

Tongwei Co., Ltd.

2022 Annual Report

Important Notice

- I. **The board of directors, supervisory committee as well as directors, supervisors and senior managers of the Company are responsible for the authenticity, accuracy and completeness of the information contained in this Annual Report without false records, misleading statements or material omissions, and assume joint and several liability therefor.**
- II. **All directors of the Company have been present in the board meeting.**
- III. **Sichuan Huaxin (Group) CPA (Special General Partnership) has issued a standard unqualified opinion on the Company.**
- IV. **Liu Shuqi, Head of the Company, Zhou Bin, Head of accounting affairs and Gan Lu, Head of accounting department represent that they are responsible for the authenticity, accuracy and completeness of the financial statements in this Annual Report.**

V. The proposal on profit distribution or the proposal on conversion of capital reserve to share capital for current period resolved in the board meeting

The Company will distribute profits for the year 2022 based on its total share capital on the record date. A cash dividend of 28.58 yuan per 10 shares (including tax) will be distributed to all shareholders. As of December 31, 2022, the total share capital of the Company was 4,501,946,097 shares, based on which the total cash dividend to be distributed is 12,866,561,945.23 yuan (including tax). If there is any change in the total share capital before the record date, the total dividend amount will remain unchanged, and the dividend per share will be adjusted accordingly. The above profit distribution proposal will be submitted to the Company's general meeting for approval before execution.

VI. Cautionary note on forward-looking statement

Applicable" Not applicable"

The forward-looking statements of the Company regarding its future development strategies and business plans do not constitute any substantial commitment of the Company to investors; and investors should pay attention to risks.

VII. Any funds possessed by the controlling shareholder and other related parties for non-operating purposes?

No

VIII. Any outward guarantee provided by the Company in violation of the prescribed decision-making procedures?

No

IX. More than half of the directors cannot ensure the truthfulness, accuracy, and completeness of the annual report disclosed by the Company?

No

X. Notice on material risks

The Company had detailed possible risks in this Report. Please refer to "VI Discussion and Analysis on the Company's Future Development" in Section III Management Discussion and Analysis for more information on possible risks and actions.

XI. Others

Applicable" Not applicable"

*The 2022 Annual Report of Tongwei Co., Ltd. was published both in Chinese and English. Where any discrepancy arises between the English and the Chinese content, the Chinese version shall prevail. The English version here was only used for investors' reference.

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List of documents to be checked	Financial statements bearing the signatures and seals of the head of the Company, the head of the accounting affairs, and the head of the accounting department.
	Original auditor's report bearing the seal of the accountant firm and the signatures of the CPAs.
	Formal copies of all Company documents and the original announcements publicly disclosed in websites designated by the CSRC.

Section I. Definitions

I. Definitions

Unless otherwise indicated in the context, the following terms shall have the following meanings in this Report:

Definitions of frequently used terms		
Tongwei, Company, We, or us	refers to	Tongwei Co., Ltd.
Tongwei Group	refers to	Tongwei Group Co., Ltd.
Yongxiang	refers to	Yongxiang Co., Ltd.
Yongxiang Polysilicon	refers to	Sichuan Yongxiang Polysilicon Co., Ltd.
Yongxiang New Energy	refers to	Sichuan Yongxiang New Energy Co., Ltd.
Inner Mongolia Tongwei	refers to	Inner Mongolia Tongwei High-purity Crystalline Silicon Company
Yunnan Tongwei	refers to	Yunnan Tongwei High-purity Crystalline Silicon Company
Tongwei New Energy	refers to	Tongwei New Energy Co., Ltd.
Hefei Solar	refers to	Tongwei Solar (Hefei) Co., Ltd.
Anhui Solar	refers to	Tongwei Solar (Anhui) Co., Ltd.
Chengdu Solar	refers to	Tongwei Solar (Chengdu) Co., Ltd.
Meishan Solar	refers to	Tongwei Solar (Meishan) Co., Ltd.
Tongyu Property	refers to	Chengdu Tongyu Property Management Co., Ltd.
Tongwei Media	refers to	Chengdu Tongwei Culture Media Co., Ltd.
Phase II 50,000-ton High-purity Polysilicon Project of Yongxiang New Energy	refers to	Leshan Phase II 50,000-ton high-purity polysilicon project, i.e., technical renovation project on PV silicon material manufacturing (Phase II High-purity Polysilicon Project)
Phase I 50,000-ton High-purity Polysilicon Project of Yunnan Tongwei	refers to	Baoshan Phase I 50,000-ton high-purity polysilicon project, i.e., High-purity Green Energy Project (Phase I 50,000-ton High-purity Polysilicon Project)
Phase II 50,000-ton High-purity Polysilicon Project of Inner Mongolia Tongwei	refers to	Baotou Phase II 50,000-ton High-purity Polysilicon Project, i.e., PV Silicon Material Manufacturing Project (Phase II High-purity Polysilicon Project)
Phase I 7.5 GW High-efficiency Solar Cell Project in Meishan	refers to	Project on the application of homemade intelligent equipment (system) powered by efficient silicon-based solar cells with an annual capacity of 7.5 GW (Meishan Phase I)
Phase II 7.5 GW High-efficiency Solar Cell Project in Meishan	refers to	Project on the application of intelligent factory powered by efficient silicon-based solar cells with an annual capacity of 7.5 GW (Meishan Phase II)
Phase I 7.5 GW High-efficiency Solar Cell Project in Jintang	refers to	Project on the application of intelligent connected factory powered by efficient silicon-based solar cells with an annual capacity of 7.5 GW (Jintang Phase I)
Tonghe Project	refers to	An efficient silicon-based cell project with an annual capacity of 15 GW by Tongwei Solar and Trina Solar
Leshan Monocrystalline Rod Pulling and Cutting Project	refers to	15 GW monocrystalline rod pulling and cutting project
CSRC	refers to	China Securities Regulatory Commission
SSE	refers to	Shanghai Stock Exchange
Designated Disclosure Media	refers to	China Securities Journal, Shanghai Securities News, Securities Daily, and STCN
LONGi	refers to	LONGi Green Energy Technology Co., Ltd.
TCL Zhonghuan	refers to	TCL Zhonghuan Renewable Energy Technology Co., LTD.
Trina Solar	refers to	Trina Solar Co., Ltd.
Jinko Solar	refers to	Jinko Solar Co., Ltd.
Sichuan Jinko	refers to	Sichuan Jinko Solar Co., Ltd.

Metco Silicon Energy	refers to	Baotou Metco Silicon Energy Co., Ltd.
Yuze Semiconductor	refers to	Yuze Semiconductor (Yunnan) Co., Ltd.
Gokin Solar	refers to	Gokin Solar Co., Ltd.
Shuangliang Silicon Materials	refers to	Shuangliang Silicon Materials (Baotou) Co., Ltd.
Sichuan Huaxin	refers to	Sichuan Huaxin (Group) CPA (Special General Partnership)
Energy conversion efficiency	refers to	A measure that indicates the ability of solar cells to convert light energy into electrical energy
Convertible bonds	refers to	Convertible bonds
W	refers to	Watt, the unit of power
KW, MW, and GW	refers to	Units of power, 1 KW = 1000 W, 1 MW = 1000 KW, and 1 GW = 1000 MW
High-purity polysilicon	refers to	High-purity metal silicon with purity greater than 99.9999999%
166 mm cell	refers to	A cell produced with M6 silicon wafer (with a length of 166 mm), whose area is 12.21% larger than that of a cell produced by the conventional M2 silicon wafer (with a length of 156.75 mm).
182 mm cell	refers to	A cell produced with M10 silicon wafer (with a length of 182 mm), whose area is 35.34% larger than that of a cell produced by the conventional M2 silicon wafer (with a length of 156.75 mm).
210 mm cell	refers to	A cell produced with M12 silicon wafer (with a length of 210 mm), whose area is 80.5% larger than that of a cell produced by the conventional M2 silicon wafer (with a length of 156.75 mm).
PERC Cell	refers to	Passivated Emitter and Rear Contact, a high-efficiency crystalline silicon solar cell structure, where a passivation layer of Al ₂ O ₃ or SiN _x is added on the back side of the cell to deal with the high carrier recombination on the back side of all aluminum back surface field solar cells, and then the film will be opened to make the aluminum back surface field effectively contact with the silicon substrate.
IBC Cell	refers to	Interdigitated Back Contact, a high-efficiency solar cell structure. The front side only has a passivation and anti-reflection coating without any grating electrodes with both positive and negative poles crossed on the back side. The biggest feature of an IBC cell is that both the PN junction and metal contact are on the back side so that the front side is protected against from the metal shading, which provides more effective power generation area and therefore helps increasing the energy conversion efficiency.
TOPCon Cell	refers to	Tunnel Oxide Passivated Contact, where an ultra-thin tunnel oxide and a heavily doped polysilicon thin film are prepared on the surface of the cell to form a passivation contact structure, thus increasing the open-circuit voltage and short-circuit current of the cell and then improving the energy conversion efficiency.
HJT Cell	refers to	Hetero-junction with Intrinsic Thin-layer, a high-efficiency crystalline silicon solar cell structure, a hybrid solar cell made of crystalline silicon substrate and amorphous silicon thin film, i.e., adding a non-doped (intrinsic) hydrogenated amorphous silicon thin film between P-type hydrogenated amorphous silicon and N-type hydrogenated amorphous silicon and N-type silicon substrate. HJT cells are welcomed due to their low process temperature, good passivation effect, high open-circuit voltage and double-sided power generation.
CTM value	refers to	The percentage of the total output power of the module to the cell power shows the degree of module power loss. A higher CTM value indicates a smaller degree of module package power loss.
TNC	refers to	Tongwei N-passivated Contact Cell, a Tongwei solar cell designed with type-N passivated contact technology. it is an advanced solar cell that can improve the conversion efficiency by leveraging the PECVD technology developed by Tongwei.

TBC	refers to	Tongwei Back Contact Cell, a Tongwei solar cell designed with back contact technology.
THC	refers to	Tongwei HJT Cell, a Tongwei solar cell designed with HJT technology.
Flexible support	refers to	A large spanning support consisting of prestrained flexible rigging structures that can increase the land utilization.
SE	refers to	Selective-emitter that influences the conductive properties of solar cells by high-doping the electrode contact area and low-doping the light absorption area.
Corab S. A	refers to	A leading Polish producer of solar energy system and a distributor of well-known branded equipment
PVO International	refers to	A leading supplier of solar cells, inverters, photovoltaic systems and materials across Europe
Energy 3000 Solar GmbH	refers to	A leading Austrian provider of energy products, solutions and services in the photovoltaic and energy storage system.
Certisolis	refers to	The only French certification body authorized by the Energy Regulatory Commission (CRE) to issue “simplified carbon footprint assessments” for solar power plants.
InfoLink Consulting	refers to	A global leader of research and consulting services in the renewable energy and technology sector
CINNOResearch	refers to	CINNO Research Institute
CPIA	refers to	China Photovoltaic Industry Association
IEA	refers to	International Energy Agency
Reporting period	refers to	The period from January 1, 2022 to December 31, 2022

Section II. Company Profile and Major Financial Indicators

I. Company information

Full Chinese name	通威股份有限公司
Short Chinese name	通威股份
Full English name	TONGWEI CO., LTD
Short English name	TONGWEI CO., LTD
Legal representative	Liu Shuqi

II. Contacts and contact details

	Secretary of the Board of Directors	Representative of Securities Affairs
Name	Yan Ke	Li Huayu
Address	No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, China (Sichuan) Pilot Free Trade Zone	No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, China (Sichuan) Pilot Free Trade Zone
Telephone	028-86168555	028-86168555
Fax	028-85199999	028-85199999
Email	yank@tongwei.com	lihy05@tongwei.com

III. Basic information

Registered address	No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, China (Sichuan) Pilot Free Trade Zone
Changes of the registered address	In the third interim general meeting held on November 16, 2016, the Company discussed and resolved the Tongwei Co., Ltd Proposal on Changing its Registered Address and Modifying its Articles of Association by agreeing to change the registered address from No. 11, Forth Section of South 2nd Ring Road, High-tech Zone, Chengdu” to “No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu”.
Office address	No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, China

	(Sichuan) Pilot Free Trade Zone
Post code	610041
Website	http://www.tongwei.com.cn/
Email	zqb@tongwei.com

IV. Information disclosure and site

Media names and websites where the Company disclose its annual reports	China Securities Journal, Shanghai Securities News, Securities Daily, and STCN
Stock exchange websites where the Company disclose its annual reports	www.sse.com.cn
Location where the Company stores its annual report	Securities Department

V. Stock information

Stock information				
Stock type	Stock exchange	Stock name	Stock code	Previous stock name
A - share	Shanghai Stock Exchange	通威股份	600438	

VI. Other information

Accountant firm engaged by the Company (domestic)	Name	Sichuan Huaxin (Group) CPA (Special General Partnership)
	Office location	28th Floor, Jinmao Lidu South, No. 18, Ximianqiao Street, Chengdu
	Signatory accountants	Li Wulin, Tang Fangmo, and Xia Hongbo
Sponsor that performs continuous supervision duties in the reporting period	Name	China Securities Co., Ltd
	Office location	Building B and E, Kaiheng Center, No. 2 Chaonei Street, Dongcheng District, Beijing
	Signatory representatives	Li Puhai and Pu Fei
	Period of continuous supervision	Continuous supervision period for offering of convertible bonds: from March 18, 2022 to December 31, 2023

VII. Major accounting data and financial indicators within the latest three years

(I). Major accounting data

Unit: Yuan Currency: CNY

Major accounting data	2022	2021		YoY change (%)	2020	
		After adjustment	Before adjustment		After adjustment	Before adjustment
Operating revenue	142,422,517,994.99	64,829,996,083.91	63,491,070,520.12	119.69	44,557,589,877.68	44,200,270,334.23
Net profit attributable to shareholders of the listed company	25,726,447,236.27	8,109,125,091.40	8,207,920,822.18	217.25	3,565,490,330.73	3,607,923,359.56
Net profit net of non-recurring gain and loss attributable to shareholders of the listed company	26,547,373,729.76	8,387,692,913.89	8,486,488,644.67	216.50	2,366,121,200.54	2,408,554,229.37
Net cash flow generated from operating activities	43,817,909,631.70	7,474,393,433.33	7,618,273,876.72	486.24	2,964,584,179.22	3,024,927,931.94
	2022 close	2021 close		YoY change (%)	2020 close	

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		After adjustment	Before adjustment		After adjustment	Before adjustment
Net assets attributable to shareholders of the listed company	60,797,263,389.21	37,183,020,306.85	37,502,570,958.36	63.51	30,320,650,109.00	30,541,405,029.73
Total assets	145,243,793,631.19	87,895,197,228.99	88,249,992,122.16	65.25	64,017,869,793.39	64,251,948,070.91

(II). Major financial indicators

Major financial indicators	2022	2021		YoY change (%)	2020	
		After adjustment	Before adjustment		After adjustment	Before adjustment
Basic earnings per share (yuan/share)	5.7149	1.8014	1.8234	217.25	0.8480	0.8581
Diluted earnings per share (yuan/share)	5.4889	1.8014	1.8234	204.70	0.8367	0.8466
Basic earnings per share net of non-recurring gain and loss (yuan/share)	5.8973	1.8633	1.8852	216.50	0.5628	0.5729
Weighted average return on net assets (%)	52.36	24.14	24.24	+ 28.22 ppts	16.08	16.13
Weighted average return on net assets excluding of non-recurring gain and loss (%)	54.03	24.97	25.07	+ 29.06 ppts	10.67	10.77

Note on major accounting data and financial indicators within the latest three years by the end of reporting period

Applicable" Not applicable"

The Ministry of Finance issued the “Interpretation No. 15 of Accounting Standard for Business Enterprises” (Cai Kuai [2021] No. 35) (“Interpretation No. 15”) on December 31, 2021, which clarifies the accounting treatment of products or by-products produced by enterprises for sales before the fixed assets reach the intended usable state or during the research and development process. According to relevant provisions of Interpretation No. 15, the Company implemented the relevant provisions of Interpretation No. 15 and make retrospective adjustments from January 1, 2022.

VIII. Differences between accounting data under domestic and foreign accounting standards**(I). Difference in net profit and net assets attributable to shareholders of the listed company contained in the financial statements disclosed simultaneously under International Accounting Standard and China Accounting Standard**

Applicable" Not applicable"

(II). Difference in net profit and net assets attributable to shareholders of the listed company contained in the financial statements disclosed simultaneously under Foreign Accounting Standard and China Accounting Standard

Applicable" Not applicable"

(III). Note on differences between China and foreign accounting standards:

Applicable" Not applicable"

IX. 2022 major financial data by quarters

Unit: Yuan Currency: CNY

	Q1 (Jan - Mar)	Q2 (Apr - Jun)	Q3 (Jul - Sept)	Q4 (Oct - Dec)
Operating revenue	24,685,190,176.42	35,654,024,725.73	41,744,959,822.97	40,338,343,269.87
Net profit attributable to shareholders of the listed company	5,194,494,567.14	7,029,292,140.45	9,506,614,023.42	3,996,046,505.26
Net profit net of non-recurring gain and loss attributable to shareholders of the listed	5,134,900,689.19	7,358,044,406.71	9,487,789,588.89	4,566,639,044.97

company				
Net cash flow generated from operating activities	3,248,916,632.41	10,187,380,023.49	15,446,295,023.92	14,935,317,951.88

Note on differences between these quarterly data and data contained in disclosed regular reports

Applicable" Not applicable"

X. Non-recurring gain and loss items and amounts

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Non-recurring gain and loss items	2022 amount	Notes (if applicable)	2021 amount	2020 amount
Profit and loss on disposal of non-current assets	-12,315,759.20		-77,844,159.34	1,541,869,733.03
Government subsidies included in current profit and loss, but excluding ration or quota-based on-gonging government subsidies closely related to the normal operating businesses of the Company, complying with national policies	387,940,097.37		345,025,134.17	296,657,874.92
In addition to the effective hedging business related to the normal business operations of the Company, the fair value gain and loss from held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, and derivative financial liabilities, as well as investment returns from disposal of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities, and other debt investments	-130,149,063.69		54,403,941.63	14,385,110.27
Non-operating revenue and expenses other than aforementioned items	-1,235,055,137.99		-444,426,951.82	-439,396,332.17
Less: Effects of income tax	-156,512,227.43		163,036,399.95	209,491,363.52
Effects of minority interest (after tax)	-12,141,142.59		-7,310,612.82	4,655,892.34
Total	-820,926,493.49		-278,567,822.49	1,199,369,130.19

Where the Company lists the non-recurring gain and loss items defined in the Explanatory Announcement on Information Disclosure for Companies Offering Their Securities to the Public No.1 - Non-Recurring Gain and Loss Items as recurring gain and loss items, notes should be provided.

Applicable" Not applicable"

XI. Items measured at fair value

Applicable" Not applicable"

XII. Others

Applicable" Not applicable"

Section III. Management Discussion and Analysis

I. Operation discussion and analysis

In 2022, against the backdrop of escalating Russia and Ukraine conflict, the world political and economic situation was turbulent, and games between greater powers were impacting global supply chains. The prices of commodities, in particular energy and food, continued to rise, and structural supply shortages pushed up inflation levels in major economies. According to the International Monetary Fund estimates, the world's average consumer price index grew by 8.8% in 2022, the highest inflation level since the 21st century started. The economic growth rate declined, and the recovery fell short of expectations across the globe. Although facing triple pressures of shrinking demand, supply shocks, and weakening expectations, China timely introduced policies to stabilize its economy, maintaining the steady growth of the domestic

economy. According to the data from the National Bureau of Statistics, China's GDP reached 121 trillion yuan in 2022, a year-on-year increase of 3%, continuing to lead the world's major economies in terms of growth rate.

During the reporting period, the photovoltaic industry maintained high-speed growth, and the feed industry made steady progress. The Company firmly grasped the opportunities for industrial development and adhered to the operation policy of "focus, execution and efficiency" as a response to the complicated economic environment, having conducted businesses in a stable manner with great performance. In 2022, the Company recorded a revenue of 142.423 billion yuan for a year-on-year growth of 119.69%; net profit attributable to shareholders of the listed company of 25.726 billion yuan for a year-on-year growth of 217.25%; net profit excluding non-recurring gain and loss attributable to shareholders of the listed company of 26.547 billion yuan for a year-on-year growth of 216.50%. The Company's net weighted average return on assets for the year was 52.36%, and the year-end debt to asset ratio was 49.57%, a decrease of 3.44 percentage points from the end of last year.

(I) Feed and industry chain

In 2022, China's feed industry continued to develop stably in the context of significant economic growth pressures. The total production of industrial feed reached 302.234 million tons, a year-on-year increase of 3%. Among them, the production of pig feed was 135.975 million tons, a year-on-year increase of 4.0%; the production of poultry feed 121.363 million tons, a year-on-year decrease of 0.04%; and the production of aquatic feed 25.257 million tons, a year-on-year increase of 10.2%. Affected by international situation and extreme weather, the cost of feed raw materials has significantly increased. According to Wind, the prices of corn and soybean meal increased by 7.3% and 31.9% respectively, compared to the beginning of 2022 year. On the other hand, in some domestic regions, there was a temporary economic slowdown and insufficient consumer demand, which resulted in lower than expected prices for breeding products. Feed companies faced dual pressures from upstream and downstream operations. While top companies effectively withheld risks with their comprehensive competitive advantages, survival and development for small and medium-sized companies remained difficult.

In 2022, the Company integrated its feed and related industrial chain businesses by establishing Tongwei Agriculture Development Co., Ltd., further enhancing its level of specialized operation. For maximizing customer benefits, everyone at Tongwei adhered to the "quality policy", deeply promoted specialization, standardization and scaled development for mutual development with customers. During the reporting period, the Company's feed and industrial chain businesses achieved operating income of 31.646 billion yuan, a year-on-year increase of 28.69%. The total sales volume of feed was 7.194 million tons, a year-on-year increase of 30.42%, with sales volumes of livestock and poultry feed and aquatic feed reaching historical highs with year-on-year increases of 41.23% and 18.94% respectively.

In the reporting period, the Company performed the following key tasks:

1. Full effort into specialization, standardization and scaled development for higher core competitiveness

The Company adhered to the "quality policy" throughout the year, and focused on promoting "specialization, standardization and scaled" development, achieving remarkable results and further strengthening its competitive advantages, which has been highly recognized by customers. Specialization in procurement ensures stable feed quality from the source and effectively supports breeding results; specialization in technology combines product development with user needs through a closed-loop process of "market insights, R&D management, product design, and optimization by tracking", achieving maximum breeding benefits; product specialization includes regular dynamic reviews of product structure, optimizing it to ensure consistent product quality. In 2022, the Company focused on "production automation, business digitalization, and operation standardization" promoting comprehensive cost reduction and efficiency improvement in feed production. Through the creation of a "benchmark factory", it further explored new models of digital production and intelligent management. In 2022, the Company applied for 24 patents relating to the "intelligent management system for feed production" and environmental protection in feed production. The company achieved one-click startup management for the puffing machine and developed a set of feed production management modes that can be rolled out, opening new ways to reduce production costs and improve product quality by reducing labor and increasing automation. The company focused on both production and sales for scaled development. It improved the efficiency by continuously optimizing the production process and promoting team building, and promoted sales through innovative models such as host marketing and breeding competitions. Through the "Marketing Communication", a digital application system developed by the Company, it integrated the supply and demand of its customers, achieving high synergy between production and sales. As a result, several subsidiaries achieved full production and sales, and the Company's capacity utilization rate increased by 5.40 percentage points year-on-year.

2. Maintaining leading quality by strengthening the advantage in procurement of raw materials

As a manufacturing process, feed production relies heavily on raw materials, which make up over 90% of the cost and the quality of raw materials directly affects the breeding results. During the reporting period, the prices of feed raw materials were affected by internal and external macro factors, continuing to rise with significant fluctuations, which has significantly increased the operating pressure on feed companies. Some companies even resorted to low-quality and low-cost raw materials to cut costs. In this context, the Company adhered to the quality by keeping the procurement strategy of “stable raw materials and consistent quality”. With a long-term specialized procurement team and mode, it closely tracked the feed raw material market, assessed the timing of procurement, accurately understood the impact of factors such as exchange rate fluctuations on raw material procurement to avoid future cost fluctuations. The Company implemented a rolling cost budget mechanism and used advance procurement for core materials to achieve cost optimization. It continued to strengthen cooperation with strategic suppliers, enhanced strategic procurement of raw materials and factory direct procurement, with major raw material suppliers accounting for over 75% of the procurement volume and a direct supply rate of 94% for local raw materials, further consolidating its competitive advantage in the raw material supply chain. Through a reasonable supplier evaluation system, the Company adopts site visits before supplier onboarding, spot checks, and evaluation ranking to strictly guard against raw material quality risks, and ensured long-term and leading feed quality from the source.

3. Creating new highlights in agriculture and husbandry sectors through a reasonable degree of diversification

During the reporting period, while focusing on feed, the Company also fully utilized its professional advantages in the fisheries sector and moderately extended its reach around the green aquatic industry chain, creating new highlights in agriculture and husbandry sectors. In 2022, the Company's food business saw a high-speed growth in profits, driven in part by its seafood export, which demonstrated a keen understanding of market trends, seized opportunities, and expanded production capacity. As a result, gross margins increased significantly, and profits reached an all-time high. The Company also continued to develop its offline business by opening new stores and hosting various themed events, such as the “Fresh Journey” and the “Tongwei Fish Banquet”, which increased customer loyalty and attracted new customers. The e-commerce business adopted a “platform + community” supply chain model and focused on mid-to-high-end consumers, resulting in a rapid increase in membership numbers and a significant improvement in operational efficiency. Tongwei Fresh Fish worked hard to build differentiated competitive strength in product quality with the standardization of facilities and having borne fruits of consistent quality. Throughout the year, the brand's influence steadily increased, and it secured partnerships with large-scale e-commerce platforms such as Hema and PuPu.

Leveraging its accumulated aquaculture technologies and complete resources in the industry chain, during the reporting period, the Company strategically developed its shrimp farming business. By focusing on building a modern shrimp farming base of zero-emission, automation, digitization, and intelligence, and supporting it with seedlings, animal health, feed, and equipment, the Company was committed to producing environmentally friendly shrimp products of higher survival rate, better quality and lower cost, satisfying consumers' demand for safe and better aquatic products. The Company has achieved results in shrimp seedling cultivation, circular water system, and intelligent aquaculture exploration, and launched a project for the annual production of 10,000 tons of shrimp in a factory-farmed manner. The first-phase construction is currently underway, and is expected to be completed and put into operation within 2023, making it an industry leader in indoor shrimp farming.

(II) PV business

In 2022, under the stimulus of the Russia-Ukraine conflict, fossil fuel prices surged, and the energy crisis quickly became highlighted. The economic benefits and energy security role of photovoltaic power were significantly enhanced, and the global PV installed capacity grew substantially. According to China Photovoltaic Industry Association (CPIA), the global newly installed PV capacity reached a record-breaking 230 GW in 2022, a year-on-year increase of 35.3%. China ranked first in the world with 87.41 GW of newly installed PV capacity, a year-on-year increase of 59.3%, followed closely by the EU, with a newly installed capacity of 41.4 GW, a year-on-year increase of 47%. In terms of the manufacturing chain, China's PV industry achieved excellent performance in 2022 again. According to CPIA, the domestic PV manufacturing output value reached 1.4 trillion yuan, a year-on-year increase of over 95%. The production of polycrystalline silicon, silicon wafers, cells, and modules reached 827,000 tons, 357 GW, 318 GW, and 288.7 GW respectively, with year-on-year increases of 63.7%, 57.5%, 60.7%, and 58.8%. The total export value of products exceeded 50 billion US dollars for the first time, a year-on-year increase of 80.3%, reaching a record high. Due to the uneven production capacity in different parts of the industrial chain, supply and demand contradictions still exist, and product prices fluctuated greatly throughout the

year. However, under the strong support of end-market demand, industrial chain prices still showed an upward trend. Among them, polycrystalline silicon showed the most significant year-on-year increase in prices due to the largest production capacity gap. At the same time, driven by factors such as industry supply and demand mismatch, technological changes, and rising demand, many players outside the industry entered the PV sector, and existing players expanded production or extended the industrial chain, intensifying market competition.

Based on the expected future development of the PV industry and the Company's judgment about its competitive strength, the Company released an Announcement on the Progress of Development Plan and Future Plan for High-purity Polycrystalline Silicon and Solar Cell Business, stating that the cumulative production capacity of high-purity polycrystalline silicon and solar cells will reach 800,000 to 1 million tons and 130 to 150 GW respectively from 2024 to 2026. It would also continue to increase its investment in technological development and enhance lean management levels to increase market share and become a global leader in the field of high-purity polycrystalline silicon and solar cells. On the other hand, the Company has responded to the trend of industry development by giving full play to its advantages in scale, cost, and technology in the industrial chain, and began to expand the business in solar modules in the second half of 2022. This ensured that the Company continued to provide customers with more advanced, higher quality, and lower carbon PV products while keeping the long-term stable development of its PV business.

In 2022, some regions in China experienced power shortages due to high temperatures, and the industry underwent technological updates, accelerating the expansion of production capacity. Against these challenges, the Company has focused on safety production, technological innovation, and lean management for its PV business, worked efficiently and collaboratively to reduce costs and increase efficiency, and further enhanced its core competitiveness.

1. High-purity polysilicon

The Company is a global leader in high-purity polysilicon, with industry-leading production capacity, production costs, and product quality. During the reporting period, the production capacity of high-purity polysilicon remained stable. Although being temporarily affected by objective factors such as high temperatures and power restrictions, with the rapid operation of new projects, the Company achieved a sales volume of 256,800 tons of high-purity polysilicon for the year, a year-on-year increase of 138.41%. As the conflict between Russia and Ukraine accelerated energy transformation, global demand for photovoltaic end-user installations exceeded expectations during the reporting period, and the supply of high-purity polysilicon products was unable to meet demand, resulting in price surges. The Company's profitability in high-purity polysilicon reached a record high, and has recovered all investment costs for its in-production capacity.

During the reporting period, the Company strengthened its safety responsibility and made workplace safety and stable operation its top priority. Based on the strict implementation of Yongxiang "Safe Production Rules and Regulations", the Company conducted a series of safety-specific activities such as the "100-day safety campaign" and carried out comprehensive checklist-based inspections and investigations for continuous and stable operation of production facilities throughout the year and for four-zero targets (zero work injury, zero accident, zero operational error and zero unplanned downtime). In terms of improving product efficiency, the Company increased R&D efforts, improved lean management levels, and encouraged all employees to innovate in the form of reasonable proposals by timely delivering incentives. These have effectively improved production performances. The silicon consumption, comprehensive electricity consumption, and steam consumption per unit of output in the year all decreased by 2.7%, 10.7%, and 72% year-on-year respectively. The product quality further improved, and the mono-grade rate stabilized above 99%, achieving long-term stable supply to downstream major N-type material customers, and the annual supply of N-type materials increased significantly year-on-year.

In 2022, the Company accelerated the construction and capacity release of all kinds of projects without compromising the safety and quality. Among them, the second phase of the Inner Mongolia Tongwei 50,000ton project achieved early production and broke the industry's practice of quality ramp-up. The first batch produced met the solar grade standard. Meanwhile, the Company steadily advanced the construction of Yongxiang Energy Technology's first phase of 120,000-ton project which is expected to be put into operation in the third quarter of 2023. At that time, the Company's annual production capacity of high-purity polysilicon will exceed 380,000 tons¹, and its scale advantages will be further expanded. In accordance with its development plan, the Company announced investment plans for Inner Mongolia

¹The completion of some high-purity polysilicon projects and equipment upgrades and renovations have resulted in production capacity increase, and as of the end of the reporting period, the Company's high-purity polysilicon production capacity exceeded 260,000 tons.

Tongwei 200,000-ton high-purity polysilicon and supporting projects and Yunnan Tongwei Phase II 200,000-ton high-purity polysilicon and supporting projects during the reporting period. The new projects would adopt the “Eighth Generation Yongxiang Method” process, with larger unit size, lower unit investment, better process level, and higher intelligence level, continuing to lead the industry.

In line with the principle of long-term cooperation and common development, in 2022, the company signed new long-term contracts on high-purity polysilicon with silicon wafer companies such as Longi, Yuze Semiconductor, Meeco Silicon Energy, Qinghai Gokin Solar, and Shuangliang Silicon Materials to ensure stable product sales. At the same time, the Company continued the equity partnership with Longi on Yunnan Tongwei Phase II 200,000-ton high-purity polysilicon project as a part of its way to build strategic cooperation relationships with upstream and downstream partners. The Company will continue to leverage its professional advantages in the high-purity polysilicon segment, provide customers with high-quality and low-carbon high-purity polysilicon products, and contribute to the development of the industry.

2. Solar cells

During the reporting period, the Company actively seized market opportunities and comprehensively promoted the upgrading and transformation of small-size production lines, accelerated the construction of new projects, and achieved rapid release of production capacity for 182mm and larger PERC cells, effectively matching market demand. Based on its capacity planning, the Company successively launched Tonghe project, Jintang Phase II, and Meishan Phase III project. Its total production capacity has exceeded 70GW, of which the capacity for 182mm and above size exceeds 95%. During the reporting period, the Company sold 47.98GW, a year-on-year increase of 37.35%. According to InfoLink Consulting, in 2022, the Company still led the world in solar cell shipments and became the first cell manufacturer in the industry to exceed 100GW in cumulative shipments.

At the same time, the Company tapped the potential for cost reduction and efficiency improvement, and through measures such as process improvement, graphic optimization, and use of domestic materials, it achieved a steady increase in PERC cell efficiency and a continuous decrease in material consumption while adapting to the rapid trend of thinning in the industry. Key competitive indicators such as A-level rate, conversion efficiency, fragment rate, and non-silicon cost allowed the Company to remain at the industry-leading level, and the average non-silicon cost of PERC products decreased by 13% year-on-year. As a leader in the solar cell industry, the Company attaches great importance to changes in cell technologies by continuously increasing R&D investment. It is one of the earliest companies to invest in GW-level HJT and TOPCon technology pilot lines. The Company focuses on R&D around the scale production of new technologies. During the reporting period, the Company launched TNC cell products based on the industry’s first large-size PECVD Poly production line developed on its own regarding the TOPCon technology path. In late November 2022, it put into operation the Meishan 9GW TNC cell project, which is now fully operational and has an average conversion efficiency of 25.5%. If SE and other technologies are added, the conversion efficiency is expected to be 25.7%. At the end of the year, the Company started the construction of the Pengshan 16GW TNC cell project, which is expected to be completed and put into operation in the second half of 2023. At that time, the Company’s TNC cell capacity will reach 25GW. In the HJT technology route, the Company has completed the development of double-sided nanocrystalline technology, and the module power has exceeded 720W (210 mm 66-piece format). The industry’s first 210 half-cut copper interconnect pilot line has been established, and full-scale development has been carried out in equipment, process, and materials. The grid line width has been reduced to below 15 μ m, the efficiency has increased by more than 0.2% compared to the printing process, and the yield rate has reached 95%, further approaching mass production conditions. In addition to above technology routes, the Company has advanced its R&D effort into cutting-edge technologies such as full-back contact cells and perovskite/silicon layered cells, all of which have made positive progress. Among them, the perovskite/silicon layered cell laboratory was put into use during the reporting period, and the third-party certified efficiency of small-size perovskite/crystalline silicon layered cells reached 27.19%.

3. Modules

The Company has been deeply involved in the photovoltaic industry for many years. It deployed some production capacity since entering the solar cell industry, and based on which, the effort into R&D and market development has never stopped. Based on the national dual carbon requirements and in line with the trend of industry integration, during the reporting period, the Company started to comprehensively develop its modules business and build a more competitive photovoltaic industry structure to ensure the steady development of its photovoltaic business.

During the reporting period, the Company completed the “8GW Photovoltaic Intelligent Factory Technical Transformation Project” by renovating the multicrystalline cell workshop at the original Hefei base in just three months, and the production capacity jumped to 14GW. Thanks to the quality support from

the upstream of the industrial chain and excellent production control capabilities, the Company's core production indicators such as product yield and single-line output have reached the industry's leading level. With full benchmarking with excellent product standards and quality systems from peers, the Company has built a standardized management system with lean thinking. It has successfully passed the QMS, EMS and OHSAS certification, and IEC 62941 system certification, obtained the French carbon footprint certification and got listed on the Bloomberg New Energy Finance's Tier 1 list of global photovoltaic module manufacturers.

Its business of modules is positioned as a top brand. By quickly forming a professional team and fully leveraging upstream resource advantages, it has helped to rapidly build a global distribution channel through comprehensive brand promotion. In the centralized market, relying on reliable product quality, excellent performance capability, and strong after-sales system, the Company has won orders from multiple central state-owned power generation groups. In the distributed market, it actively explores the win-win model of specialized division of labor and collaborative development by cooperating with terminal platform-like companies. In the overseas market, it focuses on end markets in Europe, Asia-Pacific, South America, etc., and uses a "matrix" of various product models such as overlapped-cell modules and half-cell products to meet the differentiated needs of overseas customers for efficient modules. It has reached strategic cooperation with overseas distributors and customers such as China Machinery Import and Export (Group) Co., Ltd., Corab S.A, PVO International, and Energy 3000 Solar GmbH to realize the rapid expansion of overseas channels. In 2022, the Company's modules sales reached 7.94GW, a year-on-year increase of 226.06%. According to InfoLink Consulting data, the Company was among the world's top ten in terms of module shipments.

To ensure leading quality and optimized cost in modules, the Company started module projects in Yancheng, Jintang, Nantong and other sites during the reporting period. According to the project investment plan, it is expected that the its module production capacity will reach 80GW by the end of 2023. The construction and operation of new projects will strongly support the its global expansion of module business and provide downstream customers with stable and high-quality solar module products.

4. Aquaculture-Photovoltaic Integration PV powerplants

During the reporting period, the Company continued to focus on the development and construction of large-scale Aquaculture-Photovoltaic Integration bases. Through systematic cost control and the reserve of high-quality water surface resources, it has created an "ecological aquaculture + green energy" model with core competitiveness, which can promote the coordinated development of industries, and moderately develop tourism, leisure, and popular science areas. This has formed an organic integration of primary, secondary, and tertiary industries, creating the "Tongwei Solution" in line with the new fisheries, new energy, and new rural construction. This has effectively improved the added value of the industry. By the end of 2022, the Company constructed 52 PV stations led by Aquaculture-Photovoltaic Integration with a cumulative installed capacity connected to the grid being 3.4GW. The electricity settlement amount in the year was 4.06 billion kWh, reducing 3.09 million tons of carbon emissions.

With continuous R&D investment and solid technology accumulation, the Company introduced construction plans for a flexible support system with large span, high clearance, and zero deflection during the reporting period. This has provided a more friendly fishing environment for PV projects, achieved higher photovoltaic power generation efficiency, and opened up new ways to increase power generation. By the end of the reporting period, the Company obtained 37 patents related to the construction plans. There were over 12 flexible projects connected to the grid or under construction with a total scale exceeding 960MW. Among them, two external projects had a scale of over 100MW. With the on-going development of technologies in the PV industry, the Company will further improve the economic benefits of the Aquaculture-Photovoltaic Integration model through the use of efficient modules, flexible brackets and automatic construction. By adhering to the scale, cluster and benefit principle, the Company will advance the implementation of more Aquaculture-Photovoltaic Integration projects for driving the fishery transformation, and producing more clean energy, thereby making its own contribution to the green development of the country while achieving its economic benefits.

II. Industries where the Company operated in the reporting period

(I) Feed industry

The feed industry provides materials for the modern husbandry and relates closely to the safe and stable supply of animal products, being one of the significant pillars of the national economy. Since the Reform and Opening-up policy, China's feed industry has developed rapidly and formed a complete industrial system, making significant contributions to the development of modern animal husbandry and the agricultural and rural economy. In recent years, due to factors such as the slowdown in livestock production

and industry integration, increased environmental and resource constraints, higher quality and safety requirements, and intensified market competition, the growth rate of the feed industry has slowed significantly. It has gradually transitioned from a high-speed growth stage focused on quantity to an integration and improvement stage focused on quality. According to China Feed Industry Association, the average annual compound growth rate of China's feed production reached 16.6% from 2000 to 2010, but declined to 4.79% from 2011 to 2022. In the reporting period, the feed industry presented the following development characteristics:

1. Total feed production grew steadily and business sizes were adjusted moderately

In 2022, the total output value of China's feed industry reached 1,316.85 billion yuan, a year-on-year increase of 7.6%, and the total output of industrial feed was 302.234 million tons, a year-on-year increase of 3%, exceeding 300 million tons for the first time. The industry has accelerated the adjustment of the structure of feed products, and the pace of innovation has accelerated, with overall development being stable toward a positive direction. In terms of operating scale, there were six feed groups with an annual capacity of 10 million tons in 2022, similar to 2021. There were 36 feed companies with a capacity of over 1 million tons per year, 3 fewer than in 2021. The total feed output of these companies accounted for 57.5% of the national total feed output, a decrease of 2.2 percentage points from 2021. Although the operating scale has adjusted, the competitiveness of leading enterprises remains strong.

2. Costs of raw materials remained elevated and companies were under greater pressure

Affected by factors such as the escalation of geopolitical tensions, sustained inflation, and reduced production in major regions, the supply of main raw materials for feed was tight, and prices continued to rise in 2022. Feed companies faced significant challenges in ensuring raw material supply and controlling costs, with some even experiencing a decrease in raw material quality and supply disruptions. In the same period, the weakening of regional economic activity affected the end market, with weak consumption in the catering sector, poor trading atmosphere in the wholesale market, and weak market conditions for major livestock products. With the continuous increase in feed costs, the profitability of livestock breeding continued to decline, with low interest in breeding, resulting in more small-scale farmers exiting from the industry. Feed companies faced both upstream and downstream pressures, and the difficulty of operation further increased.

3. Regulatory policies were deepened and industry transformation accelerated

In recent years, China's requirements for quality, safety, and environmental regulation in the feed industry have deepened, and the industry has been accelerating its transformation towards specialized, standard, green and regulated direction. In 2022, China issued and implemented policies such as the 14th Five-Year Plan for the National Forage Industry Development, the 2022 Work Plan for Feed Quality and Safety Supervision, and the Management Measures for Production Licenses for Feeds and Feed Additives, which raised higher requirements for feed companies in terms of R&D, biological safety, and quality control capabilities. Under this trend, companies with standard operations, strong technological capabilities, strong regional presence, and excellent control capabilities are better able to adapt to policy requirements and continue to transform and upgrade, while those with insufficient standardization face greater policy risks.

(II) PV industry

PV is one of the strategic emerging industries in China. As the main direction of renewable energy, the photovoltaic industry has become an important guarantee for global energy transformation and green development, growing faster than economic development and having huge market space. After years of twists and turns in the development, China's photovoltaic industry has basically freed itself from external dependence and formed a complete industry chain with significant global competitive advantages, making important contributions to the country's leapfrog development of renewable energy. In 2022, the production of polysilicon, silicon wafers, cells, and modules in China's PV industry reached 827,000 tons, 357GW, 318GW, and 288.7GW respectively, with year-on-year growth rates all exceeding 55%. The industry's total output value exceeded 1.4 trillion yuan and annual export exceeded 50 billion US dollars. As of 2022, China has ranked first in the world for 10 consecutive years in terms of new photovoltaic installed capacity, and the cumulative installed capacity the first in the world for 8 consecutive years. Against the backdrop of global energy transformation, with the continuous implementation of energy conservation, emission reduction, and green development policies at home and abroad, the industry will maintain high-speed development. In the reporting period, the PV Industry presented the following development characteristics:

1. Turbulent global situation accelerated energy transformation with global installed capacity exceeding expectation

For a long time, Russia has been an important exporter of traditional fossil energy, such as oil and natural gas, to Europe. The Russia-Ukraine conflict broke out in the first half of 2022 pushed up global prices for oil and natural gas and significantly impacted the international energy supply chain, causing an

aggravating energy crisis in Europe. As a result, major overseas economies represented by European countries accelerated their renewable energy transformation, and global photovoltaic installations exceeded expectations, with the annual new installed capacity reaching 230GW, a year-on-year increase of 35.3%. In China, despite rising prices throughout the photovoltaic industry chain and a year-on-year decline in the investment return rate of power station companies, the country still achieved a year-on-year growth rate of 59.3% in new installed capacity, reaching 87.41GW, with distributed photovoltaics, which have relatively lower price sensitivity, achieving a year-on-year growth of more than 70%.

2. Capital inflow remarkably sped up investments with intensified competitions in the industry

Given its development far exceeds the average economic growth, the photovoltaic industry continues to be sought after in both the capital market and the industrial market. According to CINNOResearch, the investment in China's photovoltaic and wind power industries was approximately 3.4 trillion yuan in 2022. Incomplete statistics show that in 2022, 15 new photovoltaic-related companies got listed in China, and over 50 companies across the industry expanded into distributed photovoltaic and solar cell fields, with about 30 of them listed on the A-share market. With the acceleration of production expansion by companies within and beyond the industry, the tense supply in the industry chain will gradually ease. However, the competition for top talents and high-quality resources such as land, raw materials, and electricity will become more intense. Top companies in the industry will further secure their market position with comprehensive competitive advantages in market presence, technological innovation, brand management, and talent resources, while new players may face greater operational uncertainties and competitive pressures.

3. Mismatch between supply and demand continued with elevated prices

Given the sustained and unexpectedly strong demand for end-user installations, the industry development further accelerated. Although investment in all aspects of the industry increased in scale and speed, and new production capacity was released, the release of production capacity was slow compared to downstream demand growth, due to the large scale of investment in the upstream high-purity polysilicon segment, long construction cycles, high management difficulties, coupled with factors such as unplanned maintenance of some capacity in the industry and high-temperature power supply restrictions in regions such as Sichuan. As a result, the supply of high-purity polysilicon and downstream products remained tight throughout the year, and prices for high-purity polysilicon and downstream products continued to rise and remained high for a long time.

