to 58.87% for the six months ended 30 June 2019 mainly due to the increase of silicon sand quality.

Sales expenses

For the six months ended 30 June 2019, sales expenses amounted to RMB96.0 million, representing an increase of 101.02%, from RMB47.7 million for the six months ended 30 June 2018. The reasons for the increase were mainly due to (i) a significant increase of sales volume in the first half of 2019 as compared to the same period of 2018; and (ii) the increase of average shipment distance leads to the increase of shipment expenses.

Administrative expenses

Administrative expenses of the Group decreased from RMB53.6 million for the six months ended 30 June 2018 to RMB52.3 million for the six months ended 30 June 2019.

Research and development costs

For the six months ended 30 June 2019, research and development costs increased by RMB54.6 million, from RMB49.8 million for the six months ended 30 June 2018 to RMB104.4 million for the six months ended 30 June 2019 mainly due to the investment of thin sheet glass R&D project and ultra-clear PV glass R&D project etc..

Financial costs

For the six months ended 30 June 2019, financial costs of the Group increased by RMB14.8 million, from RMB9.8 million for the six months ended 30 June 2018 to RMB24.6 million for the six months ended 30 June 2019. It was mainly due to the increase of interest costs for outstanding borrowing.

Income tax expense

For the six months ended 30 June 2019, income tax expenses amounted to RMB49.0 million, and that for the same period in 2018 was RMB34.7 million. It was mainly due to the increase of profit before tax.

EBITDA and profit for the period

For the six months ended 30 June 2019, EBITDA of the Group (earnings before interests, taxes, depreciation and amortization) was increased by RMB109.3 million from RMB383.2 million for the six months ended 30 June 2018 to RMB492.5 million for the six months ended 30 June 2019. The Company's EBITDA margin was 24.21% for the six months ended 30 June 2019 as compared to 26.2% for the six months ended 30 June 2018.

For the six months ended 30 June 2019, the net profit for the period increased by RMB48.5 million, from RMB212.9 million for the six months ended 30 June 2018 to RMB261.4 million for the six months ended 30 June 2019.

Assets and equity

Total assets as at 30 June 2019 amounted to RMB8,048.6 million, which increased by RMB1,095.1 million, or 15.75%, from RMB6,953.5 million as at 31 December 2018. It was mainly due to proceeds for the A share offering and increase of trade receivables, bill receivable, fixed assets and contruction in progress. Total equity as at 30 June 2019 amounted to RMB4,096.0 million, which increased by RMB427.4 million, or 11.65%, from RMB3,668.6 million as at 31 December 2018.

Financial resources and liquidity

For the six months ended 30 June 2019, the current ratio of the Group was 1.28 as compared with that as at 31 December 2018, the current ratio was 1.36.

For the six months ended 30 June 2019, the Group's main sources of funding were cash from operating activities, bank borrowings and proceeds for the A share offering. Net cash inflow from operating activities for the six months ended 30 June 2019 was RMB107.8 million (six months ended 30 June 2018: RMB167.3 million).

Asset-liability ratio

As at 30 June 2019, the asset-liability ratio (asset-liability ratio equals total debt divided by total asset as of the end of the year or period multiplied by 100%). Asset-liability ratio of the Group was 49.11%, increased by 1.87% as compared to 47.24% as at 31 December 2018.

Capital commitment

For the six months ended 30 June 2019, capital commitment of the Group was RMB577.2 million, mainly from the newly-established PV glass production bases in Anhui Province, PRC and Haiphong, Vietnam.

EMPLOYEE AND REMUNERATION POLICY

As at 30 June 2019, the Group employed a total of 2,988 employees and most of them were based in the PRC, with a total employee remuneration amounted to RMB128.9 million, representing 6.3 % of the Group's total revenue.

The Group maintains a good relationship with its employees and provides trainings to its employees. New joiners must attend mandatory in-house training. Furthermore, employees may attend external trainings such as trainings for manufacturing management, quality control management and human resources management. Remuneration of employees is reviewed periodically by reference to the market rate. After considering performance of the Group and job performance of specific employees, the Group may pay them discretionary bonus.

The Group makes contributions for its employees in relation to the mandatory social security funds including pension, work-related injury insurance, maternity insurance, medical and unemployment insurance and housing provident fund contributions in the PRC.

CREDIT RISK AND FOREIGN EXCHANGE RISK

Transactions of the Group are settled in RMB, United States dollars, Euros, Hong Kong dollars, Vietnam Dong and Japanese yen whereas, the Group's operating activities are mainly located in the PRC. Bank financing of the Group was settled in RMB and United States dollars for the six months ended 30 June 2019 with annual interest rates were between 3.19% and 5.4%. As the Group's certain sales, procurements and financing are not in the Group's reporting currency of RMB but in foreign currencies, the Group is exposed to foreign exchange risk. For the six months ended 30 June 2019, such risks did not have any material impact on the financial performance of the Group.

Furthermore, the Group is exposed to interest rate risk, in particular from the variable-rate borrowings with Citibank of US$150 million. The Group closely monitors interest rate risk exposures and purchase appropriate interest rate swap contracts to mitigate risk exposures. During the year under review, the Group entered into interest rate swap contracts to swap variable interest rates to fixed interest rates in order to reduce its exposure to interest rate fluctuation arising from borrowings.

CAPITAL STRUCTURE

As at 30 June 2019, the total equity of the Group was 1,950,000,000 shares, of which 1,500,000,000 were A shares and 450,000,000 were H shares.

Corporate Governance and Other Information

Compliance with Corporate Governance Code

In the opinion of Directors, the Company had complied with the code provisions in the Corporate Governance Code as set forth in Appendix 14 to the Listing Rules throughout the period from 1 January 2019 to 30 June 2019 except for code provision A.2.1.

Under code provision A.2.1 of the Corporate Governance Code, the role of the chairman and chief executive should be separated and should not be performed by the same individual. Mr. Ruan Hongliang currently holds both position. Throughout the Group's business history of over 20 years, Mr. Ruan has held the key leadership position of the Group and has been deeply involved in the formulation of corporate strategies and management of business and operations of the Group. Taking into account the consistent leadership within the Group and in order to enable more effective and efficient overall strategic planning and continuation of the implementation of such plans, the Board considers that Mr. Ruan is the best candidate for both positions and the present arrangements are beneficial and in the interest of the Company and the shareholders as a whole.

Model Code for Securities Transactions by Directors and Supervisors

The Company has adopted the Model Code for Securities Transaction by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 to the Listing Rules as the code of conduct regarding securities transactions by the Directors and supervisors of the Company. Directors and supervisors of the Company are reminded of their obligations under the Model Code on a regular basis. Following specific enquiries by the Group, all of the Directors and supervisors of the Company have confirmed that they had complied with the required standard set out in the Model Code throughout the period from 1 January 2019 to 30 June 2019.

Corporate Governance and Other Information

Interests and Short Positions of Directors, Supervisors and Chief Executives

As at 30 June 2019, the interests and short positions of directors, supervisors and chief executives of the Company in the Shares, underlying shares or debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")), as recorded in the register required to be kept by the Company pursuant to section 352 of the SFO; or as otherwise notified to the Company and the Stock Exchange pursuant to the Divisions 7 and 8 of Part XV of the SFO (including interest or short position which the Directors or the chief executive were taken or deemed to have under such provisions) and the Model Code contained in the Listing Rules, were as follows:

Shareholder	Number of Shares held	Class	Nature of interest	Approximate percentage of shareholding in the relevant class of Shares [1]	Approximate percentage of shareholding in the total share capital of the Company[2]
Directors					
Mr. Ruan Hongliang[3]	1,118,772,000	A Shares	Beneficial owner and parties acting in concert	74.58%	57.37%
Ms. Jiang Jinhua[3]	1,118,772,000	A Shares	Beneficial owner and parties acting in concert	74.58%	57.37%
Mr. Wei Yezhong	19,260,000	A Shares	Beneficial owner	1.28%	0.99%
Mr. Shen Qifu	12,840,000	A Shares	Beneficial owner	0.86%	0.66%
Supervisors					
Mr. Zheng Wenrong	57,780,000	A Shares	Beneficial owner	3.85%	2.96%
Mr. Shen Fuquan	38,520,000	A Shares	Beneficial owner	2.57%	1.98%
Mr. Zhu Quanming	38,520,000	A Shares	Beneficial owner	2.57%	1.98%

Notes:

(1) The calculation is based on the total number of 1,500,000,000 A Shares of the company in issue as at 30 June 2019.

(2) The calculation is based on the total number of 1,500,000,000 A Shares and the total number of 450,000,000 H Shares (i.e. a total of 1,950,000,000 Shares) in issue as at 30 June 2019.

(3) Mr. Ruan Hongliang is the spouse of Ms. Jiang Jinhua. Mr. Ruan Hongliang owns 439,358,400 A Shares. Ms. Jiang Jinhua owns 324,081,600 A Shares. Ms. Ruan Zeyun is the spouse of Mr. Zhao Xiaofei, and the daughter of Mr. Ruan Hongliang and Ms. Jiang Jinhua. Ms. Ruan Zeyun owns 350,532,000 A Shares. Mr. Zhao Xiaofei owns 4,800,000 A Shares. In addition, pursuant to a concert party agreement dated 19 September 2016 entered into between Mr. Ruan Hongliang ("Mr. Ruan"), Ms. Jiang Jinhua ("Ms Jiang"), Ms. Ruan Zeyun ("Ms.Ruan") and Mr. Zhao Xiaofei ("Mr.Zhao"), each of Mr. Ruan, Ms. Jiang, Ms. Ruan and Mr. Zhao is considered to be interested in 1,118,772,000 A Shares under the SFO.

Save as disclosed above, as at 30 June 2019, to the knowledge of the Company, none of the Directors, supervisors and the chief executive of the Company had or was deemed under the SFO to have any interests or short positions in any of the shares or the underlying shares and debentures of the Company and any of its associated corporations (within the meaning of Part XV of the SFO) which was required to be recorded in the register required to be kept by the Company pursuant to section 352 of the SFO, or as otherwise required to be notified to the Company and the Stock Exchange pursuant to the Divisions 7 and 8 of Part XV of the SFO or to be notified to the Company and the Stock Exchange pursuant to the Model Code.

Interests and Short Positions of Substantial Shareholders

As at 30 June 2019, the persons or corporations who has an interest or short position in the Shares, underlying shares or debentures of the Company which were required to be disclosed to the Company under the provisions of Division 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept under section 336 of the SFO were as follows:

Shareholder	Number of Shares held	Class	Nature of interest	Approximate percentage of shareholding in the relevant class of Shares [1]	Approximate percentage of shareholding in the total share capital of the Company [2]
Ms. Ruan Zeyun [3]	1,118,772,000	A Shares	Beneficial owner and parties acting in concert	74.58%	57.37%
Mr. Zhao Xiaofei [3]	1,118,772,000	A Shares	Beneficial owner and parties acting in concert	74.58%	57.37%
Ms. Zhang Wenfang	35,852,000	H Shares	Beneficial Interest	7.97%	1.84%
Pacific Asset Management Co., Ltd.	31,525,000	H Shares	Investment manager	7.01%	1.62%
Mr. Jiang Jinzhi [4]	48,560,000	H Shares	Interest of controlled corporation	10.79%	2.49%
Xizang Jingning Corporate Management Company Limited [4]	28,560,000	H Shares	Interest of controlled corporation	6.35%	1.46%
Shanghai Greenwoods Assets Management Company Limited [4]	28,560,000	H Shares	Investment manager	6.35%	1.46%
China International Capital Corporation Limited [5]	28,651,000	H Shares	Interest of controlled corporation	6.37%	1.47%
CICC Pucheng Investment Co., Ltd. [5]	23,870,000	H Shares	Beneficial Interest	5.30%	1.22%

Notes:

(1) The calculation is based on the number of 450,000,000 H Shares or 1,500,000,000 A Shares in issue as at 30 June 2019.

(2) The calculation is based on the total number of 1,950,000,000 Shares in issue as at 30 June 2019.

(3) Mr. Ruan Hongliang is the spouse of Ms. Jiang Jinhua. Mr. Ruan Hongliang owns 439,358,400 A Shares. Ms. Jiang Jinhua owns 324,081,600 A Shares. Ms. Ruan Zeyun is the spouse of Mr. Zhao Xiaofei, the daughter of Mr. Ruan Hongliang and Ms. Jiang Jinhua. Ms. Ruan Zeyun owns 350,532,000 A Shares. Mr. Zhao Xiaofei owns 4,800,000 A Shares. In addition, pursuant to a concert party agreement dated 19 September 2016 entered into between Mr. Ruan Hongliang ("Mr. Ruan"), Ms. Jiang Jinhua ("Ms. Jiang"), Ms. Ruan Zeyun ("Ms. Ruan") and Mr. Zhao Xiaofei ("Mr. Zhao"), Mr. Ruan, Ms. Jiang, Ms. Ruan and Mr. Zhao Jointly owned 1,118,772,000 A Shares under the SFO.

(4) Shanghai Greenwoods Asset Management Company Limited is owned as to 100% by Xizang Jingning Corporate Management Company Limited, which is in turn owned as to 84.5% by Mr. Jiang Jinzhi.

(5) CICC Pucheng Investment Co., Ltd. is owned as to 100% by China International Capital Corporation Limited.

Save as disclosed above, as at 30 June 2019, so far as is known to the Directors, there is no other person (other than the Directors or supervisors or the chief executive of the Company) who had interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Division 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept under section 336 of the SFO.

USE OF PROCEEDS

The total net proceeds from the listing of A shares of the Company on the Main Board of the Shanghai Stock Exchange amounted to approximately RMB254.4 million (the "IPO" proceeds). As at 30 June 2019, the IPO proceeds of approximately RMB254.4 million had been used as follows:

Use for	**Percentage of net proceeds**	**Amount of net proceeds** *RMB million*	**Amount utilized** *RMB million*	**Amount remain** *RMB million*
The annual production capacity of 900,000 tons of glass as covers for PV modules project *(Note)*	100%	254.4	254.4	0

Note: The annual production capacity of 900,000 tons of glass as covers for PV modules project will be implemented by stages. The production capacity of 600,000 tons of PV glass will be funded by the proceeds from the Proposed A Share Offering.

Purchase, Sale or Redemption of the Company's Listed Securities

The A Shares of the Company has been listed and commence trading on the Shanghai Stock Exchange on 15 February 2019. Subsequent to the completion of the A share offering on 15 February 2019, the total number of shares issued by the Company was 1,950,000,000 shares (including 450,000,000 H shares, 150,000,000 A shares under the A share offering and 1,350,000,000 A shares converted from existing domestic shares). For more details, please refer to announcement of the Company dated 14 February 2019.

Except as disclosed above, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities during the period from 1 January 2019 to 30 June 2019.

Alignment in the Disclosure of Financial Statements in Accordance with the CASBE

Since the date on which the H Shares of the Company became listed on the Stock Exchange, the Company has been preparing its financial statements under both the China Accounting Standards for Business Enterprises ("CASBE") and the International Financial Reports Standards ("IFRS"). According to the Consultation Conclusions on Acceptance of Mainland Accounting and Auditing Standards and Mainland Audit Firms for Mainland Incorporated Companies Listed in Hong Kong published by the Stock Exchange in December 2010, PRC incorporated issuers listed in Hong Kong are allowed to prepare their financial statements in accordance with the CASBE and PRC audit firms approved by the MOF and the CSRC are allowed to audit these financial statements in accordance with the CASBE.

In view of such arrangement and the completion of the A Share Offering, and in order to improve the efficiency and to reduce the cost of disclosure and audit expense, the Board proposed to change the accounting standards of the international financial statements of the Company from the IFRS to CASBE. The shareholders of the Company have approved the proposal on 24 June 2019. For details, please refer to the announcements of the Company dated 8 May 2019 and 24 June 2019, and the circular of the Company dated 9 May 2019. Starting from 2019, the financial statements of the Company have been prepared in accordance with CASBE and the relevant regulations. This interim report has been prepared in accordance with CASBE.

Taxation

Holders of A shares

In accordance with the Notice of the Ministry of Finance, the State Administration of Taxation and the CSRC on Implementing Differentiated Individual Income Tax Policy for Stock Dividends of Listed Companies (Cai Shui [2015] No. 101) (《財政部、國家稅務總局、中國證監會關於上市公司股息紅利差別化個人所得稅政策有關問題的通知》(財稅[2015]101號)), for shares of listed companies acquired by individuals from public offerings or transfer of shares in the market, where the holding period exceeds one year, the dividends shall be temporarily exempted from individual income tax; where the holding period is less than one month (inclusive), the full amount of dividends shall be counted as taxable income and where the holding period is more than one month and less than one year (inclusive), 50% of the dividends shall be counted as taxable income on a provisional basis. The individual income tax rate of 20% shall be applicable for all incomes mentioned above. For dividends distributed by listed companies, where the period of individual shareholding is within one year (inclusive), the listed companies shall not withhold the individual income tax temporarily. The tax payable, subject to individual transfer of shares, shall be calculated by China Securities Depository and Clearing Corporation Limited in accordance with duration of its holding period. Custodian of shares including securities companies will withhold the amount from individual accounts and transfer the tax to China Securities Depository and Clearing Corporation Limited. China Securities Depository and Clearing Corporation Limited shall transfer the tax to the listed companies within 5 working days of the next month, and the listed companies shall declare the tax to the competent tax authorities upon receiving the tax amount within the statutory reporting period in that month.

Resident enterprise shareholders of A shares shall report and pay for the enterprise income tax of dividends by themselves.

For the shareholders who are Qualified Foreign Institutional Investor (QFII), the listed companies shall withhold and pay enterprise income tax at a rate of 10% pursuant to the requirements of the Notice of the State Administration of Taxation Concerning the Relevant Questions on the Withholding and Payment of Enterprise Income Tax Relating to the Payment of Dividends, Bonus and Interest by PRC Resident Enterprises to QFII (Guo Shui Han [2009] No. 47) (《國家稅務總局關於中國居民企業向QFII支付股息、紅利、利息代扣代繳企業所得稅有關問題的通知》(國稅函2009[47]號)). QFII shareholders entitled to preferential tax treatment under tax treaties (arrangements) shall apply to the competent taxation authority for tax rebates according to the relevant rules and regulations after they receive the dividends, and tax rebates will be executed under tax treaties upon verification carried out by competent tax authorities.

For non-resident enterprise shareholders of A shares except the above-mentioned QFII, listed companies shall withhold and pay enterprise income tax at a rate of 10% pursuant to the requirements of the Tentative Measures for Administration of Withholding at the Source of Income Tax of Non-resident Enterprises (Guo Shui Fa [2009] No. 3) (《非居民企業所得稅源泉扣繳管理暫行辦法》(國稅發[2009]3號)) and the Response of the State Administration of Taxation Concerning Questions on Enterprise Income Tax over Dividend of B-Shares and Other Shares Received by Non-resident Enterprises (Guo Shui Han [2009] No. 394) (《國家稅務總局關於非居民企業取得B股等股票股息徵收企業所得稅問題的批覆》(國稅函[2009]394號)). Non-resident enterprise shareholders entitled to preferential tax treatment shall make registration in accordance with the relevant provisions of the tax treaties.

Pursuant to the requirements of the Notice of the Ministry of Finance, the State Administration of Taxation and the CSRC on the Tax Policies Related to the Pilot Program of the Shanghai-Hong Kong Stock Connect (Cai Shui [2014] No. 81)(《財政部、國家稅務總局、中國證監會關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2014]81號)), listed companies shall withhold an income tax at the rate of 10% on dividends from the A shares of the company invested by Hong Kong investors (including enterprises and individuals) through the SSE, and apply for withholding via the competent tax authorities (before the Hong Kong Securities Clearing Company Limited is able to provide details such as investor identities and holding periods to China Securities Depository and Clearing Corporation Limited, the policy of differentiated rates of taxation based on holding periods will temporarily not be implemented). For investors who are tax residents of other countries and whose country of domicile is a country which has entered into a tax treaty with the PRC stipulating a dividend tax rate of lower than 10%, those enterprises and individuals may, or may entrust a withholding agent to, apply to the competent tax authority of the listed company for the entitlement of the rate under such tax treaty. Upon approval by the competent tax authority, the paid amount in excess of the tax payable based on the tax rate according to such tax treaty will be refunded.

Pursuant to the requirements of the Notice of the Ministry of Finance, the State Administration of Taxation and the CSRC on the Tax Policies Related to the Pilot Program of the Shenzhen-Hong Kong Stock Connect (Cai Shui [2016] No. 127)(《財政部、國家稅務總局、中國證監會關於深港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2016]127號)), listed companies shall withhold an income tax at the rate of 10% on dividends from the A shares of the company invested by Hong Kong investors (including enterprises and individuals) through the Shenzhen Stock Exchange, and apply for withholding via the competent tax authorities (before the Hong Kong Securities Clearing Company Limited is able to provide details such as investor identities and holding periods to China Securities Depository and Clearing Corporation Limited, the policy of differentiated rates of taxation based on holding periods will temporarily not be implemented). For investors who are tax residents of other countries and whose country of domicile is a country which has entered into a tax treaty with the PRC stipulating a dividend tax rate of lower than 10%, those enterprises and individuals may, or may entrust a withholding agent to, apply to the competent tax authority of the listed company for the entitlement of the rate under such tax treaty. Upon approval by the competent tax authority, the paid amount in excess of the tax payable based on the tax rate according to such tax treaty will be refunded.

Holders of H shares

In accordance with the requirements of the Circular on Certain Issues Concerning the Policies of Individual Income Tax (Cai Shui Zi [1994] No. 020) (《關於個人所得稅若干政策問題的通知》(財稅字[1994]020號)) promulgated by the Ministry of Finance and the State Administration of Taxation on May 13, 1994, overseas individuals are, as an interim measure, exempted from the PRC individual income tax for dividends or bonuses received from foreign-invested enterprises.

Pursuant to the requirements of the Notice of the State Administration of Taxation on Matters Concerning Withholding Enterprise Income Tax When China Resident Enterprises Distribute Dividends to Foreign Nonresident Enterprise Shareholders of H Shares (Guo Shui Han [2008] No. 897) (《國家稅務總局關於中國居民企業向境外H股非居民企業股東派發股息代扣代繳企業所得稅有關問題的通知》(國稅函[2008]897號)), distributing dividends to foreign non-resident enterprise shareholders of H shares for 2008 and for the years onwards shall be subject to the enterprise income tax withheld at a uniform rate of 10%. Upon receipt of such dividends, an overseas nonresident enterprise shareholder may apply to the competent tax authorities for relevant treatment under the tax treaties (arrangements) in person or through a proxy or a withholding agent and provide evidence in support of its status as a beneficial owner as defined in the tax treaties (arrangements). Upon verification by the competent tax authorities, the difference between the tax levied and the amount of tax payable as calculated at the tax rate under the tax treaties (arrangements) will be refunded.

According to the requirements of the Notice on the Tax Policies Concerning the Pilot Program of the ShanghaiHong Kong Stock Connect published by the Ministry of Finance, the State Administration of Taxation and the CSRC (Cai Shui [2014] No. 81) (《財政部、國家稅務總局、中國證監會關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2014]81號)), H-share companies shall withhold an individual income tax at the rate of 20% on dividends from the H shares of the company invested by mainland individual investors on the Hong Kong Stock Exchange through the Shanghai-Hong Kong Stock Connect. For dividends of the shares listed on the Hong Kong Stock Exchange received by mainland securities investment funds from investment through the Shanghai-Hong Kong Stock Connect, individual income tax shall be calculated in accordance with the above requirements. For dividends of the shares listed on the Hong Kong Stock Exchange received by mainland enterprise investors from investment through the Shanghai-Hong Kong Stock Connect, H-share companies shall not withhold income tax of dividends, and mainland enterprise investors shall report and pay the tax amount by themselves. In particular, the dividends received by resident enterprises in mainland which hold H shares for at least 12 consecutive months shall be exempted from enterprise income tax according to law.