4. Manufacturing processes optimized with new cell technologies booming

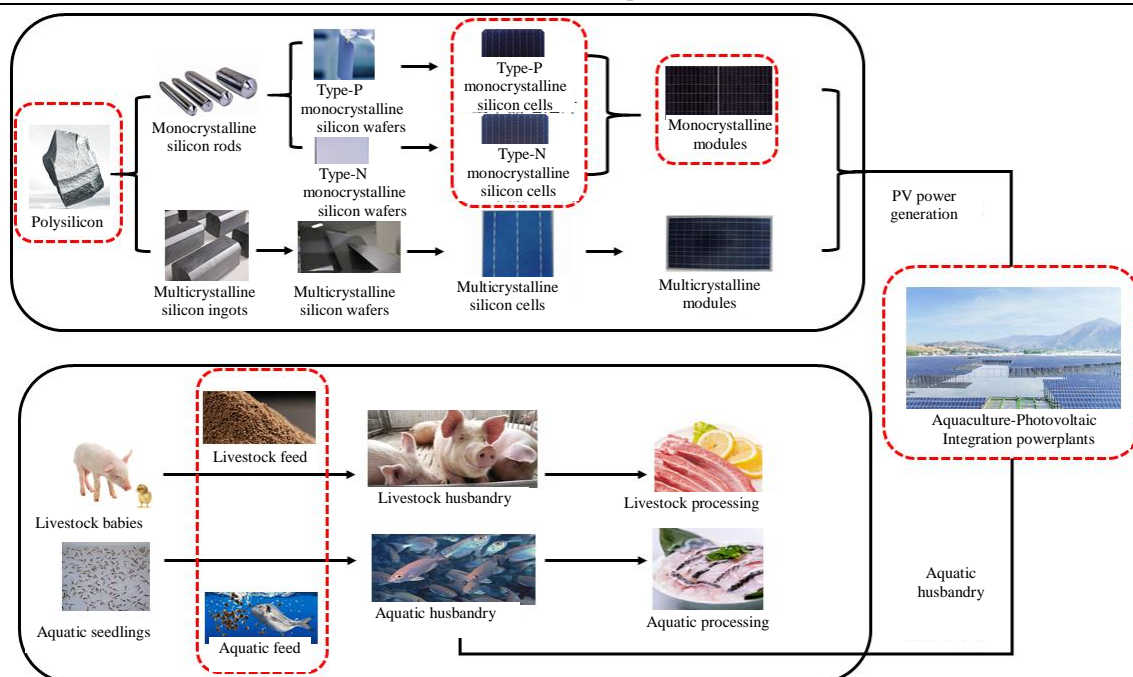
Cost reduction is an eternal topic for the development of PV industry. According to CPIA, in 2022, the average comprehensive electricity consumption and steam consumption for producing polysilicon were reduced to 60kwh/kg-Si and 15kg/kg-Si respectively, achieving significant cost reduction results. The trend of silicon wafer thinning continued, with the average thickness of P-type monocrystalline silicon wafer being around 155 μ m, a decrease of 15 μ m from the previous year. In terms of solar cells, the technology route switching remained in 2022, and the average conversion efficiency of technology routes kept breaking records. The average conversion efficiency of P-type monocrystalline cells reached 23.2%, an increase of 0.1 percentage points from 2021; the average conversion efficiency of N-type TOPCon cells 24.5%, and the average conversion efficiency of heterojunction cells 24.6%, both significantly improved from 2021. At the same time, the R&D efficiency of thin-film and perovskite cells continued to improve.

5. Integration trend furthered and top companies remained strong

Specialization and integration are two development models that have long existed in the PV industry. Specialization focuses on certain segments of the industry chain for the purpose of achieving significant competitive advantages in those segments. Integration involves a full industry chain, avoiding the cyclical fluctuations of a single segment. Since 2022, with the continuous emergence of supply-demand mismatch and the significant market fluctuations in some segments, and the continuous inflow of a large number of external companies, companies have continued to expand their business across upstream and downstream through various means. The trend of integration has become more prominent. Meanwhile, top companies have further increased their presence with significant comprehensive competitive advantages, resulting in a market pattern where the strong become stronger.

III. Businesses of the Company in the reporting period

Adhering to the vision of "For Better Life" and the corporate purpose of "Striving for Excellence, Contributing to Society", the Company mainly focuses on agriculture and new energy, thus forming a business model of "Agriculture (fishery) + PV" integration and synergy. Its main businesses and their positions in the industrial chain are shown in the figure below:



Note: Core businesses of the Company are in the dashed boxes

(I) Main businesses and the operation models

In agriculture, the major business is the research and development, production and sales of aquatic feed, livestock feed and other products to meet the needs of aquatic animals and livestock for growth. Aquatic feed has always been the core product and the main profit source of the Company in agriculture and animal husbandry business group. As of the end of the reporting period, the Company owned more than 80 subsidiaries and branches involved in feed business with a business model of adopting on-site production and establishing a peripheral sales coverage, while providing effective technical, financial and other supporting services to farmers. Around the feed business, the Company was actively engaged in seed breeding, husbandry, animal healthcare, food processing and trade which further completed the industry chain and enhanced its comprehensive strength.

In new energy, the Company focuses on the research, production, and sales of high-purity polysilicon and solar cells. As of the end of the reporting period, the Company had an annual capacity of over 260,000 tons for high-purity polysilicon, an annual capacity of over 70 GW for solar cells, and an annual capacity of 14 GW for modules. The Company has manufacturing sites in Leshan, Baotou and Baoshan for producing high-purity polysilicon products with locally sourced raw materials which are delivered to downstream manufacturers of silicon wafers. In recent years, the Company has signed long-term sale contracts with silicon wafer manufacturers. Regarding solar cells, the manufacturing sites in Shuangliu, Jintang, Meishan and Hefei have their production plans arranged directly according to the market demand with the products directly sold to the downstream manufacturers of modules. Leading technologies, quality and cost control have allowed the Company to serve top ten PV module manufacturers across the world and secure a long-term leading position in the industry. In terms of modules, the Company accelerated its business expansion in the second half of 2022, relying on years of accumulation in technology and market, and combined with the synergy benefit from high-purity polysilicon and solar cells, it has established a competitive and large-scale module business system. Customers cover major domestic central state-owned power generation groups and more than 40 countries and regions overseas. It is expected that the production capacity will reach 80GW by the end of 2023.

On the comprehensive application, the Company focuses on the development and construction of large-scale "Aquaculture-Photovoltaic Integration" bases, strives to create a model of ecological farming coupled with green energy and strengthens the coordinated development of industries. By screening high-quality water surfaces and for ensuring electricity consumption, the Company explores novel aquaculture ways with on-going advancements of the Aquaculture-Photovoltaic Integration bases in terms of scale, professionalism and intelligence, which are expected to bring new profit sources for the Company, farmers and other partners.

(II) Market positioning

In terms of agriculture and husbandry, the Company focuses on the scale-based professional development of the feed business, with an annual feed capacity of over 10 million tons, and its production and sales network covering much of the country and China and Southeast Asian countries such as Vietnam,

Bangladesh, and Indonesia. These make it a leading aquatic feed producer and an important livestock feed producer in the world. The Company has been holding a leading position in the industry regarding the production and sale volume of aquatic feed, i.e., its core product. As a national key leading enterprise in agricultural industrialization and a national enterprise technology center, the Company has won honors such as the Second Prize of the National Science and Technology Progress Award, Famous Trademark of China, and China Quality Award Nomination. During the reporting period, it again won the first prize of Shandong Provincial Science and Technology Progress Award and the second prize of Sichuan Provincial Science and Technology Progress Award, and participated in the formulation and revision of 6 national and industry feed standards. With high-quality products and comprehensive and efficient services, the brand is well-known in the industry and market.

In the field of photovoltaics, the Company has a production capacity of over 260,000 tons of high-purity polysilicon, over 70GW of solar cell capacity, and 14GW of module capacity, with world-leading product cost, quality, and efficiency. It is an important participant and driver in the global photovoltaic industry. The Company's high-purity polysilicon production has ranked first in the world for several consecutive years, with a domestic market share of over 30% in 2022. As a specialized solar cell producer, the Company's cell shipments have been the world's number one for 6 consecutive years since 2017 (according to InfoLink Consulting), and became the first company in the industry to accumulate over 100GW of cell shipments in the second quarter of 2022. In the field of modules, the Company has built a technology and market foundation over the years. In the second half of 2022, it rapidly promoted the scaled development of the module business, and entered the global top ten in terms of module shipments for the year. According to its production capacity planning, by the end of 2023, the Company's high-purity polysilicon capacity will be expected to exceed 380,000 tons, solar cell capacity reach 80-100GW, and module capacity 80GW. The coordinated development and progress of all businesses will continue boosting the company's industrial chain advantages and its core competitiveness will be further enhanced, contributing to the global effort into carbon neutrality.

IV. Analysis of the core competitiveness in the reporting period

"√ Applicable" "□ Not applicable"

(I) Clear strategic planning and positioning

The Company focuses on technological innovation and intelligent manufacturing in the main stages of PV industry, advances the large-scale application of clean energy with zero emission, is committed to creating a green healthy aquatic industrial chain to meet consumer demand for safe food, and makes every effort to provide the public with high-quality products in all industries closely related to human life and continuously improve the quality of human life.

Based on the above strategic positioning, the long-term development goal of the Company is "a world-class safe food supplier and a world-class clean energy operator", and the short and medium-term development plan is "to build and consolidate the leading position of global high-purity polysilicon, solar cells and aquatic feed."

(II) Leading capabilities of technical research and development

Regarding science and technology as the primary productive force, the Company attaches great importance to technology research and development. For each business group, it has built a R&D team led by subject matter experts and supported by increased investments, with plenty of achievements applied in the market. This has helped the Company create value.

1. Agriculture and animal husbandry business group

The Company has a National Enterprise Technology Center approved by five ministries and commissions including the National Development and Reform Commission and the Ministry of Science and Technology. After years of development and operation, the Center has established a complete organizational structure and operating mechanism for technological research and innovation, with specialization in animal nutrition and feed, animal breeding and cultivation, animal health care, automated farming facility project, aquatic and livestock product processing, and other research and technology integration related to biotechnology. By transforming innovative research results into actual productivity, the Center provides a critical support for the Company's development. The aquatic product research institute, special aquatic product research institute, livestock and poultry research institute, animal health care research institute, facility fishery engineering research institute, aquatic engineering center and testing center under the Center provide effective guide on innovations with clear goals and detailed tasks and ensure the innovation results.

During the reporting period, the Center continued various basic, applied, and forward-looking studies, comprehensively promoting the specialization and standardization of key elements such as raw materials,

formulations, and products. Important achievements were made in technology innovation and product upgrading, further consolidating the Company's core competitiveness in the aquatic industry chain. As of the end of the reporting period, the Company had submitted 971 patent applications in the agriculture and animal husbandry business group with 707 authorized, and has led or participated in the formulation or revision of 6 national and industry standards. The Precision Nutrition Study and the Development of Green and Efficient Artificial Compound Feed for *Lateolabrax Maculatus* for which the Company was a joint applicant won the first prize of the Shandong Provincial Science and Technology Progress Award, and its Development and Application of Chinese Veterinary Drugs for the Prevention and Treatment of Pig Diseases Under the Background of Antibiotic Resistance won the second prize of the Sichuan Provincial Science and Technology Progress Award.

Over the years, the Company has established a young, high-quality R&D team, which continuously consolidates its R&D capabilities and improves its product competitiveness under the leadership of the experts with special government allowances from the State Council.

2. PV business group

The Company established a Photovoltaic Technology Center based on its research system in various photovoltaic sectors. The center includes the branches of national technology centers at subsidiaries such as Tongwei Solar (Chengdu) Co., Ltd. and Yongxiang Co., Ltd. It is supported by a research team primarily consisting of industry experts. The center coordinates the joint R&D and integration of technologies in various parts of the industry chain. As of the end of the reporting period, the Company's photovoltaic business group had applied for 2,411 patents of which 1,396 were authorized, and won many national and provincial-level honors and awards, including the first prize of China Science and Technology Industrialization Award.

In 2022, the PV Technology Center was mainly tasked with the cross-business group link and integration in the introduction of new technologies and new products regarding solar cells and modules (such as TNC and THC), with increased efforts into the IUR cooperation with domestic and foreign universities, research institutes and other scientific research institutions, and strengthened the follow-up, research and development of cross-generation technology and cutting-edge technology (including HBC, TBC, perovskite, laminated cell/module, PV + storage) in the industry.

In terms of high-purity polysilicon, after years of development, the Company has made a number of achievements with independent intellectual property rights in the core technology fields such as cold hydrogenation, large-scale energy-saving rectification, high-efficiency reduction, tail gas recovery, trichlorosilane synthesis and anti-disproportionation, making it at the leading position in the industry regarding all consumptions per unit of production. In the reporting period, the mono crystal rate of high-purity polysilicon produced by the Company was over 99%; the mass delivery of N type silicon was realized. As of the end of the reporting period, 623 patent applications were submitted by Yongxiang with 423 patents authorized.

In terms of solar cells, the Company has gained a number of technological achievements with independent intellectual property rights in core technology fields such as atomic layer deposition back passivation, selective emitter technology, double-sided cells, multi-grid, TNC cells, and THC cells. It has been an industry leader when it comes to the conversion efficiency of THC, TNC and TBC cells from mass production. As of the end of the reporting period, 1366 patent applications were submitted by Tongwei Solar with 744 patents authorized.

During the reporting period, the Company focused on breaking through the SMBB (Super Multi Busbar) technology barriers in the field of solar modules, particularly achieving the industry's first large-scale production of 210 mm SMBB modules. In addition, it made phased breakthroughs in many cutting-edge module fields, including non-busbar module non-silver module, long-life module, and special-scenario module products. As of the end of the reporting period, Tongwei Modules submitted 422 patent applications and had 229 patents authorized.

(III) Scale and cost advantage

1. Agriculture and animal husbandry business group

The Company is a national key leading enterprise in agricultural industrialization, with presence across China and Southeast Asia, and annual feed capacity of more than 10 million tons, which makes it a leading aquatic feed producer and an important livestock feed manufacturer in the world. It has intensive advantages in raw material purchasing, production organization and market expansion.

2. PV business group

The Company has an annual capacity of over 260,000 tons for high-purity polysilicon with another 320,000 tons in construction and two new projects planned with a combined capacity of 320,000 tons, with investments and consumptions per unit of production declining. With the on-going improvements of technological processes and the expansion of capacity, the Company will have its costs further optimized

after the projects in construction are put into service. In terms of solar cells, the Company's annual production capacity has exceeded 70GW, with large-size production capacity accounting for over 95%. The average non-silicon cost of PERC products has dropped by 13% year-on-year. As the new project in Pengshan base is put into operation, the scale effect will be further strengthened with product technology and size structure optimized, making the non-silicon cost advantage more prominent. As for solar modules, various indicators rapidly climbed to the industry-leading level during the reporting period. According to its investment plan, the Company is expected to own a module production capacity of 80GW by the end of 2023, and its production cost will take a leading position driven by both the supporting industrial chain and technological innovation.

(IV) Quality and brand advantages

1. Agriculture and animal husbandry business group

Since its inception, the Company has developed a series of formula feeds that can meet the needs of various aquatic animals through continuous R&D and improvement. After years of tests in the market, the feed quality and market services of the Company have been highly recognized by farmers, which has created one of the iconic brands in the domestic aquatic feed industry. At the same time, the Company has made great efforts to build a well-known fresh fish brand "Tongwei Fish", and established aquatic and livestock food processing bases in Hainan and Sichuan for processing food in strict accordance with the requirements of the HACCP quality management system. As a result, the full-cycle quality monitoring from source to dinner table has been realized, which has effectively enhanced the value and competitiveness of the industrial chain.

2. PV business group

The Company has improved the quality of its monocrystalline silicon products by developing technologies for self-control of reduction processes, multiphase flow, cascaded utilization of reduction thermal energy, and boron/phosphorus/carbon impurity removal. Its product quality is top-notch, with a monocrystalline rate exceeding 99%, and it has achieved long-term stable supply of N-type materials to downstream customers. In 2022, Yongxiang was awarded multiple national and provincial-level honors, including National Intellectual Property Demonstration Enterprise, First Prize in China's Science and Technology Industrialization Award and Gongga Peiyou Enterprise. The conversion efficiency, yield rate, chip rate, CTM value, and other indicators of solar cells from the Company are leading in the industry and have been widely recognized by customers, demonstrated by multiple professional certifications at home and abroad. In 2022, Tongwei Solar was awarded multiple national, provincial, and industry honors, including National High-tech Enterprise, Outstanding Intelligent Manufacturing Scene in 2022, Top 100 Manufacturing Enterprises in Sichuan Province in 2022, Green Supply Chain Management Enterprise in Sichuan Province and Integrity Model Enterprise in Sichuan Province. In terms of the module business, the Company has rapidly gained brand awareness since accelerating its expansion during the reporting period. In 2022, Tongwei Modules was included in the Tier 1 list of global photovoltaic module manufacturers by Bloomberg New Energy Finance, and the Terra series module products received the carbon footprint certificate awarded by Certisolis, an authoritative French certification body. With efficient and reliable modules and excellent after-sales service capabilities, the Company has established stable cooperation relationships with most of China's central state-owned power generation groups and has gained customer recognition and trust.

(V) Unique Aquaculture-Photovoltaic Integration model

Supported by the unique advantage of resource integration at the end customers, the Company has created an innovative development model where solar electricity is generated above the water and fish farmed under the water, which allows the green combination of intelligent fishery and clean energy generation. In terms of fishery, the Company guides the intensive, intelligent and efficient development of aquaculture through effective water surface modification, rational application of fishery facilities, and optimization and innovation of aquaculture models. In terms of PV power generation, the Company adheres to the cost strategic planning, and continuously reduces the installed cost of PV systems through design optimization and technological innovation.

The Aquaculture-Photovoltaic Integration model can promote the coordinated development of primary, secondary and tertiary sectors, integrate and create a modern industrial park integrating new fishery, new energy, and new rural area, advance industrial transformation and upgrading, and provide an effective way for the construction of new rural areas, which has helped form a unique competitive model for the Company.

(VI) Corporate culture

An effective culture is an important support for the cohesion and creativity of the Company, and an important part of the core competitiveness of the Company. The Company has a powerful culture where Striving for Excellence Contributing to Society is the purpose; For Better Life the vision, which indicates

the value and goals of the Company; Honesty, Trust, Fairness and Excellence the management philosophy, that is, being sincere and candid, winning trust by credibility, running business with fairness and legitimacy, taking the lead with guaranteed excellence; Three Determines the important management principle of the Company, that is, efficiency determines profit, detail determines success, speed determines life and death; Work hard; Work with intelligence; Work with the spirit of seizing the day the code of conduct for employees. After years of development, the spirit advocated by the culture, closely integrated with our business targets and daily work, guides the benchmarking of all business groups, branches and subsidiaries, continuously and deeply advances the fine-tuning of management and constantly boosts the high-quality development of various business activities.

V. Main operating activities in the reporting period

Refer to the Section Operation Discussion and Analysis for details.

(I). Analysis of main businesses

1. Analysis of changes in related items of the income statement and cash flow statement

Unit: Yuan Currency: CNY

GL Account	Current period amount	Last period amount	Change (%)
Operating revenue	142,422,517,994.99	64,829,996,083.91	119.69
Operating cost	88,059,961,179.23	48,382,829,594.08	82.01
Sales expense	1,434,770,892.87	919,009,792.93	56.12
Management expense	7,867,914,704.37	2,951,233,971.46	166.60
Financial expense	689,147,212.07	637,160,688.38	8.16
R&D cost	1,464,443,543.84	1,025,715,488.68	42.77
Net cash flow generated from operating activities	43,817,909,631.70	7,474,393,433.33	486.24
Net cash flow generated from investing activities	-20,806,151,564.50	-13,447,148,909.93	-54.73
Net cash flow generated from financing activities	9,246,274,097.59	2,901,644,427.08	218.66

Note on the reasons for operating revenue change: mainly attributed to the expansion of PV business group's operation size and rise of product prices.

Note on the reasons for operating cost change: mainly attributed to the expansion of PV business group's operation size and rise of raw material costs.

Note on the reasons for change in sales expense: mainly attributed to the business expansion and increase in the advertising and marketing expense.

Note on the reasons for change in management expense: mainly attributed to increase in employee payrolls.

Note on the reasons for change in financial expense: mainly attributed to the interest increase caused by the convertible bonds issued by the Company.

Note on the reasons for change in R&D cost: mainly attributed to increased R&D investments into silicon materials, solar cells and modules.

Note on the reasons for change in net cash flow generated from operating activities: mainly attributed to the expanded operating size and improved profitability.

Note on the reasons for change in net cash flow generated from investing activities: mainly attributed to increased investments into PV business group.

Note on the reasons for change in net cash flow generated from financing activities: mainly attributed to convertible bonds issued by the Company.

Detailed note on any significant change in the business type, profit structure or profit source of the Company

"□ Applicable" "√ Not applicable"

2. Revenue and cost analysis

"□ Applicable" "√ Not applicable"

(1). Main businesses by industry, product, region and sale model

Unit: Yuan Currency: CNY

Main businesses by industry						
Industry	Operating revenue	Operating cost	Gross profit margin (%)	YoY change of operating revenue (%)	YoY change of operating cost (%)	YoY change of gross profit margin (%)
Agriculture and animal husbandry	31,646,055,679.69	29,147,668,534.83	7.89	28.69	30.95	- 1.59 ppts
PV	109,826,328,708.82	58,106,965,979.28	47.09	187.62	152.81	+ 7.29 ppts
Total	141,472,384,388.51	87,254,634,514.11	38.32	125.38	92.86	+ 10.40 ppts
Main businesses by product						
Product	Operating revenue	Operating cost	Gross profit margin (%)	YoY change of operating revenue (%)	YoY change of operating cost (%)	YoY change of gross profit margin (%)
Feed, food and relevant activities	31,646,055,679.69	29,147,668,534.83	7.89	28.69	30.95	- 1.59 ppts
Solar cells, modules and relevant activities	53,526,448,754.97	48,074,022,328.84	10.19	114.67	111.42	+ 1.38 ppts
High-purity polysilicon and chemical engineering	61,855,061,411.02	15,384,960,344.64	75.13	229.70	146.19	+ 8.44 ppts
PV power	1,654,610,456.96	773,526,860.19	53.25	3.25	29.83	- 9.57 ppts
Offset from consolidation	-7,209,791,914.13	-6,125,543,554.39				
Total	141,472,384,388.51	87,254,634,514.11	38.32	125.38	92.86	+ 10.40 ppts
Main businesses by region						
Region	Operating revenue	Operating cost	Gross profit margin (%)	YoY change of operating revenue (%)	YoY change of operating cost (%)	YoY change of gross profit margin (%)
East China	54,197,508,326.20	45,417,982,480.87	16.20	133.60	127.85	+ 2.12 ppts
South China	12,300,423,046.70	11,122,093,251.52	9.58	51.10	50.82	+ 0.17 ppts
West China	74,699,211,156.62	38,055,628,424.35	49.05	190.44	139.97	+ 10.71 ppts
North China	17,930,621,736.25	10,055,745,017.70	43.92	69.86	44.99	+ 9.62 ppts
Middle China	6,940,137,809.05	6,501,478,900.83	6.32	23.53	22.56	+ 0.74 ppts
Overseas	12,599,798,279.52	11,511,886,129.03	8.63	57.72	56.62	+ 0.64 ppts
Offset from consolidation	-37,195,315,965.83	-35,410,179,690.19				
Total	141,472,384,388.51	87,254,634,514.11	38.32	125.38	92.86	+ 10.40 ppts
Main businesses by sale model						
Sale model	Operating revenue	Operating cost	Gross profit margin (%)	YoY change of operating revenue (%)	YoY change of operating cost (%)	YoY change of gross profit margin (%)
Direct sale	115,319,222,018.16	63,337,406,388.99	45.08	144.92	104.95	+ 10.71 ppts
Franchised dealership	26,153,162,370.35	23,917,228,125.12	8.55	66.72	66.80	- 0.04 ppts

Note on main businesses by industry, product, region and sale model:
The dealership mode basically covers feed and modules dealership overseas.

(2). Production and sale analysis

"√ Applicable" "□ Not applicable"

Main products	Unit	Production	Sale	Inventory	YoY change of production (%)	YoY change of sale (%)	YoY change of inventory (%)
Feed	10,000 tons	643.36	719.40	11.18	19.65	30.42	6.67
High-purity polysilicon	10,000 tons	26.69	25.68	1.17	144.12	138.41	480.81
Solar cells	GW	49.18	47.98	1.90	38.72	37.35	60.17
Modules	GW	4.74	7.94	1.25	88.99	226.06	329.52
PV generation	100 million kWh	40.61	40.60	0.00	27.85	31.39	/

Note: The sales volume of modules in 2022 included modules produced on behalf of clients.

(3). Fulfillment of major purchase contracts and sales contracts

√ Applicable □ Not applicable

Fulfillment of major existing sales contracts as of the end of the reporting period

√ Applicable □ Not applicable

Unit: 100 million yuan Currency: CNY

Subject matter	Counterparty	Total amount	Amount fulfilled	Amount fulfilled in the reporting period	Amount to be fulfilled	Fulfillment or not	Note on non-fulfillment
High-purity polysilicon	LONGi	/	243.30	243.30	/	Yes	
High-purity polysilicon	Qinghai Gokin Solar	/	50.50	50.50	/	Yes	
High-purity polysilicon	Yuze Semiconductor	/	15.49	15.49	/	Yes	
High-purity polysilicon	Metco Silicon Energy	/	73.29	55.49	/	Yes	
High-purity polysilicon	Shuangliang Silicon Materials	/	17.94	17.94	/	Yes	
High-purity polysilicon	Jinko Solar	/	123.33	88.50	/	Yes	
High-purity polysilicon	Trina Solar	/	38.64	24.48	/	Yes	

Note: ① only quantities are agreed in the above major sales contracts where prices are determined according to the market prices; ② above amounts include taxes.

Fulfillment of major existing purchase contracts as of the end of the reporting period

"□ Applicable" "√ Not applicable"

(4). Cost analysis

Unit: Yuan

Cost by industry							
Industry	Cost item	Current amount	Current period amount to total cost (%)	Last period amount	Last period amount to total cost (%)	YoY amount change (%)	Remarks
Agriculture and animal husbandry	Raw materials	27,595,466,380.85	94.67	20,912,211,007.71	93.95	31.96	

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Agriculture and animal husbandry	Labor cost	380,990,879.22	1.31	367,104,377.22	1.65	3.78	
Agriculture and animal husbandry	Manufacturing expense	1,171,211,274.75	4.02	979,382,716.46	4.40	19.59	
PV industry	Raw materials	45,102,802,056.52	77.62	17,056,289,488.92	74.21	164.73	
PV industry	Labor cost	1,823,636,210.19	3.14	806,471,779.10	3.51	115.74	
PV industry	Manufacturing expense	11,180,527,712.58	19.24	5,121,685,079.88	22.28	104.75	
Cost by product							
Product	Cost item	Current amount	Current period amount to total cost (%)	Last period amount	Last period amount to total cost (%)	YoY amount change (%)	Remarks
Feed, food and relevant activities	Raw materials	27,595,466,380.85	94.67	20,912,211,007.71	93.95	31.96	
Feed, food and relevant activities	Labor cost	380,990,879.22	1.31	367,104,377.22	1.65	3.78	
Feed, food and relevant activities	Manufacturing expense	1,171,211,274.75	4.02	979,382,716.46	4.40	19.59	
High-purity polysilicon and chemical engineering	Raw materials	7,097,583,400.89	50.20	3,072,125,706.97	49.16	131.03	
High-purity polysilicon and chemical engineering	Labor cost	420,052,797.73	2.97	265,592,641.47	4.25	58.16	
High-purity polysilicon and chemical engineering	Manufacturing expense	6,619,608,592.98	46.82	2,911,520,274.36	46.59	127.36	
Solar cells, modules and relevant activities	Raw materials	43,504,348,412.37	90.49	20,517,743,788.12	90.23	104.78	
Solar cells, modules and relevant activities	Labor cost	1,366,510,671.86	2.84	540,879,137.63	2.38	144.01	
Solar cells, modules and relevant activities	Manufacturing expense	3,203,163,244.61	6.66	1,680,093,841.06	7.39	84.14	
PV power	Manufacturing expense	773,526,860.19	100.00	595,820,555.39	100.00	29.83	

(5). Changes in the scope of consolidation due to shareholding changes of main subsidiaries in the reporting period

Applicable" Not applicable"

(6). Significant changes or adjustments in businesses, products or services of the Company in the reporting period

Applicable" Not applicable"

(7). Major customers and suppliers**A. Main customers**

Applicable" Not applicable"

The sales amount from top five customers was 53.489 billion yuan, accounting for 37.56% of the total sale amount; the sales amount from related parties (in the sales amount from top five customers) was 0, accounting for 0% of the total sale amount.

The sale amount from a single customer was over 50% of the total sale amount and/or the top five customers include new customers or the Company was heavily dependent on a small number of customers

Applicable" Not applicable"

B. Major suppliers

Applicable" Not applicable"

The purchase amount to top five suppliers was 26.858 billion yuan, accounting for 21.23% of the total purchase amount; the purchase amount to related parties (in the purchase amount to top five suppliers) was 0, accounting for 0% of the total purchase amount.

The purchase amount to a single supplier was over 50% of the total purchase amount and/or the top five suppliers include new suppliers or the Company was heavily dependent on a small number of suppliers

Applicable" Not applicable"

Other notes

None.

3. Expenses

Applicable" Not applicable"

4. R&D cost**(1).R&D cost**

Applicable" Not applicable"

Unit: Yuan

R&D cost expensed in the current period	4,400,583,344.89
R&D cost capitalized in the current period	
Total R&D cost	4,400,583,344.89
Total R&D cost to operating revenue (%)	3.09
Percent of capitalized R&D cost (%)	

(2).R&D personnel

Applicable" Not applicable"

R&D employees	3,549
R&D employees to total employees (%)	8.61
Education background of R&D employees	
Education background	Number of employees
Doctor degree	29
Master degree	342

Bachelor's degree	1,578
Others	1,600
Age groups of R&D employees	
Age group	Number of employees
Under 30 years old	1,324
30 - 40 years old	1,595
40 - 50 years old	465
50 - 60 years old	160
60 years old or above	5

(3).Note

Applicable" Not applicable"

Science and technology are the primary productive force. The Company keeps technological innovation and development by keeping abreast of industry trends and for meeting customer needs. For each business group, it has built a R&D team led by subject matter experts and supported by increased investments, with plenty of achievements that helped the Company create value.

The Company has 3,549 R&D employees, or 8.61% of its total 41,214 employees. Specifically, those holding bachelor or higher degrees account for 54.92% of the R&D employees; 62.69% of the R&D employees are 30 years old or above, and 37.31% are under 30 years old.

(4).Reasons for material changes in R&D staff structure and the impact on the Company's future development

Applicable" Not applicable"

As of the end of the reporting period, the Company had 3,549 R&D employees, a year-on-year increase of 214 from 3,335, which is mainly driven by: the increase of talents in aquatic and livestock R&D team, technical service team, and alga R&D team because the Company intended to enhance the systematic study into indoor shrimp farming and intelligent feeding system, and processes for spirulina feed used for photoenergy aquaculture; the further business expansion of high-purity polysilicon, solar cells and solar modules with the advancement of new projects in Leshan, Yunnan, Inner Mongolia, Jintang, Meishan, Pengshan and Hefei, which required more talents and resulted in the increase of R&D employees. The increase in R&D personnel helps with the advancement of R&D projects, has boosted its R&D capability and level for improving its sustainability on a long-term basis.

5. Cash flow

Applicable" Not applicable"

Refer to the analysis of changes in related items of the income statement and cash flow statement in this Section.

(II).Note on material change in profit caused by non-main operating activities

Applicable" Not applicable"

(III). Analysis of assets and liabilities

"√Applicable" "□Not applicable"

1. Assets and liabilities

Unit: Yuan

Project name	Opening balance of current period	Opening balance to the total assets (%)	Closing balance of last period	Closing balance to the total assets (%)	YoY balance (%)	Note
Cash at bank and on hand	36,841,572,130.01	25.37	3,001,930,882.38	3.42	1,127.26	Due to improved profitability and sufficient operating cash flow.
Held-for-trading financial assets	4,298,524,475.70	2.96	10,617,668.58	0.01	40,384.64	Due to purchase of wealth management products.
Notes receivable	2,450,913,663.89	1.69	1,576,925,682.02	1.79	55.42	Due to expansion of overseas business and increase in the L/Cs.
Accounts receivable	4,501,362,630.14	3.10	2,915,527,149.08	3.32	54.39	Due to extended payment cycle to strategic customers in the agriculture and husbandry, and module businesses.
Inventories	11,002,649,108.38	7.58	5,682,791,568.04	6.47	93.61	Due to increase in goods in stock, goods in transit and raw materials as a result of increased operation size, overseas business expansion, and rise of raw material costs.
Other current assets	786,407,734.06	0.54	1,220,643,137.83	1.39	-35.57	Due to deduction of the previous year's overpaid input tax in the current year.
Construction in progress	3,997,396,999.92	2.75	10,610,819,753.03	12.07	-62.33	Due to the conversion of solar cells and high-purity polysilicon projects into fixed assets.
Short-term borrowings	87,767,124.22	0.06	1,375,230,141.70	1.56	-93.62	Due to the adjustment of the Company's financing structure.
Accounts payable	11,018,161,537.30	7.59	8,151,270,076.21	9.27	35.17	Due to business expansion and increase in procurement.
Contract liabilities	5,405,872,108.61	3.72	3,112,027,804.79	3.54	73.71	Due to business expansion and increase in advances from suppliers in the PV business group.
Long-term borrowings	15,409,335,995.67	10.61	11,441,029,860.16	13.02	34.68	Due to expanded investment size and adjustment of financing structure.

2. Overseas assets

Applicable" Not applicable"

(1) Assets

In which: The overseas assets were 2,637,790,616.96 yuan, accounting for 1.82% of the total assets.

(2) Note on the high ratio of overseas assets

Applicable" Not applicable"

3. Main restricted assets at the end of the reporting period

Applicable" Not applicable"

Unit: CNY

Item	Closing carrying value	Restriction reasons
Cash at bank and on hand	25,374,248.91	Provide guarantees for financing and operations
Receivables financing	9,665,638,659.50	Provides pledges for bank acceptance bills issued by the Company
Accounts receivable	715,625,583.47	Provide collaterals for financing of the Company
Contract assets	355,864,692.87	Provide collaterals for financing of the Company
Fixed assets	5,957,339,958.31	Provide collaterals for the Company's financing
Right-of-use assets	1,392,343,524.16	Provide collaterals for financing of the Company
Intangible assets	445,149,567.28	Provide collaterals for financing of the Company
Investment properties	72,509,754.87	Provide collaterals for financing of the Company
Total	18,629,845,989.37	

4. Other notes

Applicable" Not applicable"

(IV). Industrial operation analysis

Applicable" Not applicable"

The Company is involved in PV, agriculture, forestry, livestock husbandry and fishery.

Analysis of operational information in the PV industry**1. PV equipment manufacturing**

"□ Applicable" "√ Not applicable"

2. Key technical indicators of PV products

"√ Applicable" "□ Not applicable"

Product category	Technical indicator	
Solar energy-grade polysilicon:	Output ratio of products at all levels	Ratio of electricity cost to total product cost
Solar energy-grade polysilicon	100%	29.77%
Solar cells:	Average energy conversion efficiency in mass production	Maximum energy conversion efficiency in R&D stage
Monocrystalline silicon cells	Type P: 23.98% Type N: 25.50%	26.18%
Modules:	Average module power in mass production	Maximum module power in R&D stage
Silicon solar cells	182 72 format PERC modules: 547.9 W 182 72 format TOPCon modules: 580.5 W	182 72 format PERC modules: 588.4 W 210 66 format PERC modules: 720.7 W
Discussion and analysis of indicators: (1) Average energy conversion efficiency of mass production solar cells means the ratio of the maximum output power of solar cells when they are under sunlight to the incident ray power, an important parameter to measure the quality and technical level of cells. The higher the energy conversion efficiency rate, the higher the output power of the single wafer of the cell, and the single wafer of the cell with high power can be packaged into high power PV modules. (2) The maximum energy conversion efficiency rate in R&D stage: The highest average conversion efficiency of cells in R&D experiments is tested by recognized third-party organizations. The Company focuses on the development of high-efficiency cells. It further improves the conversion efficiency of cells and modules by adopting multi-busbars, back passivation, SE process, high-resistance dense grid, alkali polishing, overlapping solar cells and HJT technologies, allowing the Company to be the industry leader in product quality with relevant indicators.		

3. PV powerplants

"√ Applicable" "□ Not applicable"

Unit: 10,000 Yuan Currency: CNY

Development of PV powerplants					
Number of powerplants and total installed capacity held at the beginning of the period	Number of powerplants and total installed capacity sold in the reporting period	Number of powerplants and total installed capacity held at the end of the period	Total installed capacity approved	Total price of powerplant projects sold	Effect of powerplants sold in the period on the operational performance of the period
48 powerplants with grid connected installed capacity of 2.7 GW	0	52 powerplants with grid connected installed capacity of 3.4 GW	6.6 GW	0	No powerplant was sold in the period

Note: The total installed capacity approved means the installation capacity of powerplants that have been registered and held by the Company (including those connected to and not connected to the grid)

"√ Applicable" "□ Not applicable"

Unit: 10,000 Yuan Currency: CNY

Operation of PV powerplants in the year:							
Region	Installed capacity (MW)	Power generation (10,000 kWh)	Grid connected power (10,000 kWh)	Settled power (10,000 kWh)	Price of grid connected electricity (yuan/kWh)	Electricity revenue	Subsidies
Centralized:							
Anhui	280.15	36,861.82	35,620.34	35,279.63	0.37	11,858.73	1,331.86
Guangdong	245.00	20,333.34	20,101.74	19,948.37	0.48	7,977.11	1,580.52
Hubei	419.33	23,919.65	23,644.39	23,616.06	0.37	8,737.71	6.35
Jiangsu	315.00	43,288.69	42,344.96	42,305.52	0.52	14,637.66	7,302.21
Shandong	557.91	75,552.37	74,328.95	75,251.79	0.34	23,693.70	1,904.85
Others	1,504.07	198,640.43	195,429.41	195,018.79	0.34	61,428.97	4,873.37
Total	3,321.46	398,596.30	391,469.79	391,420.16	/	128,333.88	16,999.16
Distributed:							
Anhui	0.42	42.50	42.50	42.50	0.87	14.46	22.40
Hubei	3.14	201.08	201.08	201.08	0.86	98.60	73.55
Jiangsu	0.56	61.58	61.58	61.58	0.99	37.89	22.83
Shandong	11.32	1,565.29	1,534.54	1,523.20	0.75	772.21	365.83
Others	94.13	13,171.69	12,814.96	12,738.38	0.66	4,126.79	4,227.61
Total	109.57	15,042.14	14,654.66	14,566.74	/	5,049.95	4,712.22

Note:

- ① The average on-grid electricity price for centralized power generation is 0.37 yuan/kWh, while the average on-grid electricity price for distributed power generation is 0.67 yuan/kWh.
- ② The Company focuses on Aquaculture-Photovoltaic Integration a differentiator, and the market development mainly covers five provinces: Anhui, Guangdong, Hubei, Jiangsu, and Shandong.

"□ Applicable" "√ Not applicable"

4. Recommended tables**(1). Production of PV products and PV capacity in construction (as of the end of the reporting period)**

"√ Applicable" "□ Not applicable"

Unit: 10,000 Yuan Currency: CNY

Product category	Yield	Capacity utilization	Process route in operation	Total investment in production lines in construction	Current investment in production lines in construction	Designed capacity	(Expected) completion time	Process route in construction
Solar energy-grade polysilicon	266,900 tons	122.91%	Modified Siemens process	287,943.43	287,943.43	120,000 tons	2023	Modified Siemens process
			Modified Siemens process	44,719.43	44,719.43	200,000 tons	2024	Modified Siemens process
Silicon wafers:								
Monocrystalline silicon wafers	/	/	/	351,020.33	246,816.77	15 GW	2022	Monocrystalline
Solar cells:								
Monocrystalline silicon cells	49.18 GW	100.50%	PERC/TOPCON	15,629.53	15,629.53	16 GW	2023	PERC/TOPCON
Modules:								
Silicon solar modules	4.74 GW	105.43%	High-efficiency modules	1,572.17	1,572.17	25 GW	2023	High-efficiency modules
Analysis of the reasons and effect of significant changes in capacity utilization: Not applicable								

(2). Major financial indicators of PV products

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Product category	Sales-to-production ratio (%)	Sales revenue		Gross profit margin (%)	
		Domestic	Overseas	Domestic	Overseas
Solar energy-grade polysilicon	96.19	60,195,496,172.34		76.96	
Solar cells:					
Multicrystalline silicon cells	/	657,226.35	2,147,399.65	/	/
Monocrystalline silicon cells	97.56	31,920,633,281.37	5,757,095,854.34	9.82	10.56
Modules:					
Silicon solar cells	75.68	9,559,687,047.64	4,380,510,790.67	5.33	17.72

PV products sold overseas should be listed by country or region

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Overseas sales of modules		
Country/region	Sales revenue	Gross profit margin (%)
South Korea	1,961,861,356.90	21.96
Germany	1,024,126,456.79	12.75
Italy	238,821,426.13	10.64
Poland	183,826,513.94	11.04
Netherlands	212,350,501.50	14.07
France	303,098,052.91	15.00
Others	456,426,482.50	20.55

Unit: Yuan Currency: CNY

Overseas sales of monocrystalline silicon cells		
Country/region	Sales revenue	Gross profit margin (%)
Türkiye	3,348,874,889.35	11.33
South Korea	312,924,110.73	6.72
Germany	413,938,510.91	9.84
Hong Kong SAR, China	320,789,632.97	13.37
India	248,621,417.30	10.75
Others	1,111,947,293.08	8.75

(3). PV powerplant projects commissioned or developed

"□ Applicable" "√ Not applicable"

5. Other notes

"□ Applicable" "√ Not applicable"

(V). Investment analysis**Overall analysis of outward equity investments**

Applicable Not applicable

1. Significant equity investments

Applicable Not applicable

2. Significant non-equity investments

Applicable Not applicable

Unit: 10,000 Yuan

Project name	Amount invested in the reporting period	Cumulative investment amount	Project progress	Return realized in the reporting period	Sources of funds
Phase I 50,000-ton High-purity Polysilicon Project of Yunnan Tongwei	56,153.67	464,378.94	Completed	561,916.96	Self-funding
Phase II 50,000-ton High-purity Polysilicon Project of Inner Mongolia Tongwei	284,376.77	511,242.03	Completed	352,171.80	Raising fund and self-funding
15 GW Monocrystalline Rod Pulling and Cutting Project of Yongxiang PV Technology	246,816.77	351,020.33	Put into production by batch	-50,262.88	Raising fund and self-funding
Phase I 120,000-ton High-purity Polysilicon Project of Yongxiang New Energy	287,943.43	287,943.43	In progress	/	Self-funding
Tonghe Project	131,438.88	359,981.26	Completed	82,120.24	Self-funding
Phase I 16 GW High-efficiency Solar Cell Project in Pengshan	15,629.53	15,629.53	In progress	/	Self-funding
Phase II 200,000-ton High-purity Polysilicon Project of Yunnan Tongwei	44,719.43	44,719.43	In progress	/	Self-funding
25 GW High-efficiency Solar Modules Manufacturing Base Project in Yancheng	1,572.17	1,572.17	In progress	/	Self-funding

3. FVTPL financial assets

Applicable" Not applicable"

Securities investments

Applicable" Not applicable"

PE investments

Applicable" Not applicable"

Derivatives investments

Applicable" Not applicable"

4. Progress of significant asset restructuring and integration in the reporting period

Applicable" Not applicable"

(VI). Significant asset and equity sales

Applicable" Not applicable"

(VII). Analysis of companies where the Company holds shares

Applicable" Not applicable"

Unit: 10,000 Yuan

Full name of subsidiary	Business nature	Registered capital	Total assets	Net assets	Operating revenue	Operating profit	Net income
Yongxiang Co., Ltd (combination)	PV industry	142,086.69	6,516,829.10	4,310,424.63	6,233,082.70	4,069,490.58	3,429,593.31

(VIII). Structure entities controlled by the Company

Applicable" Not applicable"

VI. Discussion and analysis on the Company's future development**(I). Industry pattern and trends**

Applicable" Not applicable"

1. Feed industry**(1) Entering a stage of steady and high-quality development where there is still room for market expansion**

Since the Reform and Opening up, China's feed industry has undergone many years of high-speed development. From 2011 on, its output has steadily ranked first in the world, and its annual output now exceeds one-fifth of the global total. Since 2011, the annual growth of feed production in China has gradually slowed down. In 2022, the national growth was only 3%, and the number of feed companies decreased from over 10,000 to just over 5,000 in 2019, indicating significant industry consolidation and upgrading. The further revision, publication and implementation of relevant laws and regulations such as the Environmental Protection Law of the People's Republic of China, the Food Safety Law of the People's Republic of China, and the Measures for the Administration of Feed and Feed Additives have raised higher requirements for safety and quality, technology development, and environmental protection of feed enterprises, and the industry has entered a stable and high-quality development stage. However, from the perspective of market space, China's per capita consumption of meat is still lower than that of developed countries, indicating significant room for growth. With the further development of the domestic economy and the continuous increase in per capita disposable income, the demand for high-quality meat products, dairy products, and aquatic food by consumers will continue to rise, and the feed industry still has a good outlook.

(2) Some raw materials are dependent on imports and reducing grain in feed is a long-term strategy for the industry

Main raw materials for feed production are corn and soybean (meal), the latter is primarily imported, a situation that is unlikely to change in a long run. The demand for corn for feed is the main contributor to the

significant shortfall, making it a crucial risk point for China's food security. In recent years, impacted by global inflation and geopolitical conflicts, grain prices have risen sharply, which led to rising feed costs. Looking ahead, extreme weather, frequent geopolitical conflicts, and ongoing cross-border trade frictions may keep grain prices at high levels for a long time, making it difficult for feed companies to alleviate cost pressures. Since 2018, to resolve the high content of corn and soybean meal in feed, China launched a campaign to replace corn and soybean meal in feed, making improving feed conversion efficiency a key task to promote high-quality development of animal husbandry, which has delivered good results. The low-protein diets and precision formula technologies that are part of the action to reduce grain content in feed will also place higher requirements on the research and development, formulation, and production capabilities of feed companies, and are expected to further widen the gap between feed companies.

(3) Scaled development together with digital upgrading is the direction with the integration trend further boosted

In recent years, the scale of livestock and poultry farming has been growing, which imposes greater pressure on small-scale farmers in terms of animal quarantine, environmental protection, and profitability, leading some to exit the market. As a result, the market share of large-scale farms and breeding groups continues to increase. Aquaculture is also increasingly specialized and intensive, placing higher requirements on the scale, R&D capabilities, and biological control. Leading feed enterprises, represented by the Company, are taking the lead in exploring intelligent factories and digital enterprises, which will lead the direction of industry upgrading. At the same time, in the context of slower total growth, accelerated development of self-formulated feed by breeding enterprises, and intensified market competition, industry leaders with established channels, brand advantages, stronger capital, management, R&D, talent, and scale strength attempt to expand downstream into breeding, slaughtering, food, and trade sectors, and the trend towards integration is further strengthened. However, small and medium-sized enterprises with weak comprehensive competitiveness may face continued pressure in environmental governance, R&D, and market competition, and their survival space may be further narrowed.

2. PV

(1) The global trend of energy transformation is clear and PV has a huge development space

It is highly certain that the trend of vigorously promoting the development of green energy globally remains in a long run. Due to simple construction and installation, wide applicability, safety, cost-effectiveness and efficiency, photovoltaics have developed into the main force of renewable energy, and will also reduce the cost of electricity generation, expand the market space, and improve the development speed through continuous technological progress and increased scale. With carbon emissions becoming an important factor affecting commodity imports and exports, and many countries issuing policies to encourage investment, construction, and application of photovoltaic power generation to achieve energy independence and get rid of energy dependence, vigorously developing renewable energy in particular photovoltaics has become an inevitable choice concerning the national strategic development of countries. According to IEA, the new installed PV capacity over the world from 2022 to 2027 would reach 1500 GW. By 2027, the cumulative installed capacity of photovoltaics globally will exceed that of coal and become the largest installed energy form, indicating that the photovoltaic industry has broad prospects.

(2) Industry competition continues to intensify, and the market concentration may be subject to fragmentation

In recent years, the demand for photovoltaic products has grown rapidly, leading to supply shortfall and price increase, while the entire PV industry chain has shown strong willingness to expand production, and large amounts of capital have entered the industry. According to InfoLink Consulting, as of the end of 2022, effective production capacities for silicon materials, wafers, cells, and modules all exceeded 500GW, and there are still plans for further expansion in each segment. It is expected that by the end of 2023, the total production capacity in each segment will exceed 800GW, and the industry will go to a phase of intensified competition, with the possibility that the concentration in some segments may be subject to fragmentation. Meanwhile, some companies are accelerating their vertical integration to consolidate their competitive advantage and reduce risks associated with upstream and downstream sectors. This trend will also increase competition in the industry. Against this backdrop, leading companies with advanced R&D capability, management and operational experience, and strong talent pool will be able to bear more risks and consolidate their market position and competitive advantages during the expansion of their production capacities.

(3) Distributed PV market grows rapidly with increasingly diverse “PV+” scenarios

The wide application of photovoltaic products has resulted in two categories of PV models, i.e., centralized and distributed, in China where the latter is in particular growing fast. Driven by the national policy of “Bringing Solar Energy to Every Household”, the domestic distributed market is expected to continue its rapid growth in the future, benefiting from the accelerated development of distributed

photovoltaic projects across counties and the one-stop energy solutions facilitated by photovoltaic companies. As technology advancements, economies of scale and policy-based incentives have remarkably increased the economic benefits of photovoltaic power generation, the application scenarios of photovoltaic power generation will become increasingly diversified. The “PV+” market has spawned various business models that are combined with agriculture, industry, construction, transportation, and communication, providing photovoltaic companies with broader opportunities. Relevant companies participate in business development in various application scenarios through investment, acquisition, business cooperation, and other means to achieve performance growth. However, the requirements for photovoltaic products vary depending on application scenarios. This has imposed new requirements for photovoltaic companies in terms of targeted product development, R&D capabilities, technological reserves, production organization, and other aspects.

(4) Solar cell technologies are updating and type-n may have a significantly increased market share

As the conversion efficiency of PERC cells approaches its theoretical limit, new types of cell technologies are thriving, continuously breaking through both conversion efficiency and production capacity. As of 2022, the average conversion efficiency of P-type monocrystalline cells was 23.2%, N-type TOPCon cells 24.5%, heterojunction cells 24.6%. The conversion efficiencies of thin-film and perovskite cells are improving as well. However, given the current production capacity and investment scale at the industry-level as well as the level of end-user electricity costs, it is expected that N-type cells represented by TOPCon and HJT may become the mainstream of the next generation, while the market share of P-type cells may gradually decline.

(5) PV companies may go globally at a higher speed in the context of trade barriers and local manufacturing capability

Photovoltaics has become one of representative industries where China bears notable advantages, and Chinese companies have secured an absolute leading advantage along the entire industry chain including polysilicon, wafers, cells, and modules, with global market shares in all segments exceeding 70%. However, from the perspective of end markets, as the global energy transformation accelerates, the overseas market space and growth continue to expand, and the localization of photovoltaic manufacturing in overseas markets is a clear trend. At the same time, many countries have supported their local photovoltaic manufacturing industry in recent years through the combination of “trade barriers + support for local industries”, which has impacted domestic photovoltaic companies to some extent. Chinese photovoltaic companies will accelerate their global development, and continuous improvement of market share through product exports and overseas investment may become a new path for development.

(II). Development strategy of the Company

"√ Applicable" "□ Not applicable"

The Company's development strategy is to build a world-class safe food supplier and clean energy operator. Utilizing the comprehensive strength and large-scale advantages accumulated for a long time in scientific research, branding, comprehensive operations, and other areas, it adapts to industry development trends, adheres to the specialization, large-scale, and industrialization process of the PV business group and agriculture and animal husbandry business group, and optimizes and improves their respective industrial chain, strives to promote the Company's sustainable and stable development by both endogenous and extensional investment methods, promotes the continuous and stable development and realizes the Company's vision of "For Better Life".

1. Agriculture and animal husbandry business group: a world-class safe food supplier

Feed industry: Adhering to Quality Policy and with a focus on the specialization and scale up of the feed business, the Company tries to grow steadily by setting up facilities and M&A activities at home and abroad. While focusing on the aquatic feed business, the Company makes the most of the season-based cycle of the business by advancing the collaborative mode with large farming companies in livestock and poultry feed, a way to increase its feed business size and market share.

Aquaculture: Based on the resources (aquaculture resources, channel resources) gained over the past years, and making use of its unique Aquaculture-Photovoltaic Integration mode for efficiency improvement, the Company puts great efforts into the new approach combining the Company with farmers, and further explores and develops facility-based standard fishery where factory-based farming targeting premium aquatic products represented by shrimps and special aquatic foods, elevates the automation, intelligence and environmental standards for aquaculture, advances the transformation from traditional to modern fishery, and build state-of-the-art production bases of safe aquatic products which can be fully tracked.

Processing and trade activities: The Company accelerates the deep processing and trade of aquatic

products and build a uniform industry chain from farmers to consumers around the growth mode of “three-fish, one-prawn, one brand, one-platform and one-market”. Tongwei Fish, the Company's green and safe food benchmark, has been highly recognized in the regional market, and the successful model will be replicated in the future. At the same time, it is actively applying big data to the sale of aquatic products by combining an online e-commerce platform (Quan Nong Hui) with an aquatic wholesale market (San Lian Shui Chan Pin) to create a circulation system. By giving full play to Tongwei Fish, the Company focuses on the operation of key products like Tilapia, mullet, channel catfish and Yantian shrimp, striving to cover the entire industry chain including farming, production, processing and trade.

2. PV business group: create a world-class clean energy operator

As one of the leading manufacturers in the PV industry, the Company will continue to enhance its advantage along the industry chain and strengthen its leading positions in all parts, and accelerate the Aquaculture-Photovoltaic Integration mode to be a world-class clean energy operator.

Regarding PV manufacturing, by giving full play to its capabilities of technology development and cost control, the Company is solidifying its leading position in this area. By continuously consolidating and enhancing its scale, technology, and cost advantages that are leading in the high-purity polysilicon segment, the Company strives to increase its market share, and secure a globally leading position in the segment. By continuously strengthening the research and development, scale, and management advantages in the solar cell segment, the Company tries to consolidate its leading profitability and market share, and secure a globally leading position in the segment. By rapidly increasing the production capacity and market share in the module segment, and establishing channel and brand advantages in multiple domestic and international markets, the Company works to be one of the leading global module companies.

In the photovoltaic power generation segment, the Company firmly advances the Aquaculture-Photovoltaic Integration mode through organic combination of its resources in agriculture and PV, in order to create an Aquaculture-Photovoltaic Coexistence economy where feed, aquatic products and green energy are integrated, thereby building a differentiated competitiveness for the Company.

(III). Business plan

"√ Applicable" "□ Not applicable"

In 2023, with firm adherence to the business guidelines of focus, execution and efficiency, the Company continues securing its advantages in aquatic feed, high-purity polysilicon and solar cell while fully leveraging the synergy effect of PV business group to rapidly increase the brand impact and market share for the modules business. These are intended for increasing the Company's value and returns to shareholders.

1. Agriculture and Animal Husbandry: The Company strives to increase the revenue of feed, food and associated businesses along the industry chain by over 10% YoY.

2. PV: The Company strives to deliver 300,000 tons for high-purity polysilicon business, 70 GW (including self-use) for solar cell business, and 35 GW for module business; for the photovoltaic power generation business, it plans to construct an Aquaculture-Photovoltaic Integration project with a capacity of 1 GW through investment.

(IV). Possible risks

"√ Applicable" "□ Not applicable"

1. Feed industry

(1) Volatility of prices of main raw materials. In 2022, the prices of main raw materials for feed products continued going up due to various factors such as international political and economic turbulence, changes in production in major producing areas, and exchange rate fluctuations. From a macro perspective, the worrying situation of high inflation and high risk in Europe and America restricts the upward space of commodities and increases the downward risk. From the perspective of overall market supply, regional conflicts have eased, and the decrease of soybean production in Brazil and canola production in Canada has been relieved, so it is expected that raw materials will recover on the supply side and remain weak on the demand side, leading to falling prices of agricultural products. Given that the situation of China's high dependence on imported raw materials is difficult to change, and fluctuations in import prices may further increase the operating pressure on feed companies.

Risk response measures: The Company has a professional procurement team, which closely tracks changes in raw material prices, makes careful judgments on procurement timing, adheres to the principles of long-term, medium-term, and short-term procurement, reasonably controls raw material inventory, and effectively avoids large fluctuations in production costs. The Company is also actively building data-driven systems such as self-service analysis platforms for market conditions and procurement execution, a

management cockpit 4.0, and direct supplier data connection to assist the procurement team in making efficient and accurate decisions. The procurement team works together with technology and quality control teams to actively develop alternative raw materials with good quality, cost-effectiveness, and stable supply channels. The company will adhere to its strategy of securing raw materials to ensure stable and consistent quality of raw material supply. Additionally, it will increase the recruitment and training of outstanding talents to enhance the capabilities of the procurement team.

(2) Market demand volatility. Feed sales are directly related to breeding activities which may be negatively impacted by natural disasters, abnormal temperature, the spread of diseases, and policy changes, thereby leading to fluctuations in feed demand in some regions or periods.

Risk response measures: The Company will strengthen the tracking and monitoring of natural disasters, climate change, and animal diseases, actively guide farmers to take risk prevention and control measures, and provide timely assistance to restore normal production. It will also enhance animal immunity through developing immune-boosting products, promote standardized farming practices, assist in building a high-standard epidemic prevention system, and enhance farming benefits to increase customer loyalty. With a wide range of product categories and subsidiaries properly distributed in major farming regions, the Company can effectively respond to risks caused by abnormal weather and natural disasters in local areas.

(3) Policy risk. After policies including Environmental Protection Law of the People's Republic of China, Animal Husbandry Law of the People's Republic of China, Regulations on Pollution Prevention and Control in Scaled Livestock Husbandry, Action Plan for Prevention and Control of Water Pollution, and Guiding Opinions on Promoting the Optimization of Pig Breeding in the Southern Water Network Region have been implemented, regions across the country have set prohibition and restriction areas and boosted the supervision and punishment on environmental violations in the livestock husbandry sector, which has remarkably raised the access threshold and free range farmers that do not meet the environmental protection provisions have been exiting the industry. In addition, China has launched comprehensive actions to reduce the use of antibiotics by replacing antibiotics or eliminating antibiotics in the livestock industry. This, combined with strong incentives for the development of large-scale farms in various regions, is accelerating the livestock industry to transform towards antibiotic-free, green, scalable, and intelligent operations. This poses higher requirements for the research, production, and management of feed companies. Failure to timely adapt to policy requirements may result in operational risks for these companies.

Risk response measures: Guided by the "Quality Policy", the Company relies on robust technological capability, material procurement systems, and scalable and specialized production capability to provide customers with cost-effective feed products, achieve rapid development of large-scale farms, and continuously optimize the customer structure. It assists financially capable free-range farmers in establishing scaled farms that meet environmental protection standards and disease prevention and control requirements, promoting their smooth transition. The Company produces antibiotic-free feed and improves product formulations, production processes, and farming models to enhance customer farming benefits while effectively meeting the needs for greener livestock production, leading to rapid growth in sales.

(4) Exchange rate risk. Exchange rates are influenced by various factors, including the economic development and fiscal and monetary policies of countries, international trade tensions, geopolitical environment. In recent years, the global economic and political situation has been volatile, leading to increased exchange rate fluctuations. With the growing demand for international raw material trade and the expanded overseas feed business of the Company, frequent two-way fluctuations in the CNY exchange rate will leave an obvious impact on business operations.

Risk response measures: The Company closely monitors the economic and political situations and policies of major currency countries to assess and choose more favorable settlement currencies and methods. It actively recruits and trains specialized personnel to strengthen research and forecasting capabilities in the foreign exchange market, enhance import and export management, and effectively mitigate exchange rate risks by flexibly utilizing forward foreign exchange contracts, swaps, options, and other hedging instruments.

(5) Other risks from force majeure. In recent years, there have been frequent occurrences of unexpected public health events, natural disasters, and geopolitical conflicts. Similar force majeure events may continue to happen in the future, posing risks to feed companies' operations.

Risk response measures: The Company will strengthen the analysis and prediction of force majeure risks and take necessary measures to respond to adverse impacts on procurement, production, sales, and other operations caused by such events.

2. PV industry

(1) Industry chain instability. The photovoltaic industry covers multiple production stages, with each stage involving various raw and auxiliary materials. The expansion cycles of different materials vary. In

recent years, the industry demand has been growing rapidly. The industry chain experiences alternating mismatches and contradictions, leading to varying degrees of supply shortages for materials such as polycrystalline silicon, encapsulant films, glass, and quartz sand. This has resulted in significant price increases, placing pressure on supply chain management for companies.

Risk response measures: The Company will closely monitor and assess changes in the supply and demand of raw and auxiliary materials, make efficient decisions, and ensure timely reserves. Additionally, it will strengthen strategic cooperation with upstream and downstream partners, employing various methods such as equity cooperation and long-term supply agreements to ensure supply chain security.

(2) Policy risk. In order to implement climate governance, promote energy transformation, improve the environment, and drive economic development, countries are vigorously supporting the development of the photovoltaic applications. Some still adopt subsidy and other incentive policies for photovoltaic power generation. If these subsidies or incentives are scaled back or canceled, it may have an impact on installation demand. In China, policies related to land used for photovoltaic powerplant projects and market-based transactions may pose challenges in ensuring land availability and introduce uncertainties in electricity prices, which could affect the profitability of Aquaculture-Photovoltaic Integration powerplants.

Risk response measures: The Company will closely monitor changes in relevant policies, boost cost reduction of products, enhance product competitiveness, and maintain its competitive position. It will also keep driving the healthy and orderly development of the industry, actively explore green certification and green electricity transactions to safeguard its profitability.

(3) Technology updates. New battery technologies are evolving with conversion efficiency once again reaching a historic record. In 2022, new generation crystalline silicon solar cell technologies such as TOPCon and HJT achieved breakthroughs, and, thin-film and perovskite technologies, among others, have also advanced. Mature technology, excellent stability, and a dominant market share allow crystalline silicon solar cell products to remain the mainstream for the foreseeable future. Companies are accelerating the expansion of production capacity for new battery technologies, which will advance technological upgrades in the upstream sector. Failing to keep up with cutting-edge technologies and adapt to industry changes may weaken business competitiveness.

Risk response measures: The Company actively performs pilot testing and application of next-generation mainstream technology routes. Leveraging the cost-effectiveness of TOPCon technology, it has put a 9 GW TNC (Topcon N-Type Cell) production line into operation, and another 16 GW TNC production line under construction is expected to start production in 2023. The Company has made critical progress in cost reduction and efficiency improvement of HJT (Heterojunction) technology and keeps developing technologies such as back-contact and perovskite tandem cell to ensure its technological leadership. The Company continues to increase the proportion of high-quality N-type silicon material in the production of high-purity polysilicon, and boosts cost reduction for consolidating its core competitiveness.

(4) International trade risk. The photovoltaic application market is blooming, with rapidly increasing installed capacity. Some countries, considering energy security and manufacturing reshoring, have decided to increase support for their domestic PV industry, and impose barriers on import of Chinese PV products. It is possible that similar events may continue in the future, which may impact Chinese PV industry.

Risk response measures: The Company will continue to monitor international trade situation and develop strategies to address trade barriers, while strengthening its core competencies in product scale, technology, and cost. By creating higher value for customers, providing more efficient services, and enhancing its market share, the Company aims to mitigate the potential impact.

(5) Other risks from force majeure. In recent years, there have been frequent occurrences of unexpected public health events, natural disasters, and geopolitical conflicts, which have resulted in disruptions in logistics and transportation, prolonged installation and construction cycles, and mismatches in supply and demand within the industry chain. Similar force majeure events may continue to happen in the future, posing risks to feed companies' operations.

Risk response measures: The Company will strengthen the analysis and prediction of force majeure risks. By leveraging its industry chain resources and core competitive advantages, it will enhance supply chain collaboration, boost customer development and maintenance efforts, and mitigate the adverse impact of force majeure risks on its operations.

(V). Others

"□ Applicable" "√ Not applicable"

VII. Note on the fact that the Company fails to disclose under standards due to inapplicability of the standards due to inapplicability or national secrets and/or trade secrets and the reasons

" Applicable" " Not applicable"

Section IV. Company Governance

I. Company governance

" Applicable" " Not applicable"

In the reporting period, the Company further improved its organizational structure and governance structure, and various internal systems, and risk management given its actual conditions in strict accordance with the Company Law, Securities Law, Code of Corporate Governance for Publicly Listed Companies and other legal requirements. The general meeting, the board of directors, the supervisory committee and the management of work under clear powers and responsibilities, having formed a procedure-based governance structure for the legal entity to ensure its smooth and efficient running in accordance with regulations.

(I) Controlling shareholder and its related parties and listed companies

The controlling shareholder of the Company behaved, exercised rights and performed obligations under laws, did not directly or indirectly interfere with the Company's decision-making and business activities without the participation of the general meeting. Board of directors, supervisory committee and the management performed independently and the Company had independent businesses and was able to operate on its own. In the reporting period, the Company did not provide any guarantee to its controlling shareholder and/or its related parties, and the controlling shareholder did not occupy any funds of the Company for non-operating purposes.

In the reporting period, every related-party transaction submitted to the board of directions for discussion was approved via voting for which the voting rights of related directors were disabled. The related transactions were priced fairly without any influence on the Company's independence or harm to the listed company.

(II) Shareholders and general meeting

In the reporting period, the Company held one annual general meeting and two interim general meetings. The procedures for general meeting were in compliance with the Listing Rules of the Shanghai Stock Exchange, Articles of Association of the Company, and Rules of Procedure for General Meeting and safeguarded the legitimate interests of the Company and its shareholders. The convening, holding, voting, and result disclosure were strictly implemented in accordance with the above rules, which effectively ensured shareholders' right to information, participate, and vote on major matters of the Company, as well as safeguarded the equal status and legitimate rights and interests of shareholders.

(III) Directors and the board

At the 2021 annual general meeting held on May 16, 2022, the eighth board of directors was elected. It is composed of nine directors, including three independent directors and three female directors. During the reporting period, the board held 11 meetings. All directors attended the board meetings in accordance with the Company's Articles of Association and Rules of Procedure of the Board of Directors, fully discussed various proposals, and took into account the interests and expectations of small and medium investors, thereby enhancing the proper decision-making of the board and promoting the stability and efficiency of the Company's production and operation. The board has four committees, namely the Strategy Committee, Remuneration and Assessment Committee, Nomination Committee, and Audit Committee, which performed their duties according to corresponding rules of procedure, ensuring the orderly and efficient operation of the Company.

(IV) Supervisory committee and supervisors

The eighth supervisory committee elected at the 2021 annual general meeting on May 16, 2022 consists of three supervisors, including one employee representative and one female supervisor. During the reporting period, the committee held nine meetings, and the supervisors strictly performed their duties in accordance with relevant laws and regulations such as the Company Law, the Company's Articles of Association, and the Rules of Procedure of the Supervisory Committee. They exercised their powers independently in accordance with the law and promoted the standard operation of the Company. The supervisory committee fulfilled its supervisory responsibilities diligently by imposing compliant supervision over important matters such as the use of raised funds, employee shareholding plans, and financial conditions, effectively safeguarding the rights and interests of the Company and its shareholders.

(V) Disclosure and transparency

The Company attaches great importance to information disclosure and strictly observes the provisions of Shanghai Stock Exchange on information disclosure of listed companies as set forth in Securities Law.

In the reporting period, board of directors, board of supervisors and management of the Company prudentially signed written confirmations to ensure that the authenticity, accuracy, completeness, timeliness and fairness of the disclosure. The Company received the best rating (Grade A) on information disclosure 2021 - 2022 from Shanghai Stock Exchange for its great information disclosure.

In the reporting period, the Company managed insiders relating to periodical reporting and important issues through the registration system in strict accordance with applicable regulations to ensure the fairness principle for information disclosure and protect the legitimate rights and interests of shareholders.

(VI) Investor relationship management

The Company attaches high importance to long-term and active communications with all kinds of investors. In the reporting period, the Company conveyed its operation philosophy, results and strategic direction to investors through channels including general meetings, performance briefings and investor platforms. In addition, it responded carefully and patiently to queries from investors via phone calls, emails, visits and <http://sns.sseinfo.com/>, which helped investors understand and gain confidence in the Company, and maintained the Company's image in the capital market. In 2022, the company was awarded multiple honors, including the Top 50 Best Listed Companies by New Fortune for the fourth time, the Social Responsibility Award, Most Valuable Investment Award, and Golden Bull Secretary Award by China Securities Journal. The company was also recognized as one of the Top 100 Main Board Companies and received the Annual Excellent Management Team and Sunshine Secretary awards by STCN.

(VII) Safeguard the rights and interests of shareholders

The Company highly prioritizes the rights and interests of shareholders, in particular small and middle-sized ones and seeks for sustainable returns to shareholders. During the reporting period, the Company strictly followed the Shareholder Dividend Return Plan for the Next Three Years (2021-2023). After being approved at the 28th meeting of the 7th board of directors and the 2021 annual general meeting, the 2021 Profit Distribution Plan was implemented, and on May 30, 2022, a cash dividend of 9.12 yuan (including tax) was distributed to all shareholders for every 10 shares. According to the 2022 Profit Distribution Proposal approved at the 10th meeting of the 8th board of directors in 2023, the Company intended to distribute a cash dividend of 28.58 yuan (including tax) per ten shares to shareholders. This proposal will be submitted to the 2022 annual general meeting for consideration.

Significant difference between the corporate governance and provisions of laws, regulations and rules of the CSRC on listed companies and the reasons

Applicable" Not applicable"

II. Specific measure taken by the controlling shareholder and actual controller of the Company for ensuring the Company's independence in assets, personnel, financial affairs, organizational structure and business activities, as well as solutions, progress and work plan for influencing the Company's independence

Applicable" Not applicable"

The Company is strictly separated from its controlling shareholder and actual controller in terms of assets, personnel, financial affairs, organizational structure and business activities, takes responsibilities and risks independently. No matters that impact the Company's independence and that prevent it from being independent or keeping independent operation exist.

(I) Asset independence

The Company owns a business system and a complete asset system with all relevant assets under its control and owned and operated by the Company. The ownership between the Company and its controlling shareholder is clearly defined and the Company has no assets or funds occupied by the controlling shareholder and is exposed to any other circumstance that harms the interests of other shareholders of the Company.

(II) Personnel independence

The Company has an independent system for personnel registration, on boarding, appointment, dismissal and review, as well as an independent remuneration management and benefit system. Senior managers (general manager, deputy general managers, board secretary and financial director) serve the Company on a full-time basis and receive remuneration from the Company. No controlling shareholder, actual controller and/or businesses under their control assume positions other than directors and/or supervisor or receive payments from the Company. No financial staff of the Company takes any part-time job in the controlling shareholder, actual controller and/or businesses under their control.

(III) Financial independence

The Company has an independent finance and audit department, and an independent accounting

system and financial management system, being able to make financial decisions independently. As an independent taxpayer, the Company makes tax returns and pays taxes under laws. The Company has independent bank accounts and a special account for the use of funds raised for projects. The Company does not share any bank account with its controlling shareholder, actual controller and/or businesses under their control.

(IV) Structure independence

The Company has a completed governance structure consisting of general meeting, board of directors and board of supervisor with respective procedures. Furthermore, the Company has developed a complete operation management system with independence in power of management and not influenced by its controlling shareholder or actual controller and/or companies controlled by them.

(V) Business independence

The Company has the assets, personnel, qualifications and capabilities for independent business activities. The Company is independent of its controlling shareholder, actual controller and/or businesses controlled by them in terms of business activities; it is not a competitor of its controlling shareholder, actual controller and/or businesses controlled by them.

No issue that has an impact on the Company's independence has been found so far.

Controlling shareholder, actual controller and/or any other entity under their control is engaged in any business identical or similar to the business of the Company, and any impact of competition between the Company and its controlling shareholder, actual controller and/or any other entity under their control and any great change in such competition, actions for resolving this impact that have been taken, the resolution progress and the plan for next steps

Applicable" Not applicable"

III. Introduction to general meeting

Session No.	Session date	Link to the designated website where the published resolutions are available	Disclosure date	Resolutions
2021 annual general meeting	May 16, 2022	http://www.sse.com.cn	May 17, 2022	The following proposals were approved during the meeting: the 2021 Board of Directors Work Report, 2021 Supervisory Committee Work Report, 2021 Annual Report and Executive Summary, 2021 Year-end Closing Report, Proposal on Profit Distribution for 2021, Independent Directors' 2021 Performance Report, Proposal on the Reappointment of Accounting Firm, Proposal on Comprehensive Credit Application for 2022, Proposal on Mutual Guarantee for the Company and Its Subsidiaries in 2022, Proposal on Providing Guarantees for Customers of the Company in 2022, Proposal on the Operation of the Commercial Bill Pool in 2022, Proposal on the Election of Members of the 8th Board of Directors, Proposal on the Election of Members of the 8th Supervisory Committee, Proposal on the Registration and Issuance of Super Short-term Commercial Papers, Proposal on the Registration and Issuance of Medium-term Notes, Proposal on the Adjustment of Allowances for Directors and Supervisors, Proposal on the Revision of Articles of Association, Proposal on the Revision or Formulation of a Series of Policies and Proposal on the Progress and Future Development Plan for the High-purity Polysilicon and Solar Cell Business.
The 1st interim general meeting for the year 2022	June 01, 2022	http://www.sse.com.cn	June 02, 2022	Proposals discussed and resolved: The Proposal on Tongwei Co., Ltd. Employee Share Plan (Draft) 2022-2024 and its Summary, the Proposal on the Management Procedures on Tongwei Co., Ltd. Employee Share Plan 2022-2024, and the Proposal on Requesting the Shareholders Meeting to Authorize the Board of Directors to Deal with Issues Relating to Tongwei Co., Ltd. Employee Share Plan 2022-2024.
The 2nd interim general meeting for the year 2022	September 26, 2022	http://www.sse.com.cn	September 27, 2022	Proposals approved: The Proposal on Donations to the Earthquake-stricken Luding Area and the Proposal on the Election of Directors.

Interim general meetings requested by the preferred shareholders whose voting rights have been restored
 Applicable" Not applicable"

Note on general meetings
 Applicable" Not applicable"

IV. Information of directors, supervisors and senior managers**(I). Shareholding changes and remuneration of directors, supervisors and senior management currently in office and having left office in reporting period**

"√ Applicable" "□ Not applicable"

Unit: share

Name	Position (note)	Gender	Age	Start date	End date	Opening shares	Closing shares	Change in shares	Reason for change	Total before-tax compensation from the Company in the reporting period (10,000 Yuan)	Whether receiving compensation from related parties of the Company
Liu Shuqi (newly appointed)	Chair and CEO	F	33	March 21, 2023	May 15, 2025	80,000	80,000	0		329.76	No
Yan Hu	Vice Chair of the Board of Directors	M	59	May 09, 2016	May 15, 2025	836,650	836,650	0		413.97	No
Liu Hanyuan	Director	M	58	October 23, 2000	May 15, 2025	0	0	0		466.98	No
Ding Yi	Director	F	58	May 12, 2020	May 15, 2025	0	0	0		6.88	No
Li Peng (newly appointed)	Director	M	41	September 26, 2022	September 25, 2025	0	0	0		/	No
Xie Yi (retired)	Director	M	39	May 03, 2016	March 21, 2023	217,622	217,622	0		638.73	No
Wang Xiaohui (retired)	Director	M	46	May 08, 2019	September 25, 2022	0	0	0		/	No
Fu Daiguo	Independent director	M	58	May 08, 2019	May 15, 2025	0	0	0		13.75	No
Jiang Yumei (newly appointed)	Independent director	F	59	May 16, 2022	May 15, 2025	0	0	0		10.00	No
Song Dongsheng (newly appointed)	Independent director	M	60	May 16, 2022	May 15, 2025	0	0	0		10.00	No
Du Kunlun (retired)	Independent director	M	54	January 15, 2016	May 15, 2022	0	0	0		3.75	No
Wang Jin (retired)	Independent director	M	56	May 03, 2016	May 15, 2022	0	0	0		3.75	No
Deng San	Chair	F	38	May 05, 2017	May 15, 2025	225,880	225,880	0		241.67	No
Yang Shixian (retired)	Supervisor	M	50	April 30, 2007	May 15, 2022	158,100	0	-158,100	Secondary market trading	51.62	Yes
Chen Xiaohua (retired)	Supervisor	M	53	May 03, 2016	May 15, 2022	0	0	0		1.13	No

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Cui Yong (newly appointed)	Supervisor	M	40	May 16, 2022	May 15, 2025	0	0	0		3.13	Yes
Chen Pingfu (newly appointed)	Supervisor	M	57	May 16, 2022	May 15, 2025	444,730	469,730	25,000	Secondary market trading	130.86	No
Wang Shangwen (retired)	Senior manager	M	59	May 07, 2013	May 15, 2022	659,050	659,050	0		61.32	No
Song Gangjie (retired)	Senior manager	M	59	May 07, 2013	May 15, 2022	331,375	330,000	-1,375	Secondary market trading	106.81	No
Shen Jinzhu (retired)	Senior manager	M	57	May 09, 2016	May 15, 2022	210,300	224,898	14,598	Conversion of convertible bonds to shares	58.98	No
Li Bin (newly appointed)	Senior manager	M	57	May 16, 2022	May 15, 2025	241,888	241,888	0		8,652.91	No
Xing Guoqiang (newly appointed)	Senior manager	M	59	May 16, 2022	May 15, 2025	0	0	0		445.45	No
Gan Jufu (newly appointed)	Senior manager	M	51	May 16, 2022	May 15, 2025	0	0	0		2,482.53	No
Guo Yizhong	Senior manager	M	52	May 07, 2013	May 15, 2025	500,450	500,450	0		379.82	No
Zhang Lu	Senior manager	M	44	March 12, 2017	May 15, 2025	281,600	281,600	0		229.76	No
Zhou Bin	Senior manager	M	54	May 08, 2019	May 15, 2025	55,211	59,043	3,832	Conversion of convertible bonds to shares	615.43	No
Yan Ke	Senior manager	M	38	May 08, 2019	May 15, 2025	0	0	0		227.43	No
Total	/	/	/	/	/	4,242,856	4,126,811	-116,045	/	15,586.42	/

Name	Work experience
Liu Hanyuan	Male, born in 1964, EMBA of Guanghai School of Management, Peking University, senior engineer. He was the chair of the first to sixth board of directors of the Company, and a member of the seventh board of the Company. He is the chair of the board of directors of Tongwei Group and a director of the 8th board of directors of the Company. Other social positions include a member of the 11th Standing Committee of the CPPCC National Committee, deputy to the NPC (National People's Congress), a vice chair of All-China Federation of Industry and Commerce, the executive chairman of CNECC.
Xie Yi	Male, born in 1984, MIM from Imperial College London, UK, member of the CPC. He was the president assistance of Tongwei Group, chair of the board of directors of Tongwei Solar (Hefei) Co., Ltd., chair of the board of directors of Tongwei Solar (Chengdu) Co., Ltd., and chair of the 8th board of directors of the Company. Other social positions include, a member of the 13th Sichuan Provincial CPPCC Committee, a deputy to the 14th CPC Chengdu Congress, vice chairman of the 14th Committee of Sichuan Youth Federation, member of the 15th CPPCC Chengdu Committee, member of the 11th CPPCC Standing Committee of Shuangliu District, Chengdu; and vice chairman of the third council of CPIA.
Yan Hu	Male, born in 1964, MBA of Guanghai School of Management, Peking University, senior accountant. He was the chief accountant of the Southwest Medical Equipment Co., Ltd., the manager on behalf of the US party in the GE Healthcare China Southwest Branch, financial director of Sichuan Zhongyuan Industries Company Limited, executive

	deputy general manager of Chengdu Yuanda Wheel and Rim Manufacturing Co., Ltd., vice president and financial director of South Hope Industrial Co., Ltd., director and financial director of New Hope Group, and the director of New Hope Co., Ltd. After joining the Company, he has served as the chief accountant of Tongwei Group, chief accountant, president, and secretary of the board of directors of Tongwei Co., Ltd., and a director of the board of directors (1st, 2nd, 4th, 5th, 6th, and 7th) of Tongwei Co., Ltd. He is the vice chair of the 8th board of directors of the Company. He is also an executive member of China Association for Public Companies (CAPCO), the legal representative and vice-chair of Sichuan Association for Listed Companies, vice chair of Sichuan Enterprise Confederation and the Sichuan Entrepreneurs Association, vice-chairman of China Society of Forestry, Animal Husbandry and Fishery Economics, vice chair of Sichuan Research Institute for International Tax, and vice chair of Association of Feed Industry, and vice-chairman of Sichuan Fisheries Society.
Liu Shuqi	Female, born in 1989, a bachelor from the Queen Mary University of London. She served as the assistance to President of the Company, the general manager of commerce in PV. She is now a supervisor of Tongwei Group, the chair of the 8th board of the Company and the Company's CEO.
Wang Xiaohui	Male, born in 1976, master in economics of the Guanghua School of Management in Peking University. He was an auditor of Beijing KPMG Huazhen Accounting Firm, an industry analyst of CITIC Securities Research Department, a senior manager and director of energy industry group of Investment Banking Committee of CITIC Securities, the executive general manager of M&A Department of Investment Banking Committee of CITIC Securities, the executive director of China Life Asset Management Co., Ltd., a director of Beijing Jingneng Power Co., Ltd. and a director of the 7th and 8th boards of the Company.
Li Peng	Male, born in 1982, doctor's degree in finance from School of Economics, Xiamen University. He served as a senior manager of investment banking, a deputy general manager and senior vice president of energy and chemical industry group, and director of investment banking management committee at CITIC Securities Co., Ltd; a senior research analyst and responsible person for alternative investment and equity investment (secondary) at the Innovation Business Division of China Life Asset Management Co., Ltd. He currently serves as the Head of ED (Alternative Investment) and the Equity Investment (Secondary Market) Department at China Life Asset Management Co., Ltd; a director of Beijing Jingneng Power, China Tea, and Oriental Wisdom (Hebei) New Energy Co., Ltd. He is director of the 8th board the Company.
Ding Yi	Female, born in 1964, a member of the Communist Party of China, doctoral degree in economics from the Renmin University of China. She worked at Renmin University of China, Huaneng Power International, and China Life Asset Management Co., Ltd. She served as the chair of Huaneng Capital Services Co., Ltd., Great Wall Securities and other companies. She is a director of the 8th board of directors of the Company and also serves as an independent director of Huaxia Bank Co., Ltd, Huatai Asset Management Co., Ltd., SF International and Yuanshi New Materials Co., Ltd.
Du Kunlun	Male, born in 1969, doctor in economics, China CPA (Certified Public Accountant), China CPV (Certified Public Valuer), researcher, mentor of master candidates in Institute of Finance of Sichuan Academy of Social Sciences. He was a member of the 12th and 13th Main Board Market Issuance Examination Commission of China Securities Regulatory Commission, and an independent director of the 5th, 6th and 7th boards of directors of the Company.
Wang Jin	Male, born in 1966, doctor in economics from Emory University, USA and a professor. He worked in Emory University, Georgian College, Georgia Public Affairs, Federal Reserve Bank and other institutions on a full-time or part-time basis, and served as a teacher at Renmin University of China and Shanghai University. Since March 2012, he has been the director of the International Energy Research Institute. At present, he is an independent director of Elion Energy Company Limited and Shuangdeng Cable Co., Ltd., and an external director of the SPIC Guangdong Electric Power Co., Ltd. He was an independent director of the 7th board of directors of the Company.
Fu Daiguo	Male, born in 1964, dean of the Western Business School of Southwestern University of Finance and Economics, a professor of accounting, doctoral supervisor, and vice president of Chengdu Accounting Society. He served as an independent director of several companies such as Sichuan Crun Co., Ltd., Lier Chemical Co., Ltd., and Ingenic Semiconductor Inc. He is an independent director of the 8th board of directors of the Company, and also an independent director of Maccura Biotechnology Co., Ltd. and Sichuan Langjiu Group Co., Ltd. (which has planned its IPO).
Jiang Yumei	Female, born in 1963, doctoral degree in Law, a mentor of PhD candidates a recipient of the Special Government Allowance granted by the State Council. She served as the Deputy Director of the Law Department and Vice Dean of the Law School, Deputy Director of the Graduate School and Executive Dean of the International Business School at Southwestern University of Finance and Economics. Currently, she serves as the executive president of the Institute of Comprehensive Research on China (Sichuan) Pilot Free Trade Zone at Southwestern University of Finance and Economics. She is also a member of the Decision-making Advisory Committee, and a legal advisor of the Sichuan Provincial Party Committee and Government; a member of the National Steering Committee for the Education of Applied Graduates in International Business; vice chairman of the China Cooperation Committee for International Trade Discipline; vice chair of the China Association of Trade in Services; vice chair of the Free Trade Zone and Port Committee of the China Academy of International Trade; vice chair of Sichuan Business Economics Association; expert of the Sichuan Trade Promotion Committee, certified expert on economics and management by the Ministry of Education; member of the Chengdu Arbitration Commission; expert for the Advisory Committee of Chengdu Pilot Free Trade Zone; member of the Decision-making Advisory Committee of the Luzhou Municipal Party Committee and Municipal Government; leader of several teams, including the "Collaborative Innovation Center for Outbound Direct Investment from Inland Areas" of Sichuan Province, Innovation Team for International Trade of Sichuan Province, and Comprehensive Reform Pilot Project for International Trade in Sichuan Province; independent director of Chengdu Xingrong Environment

	Co., Ltd., Chengdu YMK Technology Co., Ltd., Liangshan Rural Commercial Bank Co., Ltd., and an external supervisor of Sichuan Tianfu Bank Co., Ltd. She is currently an independent director of the Company's eighth Board of Directors.
Song Dongsheng	Male, born in 1962, with a master's degree, senior engineer, recipient of the Special Government Allowance granted by the State Council, and an arbitrator of the Beijing Arbitration Commission. From 1981 to 1987, he worked in the Quality Section of the Technical Safety Division of the 11th Engineering and Construction Bureau of Sino-hydro Corporation, serving as a quality inspector and deputy section chief. From 1987 to 1991, he worked Gu County Branch of the 11th Engineering and Construction Bureau of Sino-hydro Corporation, serving as deputy chief of Technical Safety Section, a deputy chief of Technology Section, and a deputy director of Acceptance Office. From 1991 to 1995, he worked in the 11th Engineering and Construction Bureau of Sino-hydro Corporation, serving as a deputy head of the Technology Division and a director of the International Department. In 1996, he served as the Chinese representative and assistant project manager of the Xiaolangdi CGIC Joint Venture. From 1996 to 2004, he was the deputy head of the 11th Engineering and Construction Bureau of Sino-hydro Corporation. From 2004 to 2019, he worked for Sino-hydro Group, serving successively as deputy general manager, general manager, chairman, and general manager of the Sinohydro Corporation Limited, and the general manager of the Group. From 2016 to 2019, he served as the general manager of Power China International, chair of Power China Trade, vice president of China International Contractors Association, and chair of the International New Energy Solution. Since September 2019, he has served as an independent director of China Oil HBP Technology Co., Ltd., China National Complete Plant Import and Export Corporation Limited and Jiangsu Huasheng Tianlong Photoelectric Co., Ltd. He currently serves as an independent director of the Company's 8th board of directors.
Deng San	Female, born in 1984, CPC member, MBA of Sichuan University. She was the head of the secretary department of Tongwei Group, assistant to the chair of the board of directors of Tongwei Group, and the chair of the 6th and 7th supervisory committees of the Company. She is the chair of the 8th supervisory committee of the Company.
Yang Shixian	Male, born in 1972, master in market economics. He was the finance manager and project manager of Fuling Tongwei Feed Co., Ltd., general manager assistance and financial manager of He'nan Tongwei Feed Co., Ltd., and a member of the 3rd to 7th supervisory committees of the Company.
Chen Xiaohua	Male, born in 1969, CPA. He worked at Chengdu Zhongda Accounting Firm, Sichuan Branch of Beijing Jingdu Public Accounting Firm and Sichuan Shenghe Public Accounting Firm. He is the head of Sichuan Office of Beijing Xinghua Accounting Firm (special general partnership). He was a member of the 6th and 7th supervisory committees of the Company.
Cui Yong	Male, born in 1982, graduated from the School of Civil and Commercial Law, Southwest University of Political Science, qualified to law practice. He served as an inspector at the Supervision and Inspection Department of Tongwei Group, an assistant to the head of the Department, a deputy head of the Department, and the head of the Department. Now he is a member of the 8th supervisory committee of the Company.
Guo Yizhong	Male, born in 1970, has held various positions including general manager of Jieyang Tongwei, general manager of Guangdong Tongwei, general manager of Guangdong and Shrimp Special Materials Area at Tongwei Agriculture Development Co., Ltd. He served as the Company's general manager from October 2015 to May 2022. Since May 2022, he has served as the president of Agriculture and Animal Husbandry of the Company. He has also served as executive vice president of the 8th Council of China Feed Industry Association and member of the Quality and Safety Work Committee, vice president of Sichuan Association of Feed Industry, vice president of Sichuan Animal Agriculture Association, executive vice president of Frog Industry Branch of China Aquatic Products Processing and Marketing Association, vice president of China Association for the Promotion of International Agricultural Cooperation, and entrepreneurship mentor and part-time researcher of China Livestock Feed Industry Research Center of Renmin University of China.
Chen Pingfu	Male, born in 1965, EMBA, CPA. He was the general manager of Tongwei, the general manager of Sichuan Area for Tongwei, the general manager of Vietnam Tongwei, the general manager of Tongwei overseas business, the general manager of Vietnam Tongwei 1st Area business, the deputy general manager of Tongwei Co., Ltd, and a member of the 4th and 5th board of directors of the Company. He is a member of the 8th supervisory committee of the Company.
Wang Shangwen	Male, born in 1963, MBA, doctor's degree. He served as president assistant, director of human resources, marketing director, technology director, and deputy general manager of the Company.
Song Gangjie	Male, born in 1964, aquaculture engineer, EMBA in Agriculture from School of Continued Education, Tsinghua University (2002-2003). He served as president assistant of the Company, deputy general manager of the Company, general manager of Chongqing Area, general manager of Jiangsu and Zhejiang Area, general manager of Yangtze River and Huai River Area, general manager of Suzhou Tongwei Feed Co., Ltd., and general manager of Nanjing Tongwei Aquatic Products Technology Co., Ltd.
Shen Jinzhu	Male, born in 1966, bachelor degree, aquaculture engineer. He served as the general manager of Shashi Tongwei Feed Co., Ltd., general manager assistant of Guangdong Tongwei Feed Co., Ltd., general manager of Vietnam Area and general manager of Vietnam Tongwei., and deputy general manager of the Company and general manager of Hefei branch of the Company.
Li Bin	Male, born in 1966, graduated from Chongqing University with a major in mining machinery, MBA from Hong Kong Finance and Economics College. He is a member of the Communist Party of China and a senior mechanical engineer. He is an outstanding high-level talent in Leshan City, and has won honors such as the China Patent Excellence

	Award and the Sichuan Science and Technology Progress Award. He serves as vice president of Tongwei Co., Ltd., chair and general manager of Yongxiang Co., Ltd., and general manager of Yongxiang New Energy Co., Ltd. His other social positions include the 8th Party Representative of Leshan City, member of the Standing Committee of the 8th People's Congress of Leshan City, vice chair of the 7th Executive Committee of the Leshan Federation of Industry and Commerce (Chamber of Commerce). He is a representative of the 10th People's Congress of Wutongqiao District, executive director of the Sichuan Strategic Emerging Industry Promotion Agency, and graduate student supervisor of the Power Engineering Department of the College of Chemical Engineering at Sichuan University.
Zhang Lu	Male, born in 1979, post-doctoral degree and a researcher. As a recipient of the State Council Special Allowance, he is included into Chengdu Golden Panda Talent program and Chengdu Outstanding Talent Training program. He is an expert in the evaluation of National Science and Technology Progress Awards, vice chair of the Chinese Society of Fisheries, director of the Key Laboratory of Nutrition and Health Aquaculture of the Ministry of Agriculture and Rural Affairs, director of the Sichuan Provincial Key Laboratory of Aquatic Animal Nutrition and Feed Science, member of the National Feed Industry Standardization Technical Committee, chair of the Feed Testing Method Standardization Working Group of the National Feed Industry Standardization Technical Committee, deputy secretary-general of the Technical Committee on Aquatic Feed of the National Feed Industry Standardization Technical Committee, member of the National Aquatic Standardization Technical Committee, external supervisor of master candidates at Ocean University of China, guest professor at Nanjing Agricultural University, external supervisor of master candidates at Sichuan Agricultural University, external supervisor of master candidates at Hunan Agricultural University, and reviewer for international journals such as Aquaculture Research and Aquaculture International. Zhang Lu has led on or participated in 16 projects, including the Blue Granary project sponsored by the Chinese Ministry of Science and Technology and other key scientific and technological projects at the provincial and ministerial levels. Some outcomes have won one Second Prize of National Science and Technology Progress Award, one First Prize of Chinese Agricultural Science and Technology Award, two First Prizes of Sichuan Science and Technology Progress Award, and seven other important awards at provincial and ministerial levels. As the head of the Feed Detection Method Standardization Working Group of the National Feed Industry Standardization Technical Committee, Zhang Lu has led on the formulation or revision of 4 national and industry standards for feed, and another 2 national standards that she has led on have passed the preliminary review. Zhang Lu has published 16 papers as the first or corresponding author in domestic and foreign journals, including 11 SCI papers. 12 invention patents and 14 utility model patents were granted with him as the first inventor. He edited or translated two books. He served as the Technical Director of Fish Feed at Guangdong Yuehai Feed Group and holds positions as vice president and technology director of the Company, as well as deputy general manager of Tongwei Agricultural Development Co., Ltd.
Xing Guoqiang	Male, born in 1963, holds a bachelor's degree in physics from Peking University, a master's degree in physics and a doctor's degree in chemistry from Rice University. He has won the first prize of Shanghai Science and Technology Progress Award in 2004, the first prize of China Renewable Energy Society Science and Technology Progress Award in 2019, and the first prize of Jiangsu Science and Technology Award in 2020. He was selected into the Jiangsu High-level Program for Introducing Innovative and Entrepreneurial Talent. He holds more than 70 authorized patents in China and 28 authorized patents in the United States. He served as the leader/chief expert of some 863 Projects, a member of the Photovoltaic Professional Committee of China Renewable Energy Society, and co-chair of the SEMI International Technology Roadmap for Photovoltaic (ITRPV). He was formerly the chief technology officer and vice president of Hareon Solar Technology Co., Ltd. and senior vice president and chief technology officer of Canadian Solar. He is currently the chief technology officer of Tongwei Solar Co., Ltd.
Gan Jufu	Male, born in 1971, MBA from Xi'an Jiaotong University. He is a member of the Communist Party of China and a senior chemical engineer. He has been honored as excellent expert with outstanding contributions in Sichuan Province and a model individual in the science and technology community of Sichuan Province. He has twice won the second prize of Science and Technology Progress Award in Sichuan Province, as well as the special prize, first prize of Science and Technology Progress Award in Leshan City. He has applied for 101 patents for technological achievements in which he has served as a project leader or participant, and 66 of them have been granted, including 5 inventions for which he is one of the top two inventors. He held important positions in companies such as Emei 739, Xinguang Silicon Technology, and Jiangsu Zhongneng. He joined the Company in June 2013 and has served as the chief engineer and deputy general manager of Sichuan Yongxiang Polysilicon Co., Ltd., the general manager of Inner Mongolia Tongwei High-purity Polysilicon Co., Ltd. He is now the director of the Technology Center (National) of Yongxiang Co., Ltd., the project director of Sichuan Yongxiang Energy Technology Co., Ltd., the executive vice president and director of the Leshan West Silicon Materials Photovoltaic and New Energy Industry Technology Research Center.
Zhou Bin	Male, born in 1968, bachelor degree in accounting from Shanghai University of Finance and Economics, master degree from Southwest Jiaotong University, MBA from University of South Australia, CPA (Certified Public Accountant) and CPV (Certified Public Valuer). He was the legal representative of Sichuan Beite Certified Public Accounting Firm, the general manager of Sichuan Zhongfa Certified Tax Accountant Firm and the financial director of Yongxiang Co., Ltd. He is the financial director of the Company.
Yan Ke	Male, born in 1985, bachelor degree in accounting from Southwest University of Finance and Economics. He served as the Company's securities affairs representative. He is the secretary of the 8th board of directors of the Company.