According to the requirements of the Notice on the Tax Policies Concerning the Pilot Program of the ShenzhenHong Kong Stock Connect published by the Ministry of Finance, the State Administration of Taxation and the CSRC (Cai Shui [2016] No. 127) (《財政部、國家稅務總局、中國證監會關於深港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2016]127號)), H-share companies shall withhold an individual income tax at the rate of 20% on dividends from the H shares of the company invested by mainland individual investors on the Hong Kong Stock Exchange through the Shenzhen-Hong Kong Stock Connect. For dividends of the shares listed on the Hong Kong Stock Exchange received by mainland securities investment funds from investment through the Shenzhen-Hong Kong Stock Connect, individual income tax shall be calculated in accordance with the above requirements. For dividends of the shares listed on the Hong Kong Stock Exchange received by mainland enterprise investors from investment through the Shenzhen-Hong Kong Stock Connect, H-share companies shall not withhold income tax of dividends, and mainland enterprise investors shall report and pay the tax amount by themselves. In particular, the dividends received by resident enterprises in mainland which hold H shares for at least 12 consecutive months could be exempted from enterprise income tax according to law.

The shareholders of the Company shall pay the relevant tax and/or are entitled to tax reliefs in accordance with the above requirements.

Dividends

For the six months ended 30 June 2019, the board of directors of the Company recommended an ordinary interim dividend of RMB2.7 cents per share (before tax) (for reference only, equivalent to about HK3.02 cents per share (before tax) (the "2019 Interim Dividend")) and is subject to the approval by the 2019 first extraordinary general meeting of shareholders of the Company ("2019 First EGM") to be convened. As the date of the 2019 First EGM is yet to be set, the Company will announce in due course the details of the dates of closure of register of members, the record date and the payment date in a separate announcement.

Dividends on A shares will be paid in RMB and dividends on H shares will be paid in Hong Kong dollars. The exchange rate for the dividend to be paid in Hong Kong dollars will be the mean of the exchange rates of Hong Kong dollars to RMB as announced by the People's Bank of China during the five business days prior to the date of extraordinary general meeting.

Review of the Interim Report by the Audit Committee of the Company

The Company's interim report for the six months ended 30 June 2019 have not been audited but have been reviewed by the Company's audit committee, comprising its three independent non-executive Directors.

Consolidated Balance Sheet

Items	NOTES	As at 30 June 2019 RMB (Unaudited)	As at 31 December 2018 RMB (Audited)
Current assets:			
Cash at bank and on hand	1	**750,729,217.04**	683,018,973.73
Derivative financial assets	2	**2,910,793.14**	6,172,390.30
Bills receivables	3	**1,180,734,997.67**	911,294,531.23
Trade receivables	4	**1,176,608,078.75**	821,195,179.32
Advance payment	5	**67,969,782.22**	65,474,835.88
Other receivables	6	**1,483,299.84**	1,296,794.21
Inventories	7	**471,942,315.22**	377,123,199.96
Other current assets	8	**191,117,678.41**	181,666,205.48
Total current assets		**3,843,496,162.29**	3,047,242,110.11
Non-current assets:			
Investment properties	9	**22,380,907.03**	23,096,642.23
Fixed assets	10	**2,537,926,234.09**	2,166,275,875.65
Construction in progress	11	**955,832,157.94**	962,570,065.48
Intangible assets	12	**558,803,561.75**	536,809,851.25
Long-term prepaid expenses		**2,567,686.51**	2,777,526.55
Deferred tax assets	13	**6,165,296.25**	19,005,748.81
Other non-current assets	14	**121,468,569.42**	195,771,282.04
Total non-current assets		**4,205,144,412.99**	3,906,306,992.01
Total assets		**8,048,640,575.28**	6,953,549,102.12
Current liabilities:			
Short-term borrowings	15	**703,330,516.08**	450,399,136.69
Derivative financial liabilities	16	**630,448.14**	738,000.00
Bills payables	17	**469,119,483.10**	219,832,038.07
Trade payables	18	**1,321,178,242.30**	1,216,541,204.11
Payroll payable	19	**19,357,225.13**	26,225,994.20
Tax payable	20	**84,686,006.15**	81,681,336.98
Other payables	21	**118,086,220.62**	38,681,381.51
Including: Interests payable		**931,183.58**	1,562,660.53
Dividends payable		**87,750,000.00**	–
Contract liabilities	22	**22,736,847.23**	14,042,379.21
Non-current liabilities due within one year	23	**258,361,250.00**	188,738,000.00
Total current liabilities		**2,997,486,238.75**	2,236,879,470.77

Items	NOTES	As at 30 June 2019 RMB (Unaudited)	As at 31 December 2018 RMB (Audited)
Non-current liabilities:			
Long-term borrowings	*24*	**903,573,460.48**	989,439,412.61
Deferred income	*25*	**51,593,224.68**	58,576,554.71
Total non-current liabilities		**955,166,685.16**	1,048,015,967.32
Total liabilities		**3,952,652,923.91**	3,284,895,438.09
Owner's equity (or shareholders' equity):			
Share capital	*26*	**487,500,000.00**	450,000,000.00
Capital reserve	*27*	**839,115,113.41**	622,230,162.41
Other comprehensive income	*28*	**-6,901,555.53**	-4,685,190.57
Special reserve	*29*	**10,921,541.81**	9,425,627.41
Surplus reserve	*30*	**168,158,907.37**	168,158,907.37
Undistributed profit	*31*	**2,597,193,644.31**	2,423,524,157.41
Total equity attributable to owners of the Company		**4,095,987,651.37**	3,668,653,664.03
Total owner's equity (or shareholders' equity)		**4,095,987,651.37**	3,668,653,664.03
Total liabilities and owners' equity (or shareholders' equity)		**8,048,640,575.28**	6,953,549,102.12

Balance Sheet of the Company

Items	NOTES	As at 30 June 2019 RMB (Unaudited)	As at 31 December 2018 RMB (Audited)
Current assets:			
Cash at bank and on hand		**225,922,538.50**	248,453,770.98
Derivative financial assets		**2,383,299.33**	4,970,224.71
Bills receivables		**839,998,405.55**	774,398,067.88
Trade receivables	*1*	**649,527,862.03**	502,280,814.30
Advance payment		**34,032,874.01**	39,136,580.02
Other receivables	*2*	**200,636,489.22**	115,299,644.49
Inventories		**198,162,596.58**	162,383,851.02
Other current assets		**10,679,393.13**	24,941,889.24
Total current assets		**2,161,343,458.35**	1,871,864,842.64
Non-current assets:			
Long-term equity investments	*3*	**786,137,343.00**	786,137,343.00
Fixed assets		**1,127,053,391.03**	927,127,844.80
Construction in progress		**88,575,147.21**	243,785,148.44
Intangible assets		**166,785,267.86**	131,628,507.77
Long-term prepaid expenses		**271,142.39**	265,068.34
Deferred tax assets		**2,866,730.95**	10,881,999.81
Other non-current assets		**711,518,338.23**	788,994,654.72
Total non-current assets		**2,883,207,360.67**	2,888,820,566.88
Total assets		**5,044,550,819.02**	4,760,685,409.52
Current liabilities:			
Short-term borrowings		**381,083,047.33**	328,446,377.87
Derivative financial liabilities		**–**	738,000.00
Bills payables		**194,738,771.36**	88,051,988.88
Trade payables		**691,375,111.90**	745,246,372.34
Contract liabilities		**7,690,800.54**	4,662,060.73
Payroll payable		**10,793,491.36**	14,964,926.68
Tax payable		**7,036,542.79**	3,721,807.65
Other payables		**566,043,844.12**	632,131,765.44
Including: Interests payable		**6,398,043.02**	9,851,014.20
Dividends payable		**87,750,000.00**	–
Total current liabilities		**1,858,761,609.40**	1,817,963,299.59

Items	As at 30 June 2019 *RMB* (Unaudited)	As at 31 December 2018 *RMB* (Audited)
Non-current liabilities:		
Deferred income	**40,071,484.65**	45,599,630.00
Total non-current liabilities	**40,071,484.65**	45,599,630.00
Total liabilities	**1,898,833,094.05**	1,863,562,929.59
Owners' equity (or shareholders' equity):		
Share capital	**487,500,000.00**	450,000,000.00
Capital reserve	**839,115,113.41**	622,230,162.41
Surplus reserve	**168,158,907.37**	168,158,907.37
Undistributed profit	**1,650,943,704.19**	1,656,733,410.15
Total owners' equity (or shareholders' equity)	**3,145,717,724.97**	2,897,122,479.93
Total liabilities and owners' equity (or shareholders' equity)	**5,044,550,819.02**	4,760,685,409.52

Consolidated Income Statement

Items	NOTES	For the six months ended 30 June 2019 RMB (Unaudited)	For the six months ended 30 June 2018 RMB (Unaudited)
I. Operating revenue	*32*	**2,034,635,569.48**	1,462,411,732.10
II. Operating costs	*32*	**1,461,798,658.59**	1,044,138,280.30
Taxes and surcharges	*33*	**12,600,562.03**	14,642,799.56
Selling expenses	*34*	**95,987,142.10**	47,692,644.99
General and administrative expenses	*35*	**52,316,895.20**	53,575,152.63
Research and development expenses	*36*	**104,391,004.61**	49,818,401.47
Financial expenses	*37*	**24,653,412.20**	9,794,723.78
Including: Interest expenses		**31,390,102.09**	7,241,075.90
Interest income		**10,546,044.12**	8,212,762.07
Add: Other income	*38*	**20,070,459.20**	11,189,945.69
Investment income (loss stated with "-")	*39*	**6,939,596.25**	-14,344,232.06
Profit arising from changes in fair value (loss stated with "-")	*40*	**-3,154,045.30**	10,734,789.41
Credit impairment loss (loss stated with "-")	*41*	**-5,522,248.54**	-7,063,601.33
Asset impairment loss (loss stated with "-")	*42*	**-281,846.65**	-1,108,300.26
Gains on disposal of assets (loss stated with "-")	*43*	**1,436,320.30**	-143,932.45
III. Operating profit (loss stated with "-")		**302,376,130.01**	242,014,398.37
Add: Non-operating income	*44*	**8,075,902.33**	5,631,743.56
Less: Non-operating expenses	*45*	**45,236.23**	40,975.12
IV. Total profit (total loss stated with "-")		**310,406,796.11**	247,605,166.81
Less: Income tax expense	*46*	**48,987,309.21**	34,720,035.71
V. Net profit (net loss stated with "-")		**261,419,486.90**	212,885,131.10
(1) Breakdown by continuity of operations			
1. Net profit from continuing operations (net loss stated with "-")		**261,419,486.90**	212,885,131.10
(2) Breakdown by ownership			
1. Net profit attributable to equity owners of the Company (net loss stated with "-")		**261,419,486.90**	212,885,131.10

Items	For the six months ended 30 June 2019 *RMB* (Unaudited)	For the six months ended 30 June 2018 *RMB* (Unaudited)
VI. Other comprehensive income, net of tax	**-2,216,364.96**	1,111,202.35
Attributable to the owners of the Company	**-2,216,364.96**	1,111,202.35
(1) Other comprehensive income that can not be reclassified to profit or loss	–	–
(2) Other comprehensive income that will be reclassified to profit or loss	**-2,216,364.96**	1,111,202.35
1. Exchange differences on foreign currency financial statements translation	**-2,216,364.96**	1,111,202.35
VII. Total comprehensive income	**259,203,121.94**	213,996,333.45
Attributable to the owners of the Company	**259,203,121.94**	213,996,333.45
VIII. Earnings per share		
(1) Basic earnings per share (RMB/share)	**0.14**	0.12
(2) Diluted earnings per share (RMB/share)	**N/A**	N/A

Income Statements of the Company

Items	NOTES	For the six months ended 30 June 2019 RMB (Unaudited)	For the six months ended 30 June 2018 RMB (Unaudited)
I. Operating revenue	4	**1,487,389,522.68**	975,450,244.02
Less: Operating costs	4	**1,277,932,677.59**	711,582,893.72
Taxes and surcharges		**4,491,636.26**	6,710,490.28
Selling expenses		**27,789,371.06**	25,153,055.87
General and administrative expenses		**35,613,808.44**	34,280,009.35
Research and development expenses		**49,848,427.12**	33,734,821.71
Financial expenses		**9,870,506.16**	13,673,793.26
Including: Interest expenses		**14,186,809.42**	10,572,227.95
Interest income		**7,666,703.79**	5,179,432.19
Add: Other income		**10,833,804.60**	5,118,333.36
Investment income (loss stated with "-")	5	**1,759,200.00**	46,170,718.13
Profit arising from changes in fair value (loss stated with "-")		**-1,848,925.38**	5,016,489.41
Credit impairment loss (loss stated with "-")		**-4,304,021.92**	-4,954,199.48
Asset impairment loss (loss stated with "-")		**-492,456.99**	-1,096,941.44
Gains on disposal of assets (loss stated with "-")		**93,519.36**	-201.90
II. Operating profit (loss stated with "-")		**87,884,215.72**	200,569,377.91
Add: Non-operating income		**1,618,026.61**	4,718,886.03
Less: Non-operating expenses		**45,000.00**	–
III. Total profit (total loss stated with "-")		**89,457,242.33**	205,288,263.94
Less: Income tax expenses		**7,496,948.29**	18,595,344.90
IV. Net profit (net loss stated with "-")		**81,960,294.04**	186,692,919.04

Consolidated Statement of Cash Flow

Items	*NOTES*	**For the six months ended 30 June 2019** ***RMB*** **(Unaudited)**	For the six months ended 30 June 2018 *RMB* (Unaudited)
I. Cash flow from operating activities:			
Cash received from sale of goods or rendering of services		**1,749,688,415.44**	1,550,107,031.41
Cash received from refunds of taxes		**66,002,247.55**	25,736,020.11
Cash received relating to other operating activities	*47(1)*	**69,264,075.62**	14,423,791.26
Subtotal of cash inflows		**1,884,954,738.61**	1,590,266,842.78
Cash paid for goods and services		**1,375,785,999.76**	1,112,494,002.35
Cash paid to and on behalf of employee		**135,759,045.23**	127,173,738.63
Cash paid for payments of taxes and surcharges		**75,129,629.38**	90,009,796.67
Cash paid relating to other operating activities	*47(2)*	**190,457,401.88**	93,280,327.71
Subtotal of cash outflows		**1,777,132,076.25**	1,422,957,865.36
Net cash flow from operating activities		**107,822,662.36**	167,308,977.42
II. Cash flow from investing activities:			
Cash received from disposal of investments		–	4,200,000.00
Cash received from returns on investments		**7,004,796.25**	2,275,088.92
Net cash received from disposal of fixed assets, intangible assets and other long-term equity investments		**3,159,287.46**	98,338.34
Cash received relating to other investing activities	*47(3)*	**50,309,478.46**	30,456,973.74
Subtotal of cash inflows		**60,473,562.17**	37,030,401.00
Cash paid to purchase fixed assets, intangible assets and other long-term equity investments		**491,130,774.59**	555,147,304.82
Cash paid relating to other investing activities	*47(4)*	**69,045,662.60**	97,388,524.45
Subtotal of cash outflows		**560,176,437.19**	652,535,829.27
Net cash flow from investing activities		**-499,702,875.02**	-615,505,428.27

Consolidated Statement of Cash Flow

Items	NOTES	For the six months ended 30 June 2019 RMB (Unaudited)	For the six months ended 30 June 2018 RMB (Unaudited)
III. Cash flow from financing activities:			
Cash received from capital contribution		**267,000,000.00**	–
Cash received from borrowings		**701,884,183.12**	777,502,766.17
Cash received relating to other financing activities	*47(5)*	**107,801,794.57**	226,061,646.37
Subtotal of cash inflows		**1,076,685,977.69**	1,003,564,412.54
Cash paid for payment of borrowings		**469,747,908.22**	358,181,650.00
Cash paid for distribution of dividends, and profits or payment of interest		**52,400,629.00**	35,588,207.07
Cash paid relating to other financing activities	*47(6)*	**148,389,877.69**	159,009,157.93
Subtotal of cash outflows		**670,538,414.91**	552,779,015.00
Net cash flow from financing activities		**406,147,562.78**	450,785,397.54
IV. Effect of foreign exchange rate changes on cash and cash equivalents		**508,940.04**	4,590,974.31
V. Net increase in cash and cash equivalents		**14,776,290.16**	7,179,921.00
Add: Cash and cash equivalents at the beginning of the period		**528,750,004.08**	949,647,190.42
VI. Cash and cash equivalents at the end of the period		**543,526,294.24**	956,827,111.42

Statements of Cash Flow of the Company

Items	For the six months ended 30 June 2019 *RMB* (Unaudited)	For the six months ended 30 June 2018 *RMB* (Unaudited)
I. Cash flow from operating activities:		
Cash received from sale of goods or rendering of services	**1,459,766,592.25**	1,222,969,649.76
Cash received from refunds of taxes	**26,909,012.29**	1,583,207.12
Cash received relating to other operating activities	**14,768,259.70**	6,416,545.76
Subtotal of cash inflows	**1,501,443,864.24**	1,230,969,402.64
Cash paid for goods and services	**1,309,673,208.26**	722,145,678.44
Cash paid to and on behalf of employee	**70,039,044.39**	67,566,181.24
Cash paid for payments of taxes and surcharges	**16,569,102.78**	74,918,763.23
Cash paid relating to other operating activities	**79,071,657.61**	56,819,046.61
Subtotal of cash outflows	**1,475,353,013.04**	921,449,669.52
Net cash flow from operating activities	**26,090,851.20**	309,519,733.12
II. Cash flow from investing activities:		
Cash received from disposal of investments	**1,759,200.00**	1,448,100.00
Net cash received from disposal of fixed assets, intangible assets and other long-term equity investments	**100,367.65**	9,526.35
Cash received relating to other investing activities	**35,804,771.87**	36,640,677.58
Subtotal of cash inflows	**37,664,339.52**	38,098,303.93
Cash paid to purchase fixed assets, intangible assets and other long-term equity investments	**92,502,307.30**	121,878,521.29
Cash paid for investments	**–**	88,982,321.00
Cash paid relating to other investing activities	**189,767,427.67**	326,743,273.03
Subtotal of cash outflows	**282,269,734.97**	537,604,115.32

Items	For the six months ended 30 June 2019 *RMB* (Unaudited)	For the six months ended 30 June 2018 *RMB* (Unaudited)
Net cash flow from investing activities	**-244,605,395.45**	-499,505,811.39
III. Cash flow from financing activities:		
Cash received from capital contribution	**267,000,000.00**	–
Cash received from borrowings	**304,002,052.31**	185,000,000.00
Cash received relating to other financing activities	**71,381,499.98**	582,139,965.02
Subtotal of cash inflows	**642,383,552.29**	767,139,965.02
Cash paid for payment of borrowings	**251,365,382.85**	253,519,650.00
Cash paid for distribution of dividends, and profits or payment of interest	**17,639,780.60**	14,856,674.91
Cash paid relating to other financing activities	**217,995,697.14**	145,849,054.86
Subtotal of cash outflows	**487,000,860.59**	414,225,379.77
Net cash flow from financing activities	**155,382,691.70**	352,914,585.25
IV. Effect of foreign exchange rate changes on cash and cash equivalents	**523,795.47**	7,504,990.57
V. Net increase in cash and cash equivalents	**-62,608,057.08**	170,433,497.55
Add: Cash and cash equivalents at the beginning of the period	**171,799,091.46**	176,663,254.34
VI. Cash and cash equivalents at the end of the period	**109,191,034.38**	347,096,751.89

Consolidated Statement of Changes in Shareholders' Equity

For the six months ended 30 June 2019
RMB
(Unaudited)

Items	Share capital	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Subtotal	Total owner's equity
	Equity attributable to the owners of the Company							
I. Closing balance of the last year	450,000,000.00	622,230,162.41	-4,685,190.57	9,425,627.41	168,158,907.37	2,423,524,157.41	3,668,653,664.03	3,668,653,664.03
II. Opening balance of the current year	450,000,000.00	622,230,162.41	-4,685,190.57	9,425,627.41	168,158,907.37	2,423,524,157.41	3,668,653,664.03	3,668,653,664.03
III. Increase/decrease for the current period (Decrease stated with "-")	37,500,000.00	216,884,951.00	-2,216,364.96	1,495,914.40	-	173,669,486.90	427,333,987.34	427,333,987.34
(I) Total comprehensive income	-	-	-2,216,364.96	-	-	261,419,486.90	259,203,121.94	259,203,121.94
(II) Contribution and withdrawal of capital by owners	37,500,000.00	216,884,951.00	-	-	-	-	254,384,951.00	254,384,951.00
(III) Profit distribution	-	-	-	-	-	-87,750,000.00	-87,750,000.00	-87,750,000.00
1. Appropriation to surplus reserve	-	-	-	-	-	-	-	-
2. Appropriation to owners	-	-	-	-	-	-87,750,000.00	-87,750,000.00	-87,750,000.00
(IV) Special reserve	-	-	-	1,495,914.40	-	-	1,495,914.40	1,495,914.40
1. Current period appropriation	-	-	-	1,495,914.40	-	-	1,495,914.40	1,495,914.40
2. Utilization in the current period	-	-	-	-	-	-	-	-
IV. Closing balance of the current period	487,500,000.00	839,115,113.41	-6,901,555.53	10,921,541.81	168,158,907.37	2,597,193,644.31	4,095,987,651.37	4,095,987,651.37

Items	Share capital	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Subtotal	Total owner's equity
	For the six months ended 30 June 2018 RMB (Unaudited) Equity attributable to the owners of the Company							
I. Closing balance of the last year	450,000,000.00	622,230,162.41	-15,956,814.44	9,731,676.16	141,271,158.58	2,043,097,189.89	3,250,373,372.60	3,250,373,372.60
II. Opening balance of the current year	450,000,000.00	622,230,162.41	-15,956,814.44	9,731,676.16	141,271,158.58	2,043,097,189.89	3,250,373,372.60	3,250,373,372.60
III. Increase/decrease for the current period (Decrease stated with "-")	–	–	1,111,202.35	-212,182.32	–	212,885,131.10	213,784,151.13	213,784,151.13
(I) Total comprehensive income	–	–	1,111,202.35	–	–	212,885,131.10	213,996,333.45	213,996,333.45
(II) Contribution and withdrawal of capital by owners	–	–	–	–	–	–	–	–
(III) Profit distribution	–	–	–	–	–	–	–	–
1. Appropriation to surplus reserve	–	–	–	–	–	–	–	–
2. Appropriation to owners	–	–	–	–	–	–	–	–
(V) Special reserve	–	–	–	-212,182.32	–	–	-212,182.32	-212,182.32
1. Current period appropriation	–	–	–	2,505,934.12	–	–	2,505,934.12	2,505,934.12
2. Utilization in the current period	–	–	–	-2,718,116.44	–	–	-2,718,116.44	-2,718,116.44
IV. Closing balance of the current period	450,000,000.00	622,230,162.41	-14,845,612.09	9,519,493.84	141,271,158.58	2,255,982,320.99	3,464,157,523.73	3,464,157,523.73

Statement of Changes in Shareholders' Equity of the Company

Items	For the six months ended 30 June 2019 RMB (Unaudited)				
	Share capital	Capital reserve	Surplus reserve	Undistributed profit	Total owner's equity
I. Closing balance of the last year	**450,000,000.00**	**622,230,162.41**	**168,158,907.37**	**1,656,733,410.15**	**2,897,122,479.93**
II. Opening balance of the current year	**450,000,000.00**	**622,230,162.41**	**168,158,907.37**	**1,656,733,410.15**	**2,897,122,479.93**
III. Increase/decrease for the current period (Decrease stated with "-")	**37,500,000.00**	**216,884,951.00**	**–**	**-5,789,705.96**	**248,595,245.04**
(I) Total comprehensive income	**–**	**–**	**–**	**81,960,294.04**	**81,960,294.04**
(II) Contribution and withdrawal of capital by owners	**37,500,000.00**	**216,884,951.00**	**–**	**–**	**254,384,951.00**
1. Common shares contributed by owners	**37,500,000.00**	**216,884,951.00**	**–**	**–**	**254,384,951.00**
(III) Profit distribution	**–**	**–**	**–**	**-87,750,000.00**	**-87,750,000.00**
1. Appropriation to owners	**–**	**–**	**–**	**-87,750,000.00**	**-87,750,000.00**
IV. Closing balance of the current period	**487,500,000.00**	**839,115,113.41**	**168,158,907.37**	**1,650,943,704.19**	**3,145,717,724.97**

Items	For the six months ended 30 June 2018 RMB (Unaudited)				
	Share capital	Capital reserve	Surplus reserve	Undistributed profit	Total owner's equity
I. Closing balance of the last year	450,000,000.00	622,230,162.41	141,271,158.58	1,414,743,671.11	2,628,244,992.10
II. Opening balance of the current year	450,000,000.00	622,230,162.41	141,271,158.58	1,414,743,671.11	2,628,244,992.10
III. Increase/decrease for the current period (Decrease stated with "-")	–	–	–	186,692,919.04	186,692,919.04
(I) Total comprehensive income	–	–	–	186,692,919.04	186,692,919.04
IV. Closing balance of the current period	450,000,000.00	622,230,162.41	141,271,158.58	1,601,436,590.15	2,814,937,911.14

Notes to the Financial Statements

For six months ended 30 June 2019

(I) CORPORATE INFORMATION

1. Company Overview

Flat Glass Group Co., Ltd. (the "Company") was established on 24 June 1998 with its registered address at 1999 Yunhe Road, Xiuzhou District, Jiaxing, Zhejiang Province. On 29 December 2005, the Company was converted into a joint stock limited liability company and changed its name to Zhejiang Flat Glass & Mirror Co., Ltd. *(浙江福萊特玻璃鏡業股份有限公司). On 23 March 2011, the Company was renamed as Flat Solar Glass Group Co., Ltd.* (福萊特光伏玻璃集團股份有限公司) and subsequently renamed as Flat Glass Group Co., Ltd. *(福萊特玻璃集團股份有限公司) on 10 October 2014.