Other notes

Applicable" Not applicable"

According to the Company Law and the Articles of Association of the Company, the term of office of the seventh board of directors and supervisory committee of the Company expired on May 15, 2022. On May 16, 2022, the Company held the annual general meeting for the year 2021, which elected the members of the eighth board of directors and supervisory committee. On the same day, the first meeting of the eighth board of directors of was held, with the new management team of the Company appointed. Among the above named directors, supervisors and senior managers, Liu Shuqi, Jiang Yumei, Song Dongsheng, Cui Yong, Li Bin, Xing Guoqiang and Gan Jufu were newly appointed during the reporting period; Du Kunlun, Wang Jin, Yang Shixian, Chen Xiaohua, Wang Shangwen, Song Gangjie and Shen Jinzhu retired during the reporting period; and Chen Pingfu took on the office as a supervisor after he left the office as a senior manager. On September 26, 2022, the Company held its second extraordinary general meeting for the year 2022. Wang Xiaohui resigned from the board of directors due to work reasons. At the meeting, Li Peng was elected as a director of the eighth board of directors and appointed as a member of the Strategic Committee.

(II). Other offices of directors, supervisors and senior management currently in office and having left office in reporting period**1. Offices in shareholders**

"√ Applicable" "□ Not applicable"

Name in office	Shareholder name	Title	Start date	End date
Liu Hanyuan	Tongwei Group Co., Ltd.	Chair of the board of directors	March 2008	
Liu Shuqi	Tongwei Group Co., Ltd.	Supervisor	December 2019	
Cui Yong	Tongwei Group Co., Ltd.	Head of the Supervision Department	April 2022	
Wang Xiaohui	China Life Asset Management Company Limited	Executive director	March 2017	September 2022
Li Peng	China Life Asset Management Company Limited	Head of Equity Investment (secondary) Department	August 2021	
Note on offices in shareholders	None.			

2. Offices in other entities

"√ Applicable" "□ Not applicable"

Name in office	Entity name	Title	Start date	End date
Du Kunlun	Sichuan Academy of Social Sciences	Mentor of master candidates	December 2012	
Wang Jin	International Energy Research Institute	Head	June 2012	
	Shuangdeng Cable Co., Ltd.	Independent director	August 2020	
	Elion Energy Company Limited	Independent director	March 2021	
	SPIC Guangdong Electric Power Co., Ltd.	External director	March 2020	
Fu Daiguo	Southwestern University of Finance and Economics	Professor	December 2002	
	Maccura Biotechnology Co., Ltd.	Independent director	January 2019	
	Sichuan Langjiu Co., Ltd.	Independent director	July 2019	
Ding Yi	Hua Xia Bank Co., Ltd.	Independent director	September 2020	
	Huatai Asset Management Co., Ltd.	Independent director	September 2020	
	S.F. Holding Co., Ltd.	Independent director	December 2022	
	Yuanshi New Materials Co., Ltd.	Independent director	November 2021	
	Xi'an Togeek Information Technology Co., Ltd.	Senior Advisor	January 2022	
Wang Xiaohui	Beijing Jingneng Power Co., Ltd.	Director	December 2017	December 2022
Chen Xiaohua	Beijing Xinghua Accounting Firm (special general partnership)	Head of Sichuan office	September 2012	
Song Dongsheng	China Oil HBP Technology Co., Ltd.	Independent director	September 2019	
	China National Complete Plant Import and Export Corporation Limited	Independent director	April 2020	
	Jiangsu Huasheng Tianlong Photoelectric Co., Ltd.	Independent director	June 2020	
Li Peng	Oriental Wisdom (Hebei) New Energy Co., Ltd.	Director	February 2022	
	Beijing Jingneng Power	Director	December 2022	

	China Tea	Director	December 2019	
Jiang Yumei	Southwestern University of Finance and Economics	Executive President of the Institute of Comprehensive Research on China (Sichuan) Pilot Free Trade Zone	April 2017	
	Chengdu Xingrong Environment Co., Ltd.	Independent director	August 2020	
	Chengdu YMK Technology Co., Ltd.	Independent director	May 2022	
	Liangshan Rural Commercial Bank Co., Ltd.	Independent director	October 2022	
	Sichuan Tianfu Bank Co., Ltd.	External supervisor	May 2022	
Note on offices in other entities	None.			

(III). Remuneration of directors, supervisors, and senior managers

"√ Applicable" "□ Not applicable"

Procedure for determining the remunerations of directors, supervisors and senior managers	In accordance relevant provisions of the Company Law, the Articles of Association, and Working Rules on the Remuneration and Review Committee of the Board, the compensation policies and plans for directors are proposed by the Remuneration and Review Committee, considered by the board of directors, and then submitted to the general meeting for approval. The compensation policies and plans for directors are considered by the supervisory committee, and then submitted to the general meeting for approval. The compensation and performance review procedures applicable to senior managers are approved by the board for execution.
Basis for the remuneration of directors, supervisors, and senior managers	1. The remuneration of directors, supervisors and senior managers who take specific roles in production and operation of the Company consists of a base and a performance-based bonus. The Company ensures the overall compensations and benefits to employees are competitiveness in the industry and market through fair and appropriate payments given the specific roles, duties and performances. 2. Directors and supervisors who do not hold full-time roles in the Company received fixed allowances annually. Costs for performance of director and/or supervisor duties are from the Company's annual funds of board of directors and/or funds of board of supervisors.
Actual payments to directors, supervisors, and senior managers	The remuneration to directors, supervisors and senior managers are paid according to their performance assessed under the Performance Review Management Procedures. In the reporting period, the actual payments to directors, supervisors and senior managers are consistent with the disclosure made by the Company.
Total remuneration received by directors, supervisors, and senior managers as of the end of the reporting period	155,864,200 yuan

(IV). Changes in directors, supervisors, and senior managers

"√ Applicable" "□ Not applicable"

Name	Title	Change	Reason for change
Du Kunlun	Independent director	Resigned	Retired after term expiry
Wang Jin	Independent director	Resigned	Retired after term expiry
Yang Shixian	Supervisor	Resigned	Retired after term expiry
Chen Xiaohua	Supervisor	Resigned	Retired after term expiry
Chen Pingfu	Deputy General Manager	Resigned	Retired after term expiry
Wang Shangwen	Deputy General Manager	Resigned	Retired after term expiry

Song Gangjie	Deputy General Manager	Resigned	Retired after term expiry
Shen Jinzhu	Deputy General Manager	Resigned	Retired after term expiry
Wang Xiaohui	Director	Resigned	Resigned for work reasons
Liu Shuqi	Director	Elected	
Li Peng	Director	Elected	
Jiang Yumei	Independent director	Elected	
Song Dongsheng	Independent director	Elected	
Cui Yong	Supervisor	Elected	
Chen Pingfu	Supervisor	Elected	
Li Bin	Vice president	Engaged	
Xing Guoqiang	Director of Technology Center (National) at Tongwei Solar	Engaged	
Gan Jufu	Director of Technology Center (National) at Yongxiang Co., Ltd.	Engaged	

(V). Notes on penalties from securities regulators

" Applicable" " Not applicable"

(VI). Others

" Applicable" " Not applicable"

V. Board of directors meetings held in the reporting period

Session No.	Session date	Resolutions
24th meeting of the 7th board of directors	February 21, 2022	The proposals on Clarifying the Plan for Public Issuance of Convertible Bonds, The Plan for the Public Listing of Convertible Bonds issued by the Company and Opening a Special Account for Fundraising and Signing a Regulatory Agreement were approved.
25th meeting of the 7th board of directors	March 09, 2022	The following proposals were approved: Proposal on Using Raised Funds to Replace Self-Raised Funds Previously Invested, Proposal on Using Bills (including Bank Acceptance Drafts and Letters of Credit) to Pay for Projects and Replace them with Raised Funds, and Proposal on Using a Portion of Temporarily Idle Raised Funds to Supplement Working Capital.
26th meeting of the 7th board of directors	March 21, 2022	The Proposal on Signing Significant Sales Contracts was passed.
27th meeting of the 7th board of directors	March 31, 2022	The Proposal on Investing into the Construction of the 32 GW High-purity Silicon Project was approved.
28th meeting of the 7th board of directors	April 22, 2022	The following proposals were approved during the meeting: the 2021 Board of Directors Work Report, 2021 General Manager Work Report, 2021 Annual Report and Executive Summary, 2021 Year-end Closing Report, Proposal on Profit Distribution for 2021, 2021 ESG Report, 2021 Assessment Report on Internal Controls, 2021 Audit Report on Internal Controls, Audit Committee's Summary on the 2021 Audit Work performed by Sichuan Huaxin (Group) CPA (Special-General Partnership), Independent Directors' 2021 Performance Report, Special Report on the Storage and Use of Raised Funds for 2021, Proposal on the Provision of Asset Impairment and Scrap of Fixed Assets for 2021, Proposal on the Changes in Accounting Policies and Accounting Estimates, Proposal on the Reappointment of Accounting Firm, Proposal on Comprehensive Credit Application for 2022, Proposal on Mutual Guarantee for the Company and Its Subsidiaries in 2022, Proposal on Providing Guarantees for Customers of the Company in 2022, Proposal on the Operation of the Bill Pool in 2022, Proposal on the Estimation of Daily Related-party Transactions in 2022, Proposal on Using Short-term Surplus Funds for Wealth Management Purpose in 2022, Proposal on Hedging Business in 2022, Proposal on Applying for Registration and Issuance of Super and Short-Term Commercial Papers, Proposal on the Election of Members of the 8th Board of Directors, Proposal on the Adjustment of Allowances for Directors, Proposal on the Revision of Articles of Association, Proposal on the Revision or Formulation of a Series of Policies, Proposal on the Progress and Future Development Plan for the High-purity Polysilicon and Solar Cell Business, Q1 2022 Report, and Proposal on Holding the Annual General Meeting for the Year 2021.
1st meeting of the 8th board of directors	May 16, 2022	Proposals discussed and resolved: Proposal on Election of the Chair and Vice-chair of the Company, Proposal on Election of Members of the Four Committees under the

		8th Board of Directors, Proposal on Engagement with the Company's Management Level, Proposal on Tongwei Co., Ltd. Employee Share Plan (Draft) 2022-2024 and its Summary, the Proposal on the Management Procedures on Tongwei Co., Ltd. Employee Share Plan 2022-2024, the Proposal on Requesting the General Meeting to Authorize the Board of Directors to Deal with Issues Relating to Tongwei Co., Ltd. Employee Share Plan 2022-2024, and Proposal on Holding the 1st Interim General Meeting in 2022.
2nd meeting of the 8th board of directors	August 16, 2022	Reviewed and approved: 2022 Semi-year Report and its Summary, the 2022 Semi-year Special Report on the Storage and Use of Funds Raised, Proposal on Investing into 200,000-ton High-purity Polysilicon and Supporting Projects in Baotou, and Proposal on Investing into 200,000-ton High-purity Polysilicon and Supporting Projects in Baoshan.
3rd meeting of the 8th board of directors	September 08, 2022	Proposals approved: the Proposal on Donations to the Earthquake-stricken Luding Area, Proposal on Changes of Directors and Election of Directors, and Proposal on Holding the 2nd Interim General Meeting in 2022.
4th meeting of the 8th board of directors	September 22, 2022	The Proposal on Investing into the Construction of the 25 GW High-purity Silicon Project and Proposal on Changes in Accounting Estimates were approved.
5th meeting of the 8th board of directors	October 24, 2022	Reviewed and approved the Q3 2022 Report of the Company.
6th meeting of the 8th board of directors	December 12, 2022	Approved the Proposal on Using Some Idle Raised Funds to Temporarily Supplement Current Funds, and the Proposal on Investing the Project of 25GW High-purity Solar Modules in Nantong.

VI. Performance of duties by directors

(I). Attendances at board of directors meetings and general meetings by directors

Director name	Independent director	Attendance at board of directors meetings						Attendance at general meetings
		Number of board of directors meetings the director should have attended in the year	In person	Virtual	By proxy	Number of absences	Absence from two consecutive meetings	Number of general meetings the director has attended
Liu Hanyuan	No	11	11	9	0	0	No	2
Xie Yi	No	11	11	9	0	0	No	3
Yan Hu	No	11	11	9	0	0	No	3
Liu Shuqi	No	6	6	5	0	0	No	2
Li Peng	No	2	2	2	0	0	No	0
Ding Yi	No	11	11	11	0	0	No	0
Fu Daiguo	Yes	11	11	9	0	0	No	1
Song Dongsheng	Yes	6	6	6	0	0	No	0
Jiang Yumei	Yes	6	6	5	0	0	No	1
Wang Xiaohui (retired)	No	9	9	9	0	0	No	0
Du Kunlun (retired)	Yes	5	5	4	0	0	No	1
Wang Jin (retired)	Yes	5	5	5	0	0	No	0

Note on absence from two consecutive meetings

"□ Applicable" "√ Not applicable"

Number of board of directors meetings held in the year	11
Number of physical meetings	0
Number of virtual meetings	9
Number of virtual and physical combined meetings	2

(II). Director objections on issues of the Company

"□ Applicable" "√ Not applicable"

(III). Others

Applicable" Not applicable"

VII. Committees under the board of directors

Applicable" Not applicable"

(1).Members of committees under the board of directors

Committee	Members
Audit Committee	Fu Daiguo, Jiang Yumei, and Yan Hu
Nomination Committee	Jiang Yumei, Liu Shuqi, and Song Dongsheng
Remuneration and Review Committee	Song Dongsheng, Fu Daiguo and Liu Shuqi
Strategy Committee	Liu Shuqi, Liu Hanyuan, Yan Hu, Song Dongsheng, and Li Peng

(2).Five meetings held by the Audit Committee in the reporting period

Session date	Content	Important opinions and recommendations	Other information on performance of duties
February 28, 2022	Discussed and reviewed Issues Concerned relating to the Work of 2021 Annual Report	<p>Based on the audit results before and in 2021, Tongwei Co., Ltd has been running in accordance with regulations, with robust internal controls and adequate functioning of its internal audit and supervision system for effective risk prevention.</p> <p>According to these internal audits, due to the large number of branches and subsidiaries of the Company, the annual financial statements and the notes to the financial statements concern a large amount of data and text descriptions where there were a small number of data errors and inaccurate text expressions. These errors and inaccurate expressions are not core major problems whose risks can be well controlled.</p> <p>The 2021 annual report must be prepared in strict accordance with Standards on Annual Reports of Publicly Listed Company of CSRC, the Notice on 2021 Annual Reporting Disclosure by Companies Listed in the Main Board Market of the Shanghai Stock Exchange, and relevant memos to present the rule, accurate and complete information of the Company to investors.</p> <p>Given the disclosure timeline, the annual report and relevant materials of proposals to board of directors must be drafted before April 3, approved by the secretary of board of directors and the financial director, and then submitted to the Audit Committee, before submitting to the board of directors for discussion and approval.</p>	Asked for the audit progress of the annual report, listened to the audit information from project managers of the accounting firm, emphasized the importance of external auditing, in particular audit discrepancies, long-term equity investments and impairments, revenue and accounts receivable, and related-party transactions, required that accountants responsible for annual report audit must conduct their work with carefulness and justice, and urged the firm to submit the audit report within the specified period.
April 17, 2022	Considered the Letter of Communication with the Governance Level from Huaxin Accounting Firm	<p>Communicated with Sichuan Huaxin on the following topics:</p> <ol style="list-style-type: none"> 1. Sichuan Huaxin declaration on its independence; 2. How well the audit plan is executed; 3. The key audit matters and how well the responses are executed; 4. Evaluate the implementation of responses to other material misstatement risks; 5. Adjustments of audit differences; 6. Other important issues, including changes in accounting policies, the treatment of provision for PV powerplant impairment, loss from scrap of fixed assets, goodwill impairment testing, outward guarantee and related-party transactions. 	Checked the auditing progress on annual report on the site. Emphasized on the need for a good ending job to submit the audit report by the specified time, and communicated with audits from the accounting firm regarding the audit performance and the actual conditions of the Company.
April 19, 2022	<ol style="list-style-type: none"> 1. Considered the 2021 Annual Report of Tongwei Co., Ltd. 2. Considered the Summary Report on 2021 Audit Work by Sichuan Huaxin (Group) CPA (Special General Partnership) 3. Considered the Proposal on 	<ol style="list-style-type: none"> 1. Passed the 2021 Annual Report of Tongwei Co., Ltd. 2. Passed the Summary Report on 2021 Audit Work by Sichuan Huaxin (Group) CPA (Special General Partnership) 3. Passed the Proposal on Renewing the Engagement with the Accounting Firm 4. Passed the Proposal on Expected Daily Related-party Transactions in 2022 5. Passed the Proposal on 2021 Provision for Asset Impairment and Loss from Scrap of Fixed Assets 	

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	<p>Renewing the Engagement with the Accounting Firm</p> <p>4. Considered the Proposal on Expected Daily Related-party Transactions in 2022</p> <p>5. Considered the Proposal on 2021 Provision for Asset Impairment Reserve and Loss from Scrap of Fixed Assets</p> <p>6. Considered the Special Report on Storage and Actual Use of Funds Raised in 2021</p> <p>7. Considered the Proposal on Changes in Accounting Policies and Accounting Estimates</p> <p>8. Considered the Proposal on Revision or Re-formulation of the Related-party Transaction Policy of Tongwei Co., Ltd., the Outward Guarantee Policy of Tongwei Co., Ltd., the FX Hedging Management Policy of Tongwei Co., Ltd., the Fundraising Management Policy of Tongwei Co., Ltd., and the Short-term Wealth Management Policy of Tongwei Co., Ltd.</p> <p>9. Considered the 2021 Performance Report by Audit Committee</p> <p>10. Considered the Q1 2022 Report of Tongwei Co., Ltd.</p>	<p>6. Passed the Special Report on Storage and Actual Use of Funds Raised in 2021</p> <p>7. Passed the Proposal on Changes in Accounting Policies and Accounting Estimates.</p> <p>8. Passed the Proposal on Revision or Re-formulation of the Related-party Transaction Policy of Tongwei Co., Ltd., the Outward Guarantee Policy of Tongwei Co., Ltd., the FX Hedging Management Policy of Tongwei Co., Ltd., the Fundraising Management Policy of Tongwei Co., Ltd., and the Short-term Wealth Management Policy of Tongwei Co., Ltd.</p> <p>9. Passed the 2021 Performance Report by Audit Committee</p> <p>10. Passed the Q1 2022 Report of Tongwei Co., Ltd.</p>	
August 02, 2022	Considered the 2022 Semi- Annual Report of Tongwei Co., Ltd.	Passed the 2022 Semi-Annual Report of Tongwei Co., Ltd.	
October 14, 2022	Considered the Q3 2022 Report of Tongwei Co., Ltd.	Passed the Q3 2022 Report of Tongwei Co., Ltd.	

(3).Two meetings held by the Strategy Committee in the reporting period

Session date	Content	Important opinions and recommendations	Other information on performance of duties
August 12, 2022	Reviewed and approved: the Proposal on Investing into 200,000-ton High-purity Polysilicon and Supporting Projects in Baoshan ,and Proposal on Investing into 200,000-ton High-purity Polysilicon and	These projects are can help the Company leverage its comprehensive advantage in technology, cost, quality and management in terms of polysilicon sector, and further enhance the leading position of the Company in this sector. The Strategy Committee agreed the proposal which was then submitted to	

	Supporting Projects in Baotou.	the board of directors for consideration.	
September 21, 2022	Approved the Proposal on Investing the Project of 25GW High-purity Solar Modules in Yancheng	Proper extension of its module business is aligned with the Company's long-term strategic goal of becoming a world-class clean energy operator, and can help release its leadership in high-purity polysilicon and solar cell areas, to build a PV industrial structure with higher competitiveness.	

(4). Three meetings held by the Nomination Committee in the reporting period

Session date	Content	Important opinions and recommendations	Other information on performance of duties
April 19, 2022	Approved the Proposal on Nomination of Candidates for the Directors of the 8th Board	The committee checked the eligibility of candidates for independent directors and directors of the 8th board and made the following resolutions: 1. Mr. Liu Hanyuan, Mr. Xie Yi, Mr. Yan Hu, Ms. Liu Shuqi, Mr. Wang Xiaohui and Ms. Ding Yi are nominated as the candidates for the directors of the 8th board; 2. Mr. Fu Daiguo, Ms. Jiang Yumei and Mr. Song Dongsheng are nominated as the candidates for the independent directors of the 8th board. 3. The above candidates are to be considered by the board.	
May 13, 2022	Approved the Proposal on Election of the Chair and Vice-Chair of the Board, the Proposal on Appointment of the General Manager, the Proposal on Appointment of the Board Secretary and the Proposal on Appointment of the Deputy General Manager and Financial Director	Approved the meeting topics which were to be considered by the board.	
August 30, 2022	Approved the Proposal on Change of Directors and Election of Directors	Due to the job transfer, Mr. Wang Xiaohui, the director nominated by China Life, can no longer serve as a director of the Company's board. Therefore, Mr. Li Peng is nominated as a director of the Company's board. Mr. Li Peng is experienced in investment, and his experience and ability makes him eligible for a director of the Company. It is proposed to appoint Mr. Li Peng as a director.	

(5). Two meetings held by the Remuneration and Review Committee in the reporting period

Session date	Content	Important opinions and recommendations	Other information on performance of duties
April 19, 2022	Passed the Proposal on Adjustment of the Allowances for Directors	Given the diligence and dedication of the directors during their tenure, and the significant contributions they have made to the regulated operations, internal systems and development of the Company, and in light of the Company's current scale and status, with reference to the remuneration standards for directors of listed companies of the same size	

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		in the same industry, it is proposed to adjust the allowance for each independent director from 100,000 yuan to 160,000 yuan per year pre-tax, and the allowance for each other director from 50,000 yuan to 80,000 yuan per year pre-tax. The above proposal is agreed to be submitted to the board for consideration.	
December 30, 2022	Approved the Proposal on the Compensation and Performance Assessment of Senior Management for the Year 2022	The 2022 compensation and performance assessment plan for senior management is compliant, reasonable, and has effectively motivated the management team, laying a solid foundation for the Company's business development in 2023. The proposal is approved to be submitted to the board for consideration.	

(6). Specific circumstances where objections were raised

Applicable" Not applicable"

VIII. Note on supervisory committee's findings of the Company's risks

Applicable" Not applicable"

The supervisory committee did not raise any objection to matters supervised in the reporting period.

IX. Employees of the parent company and major subsidiaries at the end of the reporting period**(I). Employees**

Number of active employees of the parent company	166
Number of active employees of major subsidiaries	41,048
Total employees	41,214
Number of retirees for whom the parent and major subsidiaries must bear relevant expenses	67
Profession structure	
Profession	Number of employees
Production	24,824
Sales	3,635
Technology	7,792
Finance	766
Administration	4,197
Total	41,214
Education structure	
Education background	Number of employees
Master's degree or higher	731
Bachelor's degree	7,892
Three-year college	9,943
Three-year college or lower	22,648
Total	41,214

(II). Compensation policy

Applicable" Not applicable"

Adhering to the principle of external competition and internal fairness, the Company has established a fair, competitive and diverse salary and benefit system that motivates people for win-win results. In order to attract outstanding external talents, motivate, develop and retain internal potential talents, the Company continuously optimizes the salary and performance management system. By effectively linking salary to performance, the Company leverages merit-based pay to mobilize employees, increase the overall efficiency and profitability of the organization, and improve the income level of employees. To maintain moderately competitive salaries, the Company conducts periodic market research and salary cost analysis, adjusts the salary incentive strategy, and work out salaries based on factors such as job value and work intensity, thus maximizing the internal fairness of salary incentives.

(III). Training projects

Applicable" Not applicable"

Talent is the most essential resource in the process of Tongwei's development and growth. Guided by the cultural values of striving for excellence in everything, the Company has established a comprehensive talent development system. Continuously efforts into talent selection, use, development and retention, and the deployment of effective incentive policies fully guarantee the retention and personal development of talent. The Company relies on its internal training mechanism, centered on the Tongwei Learning Center, to combine high-quality education resources from internal and external sources, consolidate internal foundations, and obtain excellent management methods. Externally, the Company actively learns from advanced management experience and advanced technology from the industry, and expands its own business advantages. To meet the development needs of employees at different levels and fields, the Company has established a complete training system that focuses on internal training and integrates all business lines and subsidiaries and branches. The Company also encourages employees to improve their work skills and proficiency, and provides certain economic incentives and support for their education and

training. Talent is the key to the development of Tongwei whose future is inseparable from talent. Tongwei will continue to innovate its talent development model, optimize training methods, and strengthen its talent foundation, providing a continuous driver for its high-quality development across the globe.

(IV). Labor outsourcing

Applicable" Not applicable"

X. Proposal on profit distribution or capital reserve converted to share capital

(I). Development, execution or adjustments of cash dividend policy

Applicable" Not applicable"

The Shareholder Distribution Plan 2021-2023 approved at the 18th meeting of the 7th board of directors and the 2020 annual general meeting specified that the Company preferred the cash dividend policy with minimum dividend payout ratio to ensure the execution of the profit distribution policy.

The 2021 Profit Distribution Proposal considered at the 28th meeting of the 7th board of directors on April 22, 2022 and approved at the 2021 annual general meeting on May 16, 2022 stated that based on the total 4,501,548,184 shares, a cash dividend of 9.12 yuan (including tax) per ten shares would be paid to all shareholders for a total cash distribution of 4,105,411,943.81 yuan. This plan was fully executed on May 30, 2022.

The 2022 Distribution Proposal approved by the board meeting on April 21, 2023 stated that based on the total 4,501,946,097 shares, a cash dividend of 28.58 yuan (including tax) per ten shares would be paid to all shareholders for a total cash distribution of 12,866,561,945.23 yuan. This plan will be submitted to the 2022 annual meeting for consideration.

(II). Special note on cash dividend policy

Applicable" Not applicable"

Compliance with provisions of the Articles of Association or resolutions of the general meeting	<input checked="" type="checkbox"/> Yes" <input type="checkbox"/> No"
Dividend standards and payout ratio are clear	<input checked="" type="checkbox"/> Yes" <input type="checkbox"/> No"
Relevant decision-making procedures and mechanism are complete	<input checked="" type="checkbox"/> Yes" <input type="checkbox"/> No"
Independent directors performed their duties and played their role	<input checked="" type="checkbox"/> Yes" <input type="checkbox"/> No"
Middle and small shareholders had opportunities to fully express their views and needs with their legitimate rights and interests fully protected	<input checked="" type="checkbox"/> Yes" <input type="checkbox"/> No"

(III).The Company should disclose the reasons and the purposes and plan of these undistributed profit where the Company achieved profits and the profit attributable to shareholders of the parent company was positive, but no cash dividend proposal was raised

Applicable" Not applicable"

(IV). Profit distribution and capital reserve converted to share capital in the reporting period

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Bonus shares per 10 shares	/
Dividend per 10 shares (yuan) (including tax)	28.58
Shares converted from capital reserve per 10 shares	/
Cash distribution (including tax)	12,866,561,945.23
Net profit attributable to common shareholders of the listed company in the consolidated financial statements for the distribution year	25,726,447,236.27
% of net profit attributable to common shareholders of the listed company in the consolidated financial statements	50.01
Cash used for share repurchases that is included in the cash distribution	/
Total distribution (including tax)	12,866,561,945.23
The ratio of total distribution to the net profit attributable to common shareholders of the listed company in the consolidated financial statements	50.01

XI. The information of share incentive plan, employee share plan and other employee incentive measures and their impacts**(I). Where relevant incentive matters have been disclosed in interim announcements without further progress or change**

Applicable" Not applicable"

(II). Where relevant incentive matters were not disclosed in interim announcements or further progress or change occurred

Share incentive

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

Employee share plans

Applicable" Not applicable"

To fully mobilize employees in enthusiasm and creativity, and align the interests among shareholders, the Company, and employees, the Company has used employee share plans in recent years.

The Proposal on Tongwei Co., Ltd. Employee Share Plan (Draft) 2021-2023 and its Summary was approved at the 17th meeting of the 7th board of directors on February 9, 2021 and the first interim general meeting on February 25, 2021. The total size of employee shareholding under this plan is 2.7 billion yuan, with a term of 36 months. A total of 76,499,840 shares of the Company were purchased, accounting for 1.70% of the total share capital, at an average price of 34.43 yuan per share. The lock-up period is from May 21, 2021 to May 20, 2022. As of the end of the reporting period, this employee share plan was unlocked but not expired.

The Proposal on Tongwei Co., Ltd. Employee Share Plan (Draft) 2022-2024 and its Summary was approved at the 1st meeting of the 8th board of directors on May 16, 2022 and the first interim general meeting on June 1, 2022. The total size of employee shareholding under this plan is 5.6 billion yuan, with a term of 36 months. A total of 99,278,665 shares of the Company were purchased, accounting for 2.21% of the total share capital, at an average price of 55.28 yuan per share. The lock-up period is from July 6, 2022 to July 5, 2023.

Other incentive measures

Applicable" Not applicable"

(III). Share incentives granted to directors and senior managers in the reporting period

Applicable" Not applicable"

(IV). Evaluation mechanism for senior managers in the reporting period and the development and execution of incentive mechanism

Applicable" Not applicable"

The board of directors has a Remuneration and Review Committee which is responsible for developing the performance review criteria for senior managers and conducting the review, and the work plan and its execution of the committee are considered at board meetings. Remuneration to senior managers consists of base salary and performance-based bonus. The Remuneration and Review Committee pays fair and appropriate salaries given the Company's performance, needs of job positions, duties and work performance to ensure the compensation and benefits of employees are competitive in the market and industry.

XII. Development and implementation of internal controls in the reporting period

Applicable" Not applicable"

Refer to the Internal Control Self-Assessment Report disclosed on <http://www.sse.com.cn> by the Company on April 25, 2023.

Note on significant discrepancies in internal controls in the reporting period

Applicable" Not applicable"

XIII. Management and control over subsidiaries in the reporting period

Applicable Not applicable

As of the end of 2022, the Company had 251 subsidiaries including 239 domestic companies and 12 overseas companies. The Company held shares directly in 34 subsidiaries and indirectly in 217 subsidiaries.

It has completed management and control policies over subsidiaries. Regarding operation and business control, the Company has clear strategic goals. With completed organizational structure and business processes, it has effectively made subsidiaries organic parts for its overall strategy for synergies in business operation and for the integration, creation and sharing of resources. Also, subsidiaries submit production and operation statements to the Company as required so that it gains an understanding of and control over the operation and management of subsidiaries. Regarding financial control, the Company has created a powerful financial control system consisting of clear policies and requirements on financial budgeting and execution, funds with other parties, loans and guarantees. Subsidiaries have their financial affairs managed in strict accordance with the Company's financial management requirements and policies. Regarding personnel management, the Company sends directors, supervisors and senior managers to subsidiaries for which it is the controlling shareholder to effectively supervise them. At the same time, the Company enhances the performance review on subsidiaries to better motivate their employees, drive their development and ensure their overall operational targets are met.

XIV. Note on relevant information on internal control audit report

Applicable Not applicable

Sichuan Huaxin engaged by the Company has audited the Company's 2022 internal controls and issued a report with standard unqualified opinion, details of which are in the 2022 Internal Control Audit Report on Tongwei Co., Ltd. disclosed on <http://www.sse.com.cn> on April 25, 2023 by the Company.

Whether the internal control audit report was disclosed: Yes

Type of audit opinion: Standard unqualified opinion

XV. Correction of problems identified in self-check for the governance of listed companies

Applicable Not applicable

XVI. Others

Applicable Not applicable

Section V. Environmental and Social Responsibility**I. Environmental information**

Environmental protection mechanisms established or not	Yes
Environmental protection investment in the reporting period (unit: 10,000 Yuan)	88,814.43

(I). Note on the environmental protection by companies falling into the key waste discharge organizations published by the environmental protection authority and their major subsidiaries

Applicable Not applicable

1. Waste release

Applicable Not applicable

In the reporting period, the Company strictly observed applicable environmental laws, and regulations in the construction and operation of environmental facilities, wastewater, waste gas and solid waste produced were discharged under relevant standards for clean production. Relevant environmental information about the Company's key polluting units and major subsidiaries is as follows:

(1) Sichuan Yongxiang Polysilicon Co., Ltd.:

① Major pollutants in the wastewater: COD, NH₃-N and pH.

Release method: continuous and stable release.

Number of release outlets: 1.

Release standards: Grade one standard in Table 4 of Integrated Wastewater Discharge Standard

(GB8978-1996) — COD ≤ 100 mg/l; NH₃-N ≤ 15 mg/l; $6 \leq \text{pH} \leq 9$.

Release concentrations: COD: 10.45 mg/l, NH₃-N: 0.433 mg/l and PH: 7.748, all of which complied with the standards.

Approved annual release limits: No limits for COD and NH₃-N.

2022 total release amounts: COD: 3.427 tons and NH₃-N: 0.2085 tons.

② Major pollutants in the boiler smoke: sulfur dioxide, nitrogen oxides and particles.

Major pollutant in the waste gas from manufacturing process is hydrogen chloride.

Release method: continuous and stable release.

Number of release outlets: 18.

Release standards: Boiler smoke follows the special emission limits in Table 3 of the Emission Standard of Air Pollutants for Boiler (GB13271-2014) — sulfur dioxide ≤ 50 mg/m³, nitrogen oxides ≤ 150 mg/m³ (EIA requirement is 80 mg/m³), and particles ≤ 20 mg/m³. exhaust gas from manufacturing process follows the grade two standards in Table 2 of Integrated Emission Standard of Air Pollutants — hydrogen chloride ≤ 100 mg/m³.

Release concentrations: boiler smoke — sulfur dioxide 0.34 mg/m³, nitrogen oxides 34.85 mg/m³ and particles 0.85 mg/m³; exhaust gas from manufacturing process: Hydrogen chloride up to 0.77 mg/m³, all of which complied with the standards.

Approved annual release limits: No limits for sulfur dioxide, hydrogen chloride, and particles; nitrogen oxides ≤ 53.1 tons.

2022 total release amounts: nitrogen oxides 7.097 tons, lower than the approved amount.

(2) Sichuan Yongxiang New Energy Co., Ltd.:

① Major pollutants in the wastewater: COD, NH₃-N and pH.

Release method: continuous and stable release.

Number of release outlets: 1.

Release standards: Grade one standard in Table 4 of Integrated Wastewater Discharge Standard (GB8978-1996) — COD ≤ 100 mg/l; NH₃-N ≤ 15 mg/l; $6 \leq \text{pH} \leq 9$.

Release concentrations: COD 13.826 mg/l, NH₃-N 2.048 mg/l and PH 6 - 9, all of which complied with the standards.

Approved annual release limits: COD ≤ 43.96 tons and NH₃-N ≤ 4.4 tons.

2022 total release amounts: COD 8.35 tons and NH₃-N 1.237 tons, each of which was lower than the approved amount.

② Major pollutants in the boiler smoke: sulfur dioxide, nitrogen oxides and particles.

Major pollutant in the waste gas from manufacturing process is hydrogen chloride.

Release method: continuous and stable release.

Number of release outlets: 14.

Release standards: Boiler smoke follows the special emission limits in Table 3 of the Emission Standard of Air Pollutants for Boiler (GB13271-2014) — sulfur dioxide ≤ 50 mg/m³, nitrogen oxides ≤ 150 mg/m³ (EIA requirement is 80 mg/m³), and particles ≤ 20 mg/m³. exhaust gas from manufacturing process follows the grade two standards in Table 2 of Integrated Emission Standard of Air Pollutants — hydrogen chloride ≤ 100 mg/m³.

Release concentrations: In 2022, the Company's gas-fired boilers mainly operated during the power restriction period in August, with an average emission limits of 1.661 mg/m³ for sulfur dioxide, 55.454 mg/m³ for nitrogen oxides, and 5.188 mg/m³ for particles. The highest concentration of hydrogen chloride in the process exhaust gas was 2.53 mg/m³.

Approved annual release limits according to the new release permit: No limits for sulfur dioxide, hydrogen chloride, and particles; nitrogen oxides ≤ 55.017 tons.

2022 total release amounts: nitrogen oxides 0.528 tons.

(3) Inner Mongolia Tongwei High-purity Crystalline Silicon Company:

① No wastewater release.

② Major pollutants in the boiler smoke: sulfur dioxide, nitrogen oxides and particles.

Release method: continuous and stable release.

Number of release outlets: 10

Release standards on boiler smoke: emission limits for boilers in Table 2 of the Emission Standard of Air Pollutants for Boiler (GB13271-2014) — sulfur dioxide ≤ 50 mg/m³, nitrogen oxides ≤ 200 mg/m³ and particles ≤ 20 mg/m³.

Release standards on hydrogen production smoke: Air pollutant limits in Table 4 of the Emission Standard of Pollutants for Petroleum Chemistry Industry (GB31571-2015) — sulfur dioxide ≤ 100 mg/m³, nitrogen oxides ≤ 180 mg/m³ and particles ≤ 20 mg/m³.

Release standards on process exhaust gas: hydrogen chloride $\leq 100 \text{ mg/m}^3$ subject to grade two standards in the Integrated Standards for Emission of Air Pollutants (GB16297-1996).

Boiler smoke release concentrations: sulfur dioxide 0.71 mg/m^3 ; nitrogen oxides 53.21 mg/m^3 and particles 6.78 mg/m^3 , all of which complied with the standards.

Release concentrations of smoke from hydrogen production: sulfur dioxide 3.52 mg/m^3 ; nitrogen oxides 42.43 mg/m^3 and particles 4.86 mg/m^3 , all of which complied with the standards.

Release concentrations of manufacturing process exhaust: hydrogen chloride 30.6 mg/m^3 which complied with the standards.

Approved annual release limits: sulfur dioxide ≤ 1.459 tons, nitrogen oxides ≤ 67.36 tons.

2022 total release amounts: sulfur dioxide 0.171 tons; nitrogen oxides 6.2378 tons, each of which was lower than the approved amount.

(4) Yunnan Tongwei High-purity Crystalline Silicon Company:

① Major pollutants in the wastewater: COD, NH₃-N, pH and SS.

Release method: intermittent release.

Number of release outlets: 1.

Release standards: Grade three standard in Table 4 of Integrated Wastewater Discharge Standard (GB8978-1996) — COD $\leq 500 \text{ mg/l}$; NH₃-N no requirement; $6 \leq \text{pH} \leq 9$; SS: 400 mg/L .

Release concentrations: COD 32.25 mg/L ; SS 11.5 mg/L ; NH₃-N 1.2985 mg/L .

Approved annual release limits: The wastewater is discharged to the industrial park's wastewater treatment station without the need to assess total release amount.

② Major pollutant in the waste gas: hydrogen chloride.

Release method: continuous and stable release.

Number of release outlets: 6.

Release standards: hydrogen chloride $\leq 100 \text{ mg/m}^3$ subject to grade two standards in Table 2 of Integrated Standards for Emission of Air Pollutants;

Release concentrations: hydrogen chloride 10.2 mg/m^3 .

Approved annual release limits: hydrogen chloride 3.574 tons.

2022 total release amounts: hydrogen chloride 3.503139 tons.

(5) PVC and sodium hydroxide production in Yongxiang

① Major pollutants in the wastewater: COD, NH₃-N and pH.

Release method: continuous and stable release.

Number of release outlets: 1.

Release standards: Table 1 of Emission Standard of Pollutants for Caustic Alkali and Polyvinyl Chloride Industry (GB15581-2016) — COD $\leq 60 \text{ mg/l}$, NH₃-N $\leq 15 \text{ mg/l}$ and $6 \leq \text{pH} \leq 9$.

Release concentrations: COD 13.29 mg/l , NH₃-N 2.77 mg/l and PH 6 - 9, all of which complied with the standards.

Approved annual release limits: COD ≤ 39 tons and NH₃-N ≤ 9.75 tons.

2022 total release amounts: COD 2.13 tons and NH₃-N 0.45 tons, each of which was lower than the approved amount.

② Major pollutants in the waste gas: particles and NMHC.

Release method: continuous and stable release.

Number of release outlets: 3.

Release standards: Table 4 of Emission Standard of Pollutants for Caustic Alkali and Polyvinyl Chloride Industry (GB15581-2016) — Particles 60 mg/m^3 and NMHC 50 mg/m^3 from the waste gas from dry outlets.

Release concentrations: Particles 2.01 mg/m^3 and NMHC 4.88 mg/m^3 .

Approved annual release limits: particles ≤ 60 tons; NMHC ≤ 50 tons.

2022 total release amounts: particles 2.38 tons and NMHC 5.41 tons.

③ Major heavy metal pollutants is mercury (II) chloride which is mainly used as the catalyst for vinyl chloride synthesis, and coded as HW29 in National Directory of Hazardous Substances, must be disposed centrally to qualified suppliers for treatment and recycle.

(6) Sichuan Yongxiang New Materials Co., Ltd.:

② Major pollutants in waste gas: particles, sulfur dioxide, and nitrogen oxides.

Release method: continuous and stable release.

Number of release outlets: 2

Release standards: Emission Standard of Air Pollutants for Cement Industry (GB4915-2013) — particles $\leq 20 \text{ mg/m}^3$; sulfur dioxide $\leq 100 \text{ mg/m}^3$; and nitrogen oxides $\leq 320 \text{ mg/m}^3$.

Average release concentrations: particles in the kiln head 5.57 mg/m^3 ; smoke in the kiln tail 3.21 mg/m^3

sulfur dioxide 2.77 mg/m³; nitrogen oxides 54.29 mg/m³; all of which met the standards.

Approved annual release limits: particles 51.60 tons; sulfur dioxide 150 tons; nitrogen oxides 480 tons.

2022 total release amounts: particles from kiln head 8.91 tons; particles from kiln tail 6.82 tons; sulfur dioxide 5.84 tons; nitrogen oxides 124.64 tons. All of them were lower than the respective approved amount.

② Major pollutants in the wastewater: COD and NH₃-N.

Release method: continuous and stable release.

Number of release outlets: 1

Release standards: Grade one standards in Integrated Wastewater Discharge Standard (GB8978-1996) — COD ≤ 100 mg/l; NH₃-N ≤ 15 mg/l;

Release concentrations: COD 25.58 mg/l and NH₃-N 0.41 mg/l. Each of them met the standards.

Approved annual release limits: No limits for COD and NH₃-N.

2022 total release amounts: COD 0.75 tons and NH₃-N 0.01 tons.

(7) Tongwei Solar (Jintang) Co., Ltd.:

① Major pollutants in the waste gas: hydrogen chloride, chlorine, ammonia, particles, nitrogen oxides and VOCs; typical pollutant: fluoride.

Release method: continuous and stable release.

Number of release outlets: 14.

Release standards: Limits in Table 5 of Emission Standard of Pollutants for Battery Industry (GB30484-2013) — hydrogen chloride ≤ 5 mg/m³; fluoride ≤ 3 mg/m³; chlorine ≤ 5 mg/m³; nitrogen oxides ≤ 30 mg/m³; particles ≤ 30 mg/m³. Ammonia ≤ 20t/h (30m), 15.2kg/h (26m) subject to limits in Table 2 of Emission Standards for Odor Pollutants (GB14554-1993); VOCs ≤ 60mg/m³ subject to industrial standards for electronic industry set in Table 3 of Sichuan Control Standards for Volatile Organic Compounds (DB51/2377-2017).

Release concentrations: hydrogen chloride 1.43 mg/m³; fluoride 0.24 mg/m³; chloride 0.23 mg/m³; ammonia 1.71 kg/h; particles 10.33 mg/m³; nitrogen oxides 8.63 kg/m³; VOCs 1.21 mg/m³. Each of them met the standards.

Approved annual release limits: nitrogen oxides ≤ 25.61 tons, and VOCs ≤ 27.71 tons.

2022 total release amounts: nitrogen oxides 6.48 tons and VOCs 2.02 tons. All of them were lower than the respective approved amount.

② Major pollutants in the wastewater: pH, COD, NH₃-N and fluoride.

Release method: continuous and stable release.

Number of release outlets: 1.

Release standards: Indirect discharge standards in Table 2 of Emission Standard of Pollutants for Battery Industry (GB30484-2013) — 6 ≤ pH ≤ 9; COD ≤ 150 mg/L; NH₃-N ≤ 30 mg/l; fluoride ≤ 8 mg/L.

Release concentrations: pH 7.01- 7.73; COD 32 mg/L; NH₃-N 13.17 mg/L; fluoride 5.15 mg/L. Each of them met the standards.

Approved annual release limits: COD ≤ 1181.2 tons and NH₃-N ≤ 236.3 tons.

2022 total release amounts: COD 69.15 tons and NH₃-N 29.57 tons; each of which was lower than the approved amount.

(8) Tongwei Solar (Chengdu) Co., Ltd.:

① Major pollutants in the waste gas: fluoride, hydrogen chloride, chlorine, sulfuric acid mist, ammonia, particles and volatile organic compounds (VOCs).

Typical pollutant(s): fluoride.

Release method: continuous and stable release.

Number of release outlets: 27.

Release standards: ammonia ≤ 14 kg/h subject to limit in Table 2 of Emission Standards for Odor Pollutants (GB14554-1993); VOCs ≤ 60 mg/m³ subject to industrial standards for electronic industry set in Table 3 of Sichuan Control Standards for Volatile Organic Compounds (DB51/2377-2017); other pollutants subject to limits for solar cells in Table 5 of Emission Standard of Pollutants for Battery Industry (GB30484-2013): fluoride ≤ 3 mg/m³, chlorine ≤ 5 mg/m³, particles ≤ 30 mg/m³; hydrogen chloride ≤ 5 mg/m³ and nitrogen oxides ≤ 30 mg/m³.

Release concentrations: fluoride 0.13 mg/m³; chlorine 0.85 mg/m³; particles 2.43 mg/m³; nitrogen oxides 5.24 mg/m³; VOCs 2.43 mg/m³; hydrogen chloride 1.41 mg/m³; ammonia 0.053 kg/h, all of which met the standards.

2022 total release amounts: nitrogen oxides 27.97 tons and VOCs 12.58 tons.

② Major pollutants in the wastewater: general pollutants: COD, NH₃-N, pH; typical pollutant(s): fluoride.

Release method: continuous and stable release.

Number of release outlets: 2.

Release standards: Indirect discharge standards for solar cells in Table 2 of Emission Standard of Pollutants for Battery Industry (GB30484-2013); COD_{Cr} ≤ 150 mg/L; NH₃-N ≤ 30 mg/L; pH 6 - 9; fluoride ≤ 8 mg/L.

Release concentrations: COD_{Cr} 17.50 mg/L; NH₃-N 3.73 mg/l; pH 7.58 and fluoride 5.39 mg/l. Each of them met the standards.

Approved annual release limits: COD ≤ 1109.8 tons and NH₃-N ≤ 221.9 tons.

2022 total release limits: COD_{Cr} 90.56 tons and NH₃-N 10.08 tons, each of which was lower than the approved amount.

(9) Tonghe New Energy (Jintang) Co., Ltd.:

① Major pollutants in the waste gas: fluoride, chlorine, hydrogen chloride, particles, nitrogen oxides and VOCs.

Release method: continuous and stable release.

Number of release outlets: 18.

Release standards: Emission Standard of Pollutants for Battery Industry (GB30484-2013) — fluoride ≤ 3 mg/m³; chlorine ≤ 5 mg/m³; particles ≤ 30 mg/m³; nitrogen oxides ≤ 30 mg/m³; Sichuan Control Standards for Volatile Organic Compounds (DB51/2377-2017) — VOCs ≤ 60 mg/m³; standard limit in Table 2 of Odor Pollutants (GB14554-1993) — ammonia ≤ 14 kg/h.

Release concentrations: fluoride ≤ 0.98 mg/m³; hydrogen chloride ≤ 0.33 mg/m³; particles ≤ 15.65 mg/m³; NO_x ≤ 12 mg/m³; VOCs ≤ 0.47 mg/m³; ammonia ≤ 0.2 kg/h, all of which met the standards. Each of them met the standards.

2022 total release amounts: fluoride 1.19 tons; particles 3.1 tons; nitrogen oxides 0.72 tons, VOCs 2.85 tons and ammonia 2.06 tons.

② Major pollutants in the wastewater: general pollutants: COD, NH₃-N, pH, and SS; typical pollutant(s): fluoride.

Release method: continuous and stable release.

Number of release outlets: 1.

Release standards: Emission Standard of Pollutants for Battery Industry (GB30484) — COD ≤ 150 mg/L; NH₃-N ≤ 30 mg/L; 6 ≤ pH ≤ 9; SS ≤ 140 mg/l; total nitrogen ≤ 40 mg/l; fluoride ≤ 8 mg/L.

Release concentrations: COD 102 mg/l; NH₃-N 9.115 mg/l; PH 7.35; SS 4.75 mg/l; total nitrogen 11.8 mg/l, and fluoride 3.9325 mg/l. Each of them met the standards.

2022 total release amounts: COD 536.2 tons; NH₃-N 54.4 tons; SS 27.59 tons; total phosphorus 57.56 tons and fluoride 15.33 tons.

Environmental protection facilities and their operational status: Cell and wafer slicing wastewater were treated separately due to the different nature of pollutants in the wastewater. The cell wastewater was subject to three stages of physical and chemical treatment at the sewage treatment plant before meeting the discharge standards, while the wafer slicing wastewater was subject to micro-sand filtration, dissolved air flotation, hydrolysis and acidification, anaerobic treatment and six-stage aerobic treatment before meeting the discharge standards.

(10) Tongwei Solar (Meishan) Co., Ltd.:

① Major pollutants in the waste gas: general pollutants: chlorine, particles, hydrogen chloride and VOCs; typical pollutant: fluoride.

Release method: continuous and stable release.

Number of release outlets: 15

Release standards: Limits for waste gas from production of solar cells in Table 5 of Emission Standard of Pollutants for Battery Industry (GB30484-2013) — nitrogen oxides ≤ 30 mg/m³, fluoride ≤ 3 mg/m³, chlorine ≤ 5 mg/m³; particles ≤ 30 mg/m³; hydrogen chloride ≤ 5 mg/m³; Odor Pollutants (GB14554-1993) — ammonia ≤ 20 kg/h (manufacturing process waste gas); ammonia ≤ 14 kg/h (waste gas from the wastewater station); hydrogen sulfide ≤ 0.9 kg/h; and odor gas concentration 6000; Sichuan Control Standards for Volatile Organic Compounds (DB51/2377-2017) — VOCs ≤ 60 mg/m³; grade two limits in Table 2 of Integrated Standards for Emission of Air Pollutants (GB16297-1996) — sulfuric acid mist ≤ 60 mg/m³.

Release concentrations: fluoride 1.07 mg/m³; chlorine 0.32 mg/m³; particles 6.08 mg/m³; hydrogen chloride 0.37 mg/m³; VOCs 0.55 mg/m³; nitrogen oxides 4.38 mg/m³; sulfuric acid mist 0.44 mg/m³; ammonia 0.09 kg/h (rate), odor 296.25, all of which met the standards.

2022 total release amounts: nitrogen oxides 8.17 ton and VOCs 2.465 tons.

② Major pollutants in the wastewater: general pollutants: COD, NH₃-N, pH and total nitrogen; typical pollutant(s): fluoride.

Release method: continuous and stable release.

Number of release outlets: 3 general wastewater discharge outlets (production wastewater outlet, general wastewater outlet, and domestic wastewater outlet), and all these outlets are in the west part of the factory.

Discharge standards: production wastewater is subject to the indirect discharge standards in Table 2 of Emission Standard of Pollutants for Battery Industry (GB30484-2013), and all pollutant factors and chlorides are subject to standards for designed inlet water quality of first zone of the wastewater treatment plant in Xiuwen Town, Meishan Industrial Park; general wastewater is subject to standards for designed inlet water of the artificial wetland in second zone of the said wastewater treatment plant; domestic wastewater is subject to the grade three standards in Table 4 of Integrated Wastewater Discharge Standard (GB8978-1996), the grade B limits in Table 1 of Wastewater Quality Standards for Discharge to Municipal Sewers (GB/T31962-2015) and standards for designed inlet water of the second zone of the said wastewater treatment plant;

Release concentrations: COD 23.66 mg/l; NH₃-N 19 mg/l; pH 8.06; total nitrogen 22.23 mg/l; and fluoride 5.39 mg/l, all of which met the standards.

2022 total release amounts: COD 113.46 tons and NH₃-N 67.91 tons.

(11) Tongwei Solar (Anhui) Co., Ltd.:

① Major pollutants in the waste gas: chlorine, particles, ammonia, nitrogen oxides, hydrogen chloride, VOCs and fluoride.

Release method: continuous and stable release.

Number of release outlets: 12.

Release standards: Limits for waste gas from production of solar cells in Table 5 of Emission Standard of Pollutants for Battery Industry (GB30484-2013) — nitrogen oxides ≤ 30 mg/m³, fluoride ≤ 3 mg/m³, chlorine ≤ 5 mg/m³; particles ≤ 30 mg/m³; hydrogen chloride ≤ 5 mg/m³; ammonia ≤ 30 mg/m³; VOCs ≤ 50 mg/m³ subject to Emission Standards for Volatile Organic Compounds from Industrial Enterprises (DB16297-2014).

Release concentrations: nitrogen oxides < 3 mg/m³; fluoride 0.39 mg/m³; chlorine not detected; particles 8.6 mg/m³; hydrogen chloride 0.52 mg/m³; VOCs 2.02 mg/m³; ammonia 0.58 mg/m³; all of which met the standards.

2022 total release amounts: nitrogen oxides 0.308 tons and VOCs 3.02 tons.

② Major pollutants in the wastewater: COD, NH₃-N, pH, total nitrogen and fluoride.

Release method: continuous and stable release.

Number of release outlets: 1

Release standards: Indirect discharge standards for solar cells in of Emission Standard of Pollutants for Battery Industry (GB30484-2013) and standards for Hefei West Zutuan wastewater treatment plant; COD ≤ 150 mg/L; NH₃-N ≤ 30 mg/L; $6 \leq \text{pH} \leq 9$; total nitrogen ≤ 40 mg/L; fluoride ≤ 8 mg/L.

Release concentrations: COD 32.33 mg/l; NH₃-N 1.33 mg/l; PH 7.23; total nitrogen 15.47 mg/l; and fluoride 6.76 mg/l. Each of them met the standards.

2022 total release amounts: COD 120.43 tons and NH₃-N 9.73 tons.

(12) Chengdu Chunyuan Food Company Limited:

① Major pollutants in the wastewater: COD, NH₃-N, PH, SS, BOD, animal fats and vegetable oils, total phosphorus and total nitrogen.

Release method: intermittent release.

Number of release outlets: 1.

Release standards: grade three standards for livestock processing in Table 3 of Discharge Standard of Water Pollutants for Meat Packing Industry (GD13457-1992) — COD 500 mg/l; no limit for NH₃-N; PH 6.0-8.5; SS 400 mg/L; BOD 500 mg/L; animal fat and vegetable oils 60 mg/L; no limit for total phosphorus and no limit for total nitrogen.

Release concentrations: COD 29 mg/L; NH₃-N 12.81 mg/l/L; PH 7.5; SS 11.33 mg/L; BOD 6.07 mg/L; animal fat and vegetable oils 0.25 mg/L; total phosphorus 4.00 mg/L and total nitrogen 17.55 mg/L, all of which met the standards.

Approved annual release limits: COD 357.5 tons, no limits on other pollutants.

2022 total release amounts: COD 3.68 tons, lower than the approved.

② Major pollutants in the waste gas: sulfur dioxide, nitrogen oxides, particles and carbon monoxide.

Release method: intermittent release.

Number of release outlets: 1.

Release standards: Emission Standard of Air Pollutants for Boilers in Chengdu; random waste gas emission at facility boundaries is subject to new construction and expansion standards of grade two in Table 1 of Emission Standards for Odor Pollutants (GB14554-93): odor concentration ≤ 20 mg/m³; hydrogen sulfide \leq

0.06 mg/m³ and ammonia ≤ 1.5 mg/m³.

Release concentrations: Odor <10 mg/m³; hydrogen sulfide 0.005 mg/m³; and ammonia 0.065 mg/m³

Approved annual release amounts: No limits for sulfur dioxide, nitrogen oxides and particles.

(13) Chengdu Xintaifeng Agriculture Development Co., Ltd.:

① Major pollutants in the wastewater: COD, NH₃-N, PH, SS, BOD, animal fats and vegetable oils, total phosphorus and total nitrogen.

Release method: intermittent release.

Number of release outlets: 1.

Release standards: grade three limits for poultry slaughter in Table 3 of Discharge Standard of Water Pollutants for Meat Packing Industry (GB13457-92) — COD 500 mg/l, no limit on NH₃-N, Ph 6.0-8.5, SS 300 mg/L, BOD 250 mg/L, animal fat and vegetable oils 50 mg/L, no limit on total phosphorus and no limit on total nitrogen.

Release concentrations: COD 39 mg/L; NH₃-N 1.09 mg/l/L; PH 7.21; SS 8 mg/L; BOD 12.2 mg/L; animal fat and vegetable oils 1.75 mg/L; total phosphorus 7.26 mg/L; and total nitrogen 48.7 mg/L, all of which met the standards.

Approved annual release limits: COD 306 tons, no limits on other pollutants.

2022 total release amounts: COD 3.016 tons, lower than the approved.

② Major pollutants in the waste gas: sulfur dioxide, nitrogen oxides and particles.

Release method: continuous and stable release.

Number of release outlets: 1.

Release standards: Emission Standard of Air Pollutants for Boilers in Chengdu — odor ≤ 20 mg/m³; hydrogen sulfide ≤ 0.06 mg/m³; ammonia ≤ 1.5 mg/m³.

Boilers have been replaced with central heating; therefore, waste gas was not monitored. The waste discharge permit only requires self-monitoring of odor concentration at facility boundaries, ammonia concentration at facility boundaries and hydrogen sulfide concentration once per half a year. Random waste gas emission at facility boundaries is subject to new construction and expansion standards of grade two in Table 1 of Emission Standards for Odor Pollutants (GB14554-1993).

Release concentrations: odor 10 mg/m³; hydrogen sulfide 0.01 mg/m³; and ammonia 0.02 mg/m³

Approved annual release amounts: No limits for sulfur dioxide, nitrogen oxides and particles.

(14) Tongwei (Hainan) Aquatic Products Co., Ltd.:

Major pollutants in the wastewater are COD, NH₃-N, PH, total phosphorus and total nitrogen.

Release method: intermittent release.

Number of release outlets: 1.

Release standards: Standards of Connection to Wastewater Network of Old Downtown Wastewater Treatment Plant (West Area) — PH 6 - 9; COD ≤ 500 mg/L; NH₃-N ≤ 40 mg/L; SS ≅ 400 mg/L; total nitrogen ≅ 40 mg/L; total phosphorus ≅ 6 mg/L and BOD ≅ 300 mg/L.

Release concentrations: COD 40.3 mg/l; NH₃-N 2.98 mg/l; total nitrogen 13.6 mg/l; and total phosphorus 0.44 mg/l; all of which met the standards.

Approved annual release limits: No limits for COD, NH₃-N, SS, total nitrogen, and total phosphorus.

2022 total release amounts: COD 18.61 tons, NH₃-N 1.37 tons, total phosphorus 0.2 tons and total nitrogen 6.28 tons.

2. Construction and operation of pollution prevention and treatment facilities

"√ Applicable" "□ Not applicable"

Each of the Company's key polluting units has constructed environmental protection facilities in accordance with environmental assessment and regulatory requirements. During the reporting period, all facilities operated normally, and environment staff performed periodical inspections and maintenance of the facilities to ensure that pollutants were released in compliance with standards. Details are as below:

Yongxiang:

(1) Wastewater control facilities include domestic wastewater treatment device, wastewater treatment station, high - salinity wastewater condensation device, all of which operated normally;

(2) Waste gas control facilities include sprinkler system for process-generated waste gas, and dust removal system, all of which operated normally;

(3) Solid-waste facilities include slag shed and temporary storage room of hazardous wastes, all of which were managed subject to environmental protection requirements.

(4) Noise control facilities include mufflers and vibration absorbers for noise-generating equipment, and mufflers set for vent ports, all of which operated normally.

Tongwei Solar:

- (1) Wastewater control facilities include domestic wastewater treatment device, multi-stage physiochemical + biochemical pre-treatment + two stage A/O wastewater treatment system, all of which operated normally;
- (2) Waste gas control facilities include active carbon + low-temperature plasma treatment system, reduction-based scrubber, acid-alkali scrubber, and combustion chamber, all of which operated normally.

Agriculture, Animal Husbandry and Food Business Group:

- (1) Wastewater treatment measures: Septic tanks for domestic sewage, 2,500-ton sewage stations, phosphorus removal and dosing facilities, sludge pressure filter systems, and online monitoring facilities for sewage.
- (2) Solid-waste facilities: temporary sludge storage room and temporary storage room of hazardous wastes, all of which were managed subject to environmental protection requirements. Solid waste was transported and disposed by qualified third parties.

3. Environmental impact assessments and other administrative permits on construction projects

"√ Applicable" "□ Not applicable"

Environmental impact assessments and other administrative permits on construction projects undertaken by the Company during the reporting period:

Tongwei Solar:

- (1) Jintang Solar: The Environmental Impact Environmental Assessment Report on the project on the application of intelligent connected factory powered by efficient silicon-based solar cells with an annual capacity of 7.5 GW was approved on June 15, 2020 by Chengdu Bureau of Ecology and Environment (CHPS [2020] No.42), and the updated report was approved on June 28, 2021 by Chengdu Bureau of Ecology and Environment (CHPS [2021] No.39); the environmental protection acceptance on completion was issued on December 16, 2021 with the acceptance report made public on January 10, 2022. The Environmental Impact Environmental Assessment Report on demonstration project for the application of core technologies in domestic equipment for high-efficiency solar cells was approved on July 18, 2022 by Chengdu Bureau of Ecology and Ministry (CHPS (committed) [2022] No. 24). The environmental protection facilities for above projects have been designed, constructed, and developed in accordance with environmental laws, regulations, and environmental impact assessment requirements. Currently, the self-acceptance is underway. The pollutant release permit no: 91510121MA69DM7440001U;
- (2) Tonghe Solar: The environmental impact assessments on Tonghe wafer slicing and solar cells projects have been approved by Chengdu Bureau of Ecology and Environment, and the environmental protection acceptance on completion was completed. The approval for solar cells project is CHPS (committed) [2021] No.19; for wafer slicing project is CHPS (committed) [2021] No. 73. Self-acceptance was organized for and successfully completed for the two projects on May 26, 2022. The pollutant release permit (No. 91510121MA662CJD4R001U) was obtained on December 13, 2021;
- (3) Meishan Solar Cell: The Meishan phase III project on the application of homemade intelligent equipment (system) powered by efficient silicon-based solar cells with an annual capacity of 7.5 GW was registered with Meishan Development and Reform Commission on April 20, 2022 (CTZB [2204-511400-04-01-940169]) with No. FGQB-0061. The environmental impact assessment on the project was approved by Meishan Bureau of Ecology and Environment on December 23, 2022 (MSHJH [2022] No. 91).

Yongxiang:

- (1) Sichuan Yongxiang New Energy Co., Ltd.: Environmental impact assessment on the phase I capacity balance project was approved by Leshan Bureau of Ecology and Environment on May 30, 2022 (LSHP [2022] No.18);
- (2) Sichuan Yongxiang Energy Technology Co., Ltd.: Environmental impact assessment on the phase I high-purity polysilicon project was approved by Leshan Bureau of Ecology and Environment on September 27, 2022 (LSHP [2022] No.34);
- (3) Yunnan Tongwei high-purity polysilicon Company Limited: The pollutant release permit (No. 91530524MA6PEG4C47001V) for the phase I 50,000-ton high-purity polysilicon project was granted by Baoshan Bureau of Ecology and Environment on March 18, 2022;
- (4) The PVC and sodium hydroxide production in Yongxiang: the valid period of pollutant release permit (No. 91511127446516660002L) was extended.

4. Environmental-related emergency response plans

"√ Applicable" "□ Not applicable"

In order to prevent and reduce environmental events, standardize the emergency management and emergency response procedures of the Company for environmental emergencies, establish an emergency

work mechanism that follows central commands, takes responsibilities at different levels and acts swiftly, carry out emergency rescue work in a timely and effective manner, and form a coordinated and efficient environmental pollution emergency response system with strong prevention actions, orderly commands, the Company and its subsidiaries have formulated emergency response plans for emergency events and have the plans registered in local bureaus of ecology and environment. Registration numbers:

- (1) Environmental Emergency Response Plan of Sichuan Yongxiang New Energy Co. Ltd. (511112 - 2022 - 018 - H);
- (2) Environmental Emergency Response Plan of Yunnan Tongwei High-purity Crystalline Silicon Company (530502 - 2022 - 01 - L);
- (3) Environmental Emergency Response Plan of Sichuan Yongxiang New Materials Co., Ltd. (511112 - 2022 - 031);
- (4) Environmental Emergency Response Plan of Tongwei Solar (Jintang) Co., Ltd. (510121 - 2023 - 011 - H);
- (5) Environmental Emergency Response Plan of Tongwei Solar (Chengdu) Co., Ltd. (510122 - 2022 - 1646 - M);
- (6) Environmental Emergency Response Plan of Tonghe New Energy (Jintang) Co., Ltd. (510121 - 2022 - 082 - M);

5. Self-monitoring plans

Applicable" Not applicable"

Major subsidiaries have established safety and environment departments or management teams, equipped with sufficient personnel and advanced monitoring equipment. Various methods such as real-time monitoring by environmental monitoring equipment, regular manual monitoring, and third-party monitoring ensure the compliance with environmental management requirements.

(1) Yongxiang:

It has established a safety and environment department. Online waste gas monitoring systems are set at emission outlets of boilers and cement kilns and at main wastewater discharge outlets at each site. Online wastewater testing devices are installed at wastewater discharge outlets to detect pollutants like COD, NH₃-N and PH; online waste gas testing devices are set at emission outlets of gas-fired boilers and cement kilns to detect pollutants such as SO₂, NO_x and particles. These online monitoring instruments are connected to local environmental authorities so that all data are sent to the pollution source monitoring systems of environmental protection authorities in a real-time manner.

(2) Tongwei Solar:

It has established a safety and environment department supported by sufficient personnel and advanced monitoring and detection instruments.

Online testing devices are installed at general wastewater discharge outlets to detect pollutants like COD, NH₃-N, PH and fluoride in a real-time manner, with detection data sent to the environmental protection information platform on a regular basis. The wastewater treatment station is equipped with a wastewater testing laboratory, where laboratory technicians conduct regular tests on various stages of wastewater treatment to ensure that the discharged wastewater meets the required standards. In addition, the company has developed an annual environmental monitoring plan. In accordance with the requirements of the environmental impact assessment report and pollution discharge permit, third-party testing agencies are commissioned to test the company's exhaust gas, wastewater, noise, plant boundary exhaust gas, groundwater and other environmental aspects.

(3) Agriculture, Animal Husbandry and Food Business Group:

The Company has developed a self-monitoring plan for the environment. Qualified third parties have been commissioned to conduct quarterly tests on various indicators such as COD, pH, and suspended solids in the wastewater, and issue testing reports accordingly, and conduct semi-annual tests on kitchen exhaust, plant boundary exhaust gas, and noise levels, and issues testing reports accordingly. All online monitoring instruments are connected to the environmental protection authorities, and all monitoring data is transmitted in real-time to pollution source monitoring system of the authorities. Company has also implemented manual monitoring. In accordance with regulatory standards, it commissions qualified third-party testing agencies to conduct annual monitoring on exhaust gas and plant boundary noise, and provides testing reports.

6. Administrative penalties due to environmental problems in the reporting period

Applicable" Not applicable"

7. Other environmental information that should be disclosed

Applicable" Not applicable"

(II). Note on environmental protection by companies other than key pollutant discharge units

Applicable" Not applicable"

1. Administrative penalties due to environmental problems

Applicable" Not applicable"

Wuxi Tongwei, and Xiamen Tongwei were fined for the facility-boundary odor and water pollutants exceeding the limits. These are no significant penalties for environmental pollution. All corrective actions were completed in the reporting period and no materially adverse impact was caused to the Company.

2. Other environmental disclosure with reference to key pollutant discharge units

Applicable" Not applicable"

Companies other than key pollutant discharge units are mainly feed producers. Feed industry is a low-pollution sector. The pollutants generated in feed production are waste gas with a little wastewater, solid waste and noise. Pollution control measures are as below:

(1) Waste gas control

The waste gas generated in feed production mainly consists of dust and exhaust of high temperature, high humidity and high dust, which is treated by cyclone dust collector and dust collection bags, then treated by sprinkler-based oxidation equipment before emitted.

(2) Wastewater control

No wastewater or little wastewater is generated in feed production. The wastewater is mainly from the sprinkler system of environmental equipment. This wastewater is processed by the AAO Process and circulated, which will not cause secondary pollution to environment. Domestic wastewater generated by employees is pre-treated by the septic tank, and sent to the municipal wastewater treatment plant via the municipal wastewater network for centralized treatment, with the tail water meeting the Grade One Type A standards in Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002) discharged. No pollution will be caused.

(3) Solid waste control

Common types of solid waste generated in feed production are general solid waste and hazardous solid waste. General type is periodically removed and transported by local environmental and health authorities to landfills. Hazardous type is stored in a dedicated temporary room and sent to qualified parties periodically for further treatment.

(4) Noise control

Noise producers in feed production mainly include crushers, mixers, draught fans. The Company uses low-noise equipment and has them arranged properly so that noise attenuates to the largest extent over distance. High-noise equipment is enclosed with noise absorbing walls.

The Company and its subsidiaries have been strengthening the procedure-based environmental protection with significant effect. No significant environmental event or pollution occurred in the reporting period.

3. Reason for non-disclosure of other environmental information

Applicable" Not applicable"

(III). Information relating to protecting ecology, preventing pollution and fulfilling environmental obligation

Applicable" Not applicable"

The Company fully complies with environmental protection laws and regulations including the Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Water Pollution, and Standard for Pollution Control on Hazardous Waste Storage, and developed and implemented many internal environmental management policies.

In terms of air pollution prevention and control, the Company strictly complies with national environmental protection standards such as Emission Standards for Odor Pollutants (GB14554-1993), actively promotes special treatment of odor emissions, and conducts in-depth research on feed gas treatment technologies. It adopts various measures, including internal recycling of waste gas, multiphase

oxidation technology, and deep dust and fog removal technology. As a result, the organized emission of odor after waste gas treatment is below 200, which is much lower than specified limit (GB14554-1993) of 2000. The treatment effect has reached the leading level in the industry.

Regarding wastewater treatment, the Company standardizes the discharge procedures for domestic and production wastewater, keeps optimizing and upgrading the treatment techniques and devices for wastewater to effectively enhance its wastewater treatment capabilities and treatment quality. Regarding the comprehensive use of waste, the Company actively drives the reuse of waste, standardizes the disposal of solid waste and ensure the safe transfer and effective monitoring of solid waste for prevention of solid waste pollution.

The Company has set up an Energy Management Committee, and has created a three-level governance structure where the board of directors makes decisions, the Energy Management Committee coordinates the management, and Energy Management Working Groups execute tasks. This was to enhance the awareness of ESG and sustainable development among all departments, improve the Company's ESG management and steadily elevate the ESG governance system. The Company's 2022 Environmental, Social and Governance Report approved at the 10th meeting of the 8th board of directors and the 8th meeting of the 8th supervisory committee was disclosed on the website of Shanghai Stock Exchange and other appointed media on April 25, 2023. The report has described the Company's practices and performances in economy, environment, society and company governance over the year of 2022.

(IV). Emission reduction actions during the reporting period and the effect

Carbon reduction actions taken or not	Yes
Carbon emission reduction (tCO ₂ e)	8,248,455
Types of carbon reduction actions (such as use clean energy for power generation, use decarbonization technologies in production process and develop new products that help reduce carbon footprint)	During the reporting period, the Company achieved its carbon reduction targets through various measures such as purchasing clean energy, actively developing photovoltaic power generation, optimizing waste heat recovery and upgrading equipment and processes.

Specific description

"√ Applicable" "□ Not applicable"

At the end of 2021, the Central Committee of the CPC issued the Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy, which clearly requires the comprehensive green transformation of economic and social development, the key to which is low-carbon development of energy. The Company, as a leading player in the photovoltaic industry in China, is committed to becoming a global clean energy supplier and pursuing a "dual development" path underpinned by green energy and green agriculture. It contributes to the achievement of the country's dual-carbon goals, the development of a green economy, and the transformation of the world's energy structure.

The Company is dedicated to ecological protection and actively responds to the national call for carbon reduction. It established an Energy Management Committee at the end of 2021, and an Energy Management Execution Working Group at the head office and Sustainability Supervision Teams at branches and subsidiaries to coordinate the efforts into energy consumption management and emission reduction. The Company will always be committed to the sustainable development of the whole society.

It is improving its overall work plan, direction, and objectives for achieving carbon emissions targets, strengthening carbon emission management, optimizing and upgrading the clean energy supply system through among others carbon offset, energy conservation, and carbon footprint certification, promoting green transformation, establishing an image of green development, and achieving sustainable development. The Company has measured and calculated the carbon emissions of its silicon material and solar cell over their life cycles in accordance with the Environmental Management — Life Cycle Assessment — Requirements and Guidelines and Greenhouse Gases — Carbon Footprint of Products — Requirements and Guidelines for Quantification. It is an industry leader in terms of carbon footprint. The Yongxiang business group has established a carbon asset management department which is responsible for ensuring the implementation of Yongxiang carbon neutrality work plan, and the timely achievement of carbon neutrality goals. The Company has successfully developed key technologies, such as large-scale energy-saving reduction furnaces, energy efficiency cold hydrogenation, and high-efficiency coupled distillation through independent research and development, and has created an internationally leading Yongxiang Method for producing high-purity crystalline silicon. It has also implemented a by-product steam cascade utilization technology which fully uses waste heat steam to replace gas boilers for steam supply, with continuous

effort to upgrade, to solidly promote the quality and efficiency save energy and reduce carbon emissions for the high-purity crystalline silicon production. In terms of solar cell production, the Company actively develops photovoltaic power generation by deploying photovoltaic panels in factories to increase the use of green energy, and upgrading production equipment and processes to achieve energy-saving and emission reduction in multiple processes.

II. Social responsibility

(I). Whether or not separate disclosure of social responsibility report, sustainable development or ESG report

Applicable Not applicable

Refer to the 2022 Environmental, Social and Governance Report of Tongwei Co., Ltd. disclosed on <http://www.sse.com.cn> on April 25, 2023 for details.

(II). Social responsibility practices

Applicable Not applicable

Outward donations and public interest projects	Amount/description	Note
Total investment (10,000 yuan)	5,788.98	Donations to earthquake-stricken areas and others
In which: cash (10,000 yuan)	5,639.85	
In-kind donations (10,000 yuan)	149.13	
Number of benefited persons	/	

Specific description

Applicable Not applicable

As a company with environmental, social, and corporate governance (ESG) into its DNAs, the Company fully understand the benefits that the concept of sustainable development has brought, and is aware that practicing ESG is the only way to become a world-class safe food supplier and world-class clean energy operator. Therefore, it is firmly committed to deeply mainstreaming ESG into operations and management.

The Company has developed a sustainable development strategy covers both internal and external activities, based on the principles of building together, governing together, and sharing together. Focusing on important ESG issues such as business ethics, environmental protection, human rights and labor, and conflict minerals in the supply chain, the Company commits to self-reflection and self-improvement, while also driving suppliers and partners to strive towards a sustainable future.

To manage its ESG practices, the Company has established a three-level “decision-making, management, and execution” framework that includes the board of directors, energy management committee, functional departments, and business groups. By fully leveraging the power of each level, it has created a combined force for sustainable management, and comprehensively, systematically, and effectively implements the philosophy of sustainable development.

In terms of working mechanisms, ESG work progress is reported to the board of directors and core management, and ESG analysis, discussions, and training sessions are organized in departments and business on a monthly basis. The company also keeps track of its progress and performance in ESG-related work, and uses ESG reports as a tool to promote ESG management. The goal is to establish a long-term, effective ESG management mechanism that covers all employees and processes.

In terms of performance management, the Company promotes linking key ESG performance indicators with the performance of the heads of relevant business groups. Outstanding projects and individuals are recognized and rewarded, while departments and individuals who fail to meet the evaluation criteria are ineligible for participating in the selection of great projects and individuals for that year.

In terms of employee training, the Company incorporates ESG-related information into training programs for management personnel, key business personnel, and frontline employees to enhance ESG management capabilities across all business groups. In the reporting period, the Company held 10 ESG thematic training sessions which covered over 300 participants.

In 2022, with total employee involvement in ESG, the Company achieved a year-on-year decrease of 19.69% in greenhouse gas emissions per million yuan revenue and a year-on-year increase of 113% in clean energy power usage. It also participated in COP27 and contributed to the development of multiple

carbon-related standards, actively practicing actions to address climate change. In terms of social responsibility, the Company donated 50 million yuan to the Red Cross Society of Ya'an City and Ganzi Prefecture through the Sichuan Guangcai Charity Promotion Association to support emergency relief, transitional resettlement, and post-disaster reconstruction in the earthquake-stricken area in Luding, fulfilling its social responsibilities. In terms of corporate governance, board members are selected based on the principle of diversity, taking into account the Company's actual situation, business model, and operational needs. As of the end of 2022, the share of female members in the board increased significantly, reaching one third, compared to the previous year.

The Company is deeply aware of the need on our path to development. This is integrating the Company's development with national expectations and social needs while achieving high-quality business development. We uphold the purpose of pursuing excellence and dedicating to society, enhancing its resilience against crises or uncertainties, and working together with all stakeholders to achieve a balanced development of the Company, society, and environment, and create a sustainable future for the earth and human society.

III. Work relating to poverty relief and rural revitalization

"√ Applicable" "□ Not applicable"

Poverty-alleviation and rural revitalization projects	Amount/description	Note
Total investment (10,000 yuan)	1,420.28	
In which: cash (10,000 yuan)	1,418.78	
In-kind donations (10,000 yuan)	1.50	
Number of benefited persons	/	
Poverty relief forms (such as through industry development, employment and education)		

Specific description

"√ Applicable" "□ Not applicable"

Photovoltaic-based targeted poverty alleviation is a targeted and precise approach that combined green type, blood-generation type and industry type. To solidify and expand the achievements of poverty alleviation and actively practice the corporate social responsibility, the Company constructed PV-based poverty alleviation projects in Jilin, Shandong, Ningxia, Inner Mongolia and Sichuan, which have effectively relieved the extreme shortage of power in local areas, and provided continuous incomes for poor households. This indeed provides a long-term solution to the poverty problem and a new path for poverty alleviation combining industrial development, ecologic development and clean energy, important contribution to the national PV-based poverty alleviation and moderate prosperity of poor groups, and created a complete Tongwei Template for the country's battle against poverty.

In the area of rural revitalization, Tongwei has pioneered the Aquaculture-Photovoltaic Integration model by integrating photovoltaic power generation with modern organic fisheries. This innovative model produces green energy on the water surface while cultivating green food under the water. Aligned with the national strategy of rural revitalization, the Company has moderately introduced elements of rural tourism, striving to create a "new fishery, new energy, and new rural" project that integrates the primary, secondary, and tertiary industries perfectly.

The Company will continue to fulfill its corporate social responsibility, and combine photovoltaic industry with Aquaculture-Photovoltaic Integration to continue the photovoltaic-based poverty alleviation. It will build a sustainable and positive industry ecosystem with the unique characteristics of Tongwei, promote local industrial development, improve the environment, and achieve efficient synergy between industrial development and ecological improvement. The development of the photovoltaic industry can also help address rural poverty in China, promote the construction of new rural areas and rural revitalization, and contribute to achieving the goal of carbon neutrality.

Section VI. Important Matters

I. Fulfillment of commitments

(I). Commitments made by the Company, its actual controller, shareholders, related parties, and acquirers in or by the reporting period

"√ Applicable" "□ Not applicable"

Background	Commitment type	Commitment party	Commitment Content	Time and duration	Fulfillment duration provided or not	Fulfilled properly and in time or not	Specific reasons for non-fulfillment in time	Next steps to correct the non-fulfillment
Commitments relating to restructuring of material assets	Solve horizontal competition	Liu Hanyuan and Tongwei Group	Liu Hanyuan, Tongwei Group and entities under their control do not have horizontal competition with the target company. Liu Hanyuan, Tongwei Group and entities under their control will not conduct any operation activity that is identical, similar to or competes with the existing business or product of the target company, including but not limited to through creation of, investment into, purchase of, merger of any domestic or overseas company whose business and/or product is identical or similar to that of the target company, and will not generate any horizontal competition of any kind in any form of economic organization. Liu Hanyuan and Tongwei Group promise to properly fulfill the said commitment, and will be liable for damages under laws if the interests and rights of Tongwei or the target company are harmed due to any breach of the said commitment by Liu Hanyuan, Tongwei Group and/or any entity under their control.	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable
	Solve related-party transactions	Liu Hanyuan and Tongwei Group	Liu Hanyuan, Tongwei Group and entities under their control do not any related-party transaction with the target company. After this transaction, Liu Hanyuan, Tongwei Group and entities under their control will try every mean to avoid or reduce related-party transactions with the target company; for any related-party transaction that cannot be avoided or are necessary for reasonable grounds, a valid related-party transaction agreement will be concluded with the target company and	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable

			approval procedures will be completed under applicable laws, regulations, provisions, listing rules and other normative documents as well as the articles of association of Tongwei; any transaction with Tongwei and/or its subsidiaries will be performed at the fair value, such transactions will not be used to do anything that is harmful to Tongwei and/or its subsidiaries; the information disclosure obligation relating to related-party transactions will be performed in accordance with applicable laws, regulations, listing rules and the articles of association of Tongwei. Liu Hanyuan and Tongwei Group promise to properly fulfill the said commitment, and will be liable for damages under laws if the interests and rights of Tongwei or the target company are harmed due to any breach of the said commitment by Liu Hanyuan, Tongwei Group and/or any entity under their control.					
	Others	Liu Hanyuan and Tongwei Group	Liu Hanyuan and Tongwei Group will not harm the independence of Tongwei due to this restructuring, keep separated from Tongwei in terms of assets, personnel, finance, organizational structure and business, strictly observe relevant provisions of the CSRC on independence of listed companies, not use Tongwei as guarantee in breach of provisions, not occupy funds of Tongwei in breach of provisions, and maintain the independence of Tongwei. This commitment will remain valid as long as Tongwei is in legally existence, Liu Hanyuan acts as the actual controller of Tongwei and Tongwei Group is the controlling shareholder of Tongwei. Liu Hanyuan and Tongwei Group will be liable for damages under laws if their breach of the said commitment causes any loss to Tongwei and/or its shareholders.	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable
	Others	Tongwei Group	Tongwei Group will not occupy without payment and/or use with payment the assets, funds or other resources of Tongwei; for any funds transfer between Tongwei Group and Tongwei, Tongwei Group will strictly observe	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable

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			requirements in applicable laws and regulations, administrative rules and the articles of associations (including but not limited to provisions on related-party transactions).					
Commitments relating to IPO	Solve horizontal competition	Tongwei Group	Tongwei Group will not and will procure its affiliates not to by itself or together with, for the behalf of any person, firm or entity develop, operate or facilitate the operation of, participate in, or be engaged in any business that causes or may cause indirect or direct competition with the main business of Tongwei. Tongwei Group agrees to indemnify Tongwei from and against any and all losses, damages and expenses incurred due to its breach of this commitment.	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable
	Solve horizontal competition	Liu Hanyuan, Guan Yamei	Liu Hanyuan and Guan Yamei will not invest into any company whose business is identical or similar to the business of the Company.	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable
	Others	Tongwei Group	Tongwei Group will not occupy without payment and/or use with payment the assets, funds or other resources of Tongwei; for any funds transfer between Tongwei Group and Tongwei, Tongwei Group will strictly observe requirements in applicable laws and regulations, administrative rules and the articles of associations (including but not limited to provisions on related-party transactions).	This commitment remains valid and is being fulfilled.	No	Yes	Not applicable	Not applicable
Commitments related to refinancing	Others	Tongwei Co., Ltd.	Before using up the raised funds or within 36 months after the raised funds are in place, Tongwei shall not inject funds into similar financial services nor into Tongwei Agricultural Finance Guarantee Co., Ltd. (including capital increase, borrowing, guarantee and other forms of capital investment) shall not be allowed.	Before the raised funds are used up or within 36 months after the raised funds are in place.	Yes	Yes	Not applicable	Not applicable
Commitments related to share incentive	Restricted shares	Tongwei employee share plan “China Life Asset Management - Advantage Select 2110 Insurance-based Asset Management Product” and “China Life Asset	Shares may not be transferred within 12 months since the completion of the purchase.	May 21, 2021 to May 20, 2022	Yes	Yes	Not applicable	Not applicable

		Management - Advantage Select 2108 Insurance-based Asset Management Product”						
	Restricted shares	Tongwei Co., Ltd. Employee share plans: China Life Asset Management Company Limited - Dingkun Advantage Select 2246 Insurance Asset Management Product, China Life Asset Management Company Limited - Dingkun Advantage Select 2247 Insurance Asset Management Product, Dingkun Advantage Select 2257 Insurance Asset Management Product, Dingkun Advantage Select 2258 Insurance Asset Management Product, Dingkun Advantage Select 2260 Insurance Asset Management Product, and Dingkun Advantage Select 2271 Insurance Asset Management Product	Shares may not be transferred within 12 months since the completion of the purchase.	July 06, 2022 to July 05, 2023	Yes	Yes	Not applicable	Not applicable

(II). Where profit forecasts are made for assets or projects of the Company and the reporting period falls into the profit forecast period, the Company should explain the reasons for whether the assets and projects reach the profit forecasts

Reached" Not reached" Not applicable"

(III). Completion of performance commitment and its effect on the goodwill impairment test

Applicable" Not applicable"

II. Funds possessed by the controlling shareholder or other related parties for non-operating purposes

Applicable" Not applicable"

III. Guarantees in violation of provisions

Applicable" Not applicable"

IV. Note by the board of directors on non-standard audit report

Applicable" Not applicable"

V. Analysis and note by the Company on reasons and effect of changes in accounting policies, accounting estimates or corrections of material accounting errors

(I). Analysis and note by the Company on reasons and effect of changes in accounting policies and accounting estimates

Applicable" Not applicable"

1. **Changes in accounting estimates:** On April 22, 2022, the 28th meeting of the 7th board of directors and the 27th meeting of the 7th supervisory board were held, during which the Proposal on Changes in Accounting Policies and Accounting Estimates was approved. Due to the accelerated technological upgrading in the photovoltaic industry, the current depreciation period applied to machinery and equipment used by the Company no longer properly reflects the actual usage status of fixed assets. In order to more fairly reflect the financial status and operating results, and improve the quality of accounting information, out of prudence, the Company has adjusted the depreciation period applied to machinery and equipment in the solar cell and related processes from 10 years to 6 years, effective from January 1, 2022.

Changes in accounting estimates are accounted for using the prospective approach. This change will not have any impact on the financial position and operating results of the Company for 2021 and prior years, and therefore, there is no need for retrospective adjustments. However, the aforementioned accounting estimate changes will increase the depreciation of fixed assets provided by the company for the year 2022.

On September 22, 2022, the 4th meeting of the 8th board of directors and the 3th meeting of the 8th supervisory committee were held, during which the Proposal on Changes in Accounting Estimates was approved. Against the backdrop of global carbon neutrality, leveraging on the leading advantages in high-purity polysilicon and solar cell areas, as well as the accumulated technology and market foundation in solar modules over the years, the Company is aligned with national dual-carbon targets and industry development trends, planning to make appropriate expansions in the module area, so as to further enhance its overall competitiveness. Given that the Company has planned to expand its module business, in order to provide assured after-sales service for module customers, the Company has intended to provide module quality guarantee deposit at 1% of module sales revenue in accordance with the relevant provisions of Accounting Standard for Business Enterprises No. 13 - Contingencies, and with reference to practices of major peer companies.

The accounting estimate change involving the provision of quality warranty deposits is effective from the date of approval by the board of directors, and there is no need to retrospectively adjust previously disclosed financial statements. This change will not affect the financial condition and operating results of the Company for previous years.

2. **Changes in accounting policies:** On December 13, 2022, the Ministry of Finance and the Ministry of Emergency Management jointly issued the Management Measures for Workplace Safety Costs, which

expanded the scope of application and revised some of the standards for providing safety costs for companies.

This accounting policy change is concerned with the provision of workplace safety costs and selective application of hedging accounting. The Company implemented the latest requirement on provision and use of workplace safety costs from December 2022. The accounting policy change has no material effect on the profit, total assets and net assets of the Company, and for which the prospective application is used. There is no need to retrospectively adjust previously disclosed financial statements. This change will not affect the financial condition and operating results of the Company for previous years.

(II). Analysis and note by the Company on reasons and effect of corrections of material accounting errors

Applicable" Not applicable"

(III). Communication with former accounting firm

Applicable" Not applicable"

(IV). Other notes

Applicable" Not applicable"

VI. Engagement and dismissal of accounting firm

Unit: 10,000 Yuan Currency: CNY

	Engaged
Name of domestic accounting firm	Sichuan Huaxin (Group) CPA (Special General Partnership)
Remuneration of domestic accounting firm	491
Audit period of domestic accounting firm	22
CPA names of domestic accounting firm	Li Wulin, Tang Fangmo, and Xia Hongbo
Consecutive years of service provided by CPAs of domestic accounting firm	2 years by Li Wulin, 2 years by Tang Fangmo, and 2 years by Xia Hongbo

	Name	Remuneration
Internal control auditing firm	Sichuan Huaxin (Group) CPA (Special General Partnership)	1.52 million yuan
Sponsor	China Securities Co., Ltd	8.4 million yuan

Note on engagement and dismissal of accounting firm

Applicable" Not applicable"

As approved by 2021 general meeting on May 16, 2022, the Company renewed the appointment of Sichuan Huaxin to provide 2022 annual audit and internal control audit.