On 26 November 2015, the Company issued 450,000,000 overseas listed foreign shares (H shares) with a par value of RMB0.25 per share through global public offering. On the same date, the Company's shares were listed on The Stock Exchange of Hong Kong Limited.

On 15 February 2019, the Company issued 150,000,000 RMB ordinary shares (A shares) with a par value of RMB0.25 per share through domestic public offering at the issue price of RMB2.00 per share. After the change, the registered capital was RMB487,500,000.00.

The principal activities of the Company and its subsidiaries (the "Group") are the manufacturing and sales of glass products.

The de facto controllers of the Company are Mr. Ruan Hongliang, Ms. Jiang Jinhua, Ms. Ruan Zeyun and Mr. Zhao Xiaofei, of whom Mr. Ruan Hongliang and Ms. Jiang Jinhua are directors of the Company.

2. Scope of the Consolidated Financial Statements

The Company's company and consolidated financial statements have been approved by the Board of Directors of the Company.

Details of the scope of consolidated financial statements are set out in Note (5) "Interests in other entities" to the consolidated financial statements.

(II) BASIS OF PREPARATION OF FINANCIAL STATEMENTS

Basis of preparation

The Group has implemented the Accounting Standards for Business Enterprises and other relevant regulations issued by the Ministry of Finance (hereinafter referred to as the "CASBE") and has also disclosed relevant financial information in accordance with the Preparation Convention of Information Disclosure by Companies Offering Securities to the Public No.15 – General Provisions on Financial Reporting (revised in 2014).

Going concern

The Group has evaluated its going concern ability within 12 months since 30 June 2019 and has not found any event and condition causing substantial doubt about the going concern ability. Therefore, the financial statements have been prepared on a going concern basis.

Basis of accounting and principle of measurement

The Group has adopted accrual basis for accounting measurement. Except some financial instruments are measured at fair value, the financial statements are based on historical cost. If the assets are impaired, corresponding provisions for impairment shall be made according to relevant regulations.

Under the historical cost convention, assets are measured at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of acquisition. Liabilities are measured according to the amount of payment or assets actually received due to the assumption of current obligations, or the contract amount of the current obligation, or in accordance with the amount of cash or cash equivalents expected to be paid in daily activities to meet liabilities.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using valuation technique. Fair value measured and disclosed in the financial statements are determined according to the above basis.

The fair value measurement is divided into three levels based on the observability of the inputs of the fair value and the importance of the inputs to the fair value measurement as a whole:

- Level 1 inputs are the unadjusted quoted prices of the same assets or liabilities in the active market that can be obtained on the measurement date.

- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly.

- Level 3 inputs are unobservable inputs for the relevant asset or liability.

(III) SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

The principal activities of the Group are the manufacturing and sales of glass products. Therefore, the accounting policies for recognition of revenue, provision for bad debts of receivables, depreciation of fixed assets and amortization of intangible assets are based on the characteristics of the glass manufacturing industry.

1. Statement of Compliance with CASBE

The financial statements of the Company have been prepared in accordance with the CASBE, and present truly and completely the consolidated and the Company's financial position as at 30 June 2019 and the consolidated and the Company's results of operations, the consolidated and the Company's changes in shareholders' equity and the consolidated and the Company's cash flows for the first half of 2019.

2. Accounting Period

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

3. Operating Cycle

Operating cycle refers to the period from the purchase of assets used for processing to the realization of cash or cash equivalents. The Group's operating cycle usually takes approximately 12 months.

4. Functional Currency

Renminbi ("RMB") is the currency in the primary economic environment in which the Company and its subsidiaries other than the Vietnam subsidiary operate, the Company and its subsidiaries other than the Vietnam subsidiary use RMB as their functional currency. The Company's Vietnam subsidiary determines VND as its functional currency based on the currency in the primary economic environment in which it operates. The currency used by the Company in preparing the financial statements is RMB.

5. Business Combinations

Business combinations are classified into business combinations involving enterprises under common control and business combinations not involving enterprises under common control.

5.1 Business combinations involving enterprises under common control

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

Assets and liabilities acquired in a business combination are measured at their carrying amount of the combined party at the combination date. The difference between the carrying amount of the net assets acquired by the combining party and the carrying amount of the consideration paid for the combination (or the aggregate face value of the shares issued) is adjusted to share premium under capital reserve, if the share capital premium is insufficient to offset the difference, the retained earnings will be adjusted.

The costs that are directly attributable to the business combination are charged to profit or loss in the period in which they are incurred.

5.2 Business combinations not involving enterprises under common control and goodwill

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

The cost of combination is measured at the aggregate of the fair values, at the acquisition date, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer in exchange for control of the acquiree. The intermediary fees incurred by the acquirer in respect of auditing, legal services, valuation and consultancy services, etc. and other related administrative expenses attributable to the business combination are charged to profit or loss in the period in which they are incurred.

The identifiable assets, liabilities and contingent liabilities of the acquiree that meet the recognition conditions acquired by the acquirer in a business combination, are measured at their fair values at the acquisition date.

Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as an asset as goodwill and is initially measured at cost. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer firstly reassesses the measurement of the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities and the measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquirer's interest in the fair value of the acquiree's identifiable net assets acquired in the combination, the difference is recognised in profit or loss.

Goodwill occurred as a result of combination shall be recognised separately in the consolidated financial statements and measured at cost less accumulated impairment provision.

6. Preparation of Consolidated Financial Statements

The scope of consolidation for the consolidated financial statements is determined based on control. Control refers to the power that the investor has over the investee; it means that the investor enjoys variable returns by taking part in the relevant activities of the investee and is capable of using its power over the investee to influence the amount of return. In case of changes in the relevant elements involved in the aforesaid definition of control as a result of the changes in facts and circumstance, the Group will conduct re-assessment.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary.

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

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

No matter when the business combination occurs in the reporting period, subsidiaries acquired through a business combination involving enterprises under common control or the party being absorbed under merger by absorption are included in the Group's scope of consolidation as if they had been included in the scope of consolidation from the date when they first came under the common control of the ultimate controlling party. Their operating results and cash flows from the beginning of the earliest reporting period or from the date when they first came under the common control of the ultimate controlling party are included in the consolidated income statement and consolidated statement of cash flows, as appropriate.

The significant accounting policies and accounting periods adopted by the subsidiaries are determined in accordance with the Company's unified accounting policies and accounting periods.

All significant accounts and transactions between the Company and its subsidiaries and among the subsidiaries are eliminated on consolidation.

The portion of a subsidiary's equity that is not attributable to the Company is treated as minority interests and presented as "minority interests" under shareholders' equity in the consolidated balance sheet. The portion of a subsidiary's net profit or loss for the period attributable to minority interests is presented as "profit or loss attributable to minority interests" under net profit in the consolidated income statement.

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

A transaction is accounted for as an equity transaction when the purchase of minority interest in a subsidiary or the disposal of part of equity investment in a subsidiary does not result in the Group losing control over the subsidiary, and the carrying amount of equity attributable to the owner of the Company and minority shareholders will be adjusted to reflect the changes of their related interests in the subsidiary. The difference between the adjusted equity of minority shareholders and the fair value of the consideration paid/received is adjusted to capital reserve. If the capital reserve is insufficient to offset the difference, the retained earnings will be adjusted.

7. Recognition Criteria of Cash and Cash Equivalents

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

8. Translation of Foreign Currency Business and Financial Statements Denominated in Foreign Currency

8.1 Foreign currency business

Foreign currency transactions are translated at the spot exchange rate on the date of transaction at initial recognition.

At the balance sheet date, foreign currency monetary items are translated into RMB using the spot exchange rates at the balance sheet date. Exchange differences arising from the differences between the spot exchange rates prevailing at the balance sheet date and those on initial recognition or at the previous balance sheet date are recognised in profit or loss for the period, except that: (1) exchange differences related to special borrowings denominated in foreign currency eligible for capitalization shall be capitalized into the cost of the related assets during the capitalization period; (2) exchange differences on hedging instruments for the purpose of hedging against foreign currency risk are accounted for using hedge accounting; and (3) exchange differences arising from changes in carrying amount (other than amortised cost) of monetary items at fair value through comprehensive income are recognised in other comprehensive income.

Non-monetary items denominated in foreign currencies that are measured at historical cost are translated to functional currency at the spot exchange rate at the date of the transaction. Non-monetary items denominated in foreign currencies that are measured at fair value are translated using the foreign exchange rate at the date the fair value is determined. The difference between the translated functional currency amount and the original functional currency amount is treated as changes in fair value (including changes in exchange rates) and is recognised in profit or loss or as other comprehensive income.

8.2 Foreign currency translation

For the purpose of preparing the consolidated financial statements, the foreign currency financial statements of overseas operations are translated into RMB financial statements using the following method: all assets and liabilities in the balance sheet are translated at the spot exchange rate at the balance sheet date; equity items converted at the spot exchange rate at the time of occurrence; all items in the income statement and items reflecting the amount of profit distribution are translated at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions; the difference between assets and the sum of liabilities and shareholders' equity after translation is recognised in other comprehensive income and included in shareholders' equity.

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

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

9. Financial Instruments

The Group recognises a financial asset or a financial liability when it becomes a party to a financial instrument contract.

Where financial assets are purchased or sold in a regular way, assets to be received and liabilities to be borne are recognised on the date of transaction, or assets sold are derecognised on the date of transaction.

Financial assets and financial liabilities are initially measured at fair value. For financial assets and financial liabilities at fair value through profit or loss, the related transaction costs are directly recognised in profit or loss in the period in which they are incurred. For other categories of financial assets and financial liabilities, the related transaction costs are included in the initially recognised amount. When the Group initially recognises receivables that do not contain a significant financing component or do not consider the financing component in a contract not exceeding one year in accordance with the Accounting Standards for Business Enterprises No. 14 – Revenue (the "Revenue Standard"), the Group initially measures the receivables at the transaction price as defined in the Revenue Standard.

Effective interest rate method is the method that is used in the calculation of the amortised cost of a financial asset or a financial liability and in the allocation and recognition of the interest revenue or interest expense in profit or loss over the relevant period.

The effective interest rate is the rate that discounts estimated future cash flows through the expected duration of a financial asset or a financial liability to the carrying amount of the financial asset or to the amortised cost of the financial liability. In determining the effective interest rate, the expected cash flow is estimated on the basis of all contractual terms of the financial asset or financial liability (such as early repayment, extension, call options or other similar options, etc.) without taking into account the expected credit loss.

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

9.1 Classification and measurement of financial assets

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

If the contractual terms of the financial asset stipulate that the cash flows generated on a specific date are solely payments of the principal and the interest on the principal amount outstanding and the financial asset is managed by the Group in a business model aimed at collecting contractual cash flows, the Group shall classify the financial asset into the financial asset measured at amortised cost. Such financial assets mainly include cash and bank balances, bills receivable and receivables, other receivables, etc.

If the contractual terms of the financial asset stipulate that the cash flows generated on a specific date are solely payments of the principal and the interest on the principal amount outstanding and the financial asset is managed by the Group in a business model aimed at both collecting contractual cash flows and selling such financial assets, the Group shall classify the financial asset into the financial asset at FVTOCI.

Financial assets at FVTPL include financial assets classified as at FVTPL and financial assets designated as at FVTPL. The Group presents derivative financial assets separately.

- Financial assets that do not meet the classification criteria for financial assets at amortised cost or financial assets at FVTOCI are classified as financial assets at FVTPL.

- On initial recognition, the Group may irrevocably designate a financial asset as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch or when the criteria for the hybrid contract with embedded derivatives are met.

On initial recognition, the Group may, based on an individual financial asset, irrevocably designate a non-tradable equity instrument investment other than contingent consideration recognised in business combination not involving enterprises under common control as financial asset at FVTOCI.

The Group's purpose of holding the financial assets is for trading if one of the following conditions is satisfied:

- The purpose of acquiring the financial assets is to sell the assets in the near future.

- The relevant financial assets are part of a portfolio of identified financial instruments that are centrally managed on initial recognition, and there is objective evidence of actually a recent short-term profit-taking model.

- The relevant financial assets are derivatives, except for derivatives defined under financial guarantee contracts and derivatives designated as effective hedging instruments.

9.1.1 Financial assets measured at amortised cost

Financial asset at amortised cost is subsequently measured at amortised cost using the effective interest method. Gains or losses arising from derecognition, impairment or amortization are recognised in profit or loss.

The Group recognises interest income on financial assets measured at amortised cost using the effective interest method. The Group determines the interest income based on the carrying amount of financial assets multiplied by the effective interest rate, except for:

- For purchased or originated credit impaired financial assets, the Group recognises their interest income based on amortised cost and credit-adjusted effective interest rate of such financial assets since initial recognition.

- For purchased or originated financial assets without credit impairment but with credit impairment incurred in subsequent periods, the Group calculates and determines its interest income based on amortised cost of the financial asset and the effective interest rate in subsequent periods. If the credit risk of the financial instrument improves in subsequent periods and the financial instrument is no longer credit impaired and the improvement can be linked to an event occurring after the application of the above requirements, the Group will determine the interest income based on the effective interest rate multiplied by the carrying amount of the financial assets.

9.1.2 Financial assets classified as at FVTOCI

Except for impairment losses or gains related to financial assets at FVTOCI and interest income calculated using the effective interest method is recognised in profit or loss, changes in fair value of the financial assets are recognised in other comprehensive income. The amount of the financial assets included in profit or loss for each period shall be equal to the amount deemed as measured at amortised cost and included in profit or loss for each period. Upon derecognition of the financial assets, cumulative gains or losses previously recognised in other comprehensive income are transferred and reclassified into profit or loss for the period.

9.1.3 Financial assets designated as at FVTOCI

After the non-tradable equity instrument investment is designated as a financial asset at FVTOCI, the changes in fair value of the financial asset are recognised in other comprehensive income. When the financial asset is derecognised, the cumulative gains or losses previously recognised in other comprehensive income are transferred from other comprehensive income and recognised in retained earnings. During the period that the Group holds these non-tradable equity instrument, the dividend income is recognised and included in profit or loss when the Group’s right to receive dividends has been established and the economic benefits associated with the dividends are likely to flow into the Group and the amount of the dividends can be reliably measured.

9.1.4 Financial assets at FVTPL

Financial assets at FVTPL shall be subsequently measured at fair value. Gains or losses from change in fair value and dividends and interest income related to such financial assets shall be recognised in profit or loss.

9.2 Impairment of financial instruments

The Group performs impairment accounting for financial assets measured at amortised cost based on expected credit losses ("ECL") and recognises loss allowance.

The Group always measures the impairment allowance for receivables and commercial acceptance bills receivables at an amount equal to lifetime ECL. Expected credit losses are either individually assessed for credit impaired receivables or calculated using a collective impairment model.

For other financial instruments, except for purchased or originated credit impaired financial assets, at each balance sheet date, the Group assesses changes in credit risk of relevant financial instruments since initial recognition. If the credit risk on the financial instrument has increased significantly since initial recognition, the Group measures its loss allowance at an amount equal to lifetime ECL of the financial instrument. If the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance at an amount equal to next 12-month ECL of the financial instrument. Except for financial assets measured at FVTOCI, the increased or reversed amount of credit loss provision shall be included in profit and loss for the period as impairment loss or gain.

The Group measured loss allowance at an amount equal to the lifetime ECL of the financial instruments in the previous accounting period. However, as at the balance sheet date for the current period, for the above financial instruments, due to failure to qualify as significant increase in credit risk since initial recognition, the Group measures loss allowance for the financial instrument at an amount equal to next 12-month ECL at the balance sheet date for the current period, and the relevant reversal amount of loss allowance is included in profit or loss for the current period as an impairment gain.

9.2.1 Significant increase in credit risk

The Group uses reasonable and supportable forward-looking information that is available to determine whether the credit risk of a financial instrument has increased significantly since initial recognition by comparing the risk of a default occurring on the financial instrument as at the balance sheet date with the risk of a default occurring on the financial instrument as at the date of initial recognition. For loan commitments and financial guarantee contracts, the Group uses the date on which it becomes the party making the irrevocable undertaking as the initial recognition date when applying provisions for financial instrument impairment.

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

(1) Whether the external market indicators of credit risk for the same financial instrument or similar financial instruments with same expected life have changed significantly. These indicators include: credit spread, credit default swap prices for borrowers.

(2) Whether the debtor's internal credit rating is actually lowered or is expected to be lowered.

(3) Adverse changes in business, financial or economic conditions that are expected to cause a significant change to the debtor's ability to meet its debt obligations.

(4) Whether the actual or expected operating results of the debtor has changed significantly.

(5) Whether the regulatory, economic or technological environment in which the debtor is located has undergone significant adverse changes.

Irrespective of a significant increase in credit risk since above assessment, the credit risk of the financial instrument is considered to have increased significantly when the contractual payments are past due more than 30 days (inclusive).

As at the balance sheet date, if the Group judges that the financial instrument solely has lower credit risk, the Group will assume that the credit risk of the financial instrument has not been significantly increased since initial recognition. If the default risk of a financial instrument is low, and the borrower is highly capable of meeting its contract cash flow obligations in short term, the financial instrument is considered to have a lower credit risk even if there is a negative change in the economic situation and operating environment over a longer period of time, but it may not necessarily reduce the borrower's performance of its contract cash obligations.

9.2.2 Credit impaired financial assets

A financial asset is credit impaired when one or more events that have an adverse impact on the estimated future cash flows of the financial asset occurred. Evidence that a financial asset is credit impaired includes the following observable information:

(1) Significant financial difficulty of the issuer or the debtor;

(2) The debtor breaches the contract, such as default or overdue on interest or principal payment;

(3) The creditor, for economic or contractual reasons relating to the financial difficulties of the debtor, granted to the debtor a concession that the creditor would not otherwise consider;

(4) The debtor is likely to enter bankruptcy or other financial reorganization; or

(5) The active market for the financial asset disappeared due to the financial difficulties of the issuer or the debtor.

Based on the Group's internal credit risk management, the Group considers an event of default occurs when information proposed internally or obtained externally indicates that the debtor of the financial instrument is unable to pay its creditors (including the Group) in full (without taking into account any guarantees obtained by the Group).

Irrespective of the above assessment, the Group presumes that default has occurred when the contractual payments for a financial instrument are past due for more than 90 days (inclusive).

9.2.3 Determination of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted based on information predicted by future economic conditions. The Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the present value of the difference between the contractual cash flows that the Group should receive in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Where evidence of individual instrument level is not available, the Group grouped based on internal credit risk ratings to measure ECL on a collective basis.

The grouping is regularly reviewed by management to ensure the constituents of each group share similar credit risk characteristics.

Interest income is calculated based on the original carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortised cost of the financial asset.

9.2.4 Write-off of financial assets

The Group writes off a financial asset when there is severe financial difficulty of the counterparty and there is no evidence of recovery, for example, when the counterparty is under liquidation or has entered into bankruptcy proceedings, or in the case of a counterparty, when the receivables are past due over three years. The write-down of the Group's financial assets will depend on its recovery measures, including appropriate legal measures. A write-off constitutes a derecognition of related financial asset. Any subsequent recoveries after the write-off of the asset will be recognised in profit or loss for the period.

9.3 Transfer of financial assets

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

If the Group neither transfers nor retains substantially all the risks and rewards of ownership of a financial asset, it retains control of the financial asset, it recognises the financial asset to the extent of its continuing involvement in the transferred financial asset and recognises the related liability accordingly. The Group measures the related liabilities in the following ways:

- If the transferred financial asset is measured at amortised cost, the carrying amount of the related liability is the carrying amount of the continuing involvement in the transferred financial asset less the amortised cost of the rights retained by the Group (if the Group retains the rights due to the transfer of the financial asset) plus the amortised cost of the obligations assumed by the Group (if the Group assumes the obligations due to the transfer of the financial asset), and the related liability is not designated as financial liability at FVTPL.

- If the transferred financial asset is measured at fair value, the carrying amount of the related liability is the carrying amount of the continuing involvement in the transferred financial asset less the fair value of the rights retained by the Group (if the Group retains the rights due to the transfer of the financial asset) plus the fair value of the obligations assumed by the Group (if the Group assumes the obligations due to the transfer of the financial asset), the fair value of the rights and the obligations shall be the fair value at the time of measurement on an independent basis.

For a transfer of a financial asset in its entirety that satisfies the derecognition criteria, especially for a financial asset classified at amortised cost and financial asset classified as at FVTOCI, the difference between the carrying amount of the financial asset transferred and the sum of the consideration received from the transfer and any cumulative gain or loss that has been previously recognised in other comprehensive income is recognised in profit or loss for the period. While regarding non-trading equity instruments designated as at FVTOCI by the Group, cumulative gains or losses previously recognised in other comprehensive income are transferred and included in retained earnings.

If part of the transferred financial asset satisfies the derecognition criteria, the carrying amount of the financial asset as a whole is allocated between the part that is derecognised and the part that continues to be recognised, based on the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part derecognised and the sum of the consideration received for the part derecognised and any cumulative gain or loss allocated to the part derecognised that has been previously recognised in other comprehensive income is recognised in profit or loss or retained earnings.

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

9.4 Classification and measurement of financial liabilities and equity instruments

Based on the contractual terms of the financial instruments issued and the economic substance rather than only the form of legal contracts reflected, along with the definition of financial liabilities and equity instruments, the Group classifies the financial instruments or its components as financial liability or equity instrument at initial recognition.

9.4.1 Classification and measurement of financial liabilities

Upon initial recognition, financial liabilities are classified into financial liabilities at FVTPL and other financial liabilities.

9.4.1.1 Financial liabilities at FVTPL

Financial liabilities at fair value through profit and loss include held-for-trading financial liabilities (including derivatives that are financial liabilities) and financial liabilities designated as at FVTPL.

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

- The purpose of undertaking relevant financial liabilities is mainly for the recent repurchase.

- The relevant financial liabilities are part of a portfolio of identified financial instruments that are centrally managed on initial recognition, and there is objective evidence of actually a recent short-term profit-taking model.

- The relevant financial liabilities are derivatives, except for derivatives defined under financial guarantee contracts and derivatives designated as effective hedging instruments.

The Group may designate, on initial recognition, a financial liability as at FVTPL if one of the following conditions is satisfied: (1) such designation eliminates or significantly reduces an accounting mismatch; (2) manage and evaluate the financial liability portfolio or the portfolio of financial assets and financial liabilities at fair value based on the risk management or investment strategy as stated in the official written documents of the Group, and report to key management of the Group internally; or (3) a qualified hybrid contract containing embedded derivatives.

Held-for-trading financial liabilities are subsequently measured at fair value, and any gains or losses arising from changes in fair value and dividends or interest expenses paid on the financial liabilities are recognised in profit or loss for the period.

9.4.1.2 Other financial liabilities

Other financial liabilities other than financial liabilities arising from the transfer of financial assets that do not qualify for derecognition or continuing involvement in the transferred financial assets and financial guarantee contracts are classified as financial liabilities at amortised cost and subsequently measured at amortised cost, with gains or losses arising from derecognition or amortization recognised in profit or loss for the period.

When the Group and a counterparty modify or renegotiate a contract that does not result in derecognition of a financial liability subsequently measured at amortised cost but result in changes in contractual cash flows, the Group recalculates the carrying amount of the financial liability and recognises any related gains or losses in profit or loss for the period. In recalculating the financial liability, the Group determines the carrying amount of the renegotiated or modified contractual cash flows at the present value discounted at the original effective interest rate of the financial liability. For all costs or expenses incurred in connection with the modification or renegotiation of a contract, the Group adjusts the modified carrying amount of the financial liability and amortises it over the modified remaining period of the financial liability.