Note on change of accounting firm in the audit period

Applicable" Not applicable"

VII. Situations that cause suspension of trading risk

(I). Reasons for suspension of trading warning

Applicable" Not applicable"

(II). Proposed actions by the Company

Applicable" Not applicable"

(III). Situations and reasons for termination of trading

Applicable" Not applicable"

VIII. Matters relating to bankruptcy and reorganization

Applicable" Not applicable"

IX. Material litigation and arbitration matters

Yes" No"

X. Punishments on and corrections by the Company, and/or its directors, supervisors, senior managers, controlling shareholder, and actual controller

Applicable" Not applicable"

XI. Note on the integrity status of the Company and its controlling shareholder and actual controller

Applicable" Not applicable"

XII. Material related-party transactions**(I). Related-party transactions pertaining to everyday operation****1. Matters that have been disclosed in interim announcements without further progress or change**

Applicable" Not applicable"

2. Matters that have been disclosed in interim announcements with further progress or change

Applicable" Not applicable"

3. Matters not disclosed in interim announcements

Applicable" Not applicable"

(II). Related-party transactions due to purchase or sale of assets or shares**1. Matters that have been disclosed in interim announcements without further progress or change**

Applicable" Not applicable"

2. Matters that have been disclosed in interim announcements with further progress or change

Applicable" Not applicable"

3. Matters not disclosed in interim announcements

Applicable" Not applicable"

4. Performance achieved in the reporting period where performance agreement was involved

Applicable" Not applicable"

(III).Material related-party transactions for joint outward investments**1. Matters that have been disclosed in interim announcements without further progress or change**

Applicable" Not applicable"

2. Matters that have been disclosed in interim announcements with further progress or change

Applicable" Not applicable"

3. Matters not disclosed in interim announcements

Applicable" Not applicable"

(IV).Related-party debts and claims**1. Matters that have been disclosed in interim announcements without further progress or change**

Applicable" Not applicable"

2. Matters that have been disclosed in interim announcements with further progress or change

Applicable" Not applicable"

3. Matters not disclosed in interim announcements

Applicable" Not applicable"

(V). Financial transactions between the Company and financial companies with which the Company has a relationship or controlled by the Company, and related parties

Applicable" Not applicable"

(VI). Others

Applicable" Not applicable"

XIII. Major contracts and their performance

(I). Custody, contracting, lease matters

1. Custody

Applicable" Not applicable"

2. Contracting

Applicable" Not applicable"

3. Lease

Applicable" Not applicable"

(II). Guarantee

"√Applicable" "□Not applicable"

Unit: 10,000 Yuan Currency: CNY

Outward guarantees by the Company (excluding guarantees for subsidiaries)														
Guarantor	Relation between guarantor and the Company	Guaranteed party	Guaranteed amount	Date (agreement execution date)	Guarantee the guarantee	Guarantee Maturity date	Guarantee type	Collateral (if any)	Guarantee fulfilled completely or not	Guarantee overdue or not	Overdue amount	Counter-guarantee	Related-party guarantee or not	Relation with the related party
Tongwei Agricultural Finance Guarantee Co., Ltd.	Wholly-owned subsidiary	Farmers (rooftop powerplants)	1,792.11		January 12, 2018	May 31, 2028	Joint and several guarantee		No	No	0.00		No	
Tongwei Co., Ltd.	Head office	Farmers and dealers	5,400.00		July 13, 2022	April 15, 2023	Joint and several guarantee		No	No	0.00		No	
Tongwei Agricultural Finance Guarantee Co., Ltd.	Wholly-owned subsidiary	Farmers and dealers	12,985.20		March 04, 2022	December 16, 2023	Joint and several guarantee		No	Yes	1,855.20		No	
Total guaranteed amount in the reporting period (excluding guarantees for subsidiaries)										55,670.46				
Total balance of guaranteed amount at the end of the reporting period (A) (excluding guarantees for subsidiaries)										20,177.31				
Guarantees by the Company and its subsidiaries for other subsidiaries														
Total guaranteed amount for subsidiaries in the reporting period										634,722.54				
Total guaranteed amount for subsidiaries at the end of the reporting period (B)										1,138,383.79				
Total guaranteed amount by the Company (including guarantees for subsidiaries)														
Total guaranteed amount (A+B)										1,158,561.10				
Ratio of total guaranteed amount to net assets of the Company (%)										15.82%				
Including:														
Amount for shareholders, actual controller and its related parties (C)										0.00				
Indirect or direct guaranteed amount for parties whose debt-ratio is over 70% (D)										418,776.78				
Amount out of the total guaranteed amount that exceeds 50% of the net assets (E)										0.00				
Total of the above three items (C+D+E)										418,776.78				
Note on unexpired guarantees for which the Company may bear joint liability for repayment														
Note on guarantees										The overdue guaranteed amount means the unrecovered balance of repayments made for behalf of the guaranteed parties at the end of the reporting period				

(III). Entrusted cash management**1. Entrusted wealth management****(1) Overview of entrusted wealth management products**

"√ Applicable" "□ Not applicable"

Unit: 10,000 Yuan Currency: CNY

type	Sources of funds	Amount change	Balance not overdue	Overdue amount
Structured deposits	The Company's own funds	1,861,000.00	426,000.00	

Others

"□ Applicable" "√ Not applicable"

(2) Individual entrusted wealth management products

"√ Applicable" "□ Not applicable"

Unit: 10,000 Yuan Currency: CNY

Trustee	Type	Amount	Start date	End date	Source of funds	Purpose of funds	How to determine method	Annualized rate of return	Expected return (If any)	Actual gain or loss	Actual recovery	Statutory procedure completed or not	Future entrusted wealth management plan or not	Amount of provision for impairment reserve (if any)
Bank of Chengdu Keji Branch	"Furong Jincheng" Entity Structured Deposit	100,000.00	March 10, 2022	March 30, 2022	The Company's own funds	Structured deposits	Floating income	3.55%		197.22	100,000.00	Yes		
Chongqing Branch, Ping An Bank Co., Ltd.	Ping An Bank Business Structured Deposit (100% principal protection and link to exchange rate)	20,000.00	March 11, 2022	June 13, 2022	The Company's own funds	Structured deposits	Floating income	3.25%		167.40	20,000.00	Yes		
Chengdu Xin'du Sub-branch, Bank of Communications Co., Ltd.	CBC Yuntong Wealth Fixed-term Structured Deposit 68 Days (bullish and linked to gold)	20,000.00	March 16, 2022	May 23, 2022	The Company's own funds	Structured deposits	Floating income	3.4%		126.68	20,000.00	Yes		
Chengdu Xin'du Sub-branch, Bank of Communications Co., Ltd.	CBC Yuntong Wealth Fixed-term Structured Deposit 40 Days (bullish and linked to gold)	100,000.00	March 16, 2022	April 25, 2022	The Company's own funds	Structured deposits	Floating income	3.4%		372.60	100,000.00	Yes		
Chengdu Branch,	Liduoduo	20,000.00	March 11,	April 11,	The	Structured	Floating	3.09%		51.50	20,000.00	Yes		

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Shanghai Pudong Development Bank	Corporate Stable Rate 22JG6293 (bullish on three-level) CNY Business Structured Deposit		2022	2022	Company's own funds	deposits	income							
Chengdu Donghu Sub-branch, China CITIC Bank Corporation Ltd.	Gongying Zhixin Exchange Rate-linked CNY Structured Deposit 08872 Series	50,000.00	March 16, 2022	June 16, 2022	The Company's own funds	Structured deposits	Floating income	3.10%		390.68	50,000.00	Yes		
Chengdu Chunxi Sub-branch, Industrial and Commercial Bank of China	ICBC Exchange Rate-linked Range Accumulative Corporate CNY Structured Deposit - Special Account Series 102 Type C 2022 (112 Days)	50,000.00	March 17, 2022	July 07, 2022	The Company's own funds	Structured deposits	Floating income	1.72%		264.41	50,000.00	Yes		
Chengdu Branch, China Minsheng Banking Corporation Ltd.	Juying Exchange Rate-linked USD/JPY Structured Deposit (SDGA220070Z)	30,000.00	March 25, 2022	June 24, 2022	The Company's own funds	Structured deposits	Floating income	3.15%		235.42	30,000.00	Yes		
Chengdu Branch, Industrial Bank Co., Ltd.	Tianli Short-term Net Wealth Management Product	110,000.00	March 30, 2022	April 01, 2022	The Company's own funds	Fixed-income assets	Floating income	3.09%		18.87	110,000.00	Yes		
Bank of Chengdu Keji Branch	"Furong Jincheng" Entity Structured Deposit	100,000.00	April 01, 2022	June 10, 2022	The Company's own funds	Structured deposits	Floating income	3.61%		701.94	100,000.00	Yes		
Chengdu Shuangnan Sub-branch, Bank of China Ltd.	Linked Structured Deposit (Institutional Client)	5,500.00	April 14, 2022	July 15, 2022	The Company's own funds	Structured deposits	Floating income	1.50%		20.79	5,500.00	Yes		
Chengdu Shuangnan Sub-branch, Bank of China Ltd.	Linked Structured Deposit (Institutional Client)	4,500.00	April 14, 2022	July 15, 2022	The Company's own funds	Structured deposits	Floating income	3.43%		38.90	4,500.00	Yes		
Chengdu Branch, Shanghai Pudong Development Bank	Liduoduo Corporate Stable Rate 22JG6479 (bullish on three-level) CNY Business	20,000.00	April 18, 2022	May 18, 2022	The Company's own funds	Structured deposits	Floating income	3.25%		54.17	20,000.00	Yes		

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	Structured Deposit													
Chengdu Branch, Industrial Bank Co., Ltd.	Industrial Bank Business Finance CNY Structure Deposit	30,000.00	April 20, 2022	May 20, 2022	The Company's own funds	Structured deposits	Floating income	2.98%		73.48	30,000.00	Yes		
Chengdu Xin'du Sub-branch, Bank of Communications Co., Ltd.	CBC Yuntong Wealth Fixed-term Structured Deposit 39 Days (bullish and linked to gold)	70,000.00	April 28, 2022	June 06, 2022	The Company's own funds	Structured deposits	Floating income	3.30%		246.82	70,000.00	Yes		
Chengdu Branch, China Minsheng Banking Corporation Ltd.	Juying Exchange Rate-linked USD/JPY Structured Deposit	20,000.00	April 28, 2022	May 30, 2022	The Company's own funds	Structured deposits	Floating income	3.20%		56.11	20,000.00	Yes		
Chengdu Branch, Shanghai Pudong Development Bank	Liduoduo Corporate Stable Rate 22JG6888 (bullish on three-level) CNY Business Structured Deposit	50,000.00	May 05, 2022	June 06, 2022	The Company's own funds	Structured deposits	Floating income	3.29%		146.39	50,000.00	Yes		
Chengdu Branch, Industrial Bank Co., Ltd.	Industrial Bank Golden Snow Ball Stable Rate Series 1 Type B Net Wealth Management Product	5,000.00	May 17, 2022	November 17, 2022	The Company's own funds	Fixed-income assets	Floating income	2.70%		69.04	5,000.00	Yes		
Chengdu Chunxi Sub-branch, Industrial and Commercial Bank of China	ICBC Exchange Rate-linked Range Accumulative Corporate CNY Structured Deposit - Special Account Series 205 Type C 2022	25,000.00	June 06, 2022	December 29, 2022	The Company's own funds	Structured deposits	Floating income	2.70%		381.30	25,000.00	Yes		
Chengdu Majiahuayuan Office, China Securities Co., Ltd.	Ping An Trust Fixed Income Connect No. 1M-8 Collective Investment Trust	5,000.00	June 08, 2022	July 08, 2022	The Company's own funds	Fixed-income assets	Floating income	4.25%		17.70	5,000.00	Yes		
Chengdu Chunxi Sub-branch, Industrial and Commercial Bank of China	ICBC Series 3 2022 Certificates of Deposit for Corporate Client	30,000.00	June 06, 2022	June 05, 2023	The Company's own funds	Transferable certificates of deposit	Floating income	3.25%				Yes		
Chengdu Chunxi Sub-branch, Industrial	ICBC Exchange Rate-linked	40,000.00	June 13, 2022	December 29, 2022	The Company's	Structured deposits	Floating income	3.27%		714.15	40,000.00	Yes		

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and Commercial Bank of China	Range Accumulative Corporate CNY Structured Deposit - Special Account Series 214 Type L 2022				own funds									
Bank of Chengdu Keji Branch	“Furong Jincheng” Entity Structured Deposit	100,000.00	June 10, 2022	September 10, 2022	The Company's own funds	Structured deposits	Floating income	3.36%		910.43	100,000.00	Yes		
Chengdu Xin'du Sub-branch, Bank of Communications Co., Ltd.	CBC Yuntong Wealth Fixed-term Structured Deposit 180 Days (bullish and linked to gold)	30,000.00	June 15, 2022	December 12, 2022	The Company's own funds	Structured deposits	Floating income	3.25%		480.82	30,000.00	Yes		
Chengdu Xin'du Sub-branch, Bank of Communications Co., Ltd.	CBC Yuntong Wealth Fixed-term Structured Deposit 216 Days (bullish and linked to gold)	40,000.00	June 15, 2022	January 17, 2023	The Company's own funds	Structured deposits	Floating income	1.85%/3.3%				Yes		
Chengdu Majiahuayuan Office, China Securities Co., Ltd.	Ping An Trust Fixed Income Connect No. 6M-31 Collective Investment Trust	10,000.00	June 17, 2022	December 20, 2022	The Company's own funds	Fixed-income assets	Floating income	0.19%		9.58	10,000.00	Yes		
Chengdu Donghu Sub-branch, China CITIC Bank Corporation Ltd.	Gongying Zhixin Exchange Rate-linked CNY Structured Deposit 10199 Series	50,000.00	June 17, 2022	July 18, 2022	The Company's own funds	Structured deposits	Floating income	3.10%		131.64	50,000.00	Yes		
Bank of Chengdu Keji Branch	“Furong Jincheng” Entity Structured Deposit	30,000.00	June 20, 2022	September 20, 2022	The Company's own funds	Structured deposits	Floating income	3.60%		276.00	30,000.00	Yes		
Chengdu Branch, Shanghai Pudong Development Bank	Liduoduo Corporate Stable Rate 22JG7156 (bearish on three-level) CNY Business Structured Deposit	60,000.00	June 24, 2022	September 23, 2022	The Company's own funds	Structured deposits	Floating income	3.25%		487.50	60,000.00	Yes		
Chengdu Branch, China Minsheng Banking Corporation Ltd.	Juying Exchange Rate-linked Yield-to-Maturity of 10Y Government	35,000.00	July 21, 2022	October 21, 2022	The Company's own funds	Structured deposits	Floating income	2.63%		232.43	35,000.00	Yes		

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	Bonds Structured Deposit (SDGA220494Z)													
Chengdu Majiahuayuan Office, China Securities Co., Ltd.	Ping An Trust Fixed Income Connect No. 1M-9 Collective Investment Trust	3,000.00	July 23, 2022	October 24, 2022	The Company's own funds	Fixed-income assets	Floating income	4.08%		30.57	3,000.00	Yes		
Chengdu Branch, Shanghai Pudong Development Bank	Liduoduo Corporate Stable Rate 22JG7413 (bullish on three-level) CNY Business Structured Deposit	30,000.00	July 26, 2022	October 25, 2022	The Company's own funds	Structured deposits	Floating income	3.08%		233.63	30,000.00	Yes		
Chengdu Donghu Sub-branch, China CITIC Bank Corporation Ltd.	Gongying Zhixin Exchange Rate-linked CNY Structured Deposit 10837 Series	50,000.00	July 25, 2022	October 25, 2022	The Company's own funds	Structured deposits	Floating income	3.5%		441.10	50,000.00	Yes		
Chengdu Majiahuayuan Office, China Securities Co., Ltd.	Ping An Trust Fixed Income Connect No. 3M-31 Collective Investment Trust	2,000.00	August 15, 2022	November 15, 2022	The Company's own funds	Fixed-income assets	Floating income	3.44%		18.17	2,000.00	Yes		
Bank of Chengdu Keji Branch	"Furong Jincheng" Entity Structured Deposit	100,000.00	September 19, 2022	December 19, 2022	The Company's own funds	Structured deposits	Floating income	3.55%		897.36	100,000.00	Yes		
Chengdu Branch, Shanghai Pudong Development Bank	Liduoduo Corporate Stable Rate 22JG7766 (bullish on three-level) CNY Business Structured Deposit	60,000.00	September 26, 2022	December 26, 2022	The Company's own funds	Structured deposits	Floating income	3.30%		495.00	60,000.00	Yes		
Chengdu Branch, Shanghai Pudong Development Bank	Liduoduo Corporate Stable Rate 22JG7968 (bearish on three-level) CNY Business Structured Deposit	50,000.00	October 31, 2022	January 30, 2023	The Company's own funds	Structured deposits	Floating income	1.3%/3.1%/3.3%				Yes		
Chengdu Donghu Sub-branch, China CITIC Bank Corporation Ltd.	Gongying Zhixin Exchange Rate-linked CNY Structured Deposit 12284 Series	30,000.00	November 01, 2022	January 30, 2023	The Company's own funds	Structured deposits	Floating income	1.3%/2.95%/3.35%				Yes		

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Fujian Branch, Changjiang Securities Co., Ltd.	Changjiang Asset Management Yueyueying No.1 Collective Asset Management Plan	1,000.00	November 14, 2022	Redemption depending on the product's operation status	The Company's own funds	Fixed-income assets	Floating income	0%-3.2%				Yes		
Chengdu Branch, Industrial Bank Co., Ltd.	Industrial Bank Golden Snow Ball Stable Rate Series 1 Type B Net Wealth Management Product	15,000.00	November 16, 2022	May 16, 2023	The Company's own funds	Fixed-income assets	Floating income	0%-3.8%				Yes		
Chengdu Branch, Industrial Bank Co., Ltd.	Industrial Bank Golden Snow Ball Stable Rate Series 1 Type G Net Wealth Management Product	10,000.00	November 16, 2022	August 16, 2023	The Company's own funds	Fixed-income assets	Floating income	0%-3.8%				Yes		
Chengdu Xin'du Sub-branch, Bank of Communications Co., Ltd.	CBC Yuntong Wealth Fixed-term Structured Deposit 160 Days (bullish and linked to gold)	50,000.00	December 01, 2022	May 10, 2023	The Company's own funds	Structured deposits	Floating income	1.75%-3.2%				Yes		
Bank of Chengdu Keji Branch	"Furong Jincheng" Entity Structured Deposit	30,000.00	December 13, 2022	March 14, 2023	The Company's own funds	Structured deposits	Floating income	1.54%-3.50%				Yes		
Bank of Chengdu Keji Branch	"Furong Jincheng" Entity Structured Deposit	100,000.00	December 19, 2022	March 20, 2023	The Company's own funds	Structured deposits	Floating income	1.54%-3.50%				Yes		
Bank of Chengdu Keji Branch	"Furong Jincheng" Entity Structured Deposit	60,000.00	December 27, 2022	March 28, 2023	The Company's own funds	Structured deposits	Floating income	1.54%-3.45%				Yes		
Bank of Chengdu Keji Branch	Bank of Chengdu "Furong Jincheng" 3M No.6 Fixed-Term Open CNY Net Wealth Management Product	10,000.00	December 29, 2022	April 13, 2023	The Company's own funds	Fixed-income assets	Floating income	0%-3.95%				Yes		

Others

"□ Applicable" "√ Not applicable"

(3) Impairment reserve for entrusted wealth management

Applicable Not applicable

2. Entrusted loans

(1) Overview of entrusted loans

Applicable Not applicable

Others

Applicable Not applicable

(2) Individual entrusted loans

Applicable Not applicable

Others

Applicable Not applicable

(3) Impairment reserve for entrusted loans

Applicable Not applicable

3. Others

Applicable Not applicable

(IV). Other material contracts

Applicable Not applicable

XIV. Notes on material matters that have significant impact on value judgment and investment decisions of investors

Applicable Not applicable

Section VII. Share Changes and Shareholders

I. Change in share capital

(I). Share changes

1. Share changes

Unit: share

	Before the change	Change (+, -)	After the change
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	Number	Percent (%)	New issue	Bonus issue	Capital reserve converted to shares	Others	Sub-total	Number	Percent (%)
I. Restricted shares									
1. Shares held by the state									
2. Shares held by the state-owned legal entities									
3. Shares held by other domestic investors									
Including shares held by domestic investors other than state-owned legal entities									
Shares held by domestic natural persons									
4. Shares held by overseas investors									
Including shares held by overseas legal entities									
Shares held by overseas natural persons									
II. Floating shares	4,501,548,184	100	0	0	0	397,913	397,913	4,501,946,097	100
1. CNY common shares	4,501,548,184	100	0	0	0	397,913	397,913	4,501,946,097	100
2. Foreign shares listed in Chinese mainland									
3. Foreign shares listed outside Chinese mainland									
4. Others									
III. Total shares	4,501,548,184	100	0	0	0	397,913	397,913	4,501,946,097	100

2. Notes on share changes

Applicable" Not applicable"

On February 24, 2022, the Company issued convertible bonds (“Tong22 Convertible Bonds”) which entered the conversion period on September 2, 2022. As of December 31, 2022, a total of 397,913 shares had been converted, and the total share capital of the Company increased from 4,501,548,184 shares to 4,501,946,097 shares.

3. Impact of the share change on the earnings per share, net assets per share and other financial indicators of the latest year and the latest period (if any)

Applicable" Not applicable"

During the reporting period, due to the conversion of convertible bonds into shares, the total share capital of the Company increased from 4,501,548,184 shares to 4,501,946,097 shares. This share capital change resulted in the dilution of earnings per share and net assets per share attributable to the listed company in 2022.

4. Other disclosures the Company thinks necessary or required by the CSRC

Applicable" Not applicable"

(II). Change in restricted shares

Applicable" Not applicable"

II. Issuance and listing of securities**(I). Issuance in reporting period**

Applicable" Not applicable"

Unit: share Currency: CNY

Type of stock and its derivative securities	Issue date	Issue price (or interest rate)	Issue size	Listing date	Approved quantity to trade on market	Transaction end date
Convertible bonds, detachable convertible bonds						
Tong22 Convertible Bonds	February 24, 2022	0.20% in the 1st year, 0.40% in the 2nd year, 0.60% in the 3rd year, 1.50% in the 4th year, 1.80% in the 5th year, and 2.00% in the 6th year	120 million units	March 18, 2022	120 million units	February 23, 2028

Note on issuance of securities in the reporting period (bonds with different interest rates and within the duration should be specified individually):

Applicable" Not applicable"

Approved by the CSRC in the CSRC Permit [2021] No. 4028, on February 24, 2022, the Company issued 120 million convertible bonds publicly with the nominal value of each bond being 100 yuan for a total amount of 12 billion yuan. The duration of these convertible bonds is 6 years from February 24, 2022 to February 23, 2028, the coupon rate is 0.20% in the 1st year, 0.40% in the 2nd year, 0.60% in the 3rd year, 1.50% in the 4th year, 1.80% in the 5th year, and 2.00% in the 6th year. One interest payment is made on Tong22 Convertible Bonds each year, and the value date is the first day of the issuance (i.e., February 24, 2022). Convertible bonds converted into shares before (including) the record date for creditors are not entitled to interest for the current and subsequent interest calculation years.

According to the relevant provisions of the Listing Rules of the Shanghai Stock Exchange and the provisions of the Prospectus for the Public Offering of Convertible Bonds by Tongwei Co., Ltd., the Tong22 Convertible Bonds issued by the Company can be converted into shares from September 2, 2022. The initial conversion price of Tong22 Convertible Bonds was 39.27 yuan per share, and the latest price is 38.36 yuan per share.

(II). Changes in total shares and shareholding structure and change in the asset-liability structure

Applicable" Not applicable"

In the reporting period, the Company had a total of 4,501,946,097 shares, an increase of 397,913 shares.

As of the end of the reporting period, Tongwei Group, the controlling shareholder, held 43.85% of shares in the Company.

As of the end of the reporting period, the total assets were 145.244 billion yuan and total liabilities were 71.999 billion yuan for a L/A ratio of 49.57%.

(III). Current employee shares

Applicable" Not applicable"

III. Shareholders and actual controller**(I). Total shareholders**

Total common shareholders at the end of the reporting period	358,703
Total common shareholders at the end of the month prior to the disclosure date of annual report	421,656
Total preference shareholders at the end of the reporting period	0
Total preference shareholders with voting rights restored at the end of the month prior to the disclosure date of annual report	0

(II). Top ten shareholders, top ten floating shareholders (or non-restricted shareholders) at the end of the reporting period

Unit: share

Top ten shareholders							
Shareholder name (Full name)	Change in the reporting period	Closing shares	Percent (%)	Restricted shares	Pledge, mark or freeze		Shareholder type
					Status	Number	
Tongwei Group Co., Ltd.	0	1,974,022,515	43.85	0	Pledged	437,000,000	Domestic investor other than state-owned legal entities
Hong Kong Securities Clearing Company Ltd.	3,892,227	261,994,907	5.82	0	None.		Unknown
China Life Asset Management Company Limited - Bank of China - China Life Asset - Advantage Select 2108 Insurance Asset Management Fund	0	52,099,840	1.16	0	None.		Unknown
National Social Security Fund 110 Combination	20,241,336	42,366,732	0.94	0	None.		Unknown
Yang Lin	14,111,700	32,552,100	0.72	0	None.		Unknown
Bank of China - Huatai PineBridge Investments Zhongzheng PV Industry Trade Open-ended Index Investment Fund	2,452,761	27,013,213	0.60	0	None.		Unknown
CMB - Ruiyuan Growth Value Mixed Investment Fund	16,974,788	24,668,900	0.55	0	None.		Unknown
China Life Asset Management Company Limited - Industrial Bank of China - China Life Asset - Advantage Select 2110 Insurance Asset Management Fund	0	24,400,000	0.54	0	None.		Unknown
Dacheng Fund - Huaneng Trust Jiayue No.7 Fund Trust - Dacheng Fund Excellence No. 2 Single Asset Management Plan	-264,400	22,815,914	0.51	0	None.		Unknown
China Life Asset Management Company Limited - CGB - China Life Asset - Dingkun Advantage Select 2258 Insurance Asset Management Product	21,707,578	21,707,578	0.48	0	None.		Unknown
Top ten shareholders without restricted shares							
Shareholder name	Floating shares	Type and number of shares					
		Type	Number				
Tongwei Group Co., Ltd.	1,974,022,515	CNY common share	1,974,022,515				
Hong Kong Securities Clearing Company Ltd.	261,994,907	CNY common share	261,994,907				
China Life Asset Management Company Limited - Bank of China - China Life Asset - Advantage Select 2108 Insurance Asset Management Fund	52,099,840	CNY common share	52,099,840				
National Social Security Fund 110 Combination	42,366,732	CNY common share	42,366,732				
Yang Lin	32,552,100	CNY common share	32,552,100				
Bank of China - Huatai PineBridge Investments Zhongzheng PV Industry Trade Open-ended Index Investment Fund	27,013,213	CNY common share	27,013,213				
CMB - Ruiyuan Growth Value Mixed Investment Fund	24,668,900	CNY common share	24,668,900				

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China Life Asset Management Company Limited - Industrial Bank of China - China Life Asset - Advantage Select 2110 Insurance Asset Management Fund	24,400,000	CNY common share	24,400,000
Dacheng Fund - Huaneng Trust Jiayue No.7 Fund Trust - Dacheng Fund Excellence No. 2 Single Asset Management Plan	22,815,914	CNY common share	22,815,914
China Life Asset Management Company Limited - CGB - China Life Asset - Dingkun Advantage Select 2258 Insurance Asset Management Product	21,707,578	CNY common share	21,707,578
Note on application for special repurchase accounts among top ten shareholders	Not applicable		
Note on delegation of voting rights to or by, or wavier of voting rights by the said shareholders	Not applicable		
Note on the said shareholders' relationship or acting in concert	No relationship exists between Tongwei Group and any of the other shareholders. China Life Asset Management - Bank of China- China Life Asset - Advantage Select 2108 Insurance Asset Management Product, China Life Asset Management - Industrial Bank of China - China Life Asset - Advantage Select 2110 Insurance Asset Management Product, and China Life Asset Management Company Limited - CGB - China Life Asset - Dingkun Advantage Select 2258 Insurance Asset Management Product are created for employee share plan and they act in concert. Whether or not other shareholders have relationships or act in concert is not known.		
Note on preference shareholders with voting rights restored and number of shares they hold	Not applicable		

Number of restricted shares held by top ten restricted shareholders and the restrictions

" Applicable" " Not applicable"

(III). Strategic investors or general legal entities which became top ten shareholders due to new bonus share

Applicable" Not applicable"

IV. Controlling shareholder and actual controller**(I). Controlling shareholder****1 Legal entity**

Applicable" Not applicable"

Name	Tongwei Group Co., Ltd.
Person in charge or legal representative	Guan Yamei
Date of incorporation	October 14, 1996
Main businesses	Wholesale and retail of goods; livestock husbandry; services for promoting and applying technologies; services for software and information technology; development and operation of real properties; property management; lease; advertising; PV generation (excluding items requiring prior licenses; items requiring post licenses are subject to licenses or approvals)
Other companies listed within or outside Chinese mainland that held shares in the Company in the reporting period	None.
Other notes	None.

2 Natural person

Applicable" Not applicable"

3 Special note on the fact that the Company has no controlling shareholder

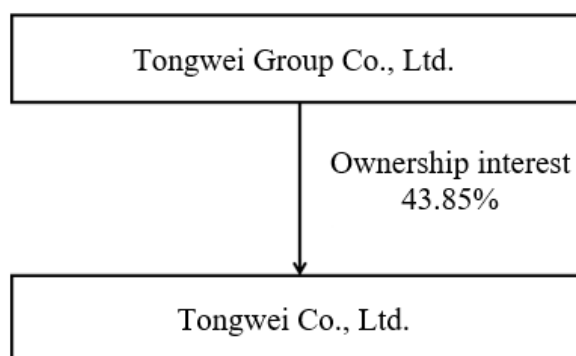
Applicable" Not applicable"

4 Note on change of controlling shareholder in the reporting period

Applicable" Not applicable"

5 Box diagram specifying the ownership and control relationship between the Company and its controlling shareholder

Applicable" Not applicable"

**(II). Actual controller****1 Legal entity**

Applicable" Not applicable"

2 Natural person

"√ Applicable" "□ Not applicable"

Name	Liu Hanyuan
Nationality	China
Residence right in another country/region	No
Main professions and titles	Chair of the board of directors of Tongwei Group, member of the 8th board of directors of the Company, member of the 11th Standing Committee of the CPPCC National Committee, deputy to the NPC, vice-chair of Standing Committee of All-China Federation of Industry and Commerce, executive chair of CNECC, and others
Listed companies within and outside Chinese mainland controlled by the actual controller in the latest 10 years	None.

3 Special note on the fact that the Company has no actual controller

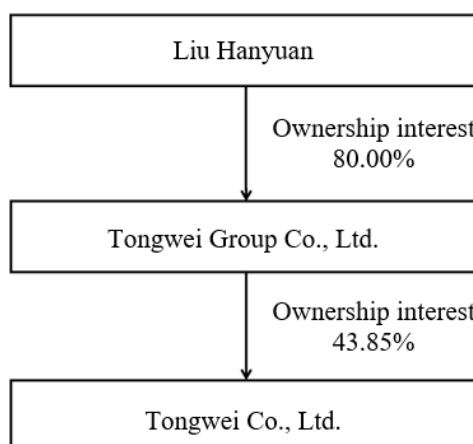
"□ Applicable" "√ Not applicable"

4 Note on change of control of the Company in the reporting period

"□ Applicable" "√ Not applicable"

5 Box diagram specifying the ownership and control relationship between the Company and its actual controller

"√ Applicable" "□ Not applicable"

**6 Actual controller controls the Company via trust or other asset management approaches**

"□ Applicable" "√ Not applicable"

(III). Other information about the controlling shareholder and actual controller

"□ Applicable" "√ Not applicable"

V. The cumulative shares pledged by controlling shareholder or the largest shareholders and their persons acting in concert account for over 80% of the total shares they hold

"□ Applicable" "√ Not applicable"

VI. Other legal entities holding over ten percent of the total shares

"□ Applicable" "√ Not applicable"

VII. Note on restricting sale of shares

Applicable Not applicable"

VIII. Specific implementation of share repurchases in the reporting period

Applicable Not applicable"

Section VIII. Preference Shares

Applicable Not applicable"

Section IX. Bonds**I. Enterprise bonds, company bonds and non-financial enterprise debt-financing instruments**

Applicable Not applicable"

(I). Enterprise bonds

Applicable Not applicable"

(II). Company bonds

Applicable Not applicable"

(III). Non-financial enterprise debt-financing instruments in inter-bank bond market

Applicable Not applicable"

1. Basic information on non-financial enterprise debt-financing instruments

Unit: 100 million yuan Currency: CNY

Bond name	Short name	Code	Issue date	Value date	Maturity date	Balance of bonds	Interest rate (%)	Payment method	Trading venue	Investor appropriateness arrangement (if any)	Trading mechanism	Risk of termination of trading
2020 Middle-Term Note Series 1 of Tongwei Co., Ltd.	20 Tongwei MTN001	102001216	June 17, 2020	June 19, 2020	June 19, 2023	1.45	3.20	Installment interest payments and principal repaid on maturity	China Interbank Bond Market	None.	Transactions are concluded with counterparties trade by trade over the counter through the CNY trading system in China Foreign Exchange Trade System	No
2022 Super & Short-term Commercial Paper Series 1 of Tongwei Co., Ltd.	22Tongwei SCP001 (green)	12281990	May 31, 2022	June 02, 2022	November 29, 2022	0.00	2.50	Interest is paid together with the principal in full at maturity.	China Interbank Bond Market	None.	Transactions are concluded with counterparties trade by trade over the counter through the CNY trading system in China Foreign Exchange Trade System	No

Response actions against risk of termination of trading

Applicable Not applicable"

Overdue bonds

Applicable Not applicable"

Interest payment and principal repayment on bonds in the reporting period

 Applicable" Not applicable"

Bond name	Note on interest payment and principal repayment
2020 Middle-Term Note Series 1 of Tongwei Co., Ltd.	Interest paid normally
2022 Green Super & Short-term Commercial Paper Series 1 of Tongwei Co., Ltd.	Paid

2. Trigger and execution of the option clause for issuers or investors and the investor protection clause Applicable" Not applicable"**3. Intermediaries for services relating to bond issuing and bond duration**

Intermediary name	Office location	Signatory accountants	Contact	Telephone
Postal Savings Bank of China Co., Ltd.	No. 3 Jinrong Street, Xicheng District, Beijing		Zheng Yarong, Lei Lufan, and Li Jiejuan	010-68857443 010-68857440
China Securities Co., Ltd	9/F, Building B and E, Kaiheng Center, No. 2 Chaonei Street, Dongcheng District, Beijing		Li Puhai, Pu Fei, Yang Junwei and Wen Bingyi	028-68850820
Industrial Bank Co., Ltd.	Industrial Bank Building, No. 398 Middle Jiangbin Avenue, Taijiang District, Fuzhou, Fujian		Li Jie, and Fan Weikai	028-84179143
China Minsheng Banking Corporation Ltd.	Minsheng Bank Building, No. 2 Fuxingmen Inner Street, Xicheng District, Beijing		Shuchang, and Yang Xi	010-58560666
Beijing Jindu Law Firm	40/F, Building A, Caifu Center, No.7, Middle Third-Ring Road, Chaoyang District, Beijing		Liu Rong and Lu Yong	028-86203818
Sichuan Huaxin (Group) CPA (Special General Partnership)	28/F, Jinmao Lidu South, No. 18 Ximianqiao Street, Chengdu, Sichuan	Li Wulin, Tang Fangmo, and Xia Hongbo	Zhang Lan	028-85560449
CCIX Credit Rating Co., Ltd.	7/F, Building D, Zhaoshang International Financial Center, No. 156 Fuxingmen Inner Street, Xicheng District, Beijing		Yu Qian and Liu Qing	010-66428877
Shanghai Clearing House	33-34/F, Oriental Financial Plaza, No. 318 South Zhongshan Road, Shanghai		Xie Chenyan and Chen Gongrong	021-23198708 021-23198682
Beijing Financial Assets Exchange	No. 17 Jinrong Street Yi, Xicheng District, Beijing		Issue Department	010-57896722 010-57896516

Changes in the above intermediaries

 Applicable" Not applicable"**4. Use of raised funds at the end of the reporting period** Applicable" Not applicable"

Progress and benefits of construction projects where the raised funds were used

 Applicable" Not applicable"

Note on changes in the said purposes of funds raised through bond issuing

 Applicable" Not applicable"

Other notes

 Applicable" Not applicable"

5. Credit rating adjustments

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

6. Execution and change of guarantees, repayment schedules and other repayment protection measures in the reporting period and their impact

Applicable" Not applicable"

7. Note on other information about non-financial enterprise debt-financing instruments

Applicable" Not applicable"

(IV). Loss from the scope of consolidation in the reporting period over 10% of the net assets at the end of the previous year

Applicable" Not applicable"

(V). Overdue interest-bearing debts other than bonds at the end of the reporting period

Applicable" Not applicable"

(VI). Impact on the rights and interest of bond investors by the Company's violations of laws, regulations, articles of association, information disclosure management policies as well as covenants or commitments made in the bond prospectus

Applicable" Not applicable"

(VII). Accounting data and financial indicators within the latest two years at the end of the reporting period

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Major indicators	2022	2021	Change YoY (%)	Reason for change
Net profit net of non-recurring gain and loss attributable to shareholders of the listed company	26,547,373,729.76	8,387,692,913.89	216.50	
Current ratio	2.08	1.01	105.94	
Quick ratio	1.77	0.81	118.52	
L/A ratio (%)	49.57	53.01	-3.44 ppts	
EBITDA/Total debt	1.42	0.75	89.33	
Interest coverage ratio	30.99	14.07	120.26	
Cash coverage ratio	80.13	21.72	268.92	
EBITDA coverage	36.43	19.96	82.52	
Repayment ratio (%)	100.00	100.00	0.00	
Interest repayment ratio (%)	100.00	100.00	0.00	

II. Convertible bonds

Applicable" Not applicable"

(I). Offering of convertible bonds

Applicable" Not applicable"

On February 21, 2022, proposals including the Proposal on Clarifying the Plan for Public Offering A-share Convertible Bonds were approved at the 24th meeting of the 7th board of directors where matters relating to the offering of convertible bonds were discussed and decided. On February 24, 2022, the Company publicly issued convertible bonds of 12 billion yuan ("Tong22 Convertible Bond", code 110085). The amount received net of undertaking and sponsorship costs (78 million yuan) (including tax) is 11.922 billion yuan. Sichuan Huaxin issued the Capital Verification Report [2022] No.0009 that confirmed the raised funds were in place. The funds raised net of issuing fee will be used for the renovation project for the

manufacturing of PV silicon materials (Yongxiang New Energy's Phase II 50,000-ton High-purity Polysilicon Project), for the manufacturing project of PV silicon materials (Inner Mongolia Tongwei's Phase II 50,000-ton High-purity Polysilicon Project), the 15 GW monocrystalline Rod Pulling and Cutting Project as well as for supplementing current funds.

On March 7, 2022, the registration and custody procedures for "Tong22 Convertible Bond" were completed in CSDC Shanghai. On March 18, 2022, "Tong22 Convertible Bond" was listed in the bond market. According to the relevant provisions of the Listing Rules of the Shanghai Stock Exchange and the provisions of the Prospectus for the Public Offering of Convertible Bonds by Tongwei Co., Ltd., the Tong22 Convertible Bonds issued by the Company can be converted into shares from September 2, 2022. The initial conversion price of Tong22 Convertible Bonds was 39.27 yuan per share, and the latest price is 38.36 yuan per share.

(II). Convertible bond holders and guarantors in the reporting period

Applicable" Not applicable"

Name of convertible bond		Tong22 Convertible Bonds	
Number of holders at the period-end		67,178	
Guarantor of the Company's convertible bonds		None.	
Top ten holders of convertible bonds:			
Convertible bonds holders	Bonds held at the end of the period (yuan)	Bond holding percent (%)	
Tongwei Group Co., Ltd.	3,251,080,000	27.13	
Haitong Securities Asset Management - CITIC Bank - Haitong Asset Management Ruifeng Huicheng No. 3 Collective Asset Management Plan	809,690,000	6.76	
ICBC - Boshi Credit Bond Investment Fund	192,892,000	1.61	
CMB - Ruiyuan Wenjin Allocation 2Y Mixed Security Investment Fund	190,226,000	1.59	
Happy Life Insurance Co., Ltd. - Distribution	153,343,000	1.28	
CNPC Business Annuity Plan - ICBC	126,208,000	1.05	
Fuguo Fuyi Aggressive Fixed Income Pension Product - ICBC	125,841,000	1.05	
China Construction Bank - E-Fund Dual-bond Enhanced Bond Investment Fund	122,285,000	1.02	
E-Fund Anxin Fixed Income Pension Product - ICBC	114,610,000	0.96	
Ping An Bank - Changxin Convertible Bond Investment Fund	113,367,000	0.95	

(III). Changes in convertible bonds in the reporting period

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Bond name	Before the change	Change			After the change
		Converted to share capital	Redemption	Sell back	
Tong22 Convertible Bonds	12,000,000,000.00	15,270,000.00			11,984,730,000.00

Cumulative conversion to shares in the reporting period

Applicable" Not applicable"

Name of convertible bond		Tong22 Convertible Bonds	
Amount converted in the reporting period (yuan)		15,270,000.00	
Shares converted in the reporting period		397,913	
Accumulated shares converted		397,913	
Ratio of accumulated shares converted to the total shares issued by the Company before the conversion (%)		0.00884	
Amount that has not converted (yuan)		11,984,730,000.00	
Ratio of balance convertible bonds to total convertible bonds issued (%)		99.87275	

(IV). Adjustments of conversion prices

Applicable" Not applicable"

Name of convertible bond		Tong22 Convertible Bonds		
Adjustment date	Conversion price after adjustment	Disclosure date	Disclosure media	Remarks
May 30, 2022	38.36 yuan/share	May 31, 2022	China Securities Journal, Shanghai Securities News, Securities Daily, and STCN	The Company paid cash distribution of 9.12 yuan for per 10 shares (including tax)
The latest conversion price as of the end of the reporting period		38.36 yuan/share		

(V). Liabilities, changes in creditworthiness and cash arrangements for debt repayment in the next year

Applicable" Not applicable"

(VI). Note on other information about the convertible bonds

Applicable" Not applicable"

Section X. Financial Report

I. Auditor's report

Applicable" Not applicable"

The annual financial report of the Company has been audited by Li Wulin, Tang Fangmo and Xia Hongbo, accountants from Sichuan Huaxin who have issued an unqualified opinion.

II. Financial Statements

Consolidated balance sheet

December 31, 2022

Prepared by: Tongwei Co., Ltd.

Unit: Yuan Currency: CNY

Item	Notes	December 31, 2022	December 31, 2021
Current assets:			
Cash at bank and on hand		36,841,572,130.01	3,001,930,882.38
Settlement provisions			
Lending to banks and other financial institutions			
Held-for-trading financial assets		4,298,524,475.70	10,617,668.58
Derivative financial assets			
Notes receivable		2,450,913,663.89	1,576,925,682.02
Accounts receivable		4,501,362,630.14	2,915,527,149.08
Receivables financing		13,066,496,368.98	11,406,947,347.71
Prepayments		1,487,172,992.72	1,606,545,040.83
Premium receivable			
Reinsurance receivable			
Reinsurance contract reserve receivable			
Other receivables		477,514,347.63	611,985,134.57
Including: Interest receivable			
Dividend receivable			
Buy-back of financial assets			
Inventories		11,002,649,108.38	5,682,791,568.04
Contract assets		597,931,195.59	715,103,024.30
Assets held for sale			
Non-current assets due within one year			
Other current assets		786,407,734.06	1,220,643,137.83
Total current assets		75,510,544,647.10	28,749,016,635.34

Non-current assets:			
Loans and advances			
Debt investments			
Other debt investments			
Long-term receivables			
Long-term equity investments		390,587,150.21	455,798,325.58
Other equity investments		154,196,557.28	153,551,598.71
Other non-current financial assets		3,146,248.25	3,146,248.25
Investment properties		107,712,227.79	112,342,965.02
Fixed assets		53,291,968,869.20	36,958,671,998.09
Construction in progress		3,997,396,999.92	10,610,819,753.03
Productive biological assets		9,069,395.61	3,637,671.91
Oil and gas assets			
Right-of-use assets		4,063,421,131.88	4,376,242,263.30
Intangible assets		2,455,828,500.38	2,410,841,890.16
R&D cost			
Goodwill		603,006,493.02	746,573,277.73
Deferred expenses		359,564,900.07	261,810,537.42
Deferred tax assets		1,593,765,733.23	612,117,399.13
Other non-current assets		2,703,584,777.25	2,440,626,665.32
Total non-current assets		69,733,248,984.09	59,146,180,593.65
Total assets		145,243,793,631.19	87,895,197,228.99
Current liabilities:			
Short-term borrowings		87,767,124.22	1,375,230,141.70
Borrowings from central bank			
Borrowings from banks and other financial institutions			
Held-for-trading financial liabilities		64,351,114.48	
Derivative financial liabilities			
Notes payable		8,851,423,365.95	9,957,923,070.67
Accounts payable		11,018,161,537.30	8,151,270,076.21
Advances from customers		36,467,894.64	102,259,825.29
Contract liabilities		5,405,872,108.61	3,112,027,804.79
Sale of financial assets to be repurchased			
Inward deposits			
Payments from sale and purchase of securities on behalf of customers			
Payments from underwriting securities on behalf of customers			
Employee benefits payable		3,141,064,588.92	1,388,757,870.41
Taxes payable		2,974,081,003.57	815,986,908.56
Other payables		2,142,680,307.16	761,620,932.59
Including: Interest payable			
Dividend payable			
Service charge and commission payable			
Reinsurance receivable			
Liabilities held for sale			
Non-current liabilities due within one year		2,212,098,569.45	2,487,029,263.29
Other current liabilities		423,380,299.96	207,540,516.40
Total current liabilities		36,357,347,914.26	28,359,646,409.91
Non-current liabilities:			
Reinsurance contract reserve			
Long-term borrowings		15,409,335,995.67	11,441,029,860.16
Bonds payable		10,276,944,561.67	410,493,072.19
Including: preference share			

Perpetual bond			
Lease liabilities		2,906,711,682.49	2,500,641,465.80
Long-term payables		974,391,127.03	1,648,303,239.69
Long-term employee benefits payable		3,805,815,900.20	649,891,600.00
Estimated liabilities		177,993,077.06	
Deferred income		867,530,196.50	900,673,699.85
Deferred tax liability		1,222,489,360.55	682,712,636.40
Other non-current liabilities			
Total non-current liabilities		35,641,211,901.17	18,233,745,574.09
Total liabilities		71,998,559,815.43	46,593,391,984.00
Owners' equity (or shareholders' equity)			
Paid-up capital (or share capital)		4,501,946,097.00	4,501,548,184.00
Other equity instruments		1,965,085,659.43	
Including: Preference share			
Perpetual bond			
Capital reserve		16,144,302,399.09	16,107,859,721.40
Less: Treasury shares			
Other comprehensive income		-108,859,803.29	-82,307,403.96
Special reserve		33,751,973.14	15,918,034.03
Surplus reserve		2,407,355,585.45	1,414,948,005.57
General risk reserve			
Undistributed profit		35,853,681,478.39	15,225,053,765.81
Total equity attributable to owners or shareholders of parent company		60,797,263,389.21	37,183,020,306.85
Minority interest		12,447,970,426.55	4,118,784,938.14
Total owners' equity (or shareholders' equity)		73,245,233,815.76	41,301,805,244.99
Total liabilities and owners' equity (or shareholders' equity)		145,243,793,631.19	87,895,197,228.99

Company Head: Liu Shuqi
Head of Accounting Department: Gan Lu

Head of Accounting Affairs: Zhou Bin

Parent balance sheet

December 31, 2022

Prepared by: Tongwei Co., Ltd.

Unit: Yuan Currency: CNY

Item	Notes	December 31, 2022	December 31, 2021
Current assets:			
Cash at bank and on hand		34,996,954,215.09	1,970,060,333.61
Held-for-trading financial assets		4,290,735,647.46	
Derivative financial assets			
Notes receivable			
Accounts receivable			40,695,659.25
Receivables financing		36,154,999.85	109,493,387.71
Prepayments		4,363,885.53	108,614,897.08
Other receivables		22,391,469,716.10	20,560,977,497.02
Including: Interest receivable			
Dividend receivable			
Inventories		14,343,230.10	261,237,746.52
Contract assets			
Assets held for sale			
Non-current assets due within one year			
Other current assets		338,226.78	2,541,944.34
Total current assets		61,734,359,920.91	23,053,621,465.53

Non-current assets:			
Debt investments			
Other debt investments			
Long-term receivables		4,441,414,203.45	3,779,357,407.99
Long-term equity investments		21,181,430,718.04	17,409,956,118.46
Other equity investments		154,196,557.28	153,551,598.71
Other non-current financial assets			
Investment properties		35,202,472.92	36,946,716.47
Fixed assets		41,873,569.27	318,040,343.39
Construction in progress		9,222,801.67	32,573,013.72
Productive biological assets			
Oil and gas assets			
Right-of-use assets		95,863,377.40	186,547,779.55
Intangible assets		9,611,894.35	59,947,661.65
R&D cost			
Goodwill			
Deferred expenses		9,951,422.32	28,608,471.43
Deferred tax assets		11,881.09	1,718,240.52
Other non-current assets		629,339.86	
Total non-current assets		25,979,408,237.65	22,007,247,351.89
Total assets		87,713,768,158.56	45,060,868,817.42
Current liabilities:			
Short-term borrowings			1,000,952,777.78
Held-for-trading financial liabilities			
Derivative financial liabilities			
Notes payable		100,599,628.21	210,000,000.00
Accounts payable		2,668,604.48	192,746,374.17
Advances from customers			980,272.02
Contract liabilities			133,018,997.22
Employee benefits payable		134,030,997.42	75,932,124.36
Taxes payable		11,295,059.26	6,854,246.18
Other payables		30,293,482,060.86	7,261,257,606.36
Including: Interest payable			
Dividend payable			
Liabilities held for sale			
Non-current liabilities due within one year		686,154,965.70	180,364,861.73
Other current liabilities			500.83
Total current liabilities		31,228,231,315.93	9,062,107,760.65
Non-current liabilities:			
Long-term borrowings		6,675,680,000.00	4,066,980,000.00
Bonds payable		10,276,944,561.67	410,493,072.19
Including: Preference share			
Perpetual bond			
Lease liabilities		97,681,720.48	175,574,283.65
Long-term payables		875,898,885.36	875,898,885.36
Long-term employee benefits payable		328,435,130.02	37,740,000.00
Estimated liabilities			
Deferred income			
Deferred tax liability			
Other non-current liabilities			
Total non-current liabilities		18,254,640,297.53	5,566,686,241.20
Total liabilities		49,482,871,613.46	14,628,794,001.85
Owners' equity (or shareholders' equity)			
Paid-up capital (or share capital)		4,501,946,097.00	4,501,548,184.00
Other equity instruments		1,965,085,659.43	

Including: preference share			
Perpetual bond			
Capital reserve		17,097,876,701.86	17,082,993,947.39
Less: Treasury shares			
Other comprehensive income		6,914,433.08	7,122,885.47
Special reserve			
Surplus reserve		2,407,355,585.45	1,414,948,005.57
Undistributed profit		12,251,718,068.28	7,425,461,793.14
Total owners' equity (or shareholders' equity)		38,230,896,545.10	30,432,074,815.57
Total liabilities and owners' equity (or shareholders' equity)		87,713,768,158.56	45,060,868,817.42

Company Head: Liu Shuqi
Head of Accounting Department: Gan Lu

Head of Accounting Affairs: Zhou Bin

Consolidated Profit Statement

Jan to Dec, 2022

Unit: Yuan Currency: CNY

Item	Notes	2022	2021
I. Total operating revenue		142,422,517,994.99	64,829,996,083.91
Including: Operating revenue		142,422,517,994.99	64,829,996,083.91
Interest income			
Earned premium			
Service charge and commission income			
II. Total operating cost		100,427,612,658.05	54,191,904,775.91
Including: Operating cost		88,059,961,179.23	48,382,829,594.08
Interest expense			
Service charge and commission expense			
Cash surrender value			
Net claims			
Net appropriation of claims reserve			
Policy dividend expense			
Reinsurance expense			
Tax and surcharge		911,375,125.67	275,955,240.38
Sales expense		1,434,770,892.87	919,009,792.93
Management expense		7,867,914,704.37	2,951,233,971.46
R&D cost		1,464,443,543.84	1,025,715,488.68
Financial expense		689,147,212.07	637,160,688.38
Including: Interest expense		1,184,822,793.36	680,586,204.87
Interest income		458,574,423.96	111,780,056.77
Add: Other income		397,490,494.89	359,499,729.72
Investment gain or loss ("-" for loss)		-421,003,980.91	42,536,586.67
Including: Gains or losses from investments into associates and joint ventures		-62,827,359.84	-14,159,521.52
Gains from de-recognition of financial assets measured at amortized cost			
Exchange gain or loss ("-" for loss)			
Net exposure hedging gain or loss ("-" for loss)			
Gain or loss from change in fair value ("-" for loss)		-36,444,307.36	5,754,600.46
Credit impairment loss ("-" for loss)		-135,768,734.15	-123,656,047.25
Asset impairment loss ("-" for loss)		-2,211,875,357.07	-129,121,084.08
Gain or loss from disposal of assets ("-" for loss)		-13,438,161.21	-78,230,632.51
III. Operating profit ("-" for loss)		39,573,865,291.13	10,714,874,461.01
Add: Non-operating revenue		31,419,391.34	19,939,910.39

2022 Annual Report

Less: Non-operating expense		1,266,474,529.33	464,366,862.21
IV: Total profit (“-” for loss)		38,338,810,153.14	10,270,447,509.19
Less: Income tax expense		5,965,924,612.33	1,648,944,454.00
V. Net profit (“-” for net loss)		32,372,885,540.81	8,621,503,055.19
(I) By continuation			
1. Going Concern profit (“-” for net loss)		32,372,885,540.81	8,621,503,055.19
2. Discontinuation profit (“-” for net loss)			
(II) By ownership attribution			
1. Net profit attributable to shareholders of the parent company (“-” for net loss)		25,726,447,236.27	8,109,125,091.40
2. Gain or loss to minority shareholders (“-” for net loss)		6,646,438,304.54	512,377,963.79
VI. Other comprehensive income after tax		-25,773,410.24	-8,662,660.90
(I) Other comprehensive income after tax attributable to owners of the parent company		-26,552,399.33	-8,393,182.24
1. Other comprehensive income that cannot be reclassified into profit or loss		644,958.57	106,497.86
(1) Change from re-measurement of defined benefit plan			
(2) Other comprehensive income that cannot be converted to profit or loss under equity method			
(3) Change in fair value of other equity investments		644,958.57	106,497.86
(4) Change in fair value of the Company's own credit risk			
2. Other comprehensive income that will be reclassified into profit or loss		-27,197,357.90	-8,499,680.10
(1) Other comprehensive income that can be converted to profit or loss under equity method		-1,120,566.26	259,086.76
(2) Change in fair value of other debt investments			
(3) Amount recorded into other comprehensive income due to reclassification of financial assets			
(4) Reserve for credit impairment of other debt investments			
(5) Cash flow hedge reserve			
(6) Foreign currency translation		-26,076,791.64	-8,758,766.86
(7) Others			
(II) Other comprehensive income after tax attributable to minority shareholders		778,989.09	-269,478.66
VII. Total other comprehensive income		32,347,112,130.57	8,612,840,394.29
(I) Total other comprehensive income attributable to owners of the parent company		25,699,894,836.94	8,100,731,909.16
(II) Total other comprehensive income attributable to minority shareholders		6,647,217,293.63	512,108,485.13
VIII. Earnings per share:			
(I) Basic earnings per share (yuan/share)		5.7149	1.8014
(II) Diluted earnings per share (yuan/share)		5.4889	1.8014

The net income realized by the acquired business before business combinations under common control is 0 yuan, the net income realized by the acquired business in the previous period is 0 yuan.

Company Head: Liu Shuqi

Head of Accounting Affairs: Zhou Bin

Head of Accounting Department: Gan Lu

Parent profit statement

Jan to Dec, 2022

Unit: Yuan Currency: CNY

Item	Notes	2022	2021
I. Operating revenue		3,367,210,659.32	4,745,062,369.13

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Less: Operating cost		2,981,184,608.14	4,138,074,509.01
Tax and surcharge		8,347,289.08	9,442,554.93
Sales expense		95,730,597.83	136,155,655.40
Management expense		590,606,402.95	284,114,028.78
R&D cost		129,328,520.57	123,549,069.00
Financial expense		308,179,111.19	43,467,537.55
Including: Interest expense		1,052,683,104.01	346,428,748.95
Interest income		851,330,246.98	313,377,278.23
Add: Other income		18,601,098.59	15,780,831.45
Investment gain or loss (“-” for loss)		10,806,401,329.43	5,126,983,146.04
Including: Gains or losses from investments into associates and joint ventures		1,006,754.59	-10,820,494.85
Gains from de-recognition of financial assets measured at amortized cost			
Net exposure hedging gain or loss (“-” for loss)			
Gain or loss from change in fair value (“-” for loss)		30,735,647.46	
Credit impairment loss (“-” for loss)		-56,886,334.13	-233,666,771.33
Asset impairment loss (“-” for loss)		-86,073,100.00	-24,020,900.00
Gain or loss from disposal of assets (“-” for loss)		3,953,723.06	373,738.64
II. Operating profit (“-” for loss)		9,970,566,493.97	4,895,709,059.26
Add: Non-operating revenue		3,981,779.45	3,088,115.30
Less: Non-operating expense		50,998,355.60	2,648,476.27
III. Total profit (“-” for loss)		9,923,549,917.82	4,896,148,698.29
Less: Income tax expense		-525,881.01	-107,732.97
IV. Net profit (“-” for net loss)		9,924,075,798.83	4,896,256,431.26
(I) Net going concern profit (“-” for net loss)		9,924,075,798.83	4,896,256,431.26
(II) Net discontinuation profit (“-” for net loss)			
V. Other comprehensive income after tax		-208,452.39	365,584.62
(I) Other comprehensive income that cannot be reclassified into profit or loss		644,958.57	106,497.86
1. Change from re-measurement of defined benefit plan			
2. Other comprehensive income that cannot be converted to profit or loss under equity method			
3. Change in fair value of other equity investments		644,958.57	106,497.86
4. Change in fair value of the Company's own credit risk			
(II) Other comprehensive income that will be reclassified into profit or loss		-853,410.96	259,086.76
1. Other comprehensive income that can be converted to profit or loss under equity method		-853,410.96	259,086.76
2. Change in fair value of other debt investments			
3. Amount recorded into other comprehensive income due to reclassification of financial assets			
4. Reserve for credit impairment of other debt investments			
5. Cash flow hedge reserve			
6. Foreign currency translation			
7. Others			
VI. Total comprehensive income		9,923,867,346.44	4,896,622,015.88
VII. Earnings per share:			
(I) Basic earnings per share (yuan/share)			
(II) Diluted earnings per share (yuan/share)			

Company Head: Liu Shuqi
Head of Accounting Department: Gan Lu

Head of Accounting Affairs: Zhou Bin

Consolidated cash flow statement

Jan to Dec, 2022

Unit: Yuan Currency: CNY

Item	Notes	2022	2021
I. Cash flow generated from operating activities:			
Cash received from sales of goods and rendering of services		129,778,869,793.04	57,872,243,385.87
Net increase in customer deposits and interbank deposits			
Net increase in borrowings from central bank			
Net increase in borrowings from other financial institutions			
Cash received from premium receipts for original insurance contracts			
Net cash received from re-insurance service			
Net increase in deposits and investments from policyholders			
Cash received from interest, service charge and commission			
Net increase in borrowings from others			
Net increase in repo service			
Net cash received from sale and purchase of securities on behalf of customers			
Tax refunds received		3,233,928,616.99	590,036,800.90
Other cash received relating to operating activities		1,667,360,720.28	1,174,476,733.25
Subtotal of cash inflows from operating activities		134,680,159,130.31	59,636,756,920.02
Cash paid for purchase of goods and services		72,510,726,290.58	46,141,587,117.16
Net increase in customer loans and advances			
Net increase in deposits in central bank and other banks			
Cash paid for claims of original insurance contracts			
Net increase in lending to other banks			
Cash paid for interest, service charge and commission			
Cash paid for policy dividend			
Cash paid to and for employees		5,677,680,301.33	3,196,053,127.99
Taxes paid		11,250,865,083.20	1,796,494,444.14
Other cash paid relating to operating activities		1,422,977,823.50	1,028,228,797.40
Subtotal of cash outflows from operating activities		90,862,249,498.61	52,162,363,486.69
Net cash flow generated from operating activities		43,817,909,631.70	7,474,393,433.33
II. Cash flow generated from investing activities:			
Cash received due to recovery of investments		15,351,122,402.01	4,833,376,932.32
Cash received from investment income		90,168,401.31	123,201,544.94
Net cash recovered from disposal of fixed assets, intangible assets and other long-term assets		32,745,081.47	123,667,405.09
Net cash received from disposal of subsidiaries and other operations			1,225,758.29
Other cash received relating to investing activities		702,279,499.81	467,644,949.90
Subtotal of cash inflows from investing activities		16,176,315,384.60	5,549,116,590.54
Cash paid for acquisition or construction of fixed assets, intangible assets and other long-term assets		15,217,915,448.02	13,831,244,643.76
Cash paid for investments		21,257,542,308.85	3,398,650,423.15
Net increase in pledge loans			
Net cash paid by subsidiaries and other operations			1,259,384,961.47

Other cash paid relating to investing activities		507,009,192.23	506,985,472.09
Subtotal of cash outflows from investing activities		36,982,466,949.10	18,996,265,500.47
Net cash flow generated from investing activities		-20,806,151,564.50	-13,447,148,909.93
III. Cash flow generated from financing activities:			
Cash received from investors		2,032,310,000.00	2,731,415,000.00
Including: Cash received by subsidiaries from minority shareholders		2,032,310,000.00	2,731,415,000.00
Cash received from borrowings		24,315,537,980.34	13,172,158,951.98
Other cash received relating to financing activities		457,955,650.47	343,181,178.57
Subtotal of cash inflows from financing activities		26,805,803,630.81	16,246,755,130.55
Cash paid for debt repayment		9,946,780,729.20	9,310,054,630.44
Cash paid for dividend or profit distribution, or interest payment		5,058,764,723.29	1,726,682,632.19
Including: Dividend and profit paid by subsidiaries to minority shareholders		352,297,232.96	217,972,571.50
Other cash paid relating to financing activities		2,553,984,080.73	2,308,373,440.84
Subtotal of cash outflows from financing activities		17,559,529,533.22	13,345,110,703.47
Net cash flow generated from financing activities		9,246,274,097.59	2,901,644,427.08
IV. Effect of exchange rate changes on cash and cash equivalents		32,930,746.69	-11,852,850.31
V. Net increase in cash and cash equivalents		32,290,962,911.48	-3,082,963,899.83
Add: Opening cash and cash equivalents		2,903,078,719.63	5,986,042,619.46
VI. Closing cash and cash equivalents		35,194,041,631.11	2,903,078,719.63

Company Head: Liu Shuqi

Head of Accounting Affairs: Zhou Bin

Head of Accounting Department: Gan Lu

Parent cash flow statement

Jan to Dec, 2022

Unit: Yuan Currency: CNY

Item	Notes	2022	2021
I. Cash flow generated from operating activities:			
Cash received from sales of goods and rendering of services		3,340,807,926.80	4,719,527,304.66
Tax refunds received			
Other cash received relating to operating activities		503,273,895.96	119,239,810.87
Subtotal of cash inflows from operating activities		3,844,081,822.76	4,838,767,115.53
Cash paid for purchase of goods and services		2,992,277,754.28	4,170,583,130.41
Cash paid to and for employees		278,171,429.61	335,195,029.61
Taxes paid		10,497,939.50	11,870,127.73
Other cash paid relating to operating activities		223,948,983.50	212,211,511.38
Subtotal of cash outflows from operating activities		3,504,896,106.89	4,729,859,799.13
Net cash flow generated from operating activities		339,185,715.87	108,907,316.40
II. Cash flow generated from investing activities:			
Cash received due to recovery of investments		14,539,599,013.42	4,665,314,477.11
Cash received from investment income		10,871,381,001.31	5,075,416,248.29
Net cash recovered from disposal of fixed assets, intangible assets and other long-term assets		13,541,176.21	2,789,338.88
Net cash received from disposal of subsidiaries and other operations			
Other cash received relating to investing activities			816,474.70
Subtotal of cash inflows from investing activities		25,424,521,190.94	9,744,336,538.98
Cash paid for acquisition or construction of fixed		21,513,848.16	110,423,219.68

assets, intangible assets and other long-term assets			
Cash paid for investments		23,556,047,295.90	6,697,701,017.73
Net cash paid by subsidiaries and other operations			
Other cash paid relating to investing activities		855,177.47	
Subtotal of cash outflows from investing activities		23,578,416,321.53	6,808,124,237.41
Net cash flow generated from investing activities		1,846,104,869.41	2,936,212,301.57
III. Cash flow generated from financing activities:			
Cash received from investors			
Cash received from borrowings		19,835,576,945.97	5,490,022,450.94
Other cash received relating to financing activities		23,008,374,092.93	3,228,660,151.11
Subtotal of cash inflows from financing activities		42,843,951,038.90	8,718,682,602.05
Cash paid for debt repayment		6,217,188,719.97	5,927,154,780.94
Cash paid for dividend or profit distribution, or interest payment		4,334,627,138.79	1,317,238,048.86
Other cash paid relating to financing activities		3,065,756,083.26	7,989,717,459.15
Subtotal of cash outflows from financing activities		13,617,571,942.02	15,234,110,288.95
Net cash flow generated from financing activities		29,226,379,096.88	-6,515,427,686.90
IV. Effect of exchange rate changes on cash and cash equivalents		299,949.33	74,502.26
V. Net increase in cash and cash equivalents		31,411,969,631.49	-3,470,233,566.67
Add: Opening cash and cash equivalents		1,959,806,333.61	5,430,039,900.28
VI. Closing cash and cash equivalents		33,371,775,965.10	1,959,806,333.61

Company Head: Liu Shuqi
Head of Accounting Department: Gan Lu

Head of Accounting Affairs: Zhou Bin

Consolidated statement of owner's equity
Jan to Dec, 2022

Unit: Yuan Currency: CNY

Item	2022													Minority interest	Total owner's equity
	Equity attributable to owners of parent company														
	Paid-up capital (or share capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	General risk reserve	Undistributed profit	Others	Sub-total		
Preference share		Perpetual bond	Others												
I. Closing balance of the previous year	4,501,548,184.00				16,107,859,721.40		-82,307,403.96	15,918,034.03	1,414,948,005.57		15,544,604,417.32	37,502,570,958.36	4,154,029,179.80	41,656,600,138.16	
Add: Changes in accounting policies											-319,550,651.51	-319,550,651.51	-35,244,241.66	-354,794,893.17	
Correction of previous errors															
Business combination under common control															
Others															
II. Opening balance of the current year	4,501,548,184.00				16,107,859,721.40		-82,307,403.96	15,918,034.03	1,414,948,005.57		15,225,053,765.81	37,183,020,306.85	4,118,784,938.14	41,301,805,244.99	
III. Change in current period ("-" for decrease)	397,913.00	-	-	1,965,085,659.43	36,442,677.69	-	-26,552,399.33	17,833,939.11	992,407,579.88		20,628,627,712.58	-23,614,243,082.36	8,329,185,488.41	31,943,428,570.77	
(I) Total comprehensive income							-26,552,399.33				25,726,447,236.27	25,699,894,836.94	6,647,217,293.63	32,347,112,130.57	
(II) Capital invested and decreased by owners	397,913.00			1,965,085,659.43	15,050,495.92							1,980,534,068.35	2,032,310,000.00	4,012,844,068.35	
1. Common shares invested by owners													2,032,310,000.00	2,032,310,000.00	
2. Capital invested by holders of other equity instruments	397,913.00			1,965,085,659.43	15,050,495.92							1,980,534,068.35		1,980,534,068.35	
3. Amount of share payment recorded into owner's equity															
4. Others															
(III) Profit distribution									992,407,579.88		-5,097,819,523.69	-4,105,411,943.81	-352,297,232.96	-4,457,709,176.77	
1. Withdrawal from surplus reserve									992,407,579.88		-992,407,579.88				
2. Withdrawal from general risk reserve															
3. Distribution to owners (or shareholders)											-4,105,411,943.81	-4,105,411,943.81	-352,297,232.96	-4,457,709,176.77	
4. Others															
(IV) Internal carryover of owner's equity															
1. Capital reserve converted to capital (or share capital)															
2. Surplus reserve converted to capital (or share capital)															

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3. Surplus reserve offset loss														
4. Change in defined benefit plan converted to retained earnings														
5. Other comprehensive income converted to retained earnings														
6. Others														
(V) Special reserve								17,833,939.11				17,833,939.11	8,458,633.63	26,292,572.74
1. Withdrawal in the current period								140,169,711.16				140,169,711.16	24,864,389.98	165,034,101.14
2. Use in the current period								122,335,772.05				122,335,772.05	16,405,756.35	138,741,528.40
(VI) Others						21,392,181.77						21,392,181.77	-6,503,205.89	14,888,975.88
IV. Closing balance of the current period	4,501,946,097.00	-	-	1,965,085,659.43	16,144,302,399.09	-	-108,859,803.29	33,751,973.14	2,407,355,585.45		35,853,681,478.39	60,797,263,389.21	12,447,970,426.55	73,245,233,815.76

Item	2021															
	Equity attributable to owners of parent company														Minority interest	Total owner's equity
	Paid-up capital (or share capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	General risk reserve	Undistributed profit	Others	Sub-total			
Preference share		Perpetual bond	Others													
I. Closing balance of the previous year	4,501,548,184.00				16,105,693,787.44		-73,914,221.72	16,401,063.07	925,322,362.44		9,066,353,854.50		30,541,405,029.73	1,002,541,280.46	31,543,946,310.19	
Add: Changes in accounting policies											-375,926,424.61		-375,926,424.61	-17,567,039.46	-393,493,464.07	
Correction of previous errors																
Business combination under common control																
Others																
II. Opening balance of the current year	4,501,548,184.00				16,105,693,787.44		-73,914,221.72	16,401,063.07	925,322,362.44		8,690,427,429.89		30,165,478,605.12	984,974,241.00	31,150,452,846.12	
III. Change in current period ("-" for decrease)					2,165,933.96		-8,393,182.24	-483,029.04	489,625,643.13		6,534,626,335.92		7,017,541,701.73	3,133,810,697.14	10,151,352,398.87	
(I) Total comprehensive income							-8,393,182.24				8,109,125,091.40		8,100,731,909.16	512,108,485.13	8,612,840,394.29	
(II) Capital invested and decreased by owners														2,731,415,000.00	2,731,415,000.00	
1. Common shares invested by owners														2,731,415,000.00	2,731,415,000.00	
2. Capital invested by holders of other equity instruments																
3. Amount of share payment recorded into owner's equity																
4. Others																
(III) Profit distribution									489,625,643.13		-1,574,498,755.48		-1,084,873,112.35	-217,972,571.50	-1,302,845,683.85	
1. Withdrawal from surplus reserve									489,625,643.13		-489,625,643.13					
2. Withdrawal from general risk reserve																
3. Distribution to owners (or shareholders)											-1,084,873,112.35		-1,084,873,112.35	-217,972,571.50	-1,302,845,683.85	

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4. Others														
(IV) Internal carryover of owner's equity														
1. Capital reserve converted to capital (or share capital)														
2. Surplus reserve converted to capital (or share capital)														
3. Surplus reserve offset loss														
4. Change in defined benefit plan converted to retained earnings														
5. Other comprehensive income converted to retained earnings														
6. Others														
(V) Special reserve							-483,029.04					-483,029.04		-483,029.04
1. Withdrawal in the current period							67,672,255.14					67,672,255.14		67,672,255.14
2. Use in the current period							68,155,284.18					68,155,284.18		68,155,284.18
(VI) Others				2,165,933.96								2,165,933.96	108,259,783.51	110,425,717.47
IV. Closing balance of the current period	4,501,548,184.00			16,107,859,721.40		-82,307,403.96	15,918,034.03	1,414,948,005.57		15,225,053,765.81		37,183,020,306.85	4,118,784,938.14	41,301,805,244.99

Company Head: Liu Shuqi

Head of Accounting Affairs: Zhou Bin

Head of Accounting Department: Gan Lu

Parent statement of owner's equity
Jan to Dec, 2022

Unit: Yuan Currency: CNY

Item	2022										
	Paid-up capital (or share capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Total owner's equity
		Preference share	Perpetual bond	Others							
I. Closing balance of the previous year	4,501,548,184.00				17,082,993,947.39		7,122,885.47		1,414,948,005.57	7,425,461,793.14	30,432,074,815.57
Add: Changes in accounting policies											
Correction of previous errors											
Others											
II. Opening balance of the current year	4,501,548,184.00				17,082,993,947.39		7,122,885.47		1,414,948,005.57	7,425,461,793.14	30,432,074,815.57
III. Change in current period ("+" for increase)	397,913.00			1,965,085,659.43	14,882,754.47		-208,452.39		992,407,579.88	4,826,256,275.14	7,798,821,729.53
(I) Total comprehensive income							-208,452.39			9,924,075,798.83	9,923,867,346.44
(II) Capital invested and decreased by owners	397,913.00			1,965,085,659.43	15,050,495.92						1,980,534,068.35
1. Common shares invested by owners											
2. Capital invested by holders of other equity instruments	397,913.00			1,965,085,659.43	15,050,495.92						1,980,534,068.35
3. Amount of share payment recorded into owner's equity											
4. Others											
(III) Profit distribution									992,407,579.88	-5,097,819,523.69	-4,105,411,943.81
1. Withdrawal from surplus reserve									992,407,579.88	-992,407,579.88	
2. Distribution to owners (or shareholders)										-4,105,411,943.81	-4,105,411,943.81
3. Others											
(IV) Internal carryover of owner's equity											
1. Capital reserve converted to capital (or share capital)											
2. Surplus reserve converted to capital (or share capital)											
3. Surplus reserve offset loss											

2022 Annual Report

4. Change in defined benefit plan converted to retained earnings											
5. Other comprehensive income converted to retained earnings											
6. Others											
(V) Special reserve											
1. Withdrawal in the current period											
2. Use in the current period											
(VI) Others										-167,741.45	
IV. Closing balance of the current period	4,501,946,097.00			1,965,085,659.43	17,097,876,701.86		6,914,433.08		2,407,355,585.45	12,251,718,068.28	38,230,896,545.10

Item	2021										
	Paid-up capital (or share capital)	Other equity instruments			Capital reserve	Less: Treasury shares	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Total owner's equity
		Preference share	Perpetual bond	Others							
I. Closing balance of the previous year	4,501,548,184.00				17,084,837,736.04		6,757,300.85		925,322,362.44	4,107,010,606.38	26,625,476,189.71
Add: Changes in accounting policies										-3,306,489.02	-3,306,489.02
Correction of previous errors											
Others											
II. Opening balance of the current year	4,501,548,184.00				17,084,837,736.04		6,757,300.85		925,322,362.44	4,103,704,117.36	26,622,169,700.69
III. Change in current period ("-" for decrease)					-1,843,788.65		365,584.62		489,625,643.13	3,321,757,675.78	3,809,905,114.88
(I) Total comprehensive income							365,584.62			4,896,256,431.26	4,896,622,015.88
(II) Capital invested and decreased by owners											
1. Common shares invested by owners											
2. Capital invested by holders of other equity instruments											
3. Amount of share payment recorded into owner's equity											
4. Others											
(III) Profit distribution									489,625,643.13	-1,574,498,755.48	-1,084,873,112.35
1. Withdrawal from surplus reserve									489,625,643.13	-489,625,643.13	
2. Distribution to owners (or shareholders)										-1,084,873,112.35	-1,084,873,112.35
3. Others											
(IV) Internal carryover of owner's equity											
1. Capital reserve converted to capital (or share capital)											
2. Surplus reserve converted to capital (or share capital)											
3. Surplus reserve offset loss											
4. Change in defined benefit plan converted to retained earnings											
5. Other comprehensive income converted to retained earnings											
6. Others											
(V) Special reserve											
1. Withdrawal in the current period											
2. Use in the current period											
(VI) Others											-1,843,788.65
IV. Closing balance of the current period	4,501,548,184.00				17,082,993,947.39		7,122,885.47		1,414,948,005.57	7,425,461,793.14	30,432,074,815.57

Company Head: Liu Shuqi

Head of Accounting Affairs: Zhou Bin

Head of Accounting Department: Gan Lu

III. Company information

1. Company overview

"√ Applicable" "□ Not applicable"

(1) History

Tongwei Co., Ltd. (the "Company") is a stock limited company incorporated through the entire change of Sichuan Tongwei Feed Co., Ltd. On October 21, 2000, as approved by Sichuan People's Government's Approval on the Incorporation of Sichuan Tongwei Co., Ltd. (the Sichuan People's Government Letter [2000] No. 311), Sichuan Tongwei Feed Co., Ltd. was entirely changed and then incorporated into Sichuan Tongwei Co., Ltd. The Company's total share capital was converted from 111.88 million yuan, the net assets of Sichuan Tongwei Feed Co., Ltd as of August 31, 2000 as audited by Sichuan Huaxin (Group) Accounting Firm Co., Ltd., to 111.88 million shares, with one yuan per share. On November 8, 2000, the Company received the Business License from Sichuan Bureau of Industry and Commerce (registration number: 5100001812986). On November 19, 2001, the State Administration for Industry and Commerce of the People's Republic of China approved the name change to Tongwei Co., Ltd. in its Notification on Approval of Enterprise Name Change of (Guo) MCBH [2001] No.419.

On February 16, 2004, as approved by China Securities Regulatory Commission in the ZJXX [2004] No.10, the Company publicly issued A-share common stock of 60 million yuan. All the shares were issued to investors in secondary market with a price of 7.50 yuan per share. The changed registered capital was 171,880,000.00 yuan.

The plan for non-tradable share reform was approved in the general meeting of Tongwei Co., Ltd. on non-tradable share reform on February 20, 2006. According to the plan, floating shareholders would get a consideration of 1.5 shares from non-floating shareholders for each 10 floating shares they hold. As such, floating shareholders obtained 9 million shares as the consideration. The registration of shares as result of the reform was completed on March 3, 2006.

On May 25, 2006, the Company increased its share capital through capital reserve (5 shares per 10 shares) and share bonus (5 shares per 10 shares). As a result of the conversion and bonus, the Company had a total of 343.76 million shares; on May 23, 2007, the Company again increased its share capital through capital reserve (7 shares per 10 shares) and share bonus (3 shares per 10 shares), leading to a total of 687.52 million shares.

On July 4, 2013, the Company issued 129,589,632 shares to Tongwei Group Co., Ltd. After that, the Company had a total of 817,109,600 shares.

With the approval of the Reply on Approving Tongwei Co., Ltd. to Purchase Assets and Raise Supporting Funds by Issuing Shares to Tongwei Group Co., Ltd. (ZJXX [2016] No. 190) from the CSRC on January 27, 2016, the Company issued common shares of 238,324,880 yuan to 17 legal persons such as Tongwei Group Co., Ltd., Sichuan Giastar Group Co., Ltd. and 29 natural persons such as Tang Guangyue, the face value of each share was 1.00 yuan. After that, the share capital was 1,055,434,512 shares.

On May 19, 2016, the Company increased its share capital through capital reserve (4 shares per 10 shares) and share bonus (6 shares per 10 shares). As a result of the conversion and bonus, the Company had a total of 2,110,869.024 shares.

On June 22, 2016, the Company issued 350,262,697 shares to 8 institutions including Tianhong Fund Management Co., Ltd. After that, the Company had a total of 2,461,131,721 shares.

With the approval of the Reply on Approving Tongwei Co., Ltd. to Purchase Assets and Raise Supporting Funds by Issuing Shares to Tongwei Group Co., Ltd. (ZJXX [2016] No. 2054) from the CSRC on September 08, 2016, the Company issued common shares of 922,901,629 yuan to Tongwei Group Co., Ltd. The face value of each share was 1.00 yuan. After that, the share capital was 3,384,033,350 shares.

On December 23, 2016, the Company issued 498,338,870 shares to 5 institutions including Essence Fund. After that, the Company had a total of 3,882,372,220 shares.

As approved in (ZJXX [2018] No. 1730) from the CSRC, the Company issued 50 million convertible bonds of 5 billion yuan on March 18, 2019, with a term of 6 years; after approved in (ZLJGJDS [2019] No.052) from the Shanghai Stock Exchange, the convertible bonds were listed for trading on the Shanghai Stock Exchange from April 10, 2019; the bonds are named as Tongwei Convertible Bond for short, the bond code is 110054; the corporate stock was not lower than 130% (namely 15.96 yuan/share) of the current conversion price of Tongwei Convertible Bond for at least 15 trading days in 30 consecutive trading days from January 14, 2020 to March 3, 2020; the redemption clause of "Tongwei Convertible Bonds" has been triggered. The sixth meeting of the seventh board of directors approved the Company to exercise the early redemption right to redeem all "Tongwei Convertible Bonds" registered on the "Redemption Registration Date"; the deadline of the redemption registration date is March 16, 2020; Tongwei Convertible Bonds with a face value of 4,979,353,000 yuan were converted into 405,483,464 company

shares. After that, the Company had a total of 4,287,855,684 shares.

On November 20, 2020, the Company issued 213,692,500 shares to 16 institutions including Changdu Tongrui Industrial Partnership (Limited Partnership) Co., Ltd. After that, the Company had a total of 4,501,548,184 shares.

As approved by CSRC in its ZJXK [2021] No. 4028, the Company publicly issued 120 million convertible bonds valued 12 billion yuan for a term of 6 years. As agreed by the Shanghai Stock Exchange in the Self-Discipline Regulation Decision 2022 [No.61], the convertible bonds were listed on Shanghai Stock Exchange on March 18, 2022. The short name of the bond is "Tong22 Convertible Bonds" (code 110085). The Tong22 Convertible Bonds can be converted to the Company's shares from September 2, 2022. From September 2, 2022 when Tong22 Convertible Bonds entered the conversion period, to December 31, 2022, a total of 152,700 Tong22 Convertible Bonds were converted into the Company's A shares, with a cumulative conversion of 15,270,000.00 yuan or 397,913 shares. After the conversion, the total number of shares is 4,501,946,097.

(2) Registered address, organizational form and headquarters address

The registered address of the Company is No. 588 Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, and its organizational form is Limited Liability Company. Its headquarters is located at No. 588, Tianfu Avenue Middle Section, High-Tech Zone, Chengdu.

(3) Business nature and main operating activities

1) Business nature

The Company is engaged in agriculture, forestry, livestock husbandry and fishery. After the combination of Yongxiang Co., Ltd., Tongwei New Energy Co., Ltd. and Tongwei Solar (Hefei) Co., Ltd. under common control in 2016, it added "PV business".

2) Main operating activities

Production and sale of Tongwei brand fish feed, swine feed, poultry feed and fresh water and seawater aquaculture feed; aquaculture and seedling cultivation; production, wholesale and retail of veterinary drugs and feed additives; slaughtering and processing fish, pig and duck food and selling live fish; production and sales of polysilicon and monocrystalline silicon, polyvinyl chloride and its series products, sodium hydroxide and ancillary products, carbide slag cement; research and development of new chemical products; production and sales of monocrystalline and polycrystalline silicon wafers, solar cell wafers, solar cell modules, solar heat pipes, solar water heaters, water heating systems and solar photo thermal applications; energy technology research and development; research and development of solar power generation technology and technical consultation; design and construction of power engineering and power system installation engineering; sales of PV equipment and providing technical advice; solar power generation; electricity supply; electrical installation; engineering design; science and technology promotion and application service industry; comprehensive utilization of waste resources; environmental governance industry; wholesale and retail of commodities; rental and commercial services; import and export industry; Internet information service, etc.

(4) Largest shareholder and actual controller

The largest shareholder is Tongwei Group Co., Ltd. ("Tongwei Group"), and the actual controller is Liu Hanyuan.

(5) Approver of financial statements

The Company's financial statements are approved by its board of directors. The financial statements for the current period were approved by the 10th meeting of the 8th board of directors on April 21, 2023.

2. Scope of consolidation

"√ Applicable" "□ Not applicable"

(1) The 37 first-level subsidiaries consolidated in the current period are listed as follows:

No.	Subsidiary name	Short name	Number of its subsidiaries	Shareholding percentage (%)	Voting interest (%)
1	Yongxiang Co., Ltd.	Yongxiang	10	100	100
2	Tongwei Solar (Hefei) Co., Ltd.	Hefei Solar	10	100	100
3	Tongwei New Energy Co., Ltd.	Tongwei New Energy	110	100	100
4	Tongwei Solar (Hainan) Co., Ltd.	Hainan Solar	2	100	100
5	Tongwei Solar (Singapore) PTE. Ltd.	Singapore Solar	3	100	100
6	Sichuan Tongwei Food Co., Ltd.	Sichuan Food	11	80	80
7	Tongwei Agriculture Development	Tongwei AD	70	100	100

	Co., Ltd.				
8	Panzhuhua Tongwei Feed Co., Ltd.	Panzhuhua Tongwei		100	100
9	Zaozhuang Tongwei Feed Co., Ltd.	Zaozhuang Feed		100	100
10	Nanning Tongwei Feed Co., Ltd.	Nanning Feed		100	100
11	Qianxi Tongwei Feed Co., Ltd.	Qianxi Feed		100	100
12	Foshan Tongwei Feed Co., Ltd.	Foshan Feed		100	100
13	Tongwei (Dafeng) Feed Co., Ltd.	Dafeng Feed		51	51
14	Fuzhou Tongwei William Feed Co., Ltd.	Fuzhou Feed		65	65
15	Ningxia Yinchuan Tongwei Feed Co., Ltd.	Yinchuan Feed		100	100
16	Sichuan Tongguang Construction Engineering Co., Ltd.	Tongguang Construction		100	100
17	Qingyuan Tongwei Feed Co., Ltd.	Qingyuan Feed		100	100
18	Chengdu Tongwei Fishery-PV Technology Co., Ltd.	Chengdu Fishery-PV Technology		100	100
19	Shenyang Tongwei Biotechnology Co., Ltd.	Shenyang Biotechnology		100	100
20	Zhejiang Tongwei Solar Technology Co., Ltd.	Zhejiang Solar		100	100
21	Sichuan Chunyuan Ecological Farming Co., Ltd.	Chunyuan Farming		100	100
22	Zibo Tongwei Food Co., Ltd.	Zibo Food		100	100
23	Tianmen Tongwei Aquaculture Technology Co., Ltd.	Tianmen Technology		100	100
24	Sichuan Fusion Link Co., Ltd.	Fusion Link		60	60
25	Chengdu Tongwei Aquaculture Technology Co., Ltd.	Chengdu Technology		100	100
26	Nanjing Tongwei Aquaculture Technology Co., Ltd.	Nanjing Technology		100	100
27	Foshan Nanhai Tongwei Aquatic Products Technology Co., Ltd.	Foshan Technology		100	100
28	Chengdu Tongwei Aquatic Seed Co., Ltd.	Chengdu Seed		100	100
29	Hefei Tongwei Biotechnology Co., Ltd.	Hefei Biotechnology		100	100
30	Shaoxing Tongwei Biotechnology Co., Ltd.	Shaoxing Biotechnology		100	100
31	Huizhou Tongwei Biotechnology Co., Ltd.	Huizhou Biotechnology		100	100
32	Changde Tongwei Biotechnology Co., Ltd.	Changde Biotechnology		100	100
33	Huanggang Tongwei Biotechnology Co., Ltd.	Huanggang Biotechnology		100	100
34	Nanchang Tongwei Feed Co., Ltd.	Nanchang Feed		100	100
35	Chengdu Tongwei Biotechnology Co., Ltd.	Chengdu Biotechnology		100	100
36	Tongwei Industrial (Tibet) Co., Ltd.	Tibet Industrial		100	100
37	Hengshui Tongwei Feed Co., Ltd.	Hengshui Feed		100	100
	Total		216		

(2) New first-level subsidiaries consolidated in the current period

Subsidiary name	Reason for change
Tongwei Solar (Hainan) Co., Ltd.	New establishment through investment
Tongwei Solar (Singapore) PTE. Ltd.	New establishment through investment

Tongwei Agriculture Development Co., Ltd.	New establishment through investment
Hefei Tongwei Biotechnology Co., Ltd.	New establishment through investment
Shaoxing Tongwei Biotechnology Co., Ltd.	New establishment through investment
Huizhou Tongwei Biotechnology Co., Ltd.	New establishment through investment
Changde Tongwei Biotechnology Co., Ltd.	New establishment through investment
Huanggang Tongwei Biotechnology Co., Ltd.	New establishment through investment
Nanchang Tongwei Feed Co., Ltd.	New establishment through investment
Chengdu Tongwei Biotechnology Co., Ltd.	New establishment through investment

(3) First-level subsidiaries canceled in the current period

Subsidiary name	Reason for change
Tongwei Industrial (Tibet) Co., Ltd.	Revoke window
Hengshui Tongwei Feed Co., Ltd.	Revoke window

(4) First-level subsidiaries merged through absorption or disposed in the current period

None.

(5) First-level subsidiaries over which the control was moved to other subsidiaries of the Company in the current period

1) Tongwei (Hainan) Aquatic Products Co., Ltd., a previous first-level subsidiary of the Company become a subsidiary of Sichuan Tongwei Food Co., Ltd. in the current period.

2) The following 54 companies over which the control was moved from the Company to Tongwei Agriculture Development Co., Ltd.:

Subsidiary name	Subsidiary name	Subsidiary name
Chongqing Tongwei Feed Co., Ltd.	Chongqing Changshou Tongwei Feed Co., Ltd.	Sichuan Willtest Technology Co., Ltd.
Shandong Tongwei Feed Co., Ltd.	Nantong Bada Feed Co., Ltd.	Wuxi Tongwei Biotechnology Co., Ltd.
Shashi Tongwei Feed Co., Ltd.	Zibo Tongwei Feed Co., Ltd.	Sichuan Tongwei Feed Co., Ltd.
Chengdu Tongwei Animal Nutrition Technology Co., Ltd.	Kunming Tongwei Feed Co., Ltd.	Qingdao Hairen Aquatic Seed Industry Technology Co., Ltd.
Yuanjiang Tongwei Feed Co., Ltd.	Foshan Gaoming Tongwei Feed Co., Ltd.	Zhanjiang Haixianfeng Bio-tech Co., Ltd.
Changchun Tongwei Feed Co., Ltd.	Tianmen Tongwei Biotechnology Co., Ltd.	Nanchang Tongwei Biotechnology Co., Ltd.
He'nan Tongwei Feed Co., Ltd.	Binyang Tongwei Feed Co., Ltd.	Yangjiang Haiyi Biotechnology Co., Ltd.
Guangdong Tongwei Feed Co., Ltd.	Chengdu Tongwei Sanxin Pharmaceutical Co. Ltd.	Nanning Tongwei Biotechnology Co., Ltd.
Xiamen Tongwei Feed Co., Ltd.	Tongwei Agricultural Finance Guarantee Co., Ltd.	Maoming Tongwei Biotechnology Co., Ltd.
Wuhan Tongwei Feed Co., Ltd.	Chengdu Tongwei Automation Equipment Co., Ltd.	Ningbo Tech-bank Feed Technology Co., Ltd.
Tianjin Tongwei Feed Co., Ltd.	Haerbin Tongwei Feed Co., Ltd.	Qingdao Qihao Biotechnology Co., Ltd.
Huaian Tongwei Feed Co., Ltd.	Zhuhai Haiyi Aquatic Products Feed Co., Ltd.	Ningbo Tech-bank Biotechnology Co., Ltd.
Jieyang Tongwei Feed Co., Ltd.	Hainan Haiyi Aquatic Seed Co., Ltd.	Yancheng Tech-bank Feed Technology Co., Ltd.
Chengdu Ronglai Tongwei Feed Co., Ltd.	Tongwei Holdings PTE. Ltd.	Nanning Aigefei Feed Co., Ltd.
Langfang Tongwei Feed Co., Ltd.	Chizhou Tongwei Feed Co., Ltd.	Bengbu Tech-bank Feed Technology Co., Ltd.
Hainan Haiyi Aquatic Products Feed Co., Ltd.	Honghu Tongwei Feed Co., Ltd.	Hubei Tech-bank Feed Co., Ltd.
Yangzhou Tongwei Feed Co., Ltd.	Hainan Tongwei Biotechnology Co., Ltd.	Dongying Tech-bank Feed Technology Co., Ltd.
Lianyungang Tongwei Feed Co.,	Hanshou Tongwei Feed Co.,	Guangdong Tongwei Biotechnology

Ltd.	Ltd.	Co., Ltd.
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Please refer to “Change in Scope of Consolidation” and “Rights and Interests in Other Entities” for details on the changes in scope of consolidation and specific changes.

IV. Basis of preparation for financial statements

1. Basis of preparation

The Company's financial statements are prepared based on the assumption of going concern and actual transactions and matters, in accordance with the Accounting Standards for Business Enterprises issued by the Ministry of Finance and its supporting guidelines as well as explanations (“ASBE”) and the disclosure provisions in the Rules for Preparation and Submission of Information Disclosure by Companies that Offer Securities to the Public (No. 15)— General Rules on the Financial Statements revised by CSRC in 2014.

2. Going concern

Applicable" Not applicable"

The Company's business activities have sufficient financial support. To the best knowledge of the Company and considering the macro-policy risks, market operation risks, current or long-term profitability, solvency and financial resources support of the enterprise and other factors, the Company believes that there are no matters or situations that have serious doubts about the Company's going concern in the next 12 months, and it is reasonable to prepare financial statements on the basis of going concern.

V. Significant accounting policies and accounting estimates

Notes to the specific accounting policies and accounting estimates:

Applicable" Not applicable"

1. Statement of compliance

These financial statements and their notes prepared by the Company comply with the requirements set forth in Accounting Standards for Business Enterprises and accurately and completely reflect the financial condition on December 31, 2022 and the operation results, cash flow and other necessary information of the Company for the year of 2022. Additionally, the Company's financial statements in all major aspects comply with the requirements for the disclosure of the financial statements and the notes in the Rules for the Preparation and Submission of Information Disclosure by Companies That Offer Securities to the Public (No. 15) — General Rules on the Financial Statements revised by CSRC in 2014.

2. Accounting periods

Each accounting year starts from the January 1st to the December 31st of the same year.

3. Operating cycle

Applicable" Not applicable"

The operating cycle is the average period of time required for the Company from purchase of assets used for processing to realization of cash and cash equivalents. For the Company, 12 months/year constitute an operating cycle which is used as a criterion for determining the liquidity of assets and liabilities.

4. Reporting currency

The reporting currency used by the Company is CNY.

5. Accounting for business combinations under common control and under different control

Applicable" Not applicable"

A business combination is a transaction or other event in which two or more businesses are combined into one reporting entity. Business combinations are classified into “common control” and “not common control” types.

(1) Business combination under common control

A business combination is a common control combination if the combining entities are ultimately controlled by the same party (or parties) both before and after the combination and common control is not transitory. For a business combination under common control, the entity that obtains the control of other

combining entities on the acquisition date is called acquirer and other called acquiree(s). Acquisition date is when the acquirer actually obtains the control of the acquiree.

The share of owner's equity of the acquiree in the carrying value recorded in the consolidated financial statements of the ultimate controller is used to calculate the initial cost of long-term equity investment. An excess of consideration paid (or the total par value of shares issued) for the combination over the carrying value of net assets obtained from the acquisition is allocated to capital reserve (share premium) first with any remaining excess charged entirely to retained earnings.

Expenses directly incurred by the acquirer that are attributed to the combination are carried into current profit and loss as incurred.

(2) Business combination under different control

A business combination is not a common control combination if the combining entities are not ultimately controlled by the same party (or parties) before and after the combination. For a business combination under different control, the entity that obtains the control of other combining entities on the acquisition date is called acquirer and other called purchased parties. Acquisition date is when the acquirer actually obtains the control of the acquiree.

For a business combination under different control, the combination cost includes the fair value of assets paid, liabilities incurred or assumed, and equity securities issued on the acquisition date by the acquirer for obtaining the control of the acquiree; intermediary expenses including audit, legal service and assessment and consulting services, and other management expenses for the combination are carried into current profit and loss as incurred. The transaction cost of issuing equity securities or debt securities for the purpose of a business combination is carried into the initial recognition amount of such equity securities or debt securities. Contingent consideration is measured at fair value on acquisition date, and when recognition criteria are met within 12 months after the acquisition date, it is treated as an adjustment to the cost of the combination with a corresponding effect on goodwill. Combination cost incurred to the acquirer and net identifiable assets obtained in the acquisition are measured at the fair value on the acquisition date. The excess of the consideration paid for the combination over the fair value of net identifiable assets obtained from the acquiree is recognized as goodwill. The excess of fair value of net identifiable assets obtained from the acquiree over the consideration paid for the combination is carried into current profit and loss if the excess remains after the fair value of measurement of all identifiable assets, liabilities and contingent liabilities obtained from the acquiree, as well as the combination cost is re-reviewed.