9.4.1.2.1 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder of the contract for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Subsequent to initial recognition, financial guarantee contracts that are not designated as financial liabilities at FVTPL are measured at the higher of the amount of loss provision and the amount initially recognised less cumulative amortization amount determined in accordance with the relevant regulations set out in Revenue Standard.

9.4.2 Derecognition of financial liabilities

The Group derecognises a financial liability (or part of it) only when the underlying present obligation (or part of it) is discharged. Where an agreement between the Group as borrower and lender is signed to replace the original financial liability and the contractual terms of the new financial liability and the original financial liability are substantially different, the Group derecognised the original financial liability and recognised the new financial liability.

On derecognition of a financial liability in its entirety or partially, the difference between the carrying amount of the part derecognised and the consideration paid (including any non-cash asset transferred or new financial liability assumed) is recognised in profit or loss for the period.

9.4.3 Equity instruments

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

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

9.5 Derivative financial instruments

Derivative financial instruments, including forward foreign exchange contracts, currency swap contracts and interest rate swap contracts, etc. Derivatives are initially measured at fair value on the signing dates of the relevant contracts and subsequently measured at fair value. The changes in fair value of the derivatives are recognised in profit or loss for the period.

9.6 Offsetting financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is presented in balance sheet when the Group has a legally enforceable right to set off the recognised financial assets and financial liabilities, and the Group intends to settle with net amount, or realise the financial asset and settle the financial liability simultaneously. Otherwise, the financial assets and financial liabilities will be presented separately in balance sheet and will not be mutually set off.

10. Bills Receivable and Receivables

10.1 Determination and accounting treatment of ECLs of bills receivable

The Group believes that the acceptance bank of bank acceptances bills held by the Group has relatively higher credit rating, therefore, there is no significant credit risk and no impairment allowance is made. The determination and accounting treatment of ECL of commercial acceptance bills held by the Group are consistent with the determination and accounting treatment of ECL of receivables.

10.2 Determination and accounting treatment of ECLs of receivables

The Group always measures the impairment allowance for receivables and commercial acceptance bills receivable at an amount equal to lifetime ECL. ECLs are either individually assessed for credit impaired receivables or calculated using a collective impairment model. The Group classifies its receivables into different groups based on shared risk characteristics. The common credit risk characteristics used are internal credit rating.

As part of the Group's credit risk management, the Group performs internal credit rating on its customers from photovoltaic glass, household glass, architectural glass, float glass and mining products business and determines the ECL for each rating of receivables.

Increase in or reversal of credit loss allowance is included in profit or loss for the period as loss/gain on impairment. When the Group no longer reasonably expects that the contractual cash flows of receivables can be collected in whole or in part, it directly writes-off the carrying amount of the receivables.

11. Other Receivables

Determination and accounting treatment of ECLs of other receivables

The Group determines the ECLs of other receivables based on internal rating approach. According to the Group's assessment on the credit risk, the losses incurred by different customer groups are not significantly different. Therefore, when calculating the impairment allowance based on credit risk, different customer groups are not further distinguished.

Increase in or reversal of credit loss allowance is included in profit or loss for the period as loss/gain on impairment. When the Group no longer reasonably expects that the contractual cash flows of other receivables can be collected in whole or in part, it directly writes-off the carrying amount of the receivables.

12. Inventories

12.1 Classification of inventories

The Group's inventories mainly include raw materials, low-value consumables, works in progress and finished goods, etc. Inventories are initially measured at cost, which comprises purchase costs, processing costs and other expenses incurred in bringing the inventories to their current location and condition.

12.2 Pricing of inventories delivered

The actual cost of inventories upon delivery is calculated using the weighted average method.

12.3 Determination of net realisable value of inventories

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

Net realisable value is the estimated selling price of inventories in the ordinary course of business less the estimated costs to completion, estimated selling expenses and related taxes. Net realisable value of inventories is determined on the basis of clear evidence obtained, taking into account the purpose of holding inventories and the effect of events after the balance sheet date.

Provision for impairment of inventories is made based on the excess of cost over net realisable value of individual inventory item.

After the provision for impairment of inventories is made, if the circumstances that previously caused inventories to be written-off no longer exist so that the net realisable value of inventories is higher than their carrying amount, the original provision for impairment of inventories is reversed and the reversed amount is recognised in profit or loss for the period.

12.4 Inventory system

The inventory system is a perpetual inventory system.

12.5 Amortization of low-value consumables

Low-value consumables are amortised using one-off write-off method.

13. Assets Held for Sale

A non-current asset or disposal group is classified as asset held for sale when the carrying amount of the asset is recovered principally through a sale transaction (including an exchange of non-monetary assets with commercial substance) rather than through continuing use.

Non-current assets or disposal groups held for sale are required to satisfy the following conditions: (1) an immediate sale can be made under the current conditions according to the practice of selling such assets or disposal groups in similar transactions; and (2) it is highly probable that a sale will occur, that is, the Group has made a resolution on a sale plan and obtained a definite purchase commitment, and the sale is expected to be completed within one year.

The Group measures non-current assets or disposal groups held for sale at the lower of carrying amount and fair value less costs to sell. If the carrying amount is higher than the net amount of the fair value less costs to sell, the carrying amount shall be written-off to the fair value less costs to sell, the amount written-off is recognised as an impairment loss of assets and included in profit or loss for the period, and the provision for impairment of assets held for sale is made simultaneously. Where there is an increase in the net amount of fair value less costs to sell of non-current assets held for sale at the subsequent balance sheet date, the amount previously written-off should be recovered and reversed in the amount of impairment loss recognised for the assets after being classified as held for sale, and the reversed amount is included in profit or loss for the period.

Depreciation or amortization shall not be made for non-current assets in the non-current assets or disposal groups held for sale. The interest of liabilities and other expenses in the disposal groups held for sale shall be continuously recognised.

14. Long-term Equity Investments

14.1 Determination of initial investment cost

For a long-term equity investment acquired through a business combination involving enterprises under common control, the initial investment cost is the attributable share of the carrying amount of the owners' equity of the acquiree in the consolidated financial statements of the ultimate controlling party at the date of combination. The difference between the initial investment cost of a long-term equity investment and the carrying amount of cash paid, non-cash assets transferred and liabilities assumed is adjusted to capital reserve. If the capital reserve is insufficient to offset the difference, the retained earnings shall be adjusted. Where the consideration of the combination is satisfied by the issue of equity securities, the initial investment cost is the attributable share of the carrying amount of the owners' equity of the acquiree in the consolidated financial statements of the ultimate controlling party at the date of combination, and the total nominal value of the shares issued is recognised as share capital. The difference between the initial investment cost of a long-term equity investment and the total nominal value of the shares issued is adjusted to capital reserve. If the capital reserve is insufficient to offset the difference, the retained earnings shall be adjusted.

For a long-term equity investment acquired through a business combination not involving enterprises under common control, the initial investment cost is the combination cost at the date of acquisition.

The intermediary expenses incurred by the acquirer or purchaser in respect of auditing, legal services, valuation and consultancy services, etc. and other related administrative expenses attributable to the business combination are recognised in profit or loss in the period in which they are incurred.

The long-term equity investment acquired other than through a business combination is initially measured at its cost.

14.2 Subsequent measurement and recognition of profit or loss

14.2.1 Long-term equity investments accounted for using the cost method

Long-term equity investments in subsidiaries are accounted for using the cost method in the financial statements of the Company. A subsidiary is an investee that is controlled by the Group.

Long-term equity investments accounted for using the cost method are measured at initial investment cost. When additional investment is made or the investment is recouped, the cost of the long-term equity investment is adjusted accordingly. The current investment income is recognised in accordance with the cash dividends or profit distributions declared by the investee.

14.3 Disposal of long-term equity investments

On disposal of a long-term equity investment, the difference between the carrying amount and the actual purchase price is recognised in profit or loss for the period.

15. Investment Properties

Investment properties are properties held for the purpose of earning rentals or capital appreciation, or both. Investment properties include leased land use rights, land use rights held and prepared for transfer after appreciation, buildings leased out, etc.

Investment properties are initially measured at cost. Subsequent expenditures related to an investment property shall be included in cost of investment property only when the economic benefits associated with the asset will likely flow to the Group and its cost can be measured reliably. All other subsequent expenditures on an investment property shall be included in profit or loss for the current year when incurred.

The Group adopts the cost model for subsequent measurement of investment properties, and investment properties are depreciated or amortised based on the same policy consistent with the buildings and land use rights.

An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposals.

When an investment property is sold, transferred, retired or damaged, the amount of any proceeds on disposal of the property net of the carrying amount and related taxes is recognised in profit or loss for the period.

16. Fixed Assets

16.1 Conditions of recognition

Fixed assets are tangible assets that are held for use in the production of goods or supply of services, for rental to others, or for administrative purposes and have a useful life of more than one accounting year. A fixed asset is recognised only when the economic benefits associated with the asset are probable to flow to the Group and the cost of the asset can be measured reliably. Fixed assets are initially measured at cost.

Subsequent expenditures incurred for a fixed asset are included in the cost of the fixed asset if it is probable that the economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably, and the carrying amount of the replaced part is derecognised. Other subsequent expenditures other than the above are charged to profit or loss for the current period when incurred.

16.2 Depreciation methods

Fixed assets are depreciated using the straight-line method over their estimated useful lives from the next month when they are available for intended use. The estimated useful lives, residual values and annual depreciation rates of each class of fixed assets are as follows:

Class	Depreciation period (Years)	Residual Value Rate (%)	Annual depreciation rate (%)
Houses and buildings	20 years	5	4.75
Machinery and equipment	4-10 years	5	9.50-23.75
Transportation equipment	4-5 years	5	19.00-23.75
Other equipment	3-5 years	5	19.00-31.67

Estimated net residual value of a fixed asset is the estimated amount that the Group would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

16.3 Other Description

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

The Group reviews the useful life, estimated net residual value of a fixed asset and the depreciation method applied at least at each financial year-end, and any change is accounted for as a change in accounting estimate.

17. Construction in Progress

Construction in progress is measured at actual cost, which includes various construction expenditures incurred during the construction period, capitalized borrowing costs before the construction is ready for its intended use and other relevant costs. Construction in progress is not depreciated. Construction in progress is transferred to fixed asset while it is ready for its intended use.

18. Borrowing Costs

The borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised when expenditures for the asset are being incurred, borrowing costs are being incurred and activities relating to the acquisition, construction or production of the asset that are necessary to prepare the asset for its intended use or sale have commenced. The capitalisation of qualifying assets under construction or production ceases when the assets are ready for their intended use or sale. The remaining borrowing costs are recognised as expenses in the period in which they are incurred.

Where funds are borrowed under a special borrowing, the amount to be capitalised is the actual interest expense incurred on that borrowing for the period less any interest income earned from depositing the unused borrowing funds into bank or any investment income on the temporary investment of those funds. Where funds are borrowed under a general borrowing, the amount capitalised is determined by applying the weighted average of the excess amounts of cumulative expenditures on the asset over the special borrowings multiplied by the capitalization rate of the general borrowings used. The capitalisation rate is determined based on the weighted average interest rate of the general borrowings. During the capitalisation period, the exchange differences on special foreign currency borrowings are all capitalised; the exchange differences on general-purpose foreign currency borrowings are recognised in profit or loss for the period.

19. Intangible Assets

19.1 Intangible assets

Intangible assets include software, pollutant discharge rights, mining rights and land use rights, etc.

The intangible assets shall be initially measured at cost. When an intangible asset with a finite useful life is available for use, its original cost less net residual value and any accumulated impairment losses is amortised over its estimated useful life using the straight-line method. Intangible assets are not amortised while their useful lives are assessed to be indefinite. The amortization method, useful life and estimated net residual value rate of each class of intangible assets are as follows:

Class	**Amortization method**	**Useful life (Years)**	**Residual Value Rate (%)**
Land use rights	Straight line method	42-50 years	–
Software	Straight line method	5-10 years	–
Pollutant discharge rights	Straight line method	5-20 years	–
Mining rights	Output method	–	–

At the end of the year, the useful life and amortization method of intangible assets with finite useful lives are reviewed and adjusted if necessary.

For the impairment test of intangible assets, please refer to Note (III).20. "Impairment of Long-term Assets".

19.2 Internal research and development expenditures

Expenditures incurred in the research stage are recognised recognised in profit or loss for the period.

Expenditures incurred in the development stage are recognised as intangible assets only when all of the following conditions are satisfied, and the expenditures in the development stage that does not meet all of the following conditions are recognised in profit or loss for the period:

(1) The technical feasibility of completing the intangible asset so that it will be available for use or sale;

(2) The intention to complete the intangible asset and use or sell it;

(3) The way in which the intangible asset generates economic benefits, including the ability to prove that there is a market for the product produced using the intangible asset or the intangible asset itself has a market, and prove its usefulness if the intangible asset will be used internally;

(4) Adequate technical, financial and other resources to complete the development of the intangible asset and to use or sell the intangible asset;

(5) The ability to measure reliably the expenditures attributable to the intangible asset during its development.

If the expenditures cannot be distinguished between the research stage and development stage, the Group recognises all of them in profit or loss for the period.

20. Impairment of Long-term Assets

The Group assesses at each balance sheet date whether there is any indication that long-term equity investments, investment properties, fixed assets, construction in progress measured using the cost method and intangible assets with finite useful lives may be impaired. If an impairment indication exists, the recoverable amount is estimated. Intangible assets with indefinite useful life and intangible assets not yet available for use are tested for impairment annually, irrespective of whether there is any indication that the assets may be impaired.

If the estimated recoverable amount of an asset is based on a single asset and it is difficult to estimate the recoverable amount of a single asset, the recoverable amount of the asset group shall be determined on the basis of the asset group to which the asset belongs. The recoverable amount is the higher of an asset's or asset group's fair value less costs of disposal and the present value of the estimated future cash flows.

If the recoverable amount of an asset is less than its carrying amount, a provision for impairment of the asset is made based on the difference and recognised in profit or loss for the period.

An impairment loss once recognised shall not be reversed in a subsequent accounting period.

21. Long-term Deferred Expenses

Long-term deferred expenses are expenses which have incurred but shall be amortised over the current period and subsequent periods of more than one year. Long-term deferred expenses are amortised evenly over the estimated benefit period.

22. Contract Liabilities

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. Contract assets and contract liabilities under common contract are presented on a net basis.

23. Employee Compensation

23.1 Accounting for short-term employee compensation

In the accounting period in which an employee has rendered services, the Group recognises the short-term employee compensation actually incurred as liabilities, and includes in profit or loss for the period or related asset costs. The employee benefits expenses incurred by the Group are recognised in profit or loss for the period or related asset costs based on the actual amount when actually incurred. The non-monetary employee benefits expenses are measured at fair value.

In determining the corresponding amount of employee compensation, social security contributions such as medical insurance, work injury insurance and maternity insurance and housing funds, as well as labour union running expenses and employee education expenses provided by the Group are calculated according to the prescribed provision bases and percentages during the accounting period in which the employees provide services to the Group, and the corresponding liabilities are recognised, and included in profit or loss for the period or related asset costs.

23.2 Accounting for post-employment benefits

Post-employment benefits are all defined contribution plans.

In the accounting period in which an employee has rendered service, the Group recognises the amount payable under the defined contribution plan as a liability, and includes in profit or loss for the period or related asset costs.

23.3 Accounting for termination benefits

When the Group provides termination benefits to employees, employee compensation liabilities arising from termination benefits are recognised in profit or loss at the earlier of the following dates: when the Group cannot unilaterally withdraw the termination benefits provided because of an employee termination plan or a layoff proposal, or when the Group confirms the costs or expenses related to the restructuring involving the payment of dismiss benefits.

24. Provisions

Obligations related to product quality guarantee contingencies are recognised as provisions when the Group has a current 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.

On the balance sheet date, provision shall be measured at the best estimate of the expenditure for settling the current obligation, taking into account the risk and uncertainty and time value of money and other factors related to the contingencies. Where the effect of the time value of money is material, the best estimate of the expenditure is determined by discounting the expected future cash outflows.

25. Share-based Payments

The Group's share-based payments are transactions in which equity instruments are granted to employees in exchange for services rendered by employees or for the assumption of liabilities based on equity instruments. The Group's share-based payments are equity-settled share-based payments.

Equity settled share-based payments

Equity-settled share-based payments to employees

Equity-settled share-based payments to employees in exchange for services rendered by employees are measured at the fair value of the equity instruments granted to employees at the grant date. When the grant is vested immediately, the amount of the fair value is included in the related costs or expenses on the grant date, with a corresponding increase in capital reserve.

26. Revenue

The Group's revenue is mainly derived from the sales of glass products, which mainly include photovoltaic glass, household glass, architectural glass, float glass and mining products, etc. Revenue from other business mainly represents rental income from properties and sales income of materials.

The Group recognises revenue based on the transaction price allocated to such performance obligation when a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer. A performance obligation represents the commitment that a good and service that is distinct shall be transferred by the Group to the customer. The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties and amounts expected to be refunded to a customer.

For the performance obligations to be performed during a certain period of time, the Group recognises revenue over time by reference to the progress of a performance obligation if one of the following criteria is met: (1) the customer receives and consumes the economic benefits brought by the Group while performing obligations; (2) the customer can control the goods under construction during the performance of the Group; (3) the goods produced during the performance of the Group have irreplaceable uses, and the Group has the right to receive payment for the part of the completed performance so far throughout the contract period. Otherwise, the Group will recognise revenue at the time point when the customer obtains control over relevant goods or services.

27. Government Grants

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

If a government grant is in the form of monetary asset, it shall be measured at the amount received or receivable.

27.1 Judgement basis and accounting treatment of government grants related to assets

The Group's government grants related to assets mainly include subsidies for industrial transformation and upgrading technological transformation projects, subsidies for major investment projects and other corporate subsidies.

A government grant related to assets is recognised as deferred income and included in other income over the useful life of the related asset using the straight-line method.

27.2 Judgement basis and accounting treatment of government grants related to revenue

The Group's government grants related to revenue mainly include natural gas subsidies, electricity subsidies, loan interest subsidies, listing incentive fees, stock reform awards, environmental protection incentive fees, economic development contribution incentives, social security financial subsidies, etc.

A government grant related to revenue used to compensate for relevant costs, expenses and losses in subsequent periods is recognised as deferred income, and is used to offset the relevant costs over the periods in which the relevant costs, expenses or losses are recognised. The government grants related to revenue used to compensate for relevant costs, expenses and losses already incurred is used to offset the relevant costs directly.

The government grants related to the Group's daily activities are included in other income/offset the relevant costs and expenses according to the nature of economic business. Otherwise, government grants are included in non-operating income or expense.

28. Safety Production Expenses

Pursuant to the requirements of the Administrative Measures for the Withdrawal and Use of Safety Production Expenses of Enterprises issued by the Ministry of Finance and the State Administration of Work Safety, the Group has made provision for safety production expenses of RMB2 per ton based on the output of raw ore of open-pit non-metallic mines. The safety production expenses are specifically used for the improvement, transformation and maintenance of the Group's safety production conditions.

The provision for safety production expenses is directly included in the cost of the relevant products or the expenses for the period, and is presented separately in the "special reserve" item under the owners' equity. When safety production expenses is being used according to the prescribed scope, the expense expenditure is used to directly offset against "special reserve"; as for the capital expenditure, the expenditure incurred is firstly collected through "construction in progress" item and recognised as fixed assets when the safety project is completed and ready for its intended use; at the same time, the "special reserve" will be written down based on the cost of the fixed asset formed and the accumulated depreciation of the same amount will be recognised, no depreciation will be provided for the fixed assets in subsequent periods.

29. Deferred Income Tax Assets/Deferred Income Tax Liabilities

Income tax expenses comprise current income tax expense and deferred income tax expense.

29.1 Current income tax

At the balance sheet date, current income tax liabilities (or assets) for the current and prior periods are measured at the amount expected to be paid (or recovered) according to the requirements of tax laws.

29.2 Deferred income tax assets and deferred income tax liabilities

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

Deferred income tax is generally recognised for all temporary differences. However, as for deductible temporary differences, deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilised. In addition, for temporary differences associated with the initial recognition of goodwill and the initial recognition of an asset or liability arising from a transaction (not a business combination) that affects neither the accounting profit nor taxable profit (or deductible loss) at the time of transaction, no deferred tax asset or liability is recognised.

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

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

At the balance sheet date, deferred income tax assets and deferred income 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 according to the requirements of tax laws.

Current and deferred income tax expenses or income are recognised in profit or loss for the period, except when they arise from transactions or events that are directly recognised in other comprehensive income or in shareholders' equity, in which case they are recognised in other comprehensive income or in shareholders' equity; and when they arise from business combinations, in which case they are adjusted to the carrying amount of goodwill.

The carrying amount of a deferred tax asset is reviewed at each balance sheet date and is reduced to the extent that it is probable that sufficient taxable profits will not be available to offset the benefits of deferred income tax assets. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

29.3 Offsetting of income tax

When the Group has a legal right to settle on a net basis and intends either to settle on a net basis or to realise the assets and settle the liabilities simultaneously, current tax assets and current tax liabilities are offset and presented on a net basis.

When the Group has a legal right to settle current tax assets and liabilities on a net basis, and deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax assets and liabilities on a net basis or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax assets or liabilities are expected to be reversed, deferred tax assets and deferred tax liabilities are offset and presented on a net basis.

30. Lease

Lease is defined as a contract that the lessor transfers the right-of-use of assets to the lessee within a certain period of time in exchange for consideration.

For a contract entered into or changed after the date of initial adoption, the Group assesses whether the contract is or contains lease on the commencement or changing date of the contract. The Group does not reassess unless the terms and conditions of the contract are changed.

The Group as lessee

Separation of leases

For a contract that contains one or more lease or non-lease components, the Group separates each individual lease component from none-lease components and allocates the consideration in the contract to each lease component on the basis of the stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

Right-of-use assets

Except for short-term leases and leases of low value assets, the Group recognises right-of-use assets at the commencement date of the lease. The lease commencement date refers to the starting date for the lessor to provide leased assets for use by the Group. Right-of-use assets are initially measured at cost. Such cost includes:

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

The carrying amount of right-of-use assets is adjusted accordingly when the lease liability is remeasured after the commencement date.

Right-of-use assets are depreciated within the remaining useful lives when the Group is reasonably certain to obtain the ownership of leased assets at the end of the lease term. The depreciation is provided during the period between the lease term and the remaining useful lives of the leased assets if it is not.

The Group determines whether the right-of-use assets are impaired to perform accounting treatment according to the relevant regulations of Accounting Standard for Business Enterprise No.8 – Impairment of Assets.

Lease liabilities

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

The lease payments refer to the amount paid by the Group to the lessor in relation to the right to use the leased asset during the lease term, including:

- fixed payments and in-substance fixed payments, less the relevant amount of any lease incentives if there are lease incentives;
- variable lease payment that are based on an index or a rate;
- the exercise price of a purchase option reasonably certain to be exercised by the Group;
- required payments that the lease term reflects for the Group exercising the option to terminate;
- estimated payable amounts based on the residual value guarantees provided by the Group.

The Group calculates the interest expense of lease liabilities for each period of the lease term at a fixed periodic interest rate after the lease commencement date.

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

- the Group remeasures lease liabilities at the present value of the changed lease payments and the revised discount rate if changes incurred from the assessment result of the purchase option or the lease term;

- The Group remeasures lease liabilities at the present value of the changed lease payments and the original discount rate based on changes incurred from the estimated payable amounts of residual value guarantees, from the index or the proportion for determining lease payments.

Short-term leases and leases of low-value assets

For short-term leases of plant, dormitory and wharf and leases of low-value assets, the Group chooses the right-of-use assets and lease liabilities that are not certain to use. Short-term lease is defined as a lease has a lease term of no more than 12 months and excludes a purchase option from the lease commencement date. Low-value asset lease refers to a lease with a lower value when the single leased asset is a new asset. The Group will include the lease payments for short-term leases and low-value asset leases in profit or loss for the period or related asset costs.

The Group as lessor

Separation of leases

For a contract that contains both lease and non-lease components, the Group allocates the consideration in the contract according to the provisions of Accounting Standard for Business Enterprises No.14 – Revenues on the allocation of transaction price that is based on their individual prices of the lease and the non-lease components.

Classification of leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially almost all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Group as lessor under operating leases

The Group recognises lease payments for operating leases as rental income by using the straight-line method in each period of the lease term.

Initial direct costs related to the Group's operating leases are capitalised when incurred, are allocated on the same basis as rental income over the lease term and are charged to profit or loss for the period in stages.

31. Critical Judgements in Applying Accounting Policies and Key Assumptions and Uncertainties in Accounting Estimates

In the process of applying the accounting policies, which are described in the notes above, the Group is required to make judgments, estimates and assumptions about the carrying amount of items in the financial statements that cannot be measured accurately, due to the inherent uncertainties of the operating activities. These judgments, estimates and assumptions are based on historical experiences of the Group's management as well as other factors that are considered to be relevant. The actual results may be different from the estimates of the Group.

The Group regularly reviews the above judgments, estimates and assumptions on the basis of going concern. Where the changes in accounting estimates only affect the period of change, the impact is recognised in the period of change. Where the changes affect both current and future periods, the impact is recognised in the period of the change and future periods.

At the balance sheet date, key assumptions and uncertainties in accounting estimates that are probable to cause a material adjustment to the carrying amount of assets and liabilities are mainly:

Useful lives of fixed assets

The management of the Group is responsible for assessing the estimated useful lives and related depreciation charges for the fixed assets. This estimate is based on the historical actual useful lives of fixed assets of similar nature and functions. In the course of the use of fixed assets, technological changes and equipment upgrades of competitors in the industry may have a significant impact on the useful life of fixed assets. If the useful lives of fixed assets differ from the original estimates, the management of the Group will adjust the future depreciation expenses.

Impairment of fixed assets

The management of the Group regularly reviews whether there are any indications of impairment for fixed assets and recognises an impairment loss if the carrying amount of an asset is lower than its recoverable amount. The Group conducts impairment test on fixed assets whenever there is an indication that the fixed assets may be impaired. The recoverable amount is the higher of an asset's fair value less costs of disposal and the present value of its future cash flows. In determining the recoverable amount of fixed assets, the management of the Group has taken into account factors including future profitability, growth rate and discount rate, etc. As at 30 June 2019, the balance of the Group's provision for impairment of fixed assets was RMB3,839,556.69.

Estimate of mineral reserve

Provision for impairment of mining rights is made after assessing the Group's mineral reserves. Estimates of mineral reserves are subjective in nature and, as a result, technical estimates of mineral reserves are generally not inaccurate, and only approximate quantities. There are certain authoritative guidelines regarding the engineering criteria that have to be complied by the Group before estimated mineral reserves can be determined as proved and probable reserve. Proved and probable reserve estimates are updated at regular intervals taking into account recent production and technical information of each mine. In addition, as production levels and technical standards change from year to year, the estimate of proved and probable reserves also changes. Despite the inherent imprecision in these technical estimates, such estimates are still used as basis in assessing impairment losses. Where the actual outcome or further expectation is different from the original estimate, such difference will impact the provision for impairment of intangible assets – mining rights in the period in which such estimate has been changed.

Impairment of mining rights

In conducting the impairment test on the mining rights owned by the Group, the Group uses the forecast data of forward product prices from domestic and overseas authoritative research institutions or the best estimates made by the management as the estimation of the future selling prices of relevant products. Based on management's latest estimates of mining plans and future capital expenditures, the discount rates take into account the current risk-free return rate, average social yield rate, enterprise-specific risk and other factors. The estimation of the future recoverable amount of the mining right assets is highly dependent on the estimation of future commodity prices, mining plans, future capital expenditure plans and discount rates stated above. The forecast of future prices of commodities does not represent the selling prices that can be actually realised in the future, and the mining plans, future capital expenditure plans and discount rates will also change. As at 30 June 2019, the management of the Group is of the opinion that there is no impairment of the mining rights assets owned by the Group. If the above projections and estimates change after the estimated period, the estimates of future recoverable amount of the Group's mining rights assets may change or result in a decrease in the carrying amount of the mining rights.

Recognition of deferred income tax assets

As at 30 June 2019, the Group has recognised deferred income tax assets of RMB6,165,296.25 which are included in the balance sheet. Deferred income tax assets arise from the actual profits and temporary differences are mainly based on the actual tax rates utilized in the upcoming years. In cases where the actual future profits generated are less than expected, a reversal of deferred income tax assets recognised may arise, which would be recognised in the income statement for the period in which such a reversal takes place. In the opinion of the management of the Group, it is uncertain whether it is probable that sufficient taxable profits will be available in the future for certain subsidiaries, and therefore, as at 30 June 2019, the deductible losses and other temporary differences in relation to the unrecognised deferred income tax assets amounted to RMB20,228,549.50 in aggregate.

Impairment of receivables

The Group uses a collective impairment model to calculate the ECLs for certain receivables and commercial acceptance bills receivable, and makes separate provisions for individually credit impaired customers. The provision rate for ECL is determined based on internal credit rating. Based on reasonable and supportable information that is available without undue cost or effort, the Group determines the provision model for credit risk portfolio based on the customer's historical default or delay in payments and taking into account future economic conditions. At each reporting date, the observable historical default rates are reassessed and the effect of changes in the future economic conditions are considered. As at 30 June 2019, the balance of provision for bad debts of the Group's receivables was RMB46,187,609.35.

Fair value measurements and valuation processes

In estimating the fair value of the Group's financial assets and financial liabilities, the Group uses market-observable data to determine whether there is objective evidence of impairment. Where Level 1 inputs are not available, the management of the Group assesses the fair value of financial instruments based on discounted cash flow or over-the-counter market transaction price. At the end of the reporting period, the management of the Group uses appropriate valuation techniques and inputs to establish a pricing model based on historical experience. Where there is a material change in fair value, the causes of the fluctuations will be reported to the board of directors of the Company.

32. Changes in Significant Accounting Policies

Changes in accounting policies

New Lease Standard

Since 1 January 2019, the Group has implemented the "Accounting Standards for Business Enterprises No. 21 – Leases" revised by the Ministry of Finance in 2018 (hereinafter referred to as the "New Lease Standard", and the lease standard before revision is known as the "Original Lease Standard"). The New Lease Standard improved the definition of lease and added the identification, split and consolidation of leases; cancelled the classification of operating leases and finance leases of the lessee, and required right-of-use assets and lease liabilities to be recognised for all leases (except short-term leases and leases of low-value assets). Also, it improved lessee's subsequent measurement of leases, added accounting treatment under the scenarios of option revaluation and modification of lease; and increased the related disclosure requirements. For the revised accounting policy of the Group as a lessee and lessor on the recognition and measurement of leases, please see III. 30.

For contracts subsisting prior to the first implementation date, the Group has elected, at the first implementation date, not to reassess whether such contracts are leases or contain a lease.

For contracts signed or modified after the first implementation date, the Group has assessed whether such contracts are leases or include a lease in accordance with the definition of lease in the New Lease Standard. Pursuant to the New Lease Standard, in determining whether a contract is a lease or includes a lease, it is based on the fact that where a party to a contract assigns its right to use with respect to one or more identified assets under its control for a certain period of time for consideration.

The Group as lessee

The Group shall, based on the cumulative effect of initially applying the new lease standards, adjust the retained earnings and the amount of other relevant items in financial statements at the first implementation date, and shall not adjust the information of the comparative period.

For operating leases other than low-value leases prior to the first implementation date, the Group has decided to adopt the following simplified approach based on each lease:

- Leases that will be completed within 12 months from the first implementation date are treated as short-term leases.

The difference between the lease liabilities recognised by the Group as at 1 January 2019 and the significant operating lease commitment disclosed in the 2018 financial statements is as follows:

RMB

Item	**As at 1 January 2019**
I. Operating lease commitment as at 31 December 2018	4,470,105.00
Lease liabilities discounted at incremental borrowing rates at the first implementation date	4,470,105.00
Less: Exemption on recognition – short-term leases	4,304,772.11
Exemption on recognition – leases of low-value assets	165,332.89
II. Lease liabilities as at 1 January 2019	–

The Group as lessor

The Group does not make transitional adjustments for leases as lessors, and performs accounting treatment in accordance with the New Lease Standard from the first implementation date.

Format of presentation of financial statements

In the preparation of its 2019 Interim Financial Statements, the Group has implemented the "Notice of the Revised Format of Financial Statements for General Business Enterprise for the Year of 2019 (Cai Kuai [2019] No. 6, hereinafter referred to as "Cai Kuai No. 6") released on 30 April 2019 by the Ministry of Finance. Cai Kuai No. 6 revised the presentation of line items of the balance sheet, income statement, statement of cash flow and statement of change in owners' equity, which split the item of "bills receivables and trade receivables" into two items of "bills receivables" and "trade receivables", split the item of "notes payable and trade payables" into two items of "notes payable" and "trade payables", added the items of "receivable financing" and "special reserves", clarified or revised the presentation of "other receivables", "non-current assets due within one year", "other payables", "deferred income", "other equity instruments", "research and development expenses", "interest income" under "finance costs", "other income", "non-operating income", "non-operating expenses" and "capital contribution by holders of other equity instruments". Meanwhile, it specified the presentation requirements of loss provisions for loan commitments and financial guarantee contracts, added the item of "derecognition of income of financial assets at amortised cost" under "investment income", adjusted the position of presentation of some items in income statement, and clarified element of government subsidy in the statement of cash flow. For the changes in the above presentation items, the Group restated the comparative data of the previous year.

(IV) TAXATION

1. Major Types of Tax and Tax Rates

Tax type	Tax basis	Tax rate
Value-added tax (VAT)	Taxable value-added amount (the tax payable is calculated on the taxable sales amount multiplied by the applicable tax rate (output-VAT) less deductible input-VAT for the current period)	Note 1
Urban maintenance and construction tax	Turnover tax payment	7%
Education surcharge	Turnover tax payment	3%
Local educational surcharges	Turnover tax payment	2%
Property tax	Cost of properties/rental income	Note 2
Resources tax	Quantity of mining products sold	RMB3/ton, 7%
Enterprise income tax (EIT)	Taxable income	Note 3
Environmental protection tax	Pollutant emissions	RMB1.2 or RMB1.4 per pollutant equivalent

Note 1: According to the Announcement of the Ministry of Finance, the General Administration of Taxation and the General Administration of Customs on Deepening Value-added Tax Reform Related Policies (announcement of the Ministry of Finance, the General Administration of Taxation and the General Administration of Customs [2019] No. 39), the value-added tax rate is adjusted from 16% to 13% from 1 April 2019.

Note 2: The property tax of self-use property is calculated at 70% of the original value of the real estate and at a rate of 1.2%; the property tax of leased buildings is calculated at 12% of rental income.

Note 3: EIT rates for the Company and subsidiaries:

	Tax rate
The Company	15%
浙江福萊特玻璃有限公司 Zhejiang Flat Glass Co., Ltd.	25%
浙江嘉福玻璃有限公司 Zhejiang Jiafu Glass Co., Ltd.	15%
上海福萊特玻璃有限公司 Shanghai Flat Glass Co., Ltd.	25%
安徽福萊特光伏玻璃有限公司 Anhui Flat Solar Glass Co., Ltd.	25%
安徽福萊特光伏材料有限公司 Anhui Flat Solar Material Co., Ltd.	25%
福萊特（香港）有限公司 Flat (Hong Kong) Limited	16.5%
嘉興福萊特新能源科技有限公司 Jiaxing Flat New Energy Technology Co., Ltd.	12.5%
福萊特（越南）有限公司 Flat (Vietnam) Company Limited	0%
福萊特（香港）投資有限公司 Flat (Hong Kong) Investment Limited	16.5%

2. Tax Preferences

The Company

On 21 November 2016, the Company obtained the "High Technology Enterprise Certificate" (No. GR201633000057) jointly approved by the Science and Technology Department of Zhejiang Province, Zhejiang Provincial Department of Finance, the State Taxation Bureau of Zhejiang Province and the Local Taxation Bureau of Zhejiang Province, for a valid period of three years, pursuant to which, the EIT rate of 15% is applied from 2016 to 2018. As the certificate will expire on 21 November 2019, the Company has submitted the qualification review information for high technology enterprise, therefore, the current EIT is levied at a reduced rate of 15%.

Zhejiang Jiafu Glass Co., Ltd.

On 21 November 2016, Zhejiang Jiafu Glass Co., Ltd. obtained the "High Technology Enterprise Certificate" (No. GR201633001835) jointly approved by the Science and Technology Department of Zhejiang Province, Zhejiang Provincial Department of Finance, the State Taxation Bureau of Zhejiang Province and the Local Taxation Bureau of Zhejiang Province, for a valid period of three years, pursuant to which, the EIT rate of 15% is applied from 2016 to 2018. As the certificate will expire on 21 November 2019, Zhejiang Jiafu Glass Co., Ltd. has submitted the qualification review information for high technology enterprise, therefore, the current EIT is levied at a reduced rate of 15%.

Jiaxing Flat New Energy Technology Co., Ltd.

Pursuant to the Notice of the Ministry of Finance and the State Administration of Taxation on Issues Concerning Preferential Enterprise Income Tax Policies for Public Infrastructure and Environmental Protection, Energy and Water Saving Projects (Caishui [2012] No. 10), Jiaxing Flat New Energy Technology Co., Ltd. is exempted from EIT for the first year to the third year from the tax year in which the first operation income is obtained, and the EIT is reduced by 50% in the fourth to sixth years. The first operation year commenced in 2014, therefore, the EIT for 2018 and 2019 was reduced by 50%.

Flat (Vietnam) Company Limited

Pursuant to the Project Investment License approved by the Vietnam Haiphong Economic Zone Authority on 30 June 2016, Flat (Vietnam) Company Limited is exempted from EIT for four years commencing from the first profit-making year, followed by a 50% reduction in EIT for the next nine years.

(V) INTERESTS IN OTHER ENTITIES

1. Interests in Subsidiaries

The composition of the corporate group

Name of subsidiary	Principal place of business	Place of registration	Nature of business	Shareholding and voting rights percentage as at 31 December 2018 (%) Direct	Indirect	Acquisition method
Zhejiang Flat Glass Co., Ltd. ("Zhejiang Flat") (Note 1)	Zhejiang	Zhejiang	Engaged in the manufacture and sale of architectural or household glass products	100.00	–	Establishment
Zhejiang Jiafu Glass Co., Ltd. ("Zhejiang Jiafu") (Note 2)	Zhejiang	Zhejiang	Manufacture and sale of photovoltaic glass	100.00	–	Establishment
Shanghai Flat Glass Co., Ltd. ("Shanghai Flat") (Note 3)	Shanghai	Shanghai	Architectural glass processing	100.00	–	Establishment
Anhui Flat Solar Glass Co., Ltd. ("Anhui Flat Glass") (Note 4)	Anhui	Anhui	Manufacture, processing and sale of special glass	100.00	–	Establishment
Anhui Flat Solar Material Co., Ltd. ("Anhui Flat Material") (Note 5)	Anhui	Anhui	Mine operations and sale of quartz ore	100.00	–	Establishment
Flat (Hong Kong) Limited ("Flat (Hong Kong)") (Note 6)	Zhejiang	Hong Kong	Glass Export	100.00	–	Establishment
Jiaxing Flat New Energy Technology Co., Ltd. ("Flat New Energy") (Note 7)	Zhejiang	Zhejiang	Investment, construction, operation and maintenance of new energy power plants	100.00	–	Establishment
Flat (Vietnam) Company Limited ("Flat Vietnam") (Note 8)	Vietnam	Vietnam	Manufacture and sale of photovoltaic glass	–	100.00	Establishment
Flat (Hong Kong) Investment Limited ("Flat Investment") (Note 9)	Hong Kong	Hong Kong	Investments	–	100.00	Establishment

Note 1: Zhejiang Flat was established on 14 February 2011 with a registered capital of RMB10,000,000.

Note 2: Zhejiang Jiafu was established on 15 August 2007 with a registered capital of RMB100,000,000, which was contributed as to 55% by the Company and as to 45% by Shanghai Flat in cash. On 15 October 2008, the registered capital of Zhejiang Jiafu was increased from RMB100,000,000 to RMB123,714,977.05 and was contributed as to 55% by the Company and 45% by Shanghai Flat, respectively. On 7 September 2009, Zhejiang Jiafu increased its registered capital by RMB26,285,022.95 and its registered capital after the change was RMB150,000,000, upon which the Company and Shanghai Flat owned 55% and 45%, respectively. On 10 March 2014, the Company entered into an equity transfer agreement with Shanghai Flat, pursuant to which, Shanghai Flat transferred its 45% equity interest in Zhejiang Jiafu to the Company. Upon completion of the transfer, Zhejiang Jiafu was wholly owned by the Company.

Note 3: Shanghai Flat was established on 6 June 2006 with a registered capital of RMB70,000,000.

Note 4: Anhui Flat Glass was established on 18 January 2011 with a registered capital of RMB150,000,000, which was contributed as to 60% by the Company and 40% by Zhejiang Jiafu. On 18 January 2013, the registered capital of Anhui Flat Glass was reduced to RMB30,000,000. On 10 March 2014, the Company entered into an equity transfer agreement with Zhejiang Jiafu, pursuant to which, Zhejiang Jiafu transferred its 40% equity interest in Anhui Flat Glass to the Company. Upon completion of the transfer, Anhui Flat Glass was wholly owned by the Company. The registered capital was increased to RMB61,000,000 on 30 December 2016, the registered capital was increased to RMB300,000,000 on 22 December 2017, and the registered capital was further increased to RMB450,000,000 on 31 July 2018.

Note 5: Anhui Flat Material was established on 19 January 2011 with a registered capital of RMB30,000,000, which was contributed as to 60% by the Company and 40% by Zhejiang Jiafu. On 10 March 2014, the Company entered into an equity transfer agreement with Zhejiang Jiafu, pursuant to which, Zhejiang Jiafu transferred its 40% equity interest in Anhui Flat Material to the Company. Upon completion of the transfer, Anhui Flat Material was wholly-owned by the Company.

Note 6: Flat (Hong Kong) was established on 9 January 2013 with a registered capital of HKD77,561. On 28 November 2016, the registered capital was increased to HKD77,548,590.

Note 7: Flat New Energy was established on 11 March 2014 with a registered capital of RMB10,000,000.

Note 8: Flat (Vietnam) was established on 28 July 2016 with a registered capital of VND1,095,500,000,000, which was contributed by Flat (Hong Kong). On 14 May 2018, the registered capital was increased to VND1,752,800,000,000.00.

Note 9: Flat Investment was established on 31 July 2017 with a registered capital of HKD1,000,000, which was contributed by Zhejiang Jiafu.

Notes to the Consolidated Statements

1. CASH AT BANK AND ON HAND

Items	Closing balance	Opening balance
Cash on hand	**23,414.54**	17,627.09
Cash at bank	**543,502,879.70**	528,732,376.99
Other cash at bank and on hand	**207,202,922.80**	154,268,969.65
Total	**750,729,217.04**	683,018,973.73
Including: total amount deposited abroad	**256,862,784.82**	322,804,026.99

2. DERIVATIVE FINANCIAL ASSETS

Items	Closing balance	Opening balance
Derivative financial asset without specified hedging relationship	**2,910,793.14**	6,172,390.30
Including: Interest rate swap contract	**2,383,299.33**	3,219,346.33
Forward foreign exchange contract	**527,493.81**	2,953,043.97
Total	**2,910,793.14**	6,172,390.30

3. BILLS RECEIVABLES

(1) Bills receivables listed by category

Items	Closing balance	Opening balance
Bank acceptance bills	**1,165,580,704.28**	907,748,537.66
Commercial acceptance bills	**15,154,293.39**	3,545,993.57
Total	**1,180,734,997.67**	911,294,531.23

(2) Bills receivables that have been endorsed or discounted by the Company but not yet due at the balance sheet date:

Items	De-recognized at the end of the period
Bank acceptance bills	820,242,700.87
Total	**820,242,700.87**

4. TRADE RECEIVABLES

(1) Disclosed by ageing

Ageing	Closing balance
Within 1 year	1,210,363,756.06
1-2 years	1,928,264.00
2-3 years	372,907.02
Over 3 years	10,130,761.02
Total	**1,222,795,688.10**

(2) Disclosed by bad debt provision method

	Closing balance				
	Book balance		Bad debt provision		
Classification	**Amount**	**Percentage (%)**	**Amount**	**Accrual percentage (%)**	**Book value**
Account receivable excluding costs for significant financing	**1,222,795,688.10**	**100.00**	**46,187,609.35**	**3.78**	**1,176,608,078.75**
Total	**1,222,795,688.10**	**100.00**	**46,187,609.35**	**3.78**	**1,176,608,078.75**

	Opening balance				
	Book balance		Bad debt provision		
Classification	Amount	Percentage (%)	Amount	Accrual percentage (%)	Book value
Account receivable excluding costs for significant financing	864,341,918.91	100.00	43,146,739.59	4.99	821,195,179.32
Total	864,341,918.91	100.00	43,146,739.59	4.99	821,195,179.32

(3) Changes of bad debt provision

Credit loss provision	Stage 2 Lifetime ECL (not credit impaired)	Stage 3 Lifetime ECL (credit impaired)	Total
Balance at 1 January 2019	33,682,788.95	9,463,950.64	43,146,739.59
Changes of the opening balance in the period			
– Transfers to Stage 3	-4,205,510.02	4,205,510.02	–
– Transferred	–	–	–
– Written off	–	-2,371,454.83	-2,371,454.83
Credit losses of new account receivable in the current period	5,412,324.59	–	5,412,324.59
Balance at 30 June 2019	34,889,603.52	11,298,005.83	46,187,609.35

(4) Details of top five trade receivables with the closing balances classified by the borrowers

Name	Relationship with the Company	Trade receivables balance	Percentage of the total trade receivables	Closing balance of credit loss provision
Customer A	Third party	256,838,107.89	21.00%	7,191,467.20
Customer B	Third party	159,230,528.54	13.02%	4,458,454.80
Customer C	Third party	151,057,322.56	12.35%	4,229,605.03
Customer D	Third party	99,673,644.07	8.15%	2,790,862.03
Customer E	Third party	69,264,217.79	5.66%	1,939,398.10
Total		736,063,820.85	60.18%	20,609,787.16

5. ADVANCE PAYMENTS

(1) Listed by ageing

Ageing	Closing balance Amount	Closing balance Percentage (%)	Opening balance Amount	Opening balance Percentage (%)
Within 1 year	**66,987,694.20**	**98.56**	64,744,078.03	98.88
1-2 years	**105,935.12**	**0.16**	89,889.88	0.14
2-3 years	**431,122.18**	**0.63**	408,247.59	0.62
Over 3 years	**445,030.72**	**0.65**	232,620.38	0.36
Total	**67,969,782.22**	**100.00**	65,474,835.88	100.00

At the end of the year, the Group had no advance payments with an ageing of more than one year and an important amount.

(2) Details of top five advance payments with the closing balances classified by the payees:

Name	Relationship with the Company	Amount	Percentage of the total advance payments (%)
Supplier A	Third party	12,598,478.97	18.54
Supplier B	Third party	10,582,389.58	15.57
Supplier C	Third party	10,315,737.04	15.18
Supplier D	Third party	10,161,235.01	14.95
Supplier E	Third party	5,780,188.44	8.50
Total	Third party	49,438,029.04	72.74

6. OTHER RECEIVABLES

(1) Listed by items

Items	Closing balance	Opening balance
Other receivables	**1,483,299.84**	1,296,794.21
Total	**1,483,299.84**	1,296,794.21

(2) Other receivables classified by nature

Nature	Closing book balance	Opening book balance
Deposit	**252,291.73**	297,291.73
Margin	**260,000.00**	210,000.00
Reserve fund	**152,382.78**	79,500.00
Others	**818,625.33**	710,002.48
Total	**1,483,299.84**	1,296,794.21

(3) Bad debt provision

Bad debt provision	Stage 1 12 months ECL	Stage 2 Lifetime ECL (without credit impaired)	Stage 3 Lifetime ECL (with credit impaired)	Total
Balance at 1 January 2019	–	–	3,000,000.00	3,000,000.00
Balance at 1 January 2019 in current period	–	–	–	–
– Transfers to Stage 2	–	–	–	–
– Transfers to Stage 3	–	–	–	–
– Transfers back to Stage 2	–	–	–	–
– Transfers back to Stage 1	–	–	–	–
Provided in current period	–	108,000.00	–	108,000.00
Transferred in the current period	–	–	–	–
Resold in the current period	–	–	–	–
Written off in the current period			-3,000,000.00	-3,000,000.00
Other changes	–	–	–	–
Balance at 30 June 2019	–	108,000.00	–	108,000.00

(4) Bad debt condition

Category	Opening balance	Changed amounts in the current period Provided	Recovered or transferred	Resold or written off	**Closing balance**
Other receivables	3,000,000.00	108,000.00	–	3,000,000.00	**108,000.00**
Total	3,000,000.00	108,000.00	–	3,000,000.00	**108,000.00**

(5) **Details of top five other receivables with the closing balances classified by the borrowers:**

Name	Nature of amount	Closing balance	Percentage of the total closing balance of other receivables (%)	Closing balance of bad debt provision
Transaction Party A	Deposit	212,291.73	13.34%	–
Transaction Party B	Margin	160,000.00	10.05%	–
Transaction Party C	Margin	100,000.00	6.28%	–
Transaction Party D	Margin	50,000.00	3.14%	50,000.00
Transaction Party E	Margin	50,000.00	3.14%	50,000.00
Total		572,291.73	35.95%	100,000.00

7. INVENTORIES

(1) Inventories category

Items	Book balance	Closing balance Inventory impairment provision	Book value
Raw materials	**194,722,929.46**	**–**	**194,722,929.46**
Low-valued consumables	**70,503,428.66**	**2,428,014.24**	**68,075,414.42**
Work in progress	**48,715,462.58**	**–**	**48,715,462.58**
Finished goods	**162,577,546.17**	**2,149,037.41**	**160,428,508.76**
Total	**476,519,366.87**	**4,577,051.65**	**471,942,315.22**

Items	Book balance	Opening balance Inventory impairment provision	Book value
Raw materials	154,950,014.57	–	154,950,014.57
Low-valued consumables	64,631,510.22	2,977,721.11	61,653,789.11
Work in progress	45,368,429.16	–	45,368,429.16
Finished goods	116,468,451.00	1,317,483.88	115,150,967.12
Total	381,418,404.95	4,295,204.99	377,123,199.96

(2) Inventory impairment provision

Items	Opening balance	Increased amount for the period Provided	Decreased amount for the period Transferred or resold	Closing balance
Raw materials				
Low-valued consumables	2,977,721.11	628,971.14	1,178,678.01	**2,428,014.24**
Work in progress				
Finished goods	1,317,483.88	1,932,753.26	1,101,199.73	**2,149,037.41**
Total	4,295,204.99	2,561,724.40	2,279,877.74	**4,577,051.65**

8. OTHER CURRENT ASSETS

Items	Closing balance	Opening balance
Value-added tax recoverable	**160,749,506.80**	163,631,254.87
A-share listing fees	–	10,841,934.89
Prepaid income tax	**19,619,956.29**	4,948,576.16
Prepaid rent	**3,985,718.10**	2,244,439.56
Prepaid import tax	**6,762,497.22**	–
Total	**191,117,678.41**	181,666,205.48

9. INVESTMENT PROPERTIES

Items	House and buildings	Land use rights	Total
I. Book value			
1. Opening and closing balance	27,486,623.54	7,525,892.36	35,012,515.90
II. Accumulated depreciation and accumulated amortization			
1. Opening balance	10,607,023.11	1,308,850.56	11,915,873.67
2. Amount increased in current period	633,932.04	81,803.16	715,735.20
(1) Provided or amortized	633,932.04	81,803.16	715,735.20
3. Closing balance	11,240,955.15	1,390,653.72	12,631,608.87
III. Book value			
1. Closing book value	16,245,668.39	6,135,238.64	22,380,907.03
2. Opening book value	16,879,600.43	6,217,041.80	23,096,642.23

10. FIXED ASSETS

Items	Houses and buildings	Machinery and equipment	Transportation equipment	Other equipment	Total
I. Book value					
1. Opening balance	946,525,109.71	2,395,005,308.27	44,142,732.40	42,552,058.29	3,428,225,208.67
2. Amount increased in the current period	5,666,455.05	520,008,397.80	860,188.83	675,642.21	527,210,683.89
(1) Purchase	2,297,830.00	7,959,147.01	860,188.83	287,146.76	11,404,312.60
(2) Transferred from construction in progress	3,368,625.05	512,049,250.79	–	388,495.45	515,806,371.29
3. Disposed in the current year	-33,649,765.00	-75,857,596.38	–	-98,558.90	-109,605,920.28
(1) Disposal or scrap	–	-40,633,849.55	–	-98,558.90	-40,732,408.45
(2) Transferred to construction in progress	-33,649,765.00	-35,223,746.83	–	–	-68,873,511.83
4. Closing balance	918,541,799.76	2,839,156,109.69	45,002,921.23	43,129,141.60	3,845,829,972.28
II. Accumulated depreciation					
1. Opening balance	265,554,787.55	911,588,984.41	34,652,108.10	34,966,460.13	1,246,762,340.19
2. Amount increased in the current year	21,426,531.95	110,060,149.38	1,444,487.84	1,445,818.91	134,376,988.08
(1) Provision	21,426,531.95	110,060,149.38	1,444,487.84	1,445,818.91	134,376,988.08
3. Amount decreased in the current year	-18,305,921.49	-58,678,868.12	–	-90,357.16	-77,075,146.77
(1) Disposal or scrap	–	-27,571,647.99	–	-90,357.16	-27,662,005.15
(2) Transferred to construction in progress	-18,305,921.49	-31,107,220.13	–	–	-49,413,141.62
4. Closing balance	268,675,398.01	962,970,265.67	36,096,595.94	36,321,921.88	1,304,064,181.50
III. Impairment provision					
1. Opening balance	–	15,186,992.83	–	–	15,186,992.83
2. Amount increased in the current period	–	–	–	–	–
3. Amount decreased in the current period	–	-11,347,436.14	–	–	-11,347,436.14
(1) Disposal or scrap	–	-11,347,436.14	–	–	-11,347,436.14
4. Closing balance	–	3,839,556.69	–	–	3,839,556.69
IV. Book value					
1. Closing balance of book value	649,866,401.75	1,872,346,287.33	8,906,325.29	6,807,219.72	2,537,926,234.09
2. Opening balance of book value	680,970,322.16	1,468,229,331.03	9,490,624.30	7,585,598.16	2,166,275,875.65

At the end of the current period, the fixed assets with a book value of RMB454,504,273.03 (end of the previous year: RMB704,633,006.14) were used as collateral for short-term borrowings and long-term borrowings.

(2) At the end of the period, the Group's temporarily idle fixed assets

Items	Book value	Accumulated depreciation	Impairment provision	Net book value
Closing balance – machinery and equipment	7,321,682.49	3,482,125.80	3,839,556.69	0.00

At the end of the current period, the Group's idle fixed assets included the fixed assets of the Company and its subsidiary, Zhejiang Jiafu. The Group considers that the above idle assets are no longer suitable for future production needs, and the management makes provision for impairment of related assets in accordance with the lower of the book value and the recoverable amount.

11. CONSTRUCTION IN PROGRESS

(1) Lising of items

Items	Closing balance	Opening balance
Construction in progress	951,972,608.20	961,085,108.63
Engineering materials	3,859,549.74	1,484,956.85
Total	955,832,157.94	962,570,065.48

(2) Construction in progress

a. Construction in progress

Items	Book balance	Closing balance Impairment provision	Book value
Annual production of 100,000 tons of online Low-E coated glass project	867,499.75	–	867,499.75
Anhui Flat annual output of 900,000 tons of PV cover glass project	511,531,535.36	–	511,531,535.36
Vietnam Flat PV glass production line	301,345,374.09	–	301,345,374.09
Jiafu Glass furnace and related production line (phase II) technical transformation project	30,029,975.94	–	30,029,975.94
Jiafu Glass furnace and related production line (phase I) technical transformation project	26,922,382.58	–	26,922,382.58
Annual production of 42 million square meters of PV backplane project	69,573,106.88	–	69,573,106.88
Others	11,702,733.60	–	11,702,733.60
Total	951,972,608.20	–	951,972,608.20

Items	Book balance	Closing balance Impairment provision	Book value
Annual production of 100,000 tons of online Low-E coated glass project	233,779,139.08	–	233,779,139.08
Anhui Flat annual output of 900,000 tons of PV cover glass project	298,196,483.75	–	298,196,483.75
Vietnam Flat PV glass production line	178,313,979.12	–	178,313,979.12
Jiafu Glass furnace and related production line (phase II) technical transformation project	243,211,965.08	–	243,211,965.08
Others	7,583,541.60	–	7,583,541.60
Total	961,085,108.63	–	961,085,108.63

b. Changes in major construction projects in progress in the current year

Project name	Budget	Opening amount	Increase in the current period	Transfer amount from fixed assets in the current period	Transfer amount into fixed assets in the current period	Closing amount	Project cumulative investment accounted for the proportion of the budget	Project progress	Accumulated amount of interest capitalization	Including: the amount of interest capitalization in the current year	Capitalization rate of interest in the current year	Sources of funds
Annual production of 100,000 tons of online Low-E coated glass project	264,173,863.38	233,779,139.08	28,394,724.30	–	261,306,363.63	867,499.75	99%	99%	14,780,562.38	2,698,536.96	5.47%	Self-funds/ special borrowings
Anhui Flat annual output of 900,000 tons of PV cover glass project	1,659,170,242.02	298,196,483.75	248,767,008.91	–	35,431,957.30	511,531,535.36	83%	83%	48,702,702.27	1,217,442.15	5.47%	Self-funds/ special borrowings
Vietnam Flat PV glass production line	1,200,000,000.00	178,313,979.12	123,031,394.97	–	–	301,345,374.09	25%	25%	51,498,826.98	12,030,924.54	5.47%	Self-funds/ special borrowings
JiaFu glass furnace and related production line (phase II) technical transformation project	250,901,657.01	243,211,965.08	5,689,691.93	–	218,871,681.07	30,029,975.94	99%	99%	4,957,264.58	995,379.10	5.47%	Self-funds/ special borrowings
JiaFu Glass furnace and related production line (phase I) technical transformation project	277,100,000.00	–	9,139,136.44	17,783,246.14	–	26,922,382.58	10%	10%	–	–	–	Self-funds
Annual production of 42 million square meters of PV backplane project	350,000,000.00	–	69,573,106.88	–	–	69,573,106.88	20%	20%	–	–	–	Self-funds

c. At the end of the period, there was no indication of impairment of the Group's construction in progress, so no provision for impairment was made.

(3) Engineering materials

Items	Closing balance	Opening balance
Others	3,859,549.74	1,484,956.85
Total	3,859,549.74	1,484,956.85

12. INTANGIBLE ASSETS

Items	Land use right	Emission rights	Mining rights	Software	Total
I. Book value					
1. Opening balance	435,525,905.74	29,742,062.45	232,964,000.00	403,931.63	698,635,899.82
2. Amount increased in the current period	38,480,195.00	–	–	–	38,480,195.00
3. Amount decreased in the current period	–	–	–	–	–
4. Exchange differences on foreign currency financial statements translation	-866,004.05	–	–	–	-866,004.05
5. Closing balance	473,140,096.69	29,742,062.45	232,964,000.00	403,931.63	736,250,090.77
II. Accumulated amortization					
1. Opening balance	49,787,856.36	20,013,713.96	91,662,768.80	361,709.45	161,826,048.57
2. Amount increased in the current period	5,164,173.90	1,679,588.67	8,808,045.68	6,031.75	15,657,840.00
(1) Provision	5,164,173.90	1,679,588.67	8,808,045.68	6,031.75	15,657,840.00
3. Amount decreased in the current period	–	–	–	–	–
4. Exchange differences on foreign currency financial statements translation	-37,359.55	–	–	–	-37,359.55
5. Closing balance	54,914,670.71	21,693,302.63	100,470,814.48	367,741.20	177,446,529.02
III. Book value					
1. Closing balance of book value	418,225,425.98	8,048,759.82	132,493,185.52	36,190.43	558,803,561.75
2. Opening balance of book value	385,738,049.38	9,728,348.49	141,301,231.20	42,222.18	536,809,851.25

At the end of the current period, the land use right with the net value of RMB151,455,232.67 (at the end of the last year: RMB136,560,872.89) was used for mortgages to obtain borrowings.

Note 1: Emission rights refer to payments made to the government agency, Jiaxing Emissions Trading Center, for the right to emit exhausted gas and wastewater. The relevant emission rights costs are calculated based on the emissions obtained by the Group. The emission rights are amortized over the useful lives of the straight-line method.

Note 2: Mining exploitation rights refer to the right of the Group to mine a quartz ore mine located in Fengyang County, Anhui Province, China. Mining rights are amortized on a production basis. The mine is operated by Anhui Flat Material. The local government granted the mining rights license for Anhui Flat Material from 2012 to 2022 for a period of ten years.

13. DEFERRED INCOME TAX

(1) Deferred tax assets before offsetting

Items	Closing balance Deductible temporary difference	Closing balance Deferred tax assets	Opening balance Deductible temporary difference	Opening balance Deferred tax assets
Provision for asset impairment	**8,416,608.34**	**1,291,432.80**	64,726,131.57	9,759,284.14
Credit impairment losses	**46,278,334.62**	**8,917,374.35**	46,133,507.53	8,828,035.06
Deferred revenue	**51,593,224.68**	**7,982,623.98**	57,293,229.59	8,998,040.35
Deductible losses	**43,351,058.26**	**10,837,764.56**	69,922,475.08	17,480,618.77
Depreciation difference for fixed assets	**25,365,130.85**	**3,804,769.63**	23,309,268.78	3,496,390.32
Total	**175,004,356.75**	**32,833,965.32**	261,384,612.55	48,562,368.64

(2) Deferred tax liabilities before offsetting

Items	Closing balance Taxable temporary differences	Closing balance Deferred tax liabilities	Opening balance Taxable temporary differences	Opening balance Deferred tax liabilities
Property revaluation arising from conversion to a joint stock company	**15,515,250.03**	**2,327,287.50**	15,724,226.99	2,358,634.05
Accelerated depreciation of fixed assets	**119,488,802.87**	**24,009,625.24**	125,895,155.53	26,262,610.67
Losses arising from changes of fair value	**2,280,345.00**	**331,756.33**	5,434,390.30	935,375.11
Total	**137,284,397.90**	**26,668,669.07**	147,053,772.82	29,556,619.83

(3) The net balances of deferred tax assets or liabilities after offsetting

Items	Offset amount of deferred tax assets and liabilities at the end of the period	Closing balance of deferred tax assets or liabilities after offsetting at the end of the period	Offset amount of deferred tax assets and liabilities at the beginning of the period	Opening balance of deferred tax assets or liabilities after offsetting at the end of the period
Deferred tax assets	26,668,669.07	6,165,296.25	29,556,619.83	19,005,748.81
Deferred tax liabilities	26,668,669.07	–	29,556,619.83	–

(4) Deductible losses and other temporary difference of unrecognized deferred tax asset

Items	Closing balance	Opening balance
Deductible losses	**18,488,875.04**	15,326,634.97
Others	**1,739,674.46**	1,949,519.22
Total	**20,228,549.50**	17,276,154.19

(5) The deductible losses of unrecognized deferred tax assets will expire in the following years:

Items	Closing balance	Opening balance
2019	**350,922.81**	350,922.81
2020	**2,070,947.48**	2,070,947.48
2021	**5,383,141.31**	5,383,141.32
2022	**2,253,828.56**	2,253,828.56
2023	**5,267,794.80**	5,267,794.80
2024	**3,162,240.07**	–
Total	**18,488,875.03**	15,326,634.97

14. OTHER NON-CURRENT ASSETS

Items	Book balance	Book value
Construction prepayment	120,332,124.77	120,332,124.77
Prepaid land deposit	1,136,444.65	1,136,444.65
Total	121,468,569.42	121,468,569.42

Items	Book balance	Book value
Construction prepayment	157,422,874.43	157,422,874.43
Land prepayment	37,206,500.00	37,206,500.00
Prepaid land deposit	1,141,907.61	1,141,907.61
Total	195,771,282.04	195,771,282.04

15. SHORT-TERM BORROWINGS

Items	Closing balance	Opening balance
Mortgaged borrowings	**562,081,356.08**	347,799,136.69
Bill discounting borrowings	**92,000,000.00**	57,600,000.00
Credit borrowings	**49,249,160.00**	45,000,000.00
Total	**703,330,516.08**	450,399,136.69

Note: For the types and amount of the asset of the secured borrowings, please refer to the notes "fixed assets" and "intangible assets".

At the end of the current year, the Group had no short-term borrowings that were overdue.

The annual interest rate of the above borrowings in this period is from 3.19% to 5.4%.

16. DERIVATIVE FINANCIAL LIABILITIES

Items	**Closing balance**	Opening balance
Derivative financial liabilities without specified hedging relationship	**630,448.14**	738,000.00
Including: Forward foreign currency contract	–	738,000.00
Foreign exchange option contract	**630,448.14**	–
Total	**630,448.14**	738,000.00

Unexpired forward foreign exchange contracts and foreign exchange option contracts are not designated as hedging instruments, and the gains or losses arising from changes in fair value are recognised directly in profit or loss in current period.

17. BILLS PAYABLES

Types	**Closing balance**	Opening balance
Bank acceptance bills	**469,119,483.10**	219,832,038.07
Total	**469,119,483.10**	219,832,038.07

The total amount of bills payables that were overdue at the end of the current period is nil.

18. TRADE PAYABLES

Listing of trade payables

Items	Closing balance	Opening balance
Trade payables	**946,796,817.15**	865,918,389.78
Construction costs payable	**374,381,425.15**	350,622,814.33
Total	**1,321,178,242.30**	1,216,541,204.11

Significant trade payables with ageing over 1 year

Items	Closing balance	Reasons of outstanding or carry-over
Construction costs payable	**29,867,859.59**	Project warranty has not yet expired and been repaid
Trade payables	**4,146,747.21**	The payable is for a product quality dispute, and payment will be made after the dispute is resolved
Total	**34,014,606.80**	/

Disclosed by ageing

Ageing	Closing balance
Within 1 year	**1,286,119,692.69**
1-2 years	**22,442,753.99**
2-3 years	**3,254,735.13**
Over 3 years	**9,361,060.49**
Total	**1,321,178,242.30**

19. PAYROLL PAYABLE

(1) Listing of payroll payable

Items	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
I. Short-term remuneration	25,298,494.96	120,926,648.84	126,867,918.67	19,357,225.13
II. Post-employment welfare – Defined contribution plan	927,499.24	7,963,627.32	8,891,126.56	–
Total	26,225,994.20	128,890,276.16	135,759,045.23	19,357,225.13

(2) Listing of short-term remuneration

Items	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
I. Wages or salaries, bonuses, allowances and subsidies	23,983,133.37	107,507,733.32	112,635,300.28	18,855,566.41
II. Staff welfare	–	4,060,874.94	4,060,874.94	–
III. Social insurance	695,211.15	4,846,325.59	5,541,536.74	–
Including: Medical insurance	570,254.01	4,274,353.35	4,844,607.36	–
Work-related injury insurance	92,839.24	318,288.12	411,127.36	–
Maternity insurance	32,117.90	253,684.12	285,802.02	–
IV. Housing funds	594,456.12	4,032,920.65	4,151,792.77	475,584.00
V. Labor union & education funds	25,694.32	478,794.34	478,413.94	26,074.72
Total	25,298,494.96	120,926,648.84	126,867,918.67	19,357,225.13

(3) Listing of defined contribution plan

Items	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
1. Basic pension insurance	895,381.34	7,711,576.99	8,606,958.33	–
2. Unemployment insurance	32,117.90	252,050.33	284,168.23	–
Total	927,499.24	7,963,627.32	8,891,126.56	–

Defined contribution plan:

The Group participates in pension insurance and unemployment insurance schemes established by government agencies as required. According to these schemes, the Group pays monthly fees to these plans at 14% and 0.5% of the employees' basic wages. Except for the above monthly paid fees, the Group does not undertake further payment obligations. The corresponding expenses are recognised in profit or loss in the period in which they are incurred.

During the period from 1 January to 30 June 2019, the Group should pay a total of RMB7,711,576.99 and RMB252,050.33 to the pension insurance and unemployment insurance schemes respectively. As of 30 June 2019, there were no payables that had been accrued but unpaid for the pension insurance and unemployment insurance schemes.

20. TAXES PAYABLE

Items	Closing balance	Opening balance
Enterprise income tax	**68,315,125.66**	67,983,107.06
VAT	**6,645,091.35**	2,901,890.85
Property tax	**1,821,132.98**	2,821,956.40
Individual income tax	**210,234.28**	230,036.31
Others	**7,694,421.88**	7,744,346.36
Total	**84,686,006.15**	81,681,336.98

21. OTHER PAYABLES

(1) Listing of items

Items	Closing balance	Opening balance
Interest payable	**931,183.58**	1,562,660.53
Dividend payable	**87,750,000.00**	
Other payables	**29,405,037.04**	37,118,720.98
Total	**118,086,220.62**	38,681,381.51

(2) Interest payable

Items	Closing balance	Opening balance
Interest for long-term borrowings with interest paid in installment and principal paid due to maturity	**676,823.49**	1,127,629.59
Interest payable for short-term borrowings	**254,360.09**	435,030.94
Total	**931,183.58**	1,562,660.53

(3) Dividend payable

Items	Closing balance	Opening balance
Ordinary share dividend	**87,750,000.00**	–
Total	**87,750,000.00**	–

(4) Listing of other payables by the nature of payments

Items	Closing balance	Opening balance
Warranty	**16,208,000.00**	20,660,000.00
Transportation premium	**8,192,338.24**	7,863,475.54
Intermediary agency service fee	–	3,441,917.50
Emissions rights purchase	**1,604,400.00**	1,604,400.00
Others	**3,400,298.80**	3,548,927.94
Total	**29,405,037.04**	37,118,720.98

At the end of the year, the Group had no other payables with an ageing of more than one year and a significant amount.

22. CONTRACT LIABILITIES

Items	Closing balance	Opening balance
Goods payment	**22,736,847.23**	14,042,379.21
Total	**22,736,847.23**	14,042,379.21

According to the contract, the Group shall deliver the products to the customer's designated location or the goods shall be picked up by the customer. The product is still controlled by the Group before the customer acceptance confirmation. Only when the customer receives the product and the qualified acceptance has been made, the control right of the product is transferred to the customer. The Group fulfills the performance obligations stipulated in the contract, and at this time, have the right to receive the contracted amount for the products provided, then the Group, at this point in time, recognise the income. When the customer initially purchases the goods, the Group will recognise the transaction price as the contract liabilities until the customer obtains control of the goods.

23. NON-CURRENT LIABILITIES DUE WITHIN ONE YEAR

Items	Closing balance	Opening balance
Long-term borrowings due within 1 year	**258,361,250.00**	188,738,000.00
Total	**258,361,250.00**	188,738,000.00

Note 1: The pledged assets of the pledge borrowings are the equity interest of Flat (Vietnam)

Note 2: For the types and amounts of secured assets of secured loans, please refer to the notes "fixed assets" and "intangible assets".

24. LONG-TERM BORROWINGS

Items	Closing balance	Opening balance
Pledged borrowings	**901,064,638.18**	956,433,985.82
Secured borrowings	**260,870,072.30**	221,743,426.79
Less: pledged borrowings due within 1 year	**257,801,250.00**	188,738,000.00
Less: secured borrowings due within 1 year	**560,000.00**	–
Total	**903,573,460.48**	989,439,412.61

The Group's floating rate borrowings and fixed rate borrowings are stated as follows:

Items	At the end of the current period	At the end of the last year
Fixed rate borrowings	**92,000,000.00**	57,600,000.00
Floating rate borrowings	**1,773,265,226.65**	1,570,976,549.30
Total	**1,865,265,226.65**	1,628,576,549.30
Including: short-term borrowings	**703,330,516.08**	450,399,136.69
Long-term borrowings due within 1 year	**258,361,250.00**	188,738,000.00
Long-term borrowings	**903,573,460.48**	989,439,412.61

25. DEFERRED REVENUE

Items	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
Government grants	58,576,554.71	–	6,983,330.03	**51,593,224.68**
Total	58,576,554.71	–	6,983,330.03	**51,593,224.68**

Liabilities projects	Opening balance	Increased amount for the period	Decreased amount for the period	Closing balance
Jiaxing City 2011 supported major investment item – TCO ultra-white conductive film project grant 1#Float Kiln	8,500,000.00	–	1,500,000.00	**7,000,000.00**
Zhejiang Finance Department 2011 industrial transformation and upgrading technical transformation grant – annual output of 170,000 tons of solar thin film battery ultra-white conductive film glass and deep processing project 1 #PV kiln	566,666.69	–	100,000.00	**466,666.69**
Jiaxing City 2011 industrial development fund grant-production of 170,000 tons of solar thin film battery ultra-white conductive film glass and deep processing project 1# photovoltaic kiln	566,666.69	–	100,000.00	**466,666.69**
Jiaxing City 2009 supported major investment items – TCO ultra-white conductive film project grant 1#Float Kiln	5,666,666.63	–	1,000,000.00	**4,666,666.63**
Jiaxing City 2012 first batch of industrial development fund grant-annual output of 170,000 tons of low – E glass and deep processing project 2# float kiln	733,333.14	–	100,000.01	**633,333.13**
Jiaxing City 2012 provincial energy-saving financial grant – 2 production lines of furnace flue gas waste heat utilization Phase II project with supporting construction of waste heat boilers and steam turbine generator sets	490,291.47	–	49,999.98	**440,291.49**

Liabilities projects	Opening balance	Increased amount for the period	Decreased amount for the period	Closing balance
Annual production of 15 million square meters of solar photovoltaic ultra-white glass expansion project	1,924,778.54	–	250,000.02	**1,674,778.52**
Jiaxing City 2012 first batch of industrial development fund grant – 2*600t/d glass melting furnace flue gas waste heat power generation first phase construction's technical transformation project	383,495.34	–	49,999.98	**333,495.36**
TCO ultra-white conductive film project grant	5,010,862.91	–	750,000.00	**4,260,862.91**
Jiaxing City 2012 first batch of industrial development fund subsidy – annual output of 15 million square meters of solar photovoltaic ultra-white glass project 1# photovoltaic kiln	2,450,494.85	–	250,000.02	**2,200,494.83**
2014 industrial transformation and upgrading items (central infrastructure investment) Flat Glass annual production of 5.8 million square meters LOW-E glass deep processing project	5,580,000.00	–	465,000.00	**5,115,000.00**
Glass melting furnace flue gas denitrification technology project grant	8,199,444.38	–	586,666.68	**7,612,777.70**
Annual production of 8 tons of high transparency optical reflection ultra-white photovoltaic glass grant	106,249.80	–	106,249.80	**0.00**
600T/D ultra-white thin special glass production line and its deep processing project grant	642,499.72	–	642,499.72	**0.00**
The second production line of a workshop and the second workshop project under construction grant	50,000.32	–	50,000.32	**0.00**
Jiaxing Finance Bureau 2011 glass melting furnace flue gas waste heat power generation project grant	1,849,999.80	–	185,000.26	**1,664,999.54**
The first phase of distributed PV project construction grant	5,018,400.00	–	167,280.00	**4,851,120.00**
The second phase of distributed PV project construction grant	1,413,760.71	–	46,607.52	**1,367,153.19**
Annual production of 5.8 million square meters LOW-E glass deep processing project	6,693,596.00	–	409,812.00	**6,283,784.00**
Annual production of 12 million square meters of high transparent photovoltaic glass project	2,729,347.72	–	174,213.72	**2,555,134.00**
Total	58,576,554.71	–	6,983,330.03	**51,593,224.68**

26. SHARE CAPITAL

	Opening balance	Increase or decrease for the period (+,-) New shares issued	Subtotal	**Closing balance**
Total shares	1,800,000,000.00	150,000,000.00	150,000,000.00	**1,950,000,000.00**

At the end of the current period, the Group issued a total of 1,950,000,000 shares with a par value of RMB0.25 per share and a total share capital of RMB487,500,000.00.

27. CAPITAL RESERVE

Items	Opening balance	Increase for the period	Decrease for the period	**Closing balance**
Share premium (Note)	622,230,162.41	216,884,951.00	–	**839,115,113.41**
Total	622,230,162.41	216,884,951.00	–	**839,115,113.41**

Note: In February 2019, with the approval of the China Securities Regulatory Commission, the Group publicly issued 150,000,000 ordinary shares (A shares) to the public, with a par value of RMB0.25 per share and the issue price of RMB2.00 per share. The total amount of proceeds were RMB300,000,000.00. After deducting the issuance expenses of RMB45,615,049.00, The actual net proceeds were RMB254,384,951.00, of which RMB37,500,00.00 was included in the share capital, and RMB216,884,951.00 was included in the capital reserve.

28. OTHER COMPREHENSIVE INCOME

Items	Opening balance	Amount incurred in the current period: Amount before income tax incurred in the current period	Less: Amount previously recognised as other comprehensive income and transferred to profit or loss in current period	Less: Income tax expense	Amount attributable to the Company after income tax	Amount attributable to minority shareholders after income tax	**Closing balance**
I. Other comprehensive income that will not be reclassified into profit or loss afterwards							
II. Other comprehensive income that will be reclassified into profit or loss afterwards	-4,685,190.57	-2,216,364.96	–	–	-2,216,364.96	–	**-6,901,555.53**
Exchange differences on foreign currency financial statements translation	-4,685,190.57	-2,216,364.96	–	–	-2,216,364.96	–	**-6,901,555.53**
Total other comprehensive income	-4,685,190.57	-2,216,364.96	–	–	-2,216,364.96	–	**-6,901,555.53**

29. SPECIAL RESERVE

Items	Opening balance	Increase in the current period	Decrease in the current period	**Closing balance**
Safety production costs	9,425,627.41	1,495,914.40	–	**10,921,541.81**
Total	9,425,627.41	1,495,914.40	–	**10,921,541.81**

30. SURPLUS RESERVE

Items	Opening balance	Increase in the current period	Decrease in the current period	**Closing balance**
Statutory surplus reserve	168,158,907.37	–	–	**168,158,907.37**
Total	168,158,907.37	–	–	**168,158,907.37**

Surplus reserve is accrued according to the Company's articles of association or with the approval from the Board. The statutory surplus reserve can be used to cover the Company's losses or to increase the share capital.

31. UNDISTRIBUTED PROFIT

Items	**Current period**	Last period
Undistributed profit of the last year before adjustments	**2,423,524,157.41**	2,043,097,189.89
Add: Net profit attributable to owners of the Company in the current period	**261,419,486.90**	212,885,131.10
Less: Accrual of statutory surplus reserves		
Dividends payable on common stock	**87,750,000.00**	–
Closing balance of the undistributed profit	**2,597,193,644.31**	2,255,982,320.99

Note 1: According to the resolution related to the 2018 profit distribution made by the shareholders' meeting of the Group in June 2019, a profit of RMB87,750,000.00 was distributed to the shareholders of the Group.

Note 2: Resolution of profit distribution after the balance sheet date

According to the proposal of the Board of the Company on 26 August 2019, based on the issued shares of 1,950,000,000 shares (with a par value of RMB0.25 per share), it is proposed to distribute 2019 interim cash dividends of RMB0.027 to all shareholders per shares, totaling RMB52,650,000.00. The above dividend distribution plan is subject to approval by the shareholders' meeting.

32. OPERATING REVENUE AND OPERATING COST

Items	Amount for the period Revenue	Amount for the period Cost	Amount for last period Revenue	Amount for last period Cost
Main business	**2,026,097,233.99**	**1,457,262,001.92**	1,447,577,083.09	1,037,204,082.07
Other business	**8,538,335.49**	**4,536,656.67**	14,834,649.01	6,934,198.23
Total	**2,034,635,569.48**	**1,461,798,658.59**	1,462,411,732.10	1,044,138,280.30

Contract classification	**Items**	**Total**
By source of revenue		
	China	1,363,738,371.40
	Asia (excluding China)	415,288,682.09
	Europe	100,015,515.20
	North America	140,772,415.32
	Others	14,820,585.47
By types of products		
	PV glass	1,532,092,856.04
	Float glass	98,360,649.76
	Household glass	163,687,639.85
	Architectural glass	202,001,643.82
	Mining business	29,954,444.52
	Other business	8,538,335.49

Performance obligations:

The Group's main business activities are the production and sales of glass products. The Group shall ship the product to the customer's designated location or the product shall be picked up by the customer. The product is still controlled by the Group before the customer's acceptance confirmation. Only when the customer receives the product and the qualified acceptance is made, the control of the product is transferred to the customer and the Group recognises the revenue. After the customer makes the acceptance, the customer has full rights to decide the selling manner and price of the goods, and assumes the primary responsibility and the risk of loss associated with the goods. The Group requires dealer customers to fully prepay the purchase payment before the delivery of the goods, and the normal credit period for direct sales customers is 30 to 120 days after the acceptance of the goods.

The estimated contract period of the Group's sales contract does not exceed one year, so the transaction price allocated to the remaining performance obligation is not disclosed.

33. TAXES AND SURCHARGES

Items	Amount for the period	Amount for last period
Urban maintenance and construction tax	**2,061,775.57**	3,452,431.74
Educational surcharges	**1,533,853.28**	2,718,416.36
Property tax	**2,562,383.46**	1,840,722.14
Resource tax	**2,300,174.29**	2,268,840.73
Land use tax	**2,128,000.66**	2,697,165.16
Stamp duty	**711,227.40**	587,106.42
Environmental protection tax	**817,051.01**	943,906.93
Special fund for water conservancy construction	**471,612.32**	–
Others	**14,484.04**	134,210.08
Total	**12,600,562.03**	14,642,799.56

34. SELLING EXPENSES

Items	Amount for the period	Amount for last period
Transportation expenses	**86,164,273.79**	37,904,823.27
Advertising expenses	**3,085,882.26**	2,847,244.66
Employee compensation and welfare	**4,395,005.53**	4,011,220.87
Depreciation and amortization	**32,892.48**	87,420.94
Others	**2,309,088.04**	2,841,935.25
Total	**95,987,142.10**	47,692,644.99

35. ADMINISTRATIVE EXPENSES

Items	Amount for the period	Amount for last period
Employee remuneration and benefits	**22,529,396.96**	27,852,375.05
Depreciation and amortization	**6,838,886.70**	6,726,293.35
Greening and environmental protection costs	**3,218,462.56**	2,851,530.44
Labor costs	**1,524,653.23**	2,669,081.74
Office expenses	**2,722,780.39**	2,069,978.79
Travelling expenses	**1,253,941.23**	1,662,133.15
Intermediary agency service fee	**5,077,513.68**	1,338,900.63
Transportation expenses	**571,734.73**	1,105,195.16
Repair and maintenance fee	**494,261.25**	297,538.88
Others	**8,085,264.47**	7,002,125.44
Total	**52,316,895.20**	53,575,152.63

36. RESEARCH AND DEVELOPMENT EXPENSES

Items	Amount for the period	Amount for last period
Employee remuneration and benefits	**25,661,075.86**	17,362,911.15
Direct material costs	**70,117,771.56**	27,660,597.86
Depreciation and amortization	**8,484,933.88**	4,630,488.64
Others	**127,223.31**	164,403.82
Total	**104,391,004.61**	49,818,401.47

37. FINANCE EXPENSES

Items	Amount for the period	Amount for last period
Borrowing interest expenses	**31,390,102.09**	7,241,075.90
Less: Interest income	**10,546,044.12**	8,212,762.07
Handling fee	**718,331.28**	730,992.69
Exchange gains and losses	**3,091,022.95**	10,035,417.26
Total	**24,653,412.20**	9,794,723.78

38. OTHER REVENUES

Items	Amount for the period	Amount for last period
Distributed PV power generation project grant	**4,492,914.25**	3,991,891.42
Deferred income amortization	**6,983,330.03**	7,198,054.27
Social security fee refund income	**8,594,214.92**	–
Total	**20,070,459.20**	11,189,945.69

39. INVESTMENT INCOME

Items	Amount for the period	Amount for last period
1. Derivative tools without the specified hedging relationship	**6,939,596.25**	-14,344,232.06
Currency swap contract investment losses	–	-15,686,477.18
Interest rate swap swap contract investment losses	–	-932,843.80
Forward foreign exchange contract investment income	**6,498,339.95**	2,275,088.92
Foreign exchange option contract investment income	**441,256.30**	–
2. Loss of gold leases and forward contracts measured at fair value	–	–
Total	**6,939,596.25**	-14,344,232.06

40. GAINS AND LOSSES ARISING FROM CHANGES IN FAIR VALUE

Items	Amount for the period	Amount for last period
1. Derivative tools without the specified hedging relationship	–	10,734,789.41
Gains and losses arising from changes in fair value of forward foreign exchange contracts	**-1,687,550.16**	307,926.50
Gains and losses arising from changes in fair value of foreign exchange option contracts	**-630,448.14**	–
Gains and losses arising from changes in fair value of currency swap contract	–	7,292,000.00
Gains and losses arising from changes in fair value of interest rate swap contract	**-836,047.00**	3,134,862.91
Total	**-3,154,045.30**	10,734,789.41

41. CREDIT IMPAIRMENT LOSSES

Items	Amount for the period	Amount for last period
Bad debt losses of trade receivables	**-5,414,248.54**	-7,063,601.33
Bad debt losses of other receivables	**-108,000.00**	–
Total	**-5,522,248.54**	-7,063,601.33

42. ASSET IMPAIRMENT LOSSES

Items	Amount for the period	Amount for last period
Inventory impairment losses	**-281,846.65**	-1,108,300.26
Total	**-281,846.65**	-1,108,300.26

43. GAINS ON DISPOSAL OF ASSET DISPOSAL

Items	Amount for the period	Amount for last period
Gains on disposal of fixed assets	**4,957,747.21**	–
Losses on disposal of fixed assets	**-3,521,426.91**	-143,932.45
Total	**1,436,320.30**	-143,932.45

44. NON-OPERATING INCOME

Items	Amount for the period	Amount for last period	Non-recurring profits and losses in the current period
Government grants	**6,797,702.98**	3,025,040.00	6,797,702.98
Others	**1,278,199.35**	2,606,703.56	1,278,199.35
Total	**8,075,902.33**	5,631,743.56	8,075,902.33

Grant items	Amount for the period	Amount for last period	Related to assets/ related to revenue
A-share listing application acceptance grant	–	1,000,000.00	Revenue
Participation of the development of national standard grant	–	800,000.00	Revenue
Land use tax grant	**4,073,800.00**	670,300.00	Revenue
Mayor Quality Award	**500,000.00**	–	Revenue
Advanced enterprises and advanced groups	**170,000.00**	–	Revenue
Economic transformation promotion reward	**386,000.00**	–	Revenue
Special fund for the construction of new materials industry	**1,400,000.00**	–	Revenue
Top ten private enterprises in Fengyang County	**100,000.00**	–	Revenue
Others	**167,902.98**	554,740.00	Revenue
Total	**6,797,702.98**	3,025,040.00	–

45. NON-OPERATING EXPENSES

Items	Amount for the period	Amount for last period	Non-recurring profits and losses in the current period
External donations	**45,000.00**	5,000.00	45,000.00
Others	**236.23**	35,975.12	236.23
Total	**45,236.23**	40,975.12	45,236.23

46. INCOME TAX EXPENSE

Items	Amount for the period	Amount for last period
Current period income tax expenses	**38,210,437.67**	31,288,213.91
Income taxes made over (refunded) for the last year	**-2,063,581.01**	-831,267.20
Deferred income tax expenses	**12,840,452.55**	4,263,089.00
Total	**48,987,309.21**	34,720,035.71

Reconciliation between income tax expense and accounting profit is as follows:

Items	Amount for the period
Total profits	**310,406,796.11**
Income tax expense calculated at tax rate of 15%	**46,561,019.44**
Effect of subsidiaries to adapt different tax rates	**19,050,704.64**
Effect of non-deductible costs, expenses and losses	**84,774.30**
Effect on makeover (refund) of the income tax for last period	**-2,063,581.01**
Tax effect on tax incentives	**922,374.50**
Effect of deductible temporary difference or deductible losses of unrecognized deferred tax assets in the period	**632,448.01**
Effect on research and development costs plus deduction	**-14,355,681.68**
Income tax expenses	**48,987,309.21**

47. ITEMS IN CASH FLOW STATEMENT

(1) Other cash received and related to business activities

Items	Amount for the period	Amount for last period
Government grants related to income	**57,034,832.15**	7,016,931.42
Interest income	**10,546,044.12**	6,393,211.84
Operating margin	**100,000.00**	700,000.00
Commission	**45,000.00**	262,500.00
Others	**1,538,199.35**	51,148.00
Total	**69,264,075.62**	14,423,791.26

(2) Other cash paid and related to operating activities

Items	Amount for the period	Amount for last period
Paid fees	**189,202,328.74**	91,707,342.95
Bank handling charge	**718,331.28**	730,992.69
External donation expenditure	**45,000.00**	5,000.00
Operating margin	**310,000.00**	550,000.00
Others	**181,741.86**	286,992.07
Total	**190,457,401.88**	93,280,327.71

(3) Other cash received and related to investment activities

Items	Amount for the period	Amount for last period
Recovery of restricted monetary funds	**49,871,478.46**	28,646,281.22
Project margin	**438,000.00**	1,810,692.52
Total	**50,309,478.46**	30,456,973.74

(4) Other cash paid and related to investment activities

Items	Amount for the period	Amount for last period
Cash paid for investment losses	**65,200.00**	16,619,320.98
Project margin	**4,990,000.00**	8,250,000.00
Payment of restricted monetary funds	**63,990,462.60**	72,519,203.47
Total	**69,045,662.60**	97,388,524.45

(5) Other cash received and related to fundraising activities

Items	Amount for the period	Amount for last period
Recovery of restricted monetary funds	**107,801,794.57**	221,061,646.37
Loan interest subsidy	**–**	5,000,000.00
Total	**107,801,794.57**	226,061,646.37

(6) Other cash paid and related to fundraising activities

Items	Amount for the period	Amount for last period
Payment of restricted monetary funds	**146,616,763.58**	157,302,618.09
A-share listing fee	**1,773,114.11**	1,706,539.84
Total	**148,389,877.69**	159,009,157.93

48. SUPPLEMENTARY INFORMATION FOR CASH FLOW STATEMENT

(1) Supplementary information for cash flow statement

Supplementary information	Amount for the period	Amount for last period
(1) Adjust net profit to cash flow from operating activities		
Net profit	**261,419,486.90**	212,885,131.10
Add: asset impairment provision (reversal)	**281,846.65**	1,108,300.26
Credit impairment losses	**5,522,248.54**	7,063,601.33
Investment property amortization	**715,735.20**	715,735.20
Depreciation of fixed assets	**134,376,988.08**	105,433,862.32
Amortization of intangible assets	**15,657,840.00**	22,215,849.26
Losses for disposal of fixed assets, intangible assets and other long-term assets	**-1,436,320.30**	143,932.45
Fair value change gains (losses)	**3,154,045.30**	-10,734,789.41
Financial expenses	**31,390,102.09**	7,241,075.90
Investment loss	**-6,939,596.25**	14,344,232.06
Decrease in deferred income tax assets (less: increase)	**12,840,452.56**	4,263,089.00
Decrease in inventory (less: increase)	**-95,100,961.92**	-109,865,042.92
Decrease of operating receivables (less: increase)	**-655,258,882.75**	-122,523,599.88
Increase in operating coping projects (less: decrease)	**408,183,008.29**	42,427,837.34
Deferred income amortization	**-6,983,330.03**	-7,198,054.27
Increase in special reserve (less: decrease)	**–**	-212,182.32
Net cash flow from operating activities	**107,822,662.36**	167,308,977.42
(2) Net changes in cash and cash equivalents		
Closing balance of cash	**543,526,294.24**	956,827,111.42
Less: opening balance of cash	**528,750,004.08**	949,647,190.42
Net increase (decrease) in cash and cash equivalents	**14,776,290.16**	7,179,921.00

(2) Component of cash and cash equivalents

Items		Closing balance	Opening balance
1.	**Cash**	**543,526,294.24**	528,750,004.08
	Inclouding: Cash on hand	**23,414.54**	17,627.09
	Blank deposit available for payment	**543,502,879.70**	528,732,376.99
	Other monetary funds available for payment	**–**	–
2.	**Cash equivalents**		
	Cash and cash equivalents at the end of the year	**543,526,294.24**	528,750,004.08

49. ASSETS WITH RESTRICTED OWNERSHIP OR USE RIGHTS

Items	Book value at the end of the year	Reasons for restriction
Monetary funds	207,202,922.80	Bills deposits,etc.
Bills receivable	92,000,000.00	Pledged to bank to obtain discount
Fixed assets	454,504,273.03	Pledged to bank to obtain credit facilities
Intangible assets	151,455,232.67	Pledge to bank to obtain credit facilities
Total	905,162,428.50	

50. FOREIGN CURRENCY MONETARY ITEMS

Items	Closing balance in foreign currency	Translation exchange rate	Closing balance translated in RMB
Cash at bank and on hand			
Including: USD	41,870,385.83	6.8747	287,846,341.47
EUR	2,071,908.52	7.8170	16,196,108.90
JPY	55,026,361.00	0.0638	3,511,562.25
HKD	17,640.35	0.8797	15,517.51
GBP	4,069.29	8.7113	35,448.81
VND	5,106,518,531.00	0.0003	1,420,609.12
CHF	1,234,408.57	7.0388	8,688,755.04
Total			317,714,343.10
Trade receivables			
Including: USD	41,298,310.16	6.8747	283,913,492.86
EUR	829,446.98	7.8170	6,483,787.04
JPY	10,483,155.00	0.0638	668,993.02
Total			291,066,272.92
Trade receivables			
Including: USD	2,818,422.35	6.8747	19,375,807.89
EUR	341,775.00	7.8170	2,671,655.18
JPY	10,113,952.00	0.0638	645,431.96
VND	1,688,392,851.00	0.0003	496,883.32
Total			23,189,778.35
Other receivables			
Including: HKD	3,970.00	0.8797	3,492.25
VND	134,940,197.00	0.0003	39,882.78
Total			43,375.03
Borrowings			
Including: USD	145,069,660.78	6.8747	997,310,396.93
GBP	985,525.39	8.7113	8,585,207.33
Total			1,005,895,604.26

51. GOVERNMENT GRANTS

Types	Amounts	Listed items	Amounts included into current period profit or loss
Land use tax grant	4,073,800.00	Non-operating revenue	4,073,800.00
Natural gas grant	34,280,000.00	Operating costs	34,280,000.00
Borrowing interest grant	2,870,000.00	Financial costs	2,870,000.00
Distributed PV power generation project grant	4,492,914.25	Other revenues	4,492,914.25
Mayor Quality Award	500,000.00	Non-operating revenue	500,000.00
Government social insurance grant	8,594,214.92	Other revenues	8,594,214.92
Advanced enterprises and advanced groups	170,000.00	Non-operating revenue	170,000.00
Economic transformation promotion reward	386,000.00	Non-operating revenue	386,000.00
Special fund for the construction of new materials industry	1,400,000.00	Non-operating revenue	1,400,000.00
Top ten private enterprises in Fengyang County	100,000.00	Non-operating revenue	100,000.00
Others	167,902.98	Non-operating revenue	167,902.98
Total	57,034,832.15		57,034,832.15

Risks Related to Financial Instruments

The Company faces various financial risks in its business operations: credit risk, market risk and liquidity risk. Major financial instruments of the Group include: cash at bank and on hand, derivative financial asset, bills receivables and trade receivables, other receivables, derivative financial liabilities, bills payable and trade payables, and other receivables and borrowings. For the specific details of each financial instrument, please refer to the relevant items in the Note. The risks related to financial instruments and the risk management policies for risk mitigation of the Group are stated as following. The management of the Company will management and supervise these risk exposures in order to ensure that the risks mentioned above are controlled within a restricted range.

1. RISK MANAGEMENT OBJECTIVES AND POLICIES

The risk management objectives of the Group are to obtain an appropriate balance between risk and return, to reduce negative effects caused by operating results to a lowest level, and to maximize interest of shareholders and other equity investors. Based on these objectives, the basic strategies are to confirm and analyze all potential risks related to the Group, to set appropriate risk limitations, to manage and monitor all risks timely and effectively, and to control the risks within a limited scope.

1.1 Credit risk

The Group's business has caused its financial risks due to the changes in interest rates and foreign exchange rates. The Group believes that the above risks during the year or the manner in which they are managed and measured have not been changed compared to the previous period.

1.1.1 Foreign exchange risk

Foreign exchange risk refers to the risk of loss arising from the losses in exchange rate. The operating economic environment of the Company and its major subsidiaries is China and Vietnam whose functional currencies are RMB and VND. Some of the Group's transactions are settled in currencies other than functional currencies such as USD, EUR, JPY, HKD and GBP, and are subject to the resulting foreign exchange risk. Related foreign currency assets and foreign currency liabilities include: cash at bank and on hand, trade receivables, other receivables, trade payables, other payables and short-term borrowings. The amount of foreign currency financial assets and foreign currency financial liabilities converted into RMB is shown in Note 7.

The Group closely monitors exchange rate movements and formulates relevant hedging policies to reduce foreign exchange risk. Foreign exchange forward contracts can be used to eliminate foreign exchange risk. At the end of the period, the foreign exchange risk faced by the Company mainly comes from financial assets and financial liabilities denominated in USD. The amount of foreign currency financial assets and foreign currency financial liabilities converted into RMB is shown in the Foreign Currency Monetary Items in this Note.

1.1.2 Interest rate risk

The Group's risks to the changes in fair value of financial instruments arising from changes in interest rates is primarily related to fixed-rate borrowings. The Group's risks to the changes in cash flows of financial instruments arising from changes in interest rates is primarily related to floating rate bank borrowings and floating rate bank deposits. The management of the Group closely monitors interest rate risk and uses interest rate swap contracts to hedge interest rate risk.

1.2 Credit risk

As of 30 June 30 2019, the maximum credit risk exposure that may cause the Group's financial losses mainly comes from the loss of the financial assets of the Group caused by the failure of the other party to perform its obligations, which is the recognized carrying amount of the financial assets in the consolidated balance sheet. The Group does not hold any collateral or other credit enhancements to cover the credit risk associated with financial assets.

In order to reduce credit risk, the Group has established a team responsible for determining the credit limits and conducting credit approval. Before accepting new customers, the Group uses an internal rating system to evaluate and regularly review potential customers' credit quality and credit limits. At the same time, the Group performs other monitoring procedures to ensure that necessary measures are taken to recover overdue claims. In addition, the Group uses the expected credit losses model to separately assess impairments for trade receivables in accordance with the Accounting Standards for Business Enterprises, and/or to assess impairments in group with similar credit risk. As a result, the management of the Group believes that the credit risk assumed by the Group has been significantly reduced.

The Group's bank deposits have a risk of credit concentration. However, the Group believes that the credit risk of bank balances is low because most of the counterparties are state-owned banks with good reputation, or banks with good credit ratings and good reputation from international credit rating agencies.

1.3 Liquidity risk

In managing the liquidity risk, the Group maintains and monitors the cash and cash equivalents that the management considers adequate to meet the Group's operational needs and mitigate the impact of fluctuations in cash flows. The management of the Group closely monitors the liquidity situation and expects to have sufficient sources of financing to finance the Group's operations. The management of the Group believes that the Group does not have any significant liquidity risk.

2. TRANSFER OF FINANCIAL ASSETS

Financial assets transferred but not derecognised as a whole

The Group discounts the bank acceptance note to the bank. If the bank acceptance note fails to be accepted, the discounting bank has the right to request the Group to pay the unsettled balance. As the Group still bears the main risks such as credit risk associated with these bank acceptance notes, the Group continues to fully recognize the book value of the bills receivable and recognizes the amount received as a result of the transfer as a borrowing of the discounted note. On 30 June 2019 and 31 December 2018, the balances of the borrowings for the relevant discounted notes were RMB92,000,000.00 and RMB57,600,000.00 separately.

The Group endorses bank acceptance notes and commercial acceptance bills. If the bank acceptance note or commercial acceptance bill fails to be accepted, the endorser has the right to request the Group to pay the unsettled balance. As the Group still bears the main risks such as credit risk associated with these bank acceptance notes or commercial acceptance bills, the Group continues to fully recognize the book value of bills receivable and recognizes the payments received as a result of the transfer as trade payables. On 30 June 2019 and 31 December 2018, the balances of the recognized relevant trade payables were RMB820,242,700.87 and RMB642,304,874.02 separately.

Interest in Subsidiaries

Name of subsidiary	Main business place	Registration place	Business nature	Shareholding percentage and voting percentage (%) at 30 June 2019		Acquisition method
				Direct	Indirect	
Zhejiang Flat Glass Co., Ltd.	Zhejiang	Zhejiang	Engaged in the manufacture and sale of architectural or household glass products	100.00	–	Established
Zhejiang Jiafu Glass Co., Ltd.	Zhejiang	Zhejiang	Manufacture and sale of photovoltaic glass	100.00	–	Established
Shanghai Flat Glass Co., Ltd.	Shanghai	Shanghai	Architectural glass processing	100.00	–	Established
Anhui Flat Solar Glass Co., Ltd.	Anhui	Anhui	Manufacture, process and sale of specialty glass	100.00	–	Established
Anhui Flat Solar Materials Co., Ltd.	Anhui	Anhui	Mine operations and quartz ore sales	100.00	–	Established
Flat (Hong Kong) Co., Limited	Zhejiang	Hong Kong	Glass exportation	100.00	–	Established
Jiaxing Flat New Energy Technology Co., Ltd.	Zhejiang	Zhejiang	Investment, construction, operation and maintenance of new energy power plants	100.00	–	Established
Flat (Vietnam) Company Limited	Vietnam	Vietnam	Manufacture and sale of PV glass	–	100.00	Established
Flat (Hong Kong) Investment Limited	Hong Kong	Hong Kong	Investment	–	100.00	Established

Disclosure of Fair Value

(1) FAIR VALUE OF THE CLOSING BALANCE OF ASSETS AND LIABILITIES MEASURED AT FAIR VALUE

Items	Fair value of the Closing balance			
	The first level of fair value measurement	The second level of fair value measurement	The third level of fair value measurement	Total
I. Continuous fair value measurement				
(1) Financial assets measured at fair value through profit or loss				
1. Derivative financial asset without the specified hedging relationship		**2,910,793.14**		**2,910,793.14**
Total assets that continue to be measured at fair value		**2,910,793.14**		**2,910,793.14**
II.Trading financial assets				
1. Derivative financial liabilities without the specified hedging relationship		**630,448.14**		**630,448.14**
Total liabilities that continue to be measured at fair value		**630,448.14**		**630,448.14**

(2) VALUATION TECHNIQUES AND QUALITATIVE AND QUANTITATIVE INFORMATION ON IMPORTANT PARAMETERS ADOPTED FOR THE SECOND LEVEL OF CONTINUOUS AND NONCONTINUOUS FAIR VALUE MEASUREMENT

Items	Fair value Closing balance	 Opening balance	Fair value level	Fair value measurement basis/ valuation method and main input value
1) Derivative financial instruments formed by forward foreign exchange contracts	Financial assets 527,493.81	Financial assets 2,953,043.97 Financial liabilities 738,000.00	Second level	Discounted cash flow method Future cash flows are based on forward exchange rates (predictable forward exchange rates at the end of the reporting period) and contract forward rates, as well as discount rates that reflect the credit risk of different trading counterparties.
2) Derivative financial instruments formed by foreign exchange option contracts	Financial liabilities 630,448.14		Second level	Discounted cash flow method Future cash flows are based on forward exchange rates (predictable forward exchange rates at the end of the reporting period) and contract forward rates, as well as discount rates that reflect the credit risk of different trading counterparties.
3) Derivative financial instruments formed by interest rate swap contracts	Financial assets 2,383,299.33	Financial assets 3,219,346.33	Second level	Discounted cash flow method Future cash flows are based on forward exchange rates (predictable forward exchange rates at the end of the reporting period) and contract forward rates, as well as discount rates that reflect the credit risk of different trading counterparties.

(3) FAIR VALUE OF FINANCIAL ASSETS AND FINANCIAL LIABILITIES NOT MEASURED AT FAIR VALUE

The book value of financial assets and financial liabilities that the Group does not consider to be measured at fair value is similar to the fair value.

Related Parties and Related Party Transactions

1. OTHER RELATED PARTIES

Enterprise name	Relationship with the connected party
Jiaxing Yihe Machinery Co., Ltd.	Controlled by one of the actual controllers of the Company
Fengyang Hongding Port Co., Ltd.	Controlled by one of the actual controllers of the Company

2. RELATED PARTY TRANSACTIONS

Sales of goods

Related party	Content of the related party transaction	Amount for the period	Amount for last period
Jiaxing Yihe Machinery Co., Ltd.	Sales of engineering glass	**11,698.89**	–

Related lease

Related party	Content of the related party transaction	Amount for the period	Amount for last period
Jiaxing Yihe Machinery Co., Ltd.	House lease	**2,152,386.12**	2,258,724.71
Fengyang Hongding Port Co., Ltd.	Pier lease	**412,844.04**	–

Remuneration of key management personnel

Items	Amount for the period	Amount for last period
Remuneration of key management personnel	**3,010,509.35**	3,061,825.28

3. AMOUNTS DUE TO/FROM RELATED PARTIES

Items	Related parties	Closing balance	Opening balance
Trade receivables	Jiaxing Yihe Machinery Co., Ltd.	**1,453,110.99**	1,439,540.28
Other current assets	Jiaxing Yihe Machinery Co., Ltd.	**2,597,172.60**	2,199,289.07
Other current assets	Fengyang Hongding Port Co., Ltd.	**1,350,000.00**	–

Significant Matters of Commitments

1. OPERATING LEASE

As of the balance sheet date, the irrevocable operating lease contracts signed by the Group are as follows:

		RMB'000
	Closing balance	**Opening balance**
Minimum lease payments for non-cancellable operating leases:		
1 year after the balance sheet date	107	4,449
1-2 years after the balance sheet date	–	21
2 years after the balance sheet date	–	–
Total	107	4,470

2. CAPITAL COMMITMENT

As of the balance sheet date, the irrevocable purchase of long-term assets contracts signed by the Group is as follows:

		RMB'000
	Closing balance	**Opening balance**
Contracted but not confirmed in the financial statements		
Purchase and build long-term asset commitments	577,248	1,014,430

OTHER SIGNIFICANT MATTERS – SEGMENT INFORMATION

(1) Determination basis and accounting policy of segment report

According to the internal organizational structure, management requirements and internal reporting system of the Group, the Group's operating activities are divided into five operating segments. Based on the operating segments, the Group has identified five reporting segments, namely the PV glass segment, the household glass segment, architectural glass segment, float glass segment and mining products segment. These reporting segments are based on product categories. The main products provided by each of the Group's reporting segments are PV glass, household glass, architectural glass, float glass and mining products. The management of the Group regularly evaluates the operating results of these segments to determine the resources to be allocated to them and to evaluate their performance. The evaluation does not include the review of the assets and liabilities of the operating segments.

The segment reporting information is disclosed in accordance with the accounting policies and measurement standards adopted by each segment when reported to management, and is recognized and measured according to the PRC accounting standards.

(2) Financial information of the report segment

	Amount for the period								
	PV glass	Household glass	Architectural glass	Float glass	Mining products	Others	Unallocated items	Mutual offset among segments	Total
Operating revenue									
External transaction revenue	1,532,092,856.04	163,687,639.85	202,001,643.82	98,360,649.76	29,954,444.52	8,538,335.49			2,034,635,569.48
Segment revenue									
Total segment operating revenues	1,532,092,856.04	163,687,639.85	202,001,643.82	98,360,649.76	29,954,444.52	8,538,335.49	–	–	2,034,635,569.48
Operating costs	1,091,331,013.28	118,013,634.42	154,826,675.24	80,768,991.28	12,321,687.70	4,536,656.67			1,461,798,658.59
Segment operating profit	440,761,842.76	45,674,005.43	47,174,968.58	17,591,658.48	17,632,756.82	4,001,678.82	–	–	572,836,910.89
Adjusted items:									
Less: Taxes and surcharges	–	–	–	–	–	–	12,600,562.03	–	12,600,562.03
Selling expenses	–	–	–	–	–	–	95,987,142.10	–	95,987,142.10
General and administrative expenses	–	–	–	–	–	–	52,316,895.20	–	52,316,895.20
Research and development expenses	–	–	–	–	–	–	104,391,004.61	–	104,391,004.61
Financial expenses	–	–	–	–	–	–	24,653,412.20	–	24,653,412.20
Including: Interest expense	–	–	–	–	–	–	31,390,102.09	–	31,390,102.09
Interest income	–	–	–	–	–	–	10,546,044.12	–	10,546,044.12
Add: other income	–	–	–	–	–	–	20,070,459.20	–	20,070,459.20
Investment income	–	–	–	–	–	–	6,939,596.25	–	6,939,596.25
Profit (losses) arising from changes in fair value	–	–	–	–	–	–	-3,154,045.30	–	-3,154,045.30
Credit impairment losses	–	–	–	–	–	–	-5,522,248.54	–	-5,522,248.54
Capital impairment losses	–	–	–	–	–	–	-281,846.65	–	-281,846.65
Losses on disposal of assets	–	–	–	–	–	–	1,436,320.30	–	1,436,320.30
Operating profit	440,761,842.76	45,674,005.43	47,174,968.58	17,591,658.48	17,632,756.82	4,001,678.82	-270,460,780.88	–	302,376,130.01
Add: Non-operating income	–	–	–	–	–	–	8,075,902.33	–	8,075,902.33
Less: Non-operating expenses	–	–	–	–	–	–	45,236.23	–	45,236.23
Total profit	440,761,842.76	45,674,005.43	47,174,968.58	17,591,658.48	17,632,756.82	4,001,678.82	-262,430,114.78	–	310,406,796.11
Less: Income tax expense	–	–	–	–	–	–	48,987,309.21	–	48,987,309.21
Net profit	440,761,842.76	45,674,005.43	47,174,968.58	17,591,658.48	17,632,756.82	4,001,678.82	-311,417,423.99	–	261,419,486.90

	Amount for last period								
	PV glass	Household glass	Architectural glass	Float glass	Mining products	Others	Unallocated items	Mutual offset among segments	Total
Operating income									
External transaction income	1,043,839,378.09	161,510,211.03	171,771,535.91	38,043,947.66	32,412,010.40	14,834,649.01	–	–	1,462,411,732.10
Segment revenue									–
Total segment operating income	1,043,839,378.09	161,510,211.03	171,771,535.91	38,043,947.66	32,412,010.40	14,834,649.01	–	–	1,462,411,732.10
Operating cost	729,180,425.13	126,256,419.26	130,826,648.45	30,346,375.97	20,594,213.26	6,934,198.23			1,044,138,280.30
Profits between segments	314,658,952.96	35,253,791.77	40,944,887.46	7,697,571.69	11,817,797.14	7,900,450.78	–	–	418,273,451.80
Adjusted items:									
Less: taxes and surcharges	–	–	–	–	–	–	14,642,799.56	–	14,642,799.56
Selling expense	–	–	–	–	–	–	47,692,644.99	–	47,692,644.99
General and administrative expenses	–	–	–	–	–	–	53,575,152.63	–	53,575,152.63
Research and development expenses	–	–	–	–	–	–	49,818,401.47	–	49,818,401.47
Financial expenses	–	–	–	–	–	–	9,794,723.78	–	9,794,723.78
Including: Interest expenses	–	–	–	–	–	–	7,241,075.90	–	7,241,075.90
Interest income	–	–	–	–	–	–	8,212,762.07	–	8,212,762.07
Add: Other income	–	–	–	–	–	–	11,189,945.69	–	11,189,945.69
Investment income	–	–	–	–	–	–	-14,344,232.06	–	-14,344,232.06
Profit (loss)arising from changes in fair value	–	–	–	–	–	–	10,734,789.41	–	10,734,789.41
Credit impairment losses	–	–	–	–	–	–	-7,063,601.33	–	-7,063,601.33
Asset impairment losses	–	–	–	–	–	–	-1,108,300.26	–	-1,108,300.26
Gains on disposal of assets	–	–	–	–	–	–	-143,932.45	–	-143,932.45
Operating profit	314,658,952.96	35,253,791.77	40,944,887.46	7,697,571.69	11,817,797.14	7,900,450.78	-176,259,053.43	–	242,014,398.37
Add: Non-operating income	–	–	–	–	–	–	5,631,743.56	–	5,631,743.56
Less: Non-operating expenses	–	–	–	–	–	–	40,975.12	–	40,975.12
Total profit	314,658,952.96	35,253,791.77	40,944,887.46	7,697,571.69	11,817,797.14	7,900,450.78	-170,668,284.99	–	247,605,166.81
Less: Income tax expense	–	–	–	–	–	–	34,720,035.71	–	34,720,035.71
Net profit	314,658,952.96	35,253,791.77	40,944,887.46	7,697,571.69	11,817,797.14	7,900,450.78	-205,388,320.70	–	212,885,131.10

Notes to the Statements of the Company

1. TRADE RECEIVABLES

(1) Disclosed by the ageing

Ageing	Closing balance
Within 1 year	**668,227,351.64**
1-2 years	**786,889.83**
2-3 years	**357,495.26**
Over 3 years	**4,328,665.59**
Total	**673,700,402.32**

(2) Disclosed by bad debt provision method

	Closing balance				
	Book balance		**Bad debt provision**		
Classification	**Amount**	**Percentage (%)**	**Amount**	**Provision percentage (%)**	**Book value**
Account receivable excluding costs for significant financing	**673,700,402.32**	**100.00**	**24,172,540.29**	**3.59**	**649,527,862.03**
Total	**673,700,402.32**	**100.00**	**24,172,540.29**	**3.59**	**649,527,862.03**

	Opening balance				
	Book balance		Bad debt provision		
Classification	Amount	Percentage (%)	Amount	Provision percentage (%)	Book value
Account receivable excluding costs for significant financing	524,316,649.90	100.00	22,035,835.60	4.20	502,280,814.30
Total	524,316,649.90	100.00	22,035,835.60	4.20	502,280,814.30

(3) Changes in credit loss provisions of trade receivables

	Stage 2 Lifetime ECL (not credit impaired)	Stage 3 Lifetime ECL (credit impaired)	Total
Balance at 1 January 2019	18,731,896.50	3,303,939.10	22,035,835.60
Balance at the beginning of the year in current period			
– Transfered to Stage 3	-3,572,805.13	3,572,805.13	–
– Reversal	–	–	–
– Written off	–	-2,051,603.89	-2,051,603.89
Credit losses of new trade receivables in the period	4,188,308.56	–	4,188,308.56
Balance at 30 June 2019	19,347,399.93	4,825,140.34	24,172,540.27

(4) Details of top five trade receivables with the Closing balances classified by the borrowers

Name	Relationship with the Company	Trade receivables balance	Percentage of the total trade receivables	Closing balance of credit loss provision
Customer B	Third party	159,230,528.54	23.64%	4,458,454.80
Customer D	Third party	99,673,644.07	14.79%	2,790,862.03
Customer E	Third party	69,270,480.56	10.28%	1,939,398.10
Customer F	Third party	49,493,452.51	7.35%	1,385,816.67
Customer G	Third party	42,750,844.74	6.35%	1,197,023.65
Total		420,418,950.42	62.40%	11,771,555.25

2. OTHER RECEIVABLES

Items	Closing balance	Opening balance
Other receivables	**200,636,489.22**	115,299,644.49
Total	**200,636,489.22**	115,299,644.49

(1) Other receivables classified by nature

Nature	Ending book balance	Beginning book balance
Amount due from subsidiaries	**200,124,865.64**	114,890,150.86
Margin	**260,000.00**	210,000.00
Reserve fund	**52,500.00**	52,500.00
Deposit	**40,000.00**	85,000.00
Others	**159,123.58**	61,993.63
Total	**200,636,489.22**	115,299,644.49

(2) Provision for bad debts

Bad debt provision	Stage 1 ECL in the next 12 months	Stage 2 Lifetime ECL (Not credit impaired)	Stage 3 Lifetime ECL (credit impaired)	Total
Balance at 1 January 2019	–	–	3,000,000.00	3,000,000.00
Balance at 1 January 2019 in current period	–	–	–	–
– Transfered to Stage 2	–	–	–	–
– Transfered to Stage 3	–	–	–	–
– Reversed to Stage 2	–	–	–	–
– Reversed to Stage 1	–	–	–	–
Provided in period	–	108,000.00	–	108,000.00
Transferred in the period	–	–	–	–
Resold in the period	–	–	–	–
Written off in the period			-3,000,000.00	-3,000,000.00
Other changes	–	–	–	–
Balance at 30 June 2019	–	108,000.00	–	108,000.00

(3) Bade debt losses for the actual write-off in the current period

Items	Write-offs
Other receivables actually written off	3,000,000.00

(4) Details of top five other receivables with the closing balance classified by the borrower:

Name	Amount nature	Closing balance	Percentage in the total Closing balance of other receivable (%)	Closing balance of bad debt provision
Zhejiang Jiafu Glass Co., Ltd.	Subsidiary transaction	132,772,723.19	66.14%	–
Anhui Flat Solar Materials Co., Ltd.	Subsidiary transaction	46,620,000.00	23.22%	–
Flat (Hong Kong) Co., Limited	Subsidiary transaction	17,062,142.45	8.50%	–
Flat (Vietnam) Company Limited	Subsidiary transaction	3,670,000.00	1.83%	–
Transaction B	Margin	160,000.00	0.08%	–
Total	/	200,284,865.64	99.77%	–

3 LONG-TERM EQUITY INVESTMENTS

Items	**Closing balance**	Opening balance
Investment in the subsidiaries	**786,137,343.00**	786,137,343.00
Total	**786,137,343.00**	786,137,343.00

Invested unit	**Opening balance**	Closing balance
Zhejiang Flat	**10,000,000.00**	10,000,000.00
Zhejiang Jiafu	**150,000,000.00**	150,000,000.00
Shanghai Flat	**70,000,000.00**	70,000,000.00
Anhui Flat Glass	**450,000,000.00**	450,000,000.00
Anhui Flat Material	**30,000,000.00**	30,000,000.00
Flat (Hong Kong)	**66,137,343.00**	66,137,343.00
Flat New Energy	**10,000,000.00**	10,000,000.00
Total	**786,137,343.00**	786,137,343.00

4. OPERATING REVENUE AND COST

Items	Amount for the Period Revenue	Amount for the Period Cost	Amount for last period Revenue	Amount for last period Cost
Principal business	**1,463,976,825.34**	**1,260,312,017.75**	964,996,136.00	705,254,422.58
Other business	**23,412,697.34**	**17,620,659.84**	10,454,108.02	6,328,471.14
Total	**1,487,389,522.68**	**1,277,932,677.59**	975,450,244.02	711,582,893.72

5. INVESTMENT INCOME

Items	Amount for the Period	Amount for last period
1 Derivative instrument without the specified hedging relationship	**1,759,200.00**	-3,829,281.87
Investment gains and losses arising from currency swap contract	–	-4,344,538.07
Investment gains and losses arising from interest rate swap contract	–	-932,834.80
Investment gains and losses arising from forward foreign exchange contract	**1,759,200.00**	1,448,100.00
2 Long-term equity investment income calculated by cost method	–	50,000,000.00
Total	**1,759,200.00**	46,170,718.13

Supplementary information

1. DETAILS OF CURRENT PERIOD EXTRA-ORDINARY PROFIT OR LOSS

Items	Amount
Gains/(losses) on disposal of non-current assets	1,436,320.30
Government grants recorded in current profit or loss (except for government grants closely associated with the business of the Company in fixed amount or fixed quantity according to national policies)	25,245,247.93
Apart from hedging instruments relating to the normal operations of the Company, profit or loss from change in fair value of held-for-trading financial assets and held-for-trading financial liabilities, and investment income from disposal of held-for-trading financial assets, held-for-trading financial liabilities and available for-sale financial assets	3,785,550.95
Other non-operating income/(expenses) other than above	1,232,963.12
Effects of income tax	-6,168,305.33
Effects on minority interests	
Total	25,531,776.97

2. RETURN ON EQUITY AND EARNINGS PER SHARE

The calculation form of the return on equity and earnings per share is prepared in accordance with the relevant provisions of Public Issuance of Securities Companies Information Disclosure and Compilation Rules No. 09 – Calculation and Disclosure of Return on Net Assets and Earnings Per Share (Revised in 2010) (CSRC Announcement [2010] No. 2) issued by the China Securities Regulatory Commission.

Profit in the reporting period	Weighted average return on equity(%)	Earnings per share Basic earnings per share	Earnings per share Diluted earnings per share
From 1 January 2019 to 30 June 2019			
Net profit attributable to ordinary shareholders of the Company	7	0.14	N/A
Net profit attributable to ordinary shareholders of the Company excluding non-recurring items	6	0.12	N/A
From 1 January 2018 to 30 June 2018			
Net profit attributable to ordinary shareholders of the Company	6	0.12	N/A
Net profit attributable to ordinary shareholders of the Company excluding non-recurring items	6	0.11	N/A