Where the deductible temporary difference obtained by the acquirer from the acquiree is not recognized due to its non-compliance with criteria for the recognition of deferred tax assets at the acquisition date, if any new or further evidence obtained within 12 months after the acquisition date reveals that criteria was met at the acquisition date, and it is expected that the economic benefit brought by such deductible temporary difference on acquisition date can be realized, relevant deferred income tax assets must be recognized with goodwill decreased (where goodwill is insufficient to offset, the balance must be recognized as current profit and loss); all other deferred income tax assets recognized that are linked with business combination must be included in current profit and loss.

For a business combination under different control completed through multiple transactions, the "package deal" criteria in Notice of the Ministry of Finance on Printing and Distributing the Interpretation No. 5 of the Accounting Standards for Business Enterprises issued by Ministry of Finance (CK [2012] No. 19) and Article 51 of Accounting Standards for Business Enterprises No. 33 - Consolidated Financial Statements are applied to determine whether these transactions form a package deal. Accounting for a package deal is similar to the accounting for "long-term equity investments"; otherwise, accounting is performed by separate financial statements and consolidated financial statements.

In separate financial statements, the sum of carrying value of the equity investment in the acquiree held by the acquirer before the acquisition date and the cost of investment newly added on the acquisition date shall be taken as initial investment cost of the investment; where the equity held before the acquisition date involves other comprehensive income, the investment and other comprehensive incomes relating thereto shall be subject accounting treatment using the same basis on which the acquiree directly disposes related assets or liabilities (namely, except for the corresponding share in the change arising from the acquiree's re-measurement of net liabilities or net assets of defined benefit plan under equity method, the rest will be carried into investment income of current period).

In consolidated financial statements, the sum of carrying value of the equity investment in the acquiree held by the acquirer before the acquisition date is remeasured at fair value at the acquisition date, with the difference between fair value and carrying value carried into current investment income; where the equity held before the acquisition date involves other comprehensive income, the investment and other comprehensive incomes relating thereto shall be subject accounting treatment using the same basis on which the acquiree directly disposes related assets or liabilities (namely, except for the corresponding share

in the change arising from the acquiree's re-measurement of net liabilities or net assets of defined benefit plan under equity method, the rest will be carried into investment income of the period in which the acquisition data fall).

6. Methods used for preparing consolidated financial statements

Applicable" Not applicable"

(1) Principles for determining the scope of consolidation

The scope of consolidation is determined on the basis of control. Control means the power of the Company over the investee; the Company is entitled to variable returns by participating in related activities of the investee and able to influence the amount of return by exercising the power. The scope of consolidation covers the Company and all of its subsidiaries. Subsidiaries are entities under control of the Company.

(2) Methods used for preparing consolidated financial statements

The Company starts to include a subsidiary into the scope of consolidation from the date when it obtains the actual control over the subsidiary, and ceases including the subsidiary into the scope of consolidation from the date when it loses the actual control over the subsidiary. For the disposed of subsidiary, the operation results and cash flow until the disposal date have been appropriately included in the consolidated profit statement and consolidated cash flow statement; disposal of subsidiaries during the current period do not affect the opening balances in the consolidated balance sheet. For a new subsidiary from a business combination under different control, the operation results and cash flow after the disposal date have been appropriately included in the consolidated profit statement and consolidated cash flow statement; and the opening balances and comparison numbers in consolidated financial statements are not adjusted. For a new subsidiary from a business combination under common control and the acquiree from Absorption combination, the operation results and cash flow from the start of the acquisition period to the acquisition date have been appropriately included in the consolidated profit statement and consolidated cash flow statement, with the comparison numbers in the consolidated financial statements adjusted.

Regarding preparation of consolidation financial statement, if there are any difference between any subsidiary and the Company in relation to the adopted accounting policies or accounting periods, necessary adjustments shall be made to financial statements of such subsidiary such that these differences are eliminated. For a subsidiary obtained through business combination under different control, adjustments to its financial statements shall be based on the fair value of net identifiable assets on the acquisition date.

All material intra-company balances, transactions and unrealized profits are offset in preparation of consolidated financial statements.

The shares of shareholders' equity and current net profit and loss that are not attributed to the Company, are respectively presented as minority interest, and minority interest gain or loss in the items of shareholders' equity and net profit in the consolidated financial statements. The share of current net profit and loss that is attributed to minority interest is presented as the minority interest gain or loss in the net profit item of the consolidated financial statements. If the loss borne by minority shareholders exceeds the amount they enjoy in the shareholders' equity at the beginning of the current period, the minority interest is written down accordingly.

If the Company loses control of a subsidiary due to partial disposal of the investment or other reasons, the retained interest is re-measured at fair value on the date of losing control. The sum of consideration received from disposal of investment and the fair value of retained interest less the net assets of the former subsidiary that the Company would be entitled if the former shareholding percent was retained from the acquisition date, is carried into the investment income of current period when the control is lost. Other comprehensive incomes relating to the equity investment in the former subsidiary shall be subject to, when the control is lost, accounting treatment using the same basis on which the acquiree directly disposes relevant assets or liabilities (namely, except for changes arising from the former subsidiary's re-measurement of net liabilities or net assets of defined benefit plan, the rest will be carried into investment income of current period). The retained interest shall be subsequently measured as per the Accounting Standards for Business Enterprises No. 2 - Long-term Equity Investments or Accounting Standards for Business Enterprises No.22 - Recognition and Measurement of Financial Instruments or other relevant regulations. See "Long-term equity investments" or "Financial instrument" for details.

Where the Company loses control of a subsidiary through disposal of equity investment in the subsidiary through multiple transactions, it is required to identify whether these transactions form a package deal. These multiple transactions are generally under accounting treatment as a package deal if the terms, conditions and economic effects of these transactions fall within one or more following circumstances: ① they are entered into simultaneously or with the mutual impacts considered; ② unless

operated as a whole, they cannot reach a complete commercial result; ③ the occurrence of one transaction depends on the occurrence of another one or more; or ④ a transaction is not economic when seen separately but economic when combined with other transactions. If these transactions do not form a package deal, each transaction is treated under “Partial disposal of long-term equity investment in a subsidiary without losing control” and “Losing control of a subsidiary due to partial disposal of equity investment or other reasons” depending on the specific circumstance. Where transactions for disposal of equity investment in a subsidiary leading to losing control forms a package deal, each transaction is treated as a transaction for disposal of equity investment in a subsidiary leading to losing control; however, the difference between each disposal amount and the net assets that the Company would be entitled regarding the disposed investment, before the control is lost, is recognized as other comprehensive income in the consolidated financial statements; and upon the control is lost, all these differences are carried into profit and loss of current period when the control is lost.

7. Classification of joint arrangements and accounting for joint operations

Applicable" Not applicable"

A joint arrangement is an arrangement of which two or more parties have joint control. Joint arrangements are classified into joint operations and joint ventures depending on the rights and obligations of the Company under the arrangements. In a joint operation, the Company has rights to the assets and obligations for the liabilities relating to the arrangement. In a joint venture, the Company has rights to the net assets of the arrangement.

Investments into joint ventures are treated under equity method in accordance with the accounting policies described in “Long-term equity investments” and “long-term equity investments under equity method”.

For a joint operation, assets held and liabilities assumed separately by the Company, as well as joint assets and liabilities by the Company's share are recognized; revenue generated from sale of the share of the Company in the output of the joint operation is recognized; the revenue generated from the joint operation's sale of its products by the Company's share is recognized; expenses incurred separately by the Company as well as expenses incurred by the joint operation by the Company's share are recognized.

If the Company as a party to a joint operation invests or sells assets (except that the assets forms a business, hereinafter the same) into or purchases assets from the joint operation, before such assets are sold to a third party by the joint operation, the Company only recognizes the share of profit and loss generated from such transaction that is attributable to other parties in the joint operation. Where such assets suffer from impairment loss set forth in Accounting Standards for Business Enterprises No. 8 — Asset Impairment and other relevant provisions, the Company fully recognizes such loss if such assets are invested or sold by the Company into the joint operation; the Company recognizes partial loss by its share in the joint operation if such assets are purchased from the joint operation by the Company.

8. Criteria for cash and cash equivalents

Cash equivalents are defined as short-term investments (not greater than three months between the purchase date and the maturity date) that have strong liquidity, are easy to be converted into cashes and are unlikely to subject to value change risk.

Restricted bank deposits are not cash and cash equivalents in the cash flow statement.

9. Foreign currency transactions and foreign currency translation

Applicable" Not applicable"

(1) Accounting for foreign currency transactions:

A foreign currency transaction is recorded in reporting currency converted from the benchmark exchange rate (generally, the central parity rate) published by the People's Bank of China on its occurrence date; at the end of the period, foreign currency monetary items are converted at the spot exchange rate at the end of the period; foreign currency non-monetary items measured at historical costs are converted at the spot rate on occurrence date; foreign currency non-monetary items measured at fair value are converted at the spot rate on the fair value determination date. Exchange differences are carried into the purchase and construction costs of fixed assets if they are relating to purchase and construction of such fixed assets and before the assets reach intended usable condition; into management expense if they are not related to purchase and construction of fixed assets and during the construction preparation period; carried into current financial expense if they are during the production and operation period.

(2) Translation of foreign currency financial statements:

Assets and liabilities on the balance sheet are converted at the spot exchange rate effective on balance sheet date; all items other than undistributed profit in shareholders' equity are converted at the spot exchange rates effective on occurrence dates of these items. Income and expense items in the profit statement are converted at the exchange rate similar to the spot exchange rate of the current period; the exchange differences so generated are presented in "other comprehensive income" under the shareholder's equity of the balance sheet.

Foreign currency cash flow and cash flow generated from overseas subsidiaries are converted at exchange rates that are approximate to the spot exchange rates effective on occurrences of such cash flow items.

10. Financial instruments

"√ Applicable" "□ Not applicable"

A financial instrument is defined as any contract that gives rise to a financial asset of one entity and a financial liability or equity of another entity. When the Company becomes one party to a financial instrument contract, the financial asset or financial liability in respect to this financial instrument is recognized.

(1) Classification of financial assets

A regular way purchase or sale of financial assets shall be recognized and derecognized using trade date accounting. Financial assets upon initial recognition are classified into: financial assets measured at amortized cost; financial assets measured at fair value through other comprehensive income; financial assets measured at fair value through current profit and loss.

Financial assets meeting the following conditions are classified into financial asset measured at amortized cost: ① the business model to manage the financial assets is to collect contractual cash flow; and ② the contract terms for the financial assets provided for that a cash flow generated on a certain date is only the payment for any principal or any interest on any outstanding principal.

Financial assets meeting the following conditions are classified into financial asset measured at fair value through other comprehensive income: ① the business model to manage the financial assets is to collect contractual cash flow and sell financial assets; and ② the contract terms for the financial assets provided for that a cash flow generated on a certain date is only the payment for any principal or any interest on any outstanding principal.

Financial assets other than these measured at amortized cost and these assets measured at fair value through other comprehensive income are classified into financial assets measured at fair value through current profit and loss. In order to eliminate or significantly reduce accounting mismatches in initial recognition, the Company may designate a financial asset as a financial asset measured at fair value through current profit and loss. Such designation may not be revoked.

(2) Measurement of financial assets

Financial assets are measured at fair value upon initial recognition. For financial assets measured at fair value with changes in fair value recognized into current profit and loss, relevant transaction costs are directly carried into current profit and loss; for other financial assets, relevant transaction costs are carried into initial recognition amount. All accounts receivable or notes receivable generated through sales of products or rendering of services, which do not contain a significant financing component or for which the significant financing component is not considered, are measured at the considerations to which the Company expects to be entitled upon initial recognition. Subsequent measurement of a financial instruments depends on its category.

1) Assets measured at amortized cost

Financial assets measured at motorized cost are subsequently measured at amortized cost under effective interest method. A gain or loss on a financial asset that is measured at amortized cost and is not part of a hedging relationship is carried into current profit and loss when the financial asset is derecognized, reclassified, through the amortization process or in order to recognize impairment gains or losses.

2) Investments measured at fair value through other comprehensive income

Financial assets of this category are subsequently measured at fair value. A gain or loss on a financial asset of this category shall be recognized in other comprehensive income, except for interest calculated under effective interest method, impairment gains or losses and foreign exchange gains and losses. When the financial asset is derecognized the cumulative gain or loss previously recognized in other comprehensive income is reclassified to current profit or loss.

3) Held for trading equity investments measured at fair value through other comprehensive income

Financial assets of this category are subsequently measured at fair value. A gain or loss (including exchange gain or loss) on a financial asset of this category shall be recognized in other comprehensive

income and may not be reclassified to current profit and loss subsequently, except for dividend (except for recovered cost of investment). When the financial asset is derecognized the cumulative gain or loss previously recognized in other comprehensive income is reclassified to current retained earnings.

4) Assets measured at fair value through current profit and loss

A gain or loss arising from any change in the fair value of a financial asset of this category (except for relating to hedging accounting) is carried into current profit and loss.

(3) Impairment of financial assets

Under the expected credit loss (ECL) approach, the impairment provisions on financial assets measured at amortized cost and financial assets measured at fair value through other comprehensive income are recognized.

The Company recognizes the expected credit loss by calculating the probability weighted amount of the present value of the difference between cash flow receivable and cash flow that are expected to be collected, with default risk as the weight, by considering reasonable and supportable information, including past events, current conditions, and forecasts.

On each balance sheet date, the Company measures the expected credit loss of financial instruments at each stage. Financial instruments in relation to which credit risk has not been increased significantly since initial recognition are at the first stage, for which, the Company measures a 12-month expected credit loss as impairment loss provision; financial instruments in relation to which credit risk has been increased significantly since initial recognition but no credit impairment has occurred are at the second stage, for which, the Company measures a life-time expected credit loss as impairment loss provision; financial instruments in relation to which credit impairment has occurred since initial recognition are at the third stage, for which, the Company measures a life-time expected credit loss as impairment loss provision.

In relation to financial instruments with a lower credit risk at the balance sheet date, the Company assumes that such credit risk has not been increased significantly since initial recognition and measures a 12-month expected credit loss as impairment loss provision.

For a financial instrument at the first stage, or at the second stage or with a lower credit risk, the Company calculates its interest income by using its book balance before impairment provision is deducted and the effective interest rate. For a financial instrument at the third stage, the Company calculates its interest income by using its book balance after impairment provision is deducted and the effective interest rate.

For notes receivable, accounts receivable and receivables financing arising from sale of goods or rendering of services, whether or not containing a significant financing component, the Company measures a life-time expected credit loss as the impairment loss provision.

If it is impossible to estimate the expected credit loss with due cost for a single financial asset, the Company classifies accounts receivable into several groups by credit risk characteristics, and calculates the expected credit loss for each group. The basis for determining groups are as follows:

Group category	Group type	Basis	Provision method
Group 1	Notes or letters of credit receivable (excluding commercial acceptance bills), performance bonds receivable during the settlement period; use of petty cash by construction projects that will be reimbursed and offset by project expenditure, and other receivables for which sufficient evidence showing no risk is available	Payment type	No provision
Group 2	Accounts receivable from relevant government departments	Credit risk characteristics note 1	Expected credit loss
Group 3	Accounts receivable from related parties within the scope of consolidation and accounts receivable from joint ventures temporarily formed for coordinated use of the Company's operating funds	Payment type	No provision
Group 4	Accounts receivable other than above items	Credit risk characteristics note 2	Expected credit loss

Note 1: For accounts receivable from relevant government departments during the settlement period, no provision for bad debts is established if the payments are expected to be recovered within one year after

the balance sheet date without risk (such as government subsidies receivable); the provision for bad debts is established as 5.00% of the balance receivable if the payments are expected to be recovered after one year after the balance sheet date (such as electricity subsidies receivable) given the time value of asset; the provision for bad debts previously established by accounts receivable age over 5.00% of the balance receivable is not reserved until the payments are recovered for prudential purpose.

Note 2: Accounts receivable other than above groups are grouped according to credit risk characteristic (accounts receivable age), and the percent of provision for bad debts is estimated according to all reasonable and grounded information including forward looking information.

Age	Provision (%)
Within 1 year	5.00
1- 2 years	10.00
2- 3 years	50.00
Over 3 years	100.00

The Company recognizes an impairment loss that has been provided or reversed into current profit and loss. Gains or losses from debt investments measured at fair value through other comprehensive income are recognized into current profit and loss with the other comprehensive income adjusted accordingly.

(4) Recognition basis for and measurement of financial asset transfers

A financial asset meeting any one of the following conditions is derecognized: ① the contractual right to collect the financial asset's cash flow has expired; or ② if it has been transferred and the Company has transferred substantially all the risks and rewards of ownership of the financial asset to the recipient; or ③ if it has been transferred and the Company has surrendered control over the financial asset although it neither transferred nor retained substantially all the risks and rewards of ownership of the financial asset.

If the Company has neither retained nor transferred substantially all of the risks and rewards of the asset, and has retained control of the asset, then the Company continues to recognize the asset to the extent to which it has a continuing involvement in the asset and recognizes relevant liability. Continuing involvement in the asset means the risk level caused by the change in the asset value to which the Company will be exposed.

Where a transfer of financial asset in its entirety qualifies for derecognition, the difference between (1) the carrying value of the asset and (2) the consideration received for transfer and cumulative change in fair value previously recognized into other comprehensive income is recognized into current profit and loss.

Where a transfer of partial financial asset qualifies for derecognition, the carrying value of the asset is split into derecognition part and non-derecognition part by their relative fair values, and the difference between (1) the consideration received for transfer and cumulative change in fair value of derecognition part previously recognized into other comprehensive income and (2) the carrying value of the asset is recognized into current profit and loss.

Upon the de-recognition of a non-held-for-trading equity investment designated by the Company as measured at fair value through other comprehensive income, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to retained earnings.

(5) Classification and measurement of financial assets

1) Liabilities measured at fair value through current profit and loss

Financial liabilities measured at fair value through profit and loss (FVTPL) include financial liabilities held for trading (including derivative instruments that belong to financial liabilities) and financial liabilities designated as financial liabilities measured at fair value through current profit. Financial liabilities measured at fair value through current profit and loss are subsequently measured at fair value. A gain or loss arising from any change in the fair value of a financial liability of this category is carried into current profit and loss.

2) Other financial liabilities

Derivative financial liabilities that are linked to equity instruments that are not quoted in an active market and their fair values cannot be reliably measured, and must be settled through delivery of such equity instruments are subsequently measured at cost. Other financial liabilities are subsequently measured at amortized cost under effective interest method with gains or losses from de-recognition or amortization recognized into current profit or loss.

(6) De-recognition of financial liabilities

When the present obligation for a financial liability has been wholly or partially discharged, the Company de-recognizes the financial liability or the part thereof. Where the Company (as a debtor) and a creditor sign an agreement under which an existing financial liability is replaced by a new liability, and the new financial liability and existing financial liability are different in contractual terms in essence, the existing financial liability is derecognized and the new financial one is recognized.

Where a financial liability is de-recognized in whole or in part, the difference between the carrying value of and the consideration paid (including the non-cash asset transferred or the new financial liability assumed) for the de-recognized part is carried into current profit and loss.

(7) Offsetting of financial assets and financial liabilities

A financial asset and a financial liability should be offset and the net amount reported when and only when the Company has a legally enforceable right to set off the amounts, and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously; the net amount after such offsetting is presented in the balance sheet. In all other circumstances, financial assets and financial liabilities are presented separately in the balance sheet.

(8) Determination of fair value of financial instruments

Fair value is defined as 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. Quoted prices in an active market are used, where they exist, to measure the financial instrument. Quoted prices are readily and regularly available from an exchange, dealer, industry group, price service or regulatory agency and those prices represent the actual and regularly occurring market transactions on an arm's length basis. If the market for a financial instrument is not active, the fair value of the financial instrument is established by a valuation technique. Valuation techniques include reference to the prices used by the well-briefed and willing-to-transact parties in the latest market transactions, reference to the current fair values of other financial instruments similar in nature, discounted cash flow technique and option pricing models.

11. Notes receivable

Determination of and accounting for expected credit loss of notes receivable

Applicable" Not applicable"

A note receivable is a written promise held by the Company to collect the principal and interest on maturity, including banker's acceptance, commercial acceptance and letters of credit. Provision for expected credit loss is detailed in "Financial instruments".

12. Accounts receivable

Determination of and accounting for expected credit loss of accounts receivable

Applicable" Not applicable"

Refer to "Financial instruments" for details on provision for expected credit loss.

13. Receivables financing

Applicable" Not applicable"

It means a banker's acceptance received by the Company in order to collect principal and interest on maturity, to transfer through endorsement, and to cash by discounting. The carrying value of a banker's acceptance is used as its fair value when the remaining term to maturity is short and the carrying value is close to the fair value. Refer to "Financial instruments" for details on provision for expected credit loss.

14. Other receivables

Determination of and accounting for expected credit loss of other receivables

Applicable" Not applicable"

Refer to "Financial instruments" for details on provision for expected credit loss.

15. Inventories

Applicable" Not applicable"

(1) Classification of inventories

Inventories are classified into: raw materials, packaging materials, work-in-process, finished goods, materials in transit, materials for repeated use (including packages, low-value consumables, scaffolding for construction projects), goods on consignment, goods in transit, materials for processing on consignment, consumable biological assets, constructions.

(2) Inventory costing methods

Inventory is recorded at the actual cost upon acquisition. The weighted average method is used for calculating for the costs of all inventories except for materials for repeated use.

(3) Basis for determination of net realizable values of inventories and provision for obsolete inventory

allowance

At the end of a period, an inventory is measured at the lower of cost and net realizable value. Excess of cost over net realizable value is recognized into current profit and loss, and the provision for obsolete inventory allowance is established. For inventories related to a product series produced and sold in the same area and for similar purposes or final applications, and it is difficult to distinguish them from other items related to the product series, the provisions are established for these inventories as a whole; for inventories large in quantities and low in price, the provision is established by type of inventory.

Materials held for production are measured at cost even if the realizable value of goods generated therefrom is higher than cost. Materials are measured at net realizable value when the decrease of material price indicates that the net realizable value of goods is lower than cost.

(4) Inventory system

Perpetual system is adopted.

(5) Amortization of materials for repeated use

When materials for repeated use (low-value consumables) are collected and used, the 50%-50% amortization method is used for materials whose unit value is above 500 yuan and one-time amortization for materials whose unit value is below 500 yuan. In Tongwei Solar (Hefei) Co., Ltd., a wholly-owned subsidiary of the Company, and its subsidiaries' low-value consumables are amortized completely when they are collected, and the effects are difficult to calculate accurately, no adjustment is made in the consolidated statements.

16. Contract assets

(1). Methods and criteria for recognition of contract assets

Applicable Not applicable

A contract asset is defined as the Company's right to consideration in exchange for goods or services that the Company has transferred to a customer, when that right is conditioned on something other than the passage of time. Contract assets and contract liabilities under the same contract are presented after on a netting basis; and contract assets and contract liabilities under different contracts are presented separately.

(2). Determination of and accounting for expected credit loss of contract assets

Applicable Not applicable

Refer to "Financial instruments" for details.

17. Assets held for sale

Applicable Not applicable

A non-current asset or disposal group is classified as held for sale if most of its carrying value is expected to be recovered via future cash flow from the sale (including non-monetary exchange with commercial substance) of the asset or disposal group rather than future cash flow from use.

The following conditions must be met for an asset or disposal group to be classified as held for sale:

(1) the asset or disposal group must be available for immediate sale in its present condition subject to terms that are usual and customary for sales of such assets (or disposal groups); and

(2) the sale must be highly probable, i.e., the Company has been committed to a plan to sell the asset or disposal group and obtained a firm purchase commitment and the sale is expected to be completed within one year. Relevant approvals have been obtained from relevant authorities or regulators.

The Company measures a non-current asset (or disposal group) classified as held for sale at the lower of its carrying value and fair value less costs to sell. Where the carrying value is higher than the fair value less costs to sell, the carrying value is written down to fair value less costs to sell, and the written down amount is recognized into asset impairment loss and carried into current profit and loss, and the provision for the asset held-for-sale impairment loss is established accordingly. The company recognizes a current gain for any subsequent increase in fair value less costs to sell of an asset or disposal group held-for-sale, but not in excess of the cumulative impairment loss that has been recognized after the asset is classified into an asset held-for-sale. The carrying value of goodwill of a disposal group held-for-sale that has been written down, and the impairment loss of a non-current asset held-for-sale recognized before it is classified into an asset held-for-sale may not be reversed.

Non-current assets or disposal groups that are classified as held for sale are not depreciated or amortized. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale shall continue to be recognized.

A non-current asset or disposal group no longer classified as held for sale because it no longer meets

the classification criteria for held for sale or the asset is removed from the held for sale disposal group, is measured at the lower of:

- (1) carrying value before the asset (or disposal group) was classified as held for sale, adjusted for any depreciation, amortization or impairment that would have been recognized had the asset (or disposal group) not been classified as held for sale;
- (2) recoverable amount.

18. Debt investments

(1). Determination of and accounting for expected credit loss of debt investments

Applicable" Not applicable"

19. Other debt investments

(1). Determination of and accounting for expected credit loss of other debt investments

Applicable" Not applicable"

20. Long-term receivables

(1). Determination of and accounting for expected credit loss of long-term receivables

Applicable" Not applicable"

21. Long-term equity investments

Applicable" Not applicable"

Long-term equity investments are equity investments under which investors impose control and significant influence over investees and the equity investments into their joint ventures.

(1) Determination of investment cost

For a long-term equity investment generated from a business combination, for example, the long-term equity investment obtained from a business combination under common control, the share of owner's equity of the acquiree in the carrying value recorded in the consolidated financial statements of the ultimate controller is used to calculate the initial cost of the long-term equity investment. For a long-term equity investment obtained from a business combination under different control, the combination cost includes the fair value of assets paid, liabilities incurred or assumed, and equity securities issued on the acquisition date by the acquirer for obtaining the control of the acquiree; intermediary expenses including audit, legal service and assessment and consulting services, and other management expenses for the combination are carried into current profit and loss as incurred; transaction expenses of equity or debt securities issued by the acquirer as the consideration for the business combination are accounted for as the initial recognition of these equity or debt securities.

An equity investment other than a long-term equity investment obtained from a business combination is initially measured at cost. The cost is determined, depending on the way in which the long-term equity investment is obtained, by the actual cash payment paid by the Company, fair value of equity securities issued by the Company, value agreed in the investment contract or agreement, fair value or original carrying value of the asset exchanged for a non-monetary asset, or fair value of the long-term equity investment. Expenses, tax and other necessary expenditure directly relating to obtaining the long-term equity investment is also recorded into the investment cost.

(2) Subsequent measurement and profit and loss recognition

A long-term equity investment under which the Company has joint control (except for a joint operation) or significant influence on the investee is accounted under equity method. Long-term equity investments under which the Company has control over investees are accounted under cost method.

(1) Cost-method accounting of long-term share investments

Under the cost method of accounting, a long-term equity investment is measured at initial investment cost, except for the actually paid price for obtaining the investment or any cash dividend or profit declared but not distributed that is included into the actually paid price or consideration upon investment, current investment income is recognized as the cash dividend or profit that has been declared by the investee to which the Company is entitled.

(2) Equity method accounting of long-term share investments

Under the equity method of accounting, when the initial investment cost is greater than the Company's share of the fair value of net identifiable assets of the investee upon investment, the initial investment cost of the long-term equity investment is not adjusted; when the initial investment cost is smaller than the

Company's share of the fair value of the net identifiable assets of the investee upon investment, such difference shall be carried into current profit/loss and the cost of the long-term equity investment is adjusted.

Under the equity method of accounting, the current investment income shall be the Company's share of the net profit or loss realized by the investee during the year. The fair value of net identifiable assets of the invested upon investment is the basis for recognition of the Company's share of the net profit/loss of the investee, and such recognition is performed after the net profit of the investee is adjusted in accordance with Company's accounting policies and for the applicable accounting period. Unrealized profits and losses resulting from transactions between the Company and its associate and joint venture are eliminated to the extent of the Company's interest in the associate or joint venture, and then the investment profit or loss is recognized. However, unrealized losses between the Company and the investee are not eliminated to the extent that such losses are a result of the impairment of the assets transferred in accordance with Accounting Standards for Business Enterprises No. 8 - Asset Impairment. The Company's share of other comprehensive income of the investee is recognized as other comprehensive income with the carrying value of the long-term equity investment adjusted accordingly. Any change in the owner's equity of the investee other than net profit and loss, other comprehensive income and profit distribution, is recorded into shareholders' equity with the carrying value of the long-term equity investment adjusted accordingly. Upon subsequent disposal of the long-term equity investment, the amount recorded into shareholders' equity shall be re-classified into investment income in share or in full.

The Company's share of net loss of the investee is recognized to the extent that carrying value of the long-term equity investment and other long-term equity that constitutes of the Company's net interest in the investee is written down to zero. If the Company still has to assume additional obligations, such expected obligations are recognized as expected liabilities and carried into current investment loss. When the investee realizes any net profit in a subsequent period, the Company's share of net loss is eliminated and its share of net profit is then reversed (if possible).

3) Purchase of minority shareholding

For preparation of consolidated financial statements, the Company's capital reserve is written down to the extent of the difference between the newly added long-term equity investment from the purchase of minority shareholding, and the Company's newly added share of the net asset of the subsidiary since the acquisition date (or combination date), and if the capital reserve is insufficient, the retained earnings are adjusted accordingly.

4) Disposal of long-term equity investments

After a partial disposal of a long-term equity investment while the control is retained, in the consolidated financial statements, the difference between the disposal price and the Company's share of the net asset of the subsidiary in respect of the disposed part is recorded into shareholders' equity. After a partial disposal of a long-term equity investment that leads to control loss, refer to relevant accounting policies described in "Methods for preparing consolidated financial statements".

For a disposal of a long-term equity investment in any other circumstance, the difference between carrying value and the actually obtained price is recognized as current profit and loss; for a long-term equity investment accounted under the equity method the share of other comprehensive income that has been recorded into shareholders' equity is subject to the accounting treatment on the same basis as the investee's direct disposal of relevant assets or liabilities. The remaining interest is recognized as a long-term equity investment or other financial liability at its carrying value, and subject to subsequent measurement according to the aforesaid accounting policies for long-term equity investments or financial assets. A retroactive adjustment is made under relevant provisions if the accounting treatment for the remaining interest shifts from cost method to equity method.

(3) Basis for determination of joint control of and significant influence over an investee

Control means the power of an investor over the investee; the investor is entitled to variable returns by participating in related activities of the investee and able to influence the amount of return by exercising the power. Joint control is the control over a certain arrangement by two or more parties under relevant agreements and relevant activities for the arrangement cannot be decided unless unanimously agreed by all such parties. Significant influence is the power to participate in the decision of financial and operating policies of an entity; it is not control over these either individually or jointly with other parties. To determine whether an investor can impose control of or significant influence over an investee, potential factors concerning voting rights including company bonds convertible in the current period and warrants exercisable in the current period, that the investor and other parties hold in the investee, should be considered.

(4) Impairment test and provision for impairment

The Company assesses at each balance sheet date whether there is an indication that a long-term

equity investments may be impaired. If any such indication exists, Company shall estimate the recoverable amount of the asset. If carrying value of the asset is greater than its recoverable amount, an impairment provision equaling to the difference of the two shall be established and recorded into current profit and loss.

Once recognized, the said impairment loss on a long-term equity investment will not be reversed in subsequent periods.

22. Investment properties

(1). Measured at cost:

Depreciation or amortization method

An investment property is real estate property that has been purchased with the intention of earning a return on the investment, either through rental income, the future resale of the property or both. Investment properties include leased land use rights, land use rights held and prepared for transfer after they are appreciated, and leased building.

1) Initial measurement

An investment property is initially measured at cost if rent income or added value that are associated with the investment property will flow to the Company and the cost of the investment property can be measured reliably.

The cost of an investment property purchased from other parties includes the purchase price and relevant taxes directly attributable to the asset;

The cost of an investment property constructed by the Company consists of necessary expenditure incurred before the asset reaches expected usable condition.

The cost of an investment property obtained in another way is recognized under applicable accounting standards.

2) Subsequent measurement

Generally, subsequent expenditures on an investment property are measured at cost in subsequent periods. An investment property is depreciated or amortized under accounting policies that the Company applies to fixed assets or intangible assets.

An investment property is subsequently measured at fair value if conclusive evidence indicates that the fair value of the investment property can be reliably obtained on an ongoing basis. An investment property measured subsequently at fair value may not be depreciated or amortized; its carrying value is adjusted to the fair value on balance sheet date and the difference between fair value and original carrying value is carried into current profit and loss.

(3) An investment property which the Company has changed its purpose is reclassified into other properties.

23. Fixed assets

(1). Recognition criteria

Applicable" Not applicable"

Fixed assets refer to property, plant, and equipment with a useful life of over one year, held for use in the production or supply of goods or services, rental to others, or administrative purposes. When economic benefits relating to a fixed asset are likely to flow into the Company and its costs can be reliably measured, the fixed asset is recognized.

(2). Depreciation method

Applicable" Not applicable"

Category	Depreciation method	Useful life (years)	Residual value rate	Annual depreciation rate
Premises and buildings	Straight-line method	5—35	5%	19—2.71%
Including: overseas private land (note)	No amortization	Long term		
Machinery equipment	Straight-line method	5—12	5%	19—7.92%
PV generation equipment	Straight-line method	25	5%	3.8%
Transportation equipment	Straight-line	4—5	5%	23.75—19%

	method			
Office equipment	Straight-line method	4—5	5%	23.75—19%

Note: The Company holds a permanent title over overseas private lands purchased for constructing plants (such as in Bangladesh); these lands are for long-term use and not amortized. An impairment test is performed at the end of each reporting period.

For a fixed asset for which a provision for impairment has been established, its depreciation rate and depreciate amount shall be re-calculated according to its carrying value (i.e., the original cost less cumulative depreciation and provision for impairment) and its remaining useful life.

A fixed asset is measured at the lower of its carrying value and its recoverable amount on the balance sheet date.

(3). Recognition, measurement, and depreciation of fixed assets acquired under finance leases

Applicable" Not applicable"

If payment for a fixed asset is deferred beyond normal credit terms so that it is a financing activity, its cost is the equivalent cash price. The difference between this amount and the total payments is recognized into current profit and loss over the period of credit unless it is capitalized.

(4) Provision for impairment of fixed assets

A fixed asset is measured at the lower of its carrying value and its recoverable amount on the balance sheet date.

The Company assesses at each balance sheet date whether there is an indication that a long-term equity investments may be impaired by assessing whether the following conditions are met:

1) During the period, an asset's market value has declined significantly more than would be expected as a result of the passage of time or normal use.

2) Significant negative changes (have occurred or are expected) in the technological, market, economic or legal environment where the Company operates, and the market where an asset is located.

3) Market interest rates or other market rates of return on investments have increased (which impact the discount rate used in calculating an asset's expected future cash flow and lead to a significant decline of the asset's recoverable amount).

4) Evidence is available of obsolescence or physical damage of an asset.

5) Assets have been or will be idle, discontinued or the assets will be disposed before the previously expected date.

6) Evidence is available from internal reporting that indicates the economic performance of an asset is, or will be, worse than expected; for example, the net cash flow created or operating profit (loss) achieved by the asset is much lower (or higher) than expected amount.

7) Other signals that indicate the possible impairment of assets.

If any such indication exists, Company shall estimate the recoverable amount of the asset. If carrying value of the asset is greater than its recoverable amount, an impairment provision equaling to the difference of the two shall be established.

Once recognized, the impairment loss will not be reversed in subsequent periods.

24. Construction in progress

Applicable" Not applicable"

(1) Measurement of construction in progress

A construction in progress is measured at cost which includes borrowing interest and expense incurred before the end of a construction period that should be capitalized.

When a construction in progress reaches its intended purpose and is delivered for use, a fixed asset is recognized at actual cost; for construction in progress that has been delivered but the final account is not performed, a fixed asset is recognized at the estimated cost of construction budget, costing or actual construction cost with depreciation established. After the final account is completed, the original estimate and depreciation are adjusted accordingly.

A construction in progress is measured at the lower of its carrying value and its recoverable amount on the balance sheet date.

(2) Provision for impairment of construction in progress

A provision for impairment of a construction in progress is established at carrying value less recoverable amount at the end of the construction period if one or more of the following circumstances

exist. Once recognized, the impairment loss will not be reversed in subsequent periods.

- 1) The construction is suspended for a long term and the suspension is expected to remain in next 3 years;
- 2) The construction has been outdated in performance and technology and the economic benefits brought to the Company is largely uncertain;
- 3) Other circumstance that indicate the construction in progress has been impaired.

25. Borrowing costs

Applicable" Not applicable"

Borrowing costs that incur during the capitalization period and may be directly attributable to capitalization criteria are capitalized. Capitalization starts when all three conditions are met: ① expenditures are incurred, ② borrowing costs are incurred, and ③ the activities necessary to prepare the asset for its intended use or sale are in progress; and ends when the fixed asset reaches its intended use. The capitalization should be suspended during periods in which acquisition or construction of the fixed asset is interrupted for over consecutive three months; in this case, the borrowing costs are recognized as current expense.

The method for calculating cost to be capitalized is as follows. To the extent that the Company borrows funds specifically for the purpose of obtaining a qualifying asset, it is calculated as the actual borrowing costs incurred on that borrowing during the period, less the interest on unused borrowings deposited in banks or any investment income on the temporary investment of those borrowings. To the extent that the Company uses funds from general borrowings for the purpose of obtaining a qualifying asset, it is calculated by the weighted average of the excess of cumulative asset expenditure over the asset expenditure from special borrowings, multiplied the capitalization rate applicable to used general borrowings. The capitalized interest in each period is limited to the actual interest on relevant borrowings that incurs in the period. The discount or premium of borrowings that should be amortized in each accounting period is measured under effective interest method with the interest in each period adjusted accordingly. An ancillary cost incurred in connection with funds borrowed specifically for the purpose of obtaining a qualifying asset is capitalized as incurred if it incurs before the asset reaches its intended use or sale, and recognized as expense and carried into current profit and loss if it incurs after the asset reaches its intended use or sale.

26. Biological assets

Applicable" Not applicable"

(1) Classification of productive biological assets

Productive biological assets of the Company include boar, drake, male fish (and male pawn) and others.

(2) Initial measurement of productive biological assets

- 1) Cost for purchasing a productive biological asset includes the purchase price, relevant tax, transportation cost, insurance cost and all other expenditures that are directly attributable to purchase of the asset.
- 2) Cost for constructing or generating a productive biological asset includes the feed cost, labor cost, indirect expense that should be amortized and other necessary expenditures before the asset reaches its intended production/operation (mature age).

(3) Subsequent measurement of productive biological assets

Depending on the nature, use and expected realization of relevant economic benefits of productive biological assets, the useful life, residual value rate and depreciation rate of each productive biological asset are determined as follows:

Category	Useful life (years)	Residual value rate	Annual depreciation rate
Male fish	3	5%	31.67%
Male pawn	7 months	0%	Amortization completed in the breeding season

A productive biological asset is measured at the lower of its carrying value and its recoverable amount on the balance sheet date.

27. Oil and gas assets

Applicable" Not applicable"

28. Right-of-use assets

Applicable" Not applicable"

(1) A right-of-use asset is recognized on the commencement date of the lease except for short-term lease and low-value lease. Commencement date of a lease is the date on which the lessor makes an asset available for use by the Company. A right-of-use asset is measured at cost upon initial recognition; The cost includes:

- 1) amount of the initial measurement of the lease liability;
- 2) payments made at or before the commencement date of the lease, less any lease incentives received (if any);
- 3) initial direct costs incurred by the Company;
- 4) an estimate of costs to be incurred when the Company removes the asset, restore the place where the asset is installed or restore the asset to the condition agreed by the lease terms (excluding costs incurred to produce inventories). If the lease liability is remeasured after the commencement date of the lease, the carrying value of the right-of-use asset is adjusted accordingly.

(2) Depreciation of a lease asset is provided over remaining useful life of a right-of-use asset if the Company is able to reasonably determine that it will obtain the ownership of the asset upon the lease term expires. Otherwise, the depreciation is provided over the shorter of the remaining useful life and the lease term.

(3) The accounting policies for “impairment of long-term assets” are applicable to the identification of whether a right-of-use asset has been impaired and the identified impairment loss.

29. Intangible assets**(1). Measurement, useful life and impairment test**

Applicable" Not applicable"

An intangible asset is an identifiable non-monetary asset without physical substance that the Company owns or controls.

An intangible asset is measured at cost upon initial recognition. If payment for an intangible asset is deferred beyond normal credit terms so that it is a financing activity, its cost is the cash price equivalent. The difference between this amount and the total payments is recognized into current profit and loss over the period of credit unless it is capitalized.

The useful life of an intangible asset is analyzed and determined upon it is obtained. For an intangible asset with a finite useful life, it is amortized with straight-line method over the useful life.

At the end of each accounting period, the useful lives and amortization methods for intangible assets with finite useful lives are reviewed. At the end of each accounting year, the useful lives and amortization methods for intangible assets with finite useful lives are reviewed.

An intangible asset is measured at the lower of its carrying value and its recoverable amount on the balance sheet date.

(2). Accounting policies for internal R&D cost

Applicable" Not applicable"

All expenditure incurred at the research stage should be carried into current profit and loss when incurred. Expenditure incurred at the development stage is recognized as an intangible asset if the following conditions are met, or recorded into current profit and loss when incurred:

- 1) the technical feasibility of completing the intangible asset (so that it will be available for use or sale);
- 2) intention to complete and use or sell the asset;
- 3) the intangible asset will generate probable future economic benefits, including the Company can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is used internally, the usefulness of the intangible asset;
- 4) availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;
- 5) expenditure attributable to the intangible asset during its development stage can be reliably measured.

30. Impairment of long-term assets

Applicable" Not applicable"

The Company assesses at each balance sheet date whether there is an indication of impairment for fixed assets, right-of-use assets, construction in progress, intangible assets with finite useful lives,

investment properties measured at cost, and non-current non-financial assets such as long-term equity investments into subsidiaries, joint ventures and associates. If any such indication exists, the Company estimates the recoverable amount of the asset and performs an impairment test. Goodwill, indefinite-lived intangible assets and intangible assets that have not reached usable condition, whether or not such sign of impairment exists, must receive at least one impairment test per year.

If the impairment test indicates that book value of an asset is greater than its recoverable amount, an impairment provision equaling to the difference of the two shall be established and recorded into impairment loss. Recoverable amount of an asset is the greater of fair value less cost of disposal and the present value of future cash flow expected to be derived from the asset. Fair value of an asset is based on the price set forth in the sale agreement entered in a fair transaction; if no such sale agreement exists but an active market for the asset exists, the fair value is based on the offer given by the buyer; if neither of the two exists, the fair value is estimated according to the best knowledge. Costs of disposal include legal costs, relevant taxes, and handling costs relating to disposal of an asset, and all direct expenses incurred to bring an asset into condition for its sale. The present value of expected future cash flow of an asset is calculated as the expected future cash flow to be deprived from continuing use and disposal of the asset properly discounted. Impairment provision is calculated and recognized for each individual asset. If it is difficult to estimate the recoverable amount of an individual asset, recoverable amount of the cash-generating unit (CGU) to which the asset belongs is determined. A CGU is the minimum unit of assets that can generate cash inflows.

In impairment test, the carrying value of goodwill which is separately listed in the financial statements is shared among the CGU or the group of CGUs which are expected to be benefited from synergies of business combination. If the impairment test indicates that book value of a CGU or a group of CGUs, which takes a share of the goodwill, is greater than its recoverable amount, the corresponding impairment loss is recognized. An impairment loss amount calculated for a CGU or a group of CGUs should be allocated to the CGU or the group's individual assets - first of all to goodwill allocated to the CGU or the group, and then to the other assets of the CGU on a pro rata basis according to the book amount of each asset in the CGU or the group.

If fair value of an impaired goodwill recovers after an impairment has been recognized, the impairment may not be reversed in a subsequent period.

31. Deferred expenses

Applicable" Not applicable"

A deferred expense is recognized as incurred and amortized over the benefit period or specified amortization period with straight line method. If a deferred expense cannot bring benefits to subsequent accounting period, the amortized value is recognized into current profit and loss.

32. Contract liabilities

(1). Recognition of contract liabilities

Applicable" Not applicable"

A contract liability is the Company's obligation to transfer goods or services to a customer for which it has received consideration from the customer. If a customer pays consideration or the Company has a right to an amount of consideration that is unconditional before the Company transfers a good or service to the customer, the Company shall present the payment as a contract liability when the payment is made or the payment is due (whichever is earlier). Contract assets and contract liabilities under the same contract are presented after on a netting basis; and contract assets and contract liabilities under different contracts are presented separately.

33. Employee benefits

(1). Accounting of short-term employee benefits

Applicable" Not applicable"

Short-term employee benefits include salaries, bonuses, allowances and subsidies, benefit expense, medical insurance costs, maternity insurance costs, work injury insurance costs, house provident fund expenses, labor union expense and education expense, and non-monetary benefits. The Company recognizes the short-term employee benefits that are incurred during an accounting period in which the corresponding services are rendered as liabilities and carry them into current profit/loss or relevant cost of an asset. All non-monetary benefits are measured at fair value.

(2). Accounting of post-employment benefits

Applicable Not applicable

Post-employment benefits include defined benefit plans and defined contribution plans. Defined contribution plans include among others basic pension insurance plan and unemployment insurance, the contribution amounts are recognized into relevant costs of assets or current profit and loss when incurred. The defined benefit plan provided by the Company are life subsidies and medical benefits for retirees under national policies, the Company's provisions and the years retirees have worked for the Company.

An actuarial valuation is performed on the balance sheet date on defined benefit plans, with the gain or loss from actuarial valuation recognized into other comprehensive income. Service cost and net interest on the net defined benefit liability or asset.

(3). Accounting of termination benefits

Applicable Not applicable

Termination benefits are compensations provided for employees to terminate employment before expiry or to encourage employees to leave service voluntarily. Termination benefits are carried into employee benefits liability and into current profit and loss when paid. Termination benefits expected not to be fully settled within 12 months after the end of the annual reporting period are treated as other long-term employee benefits.

The Company provides social insurance and life allowances for internal retirees before they are formally retired. The internal retirement plan is subject to the same principle as the sad termination benefits. Salaries and social insurance premiums to be paid by Group for employees subject to internal retirement plan from the date when they stop rendering services to the date when they reach legal retirement ages, are recognized as liabilities and recorded into current profit and loss (termination benefits), if the criteria for recognition of expected liabilities are met.

(4). Accounting of other long-term employee benefits

Applicable Not applicable

Other long-term employee benefits provided for employees are subject to accounting treatment for defined contribution plans if appropriate, and otherwise, subject to the accounting treatment for defined benefit plans.

34. Lease liabilities

Applicable Not applicable

On the commencement date of lease, the Company recognizes a right-of-use asset and a lease liability, short-term leases and low-value leases that should be subject to the simplified approach are exempted.

A lease liability is initially measured at the present value of the lease payments payable over the lease term. Lease payments are the payments made by the Company to the lessor for the right to use the underlying asset over the lease period, including:

- (1) fixed payments (including in-substance fixed payments), less any lease incentives receivable (if any);
- (2) variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- (3) the exercise price of a purchase option that the Company is reasonably certain to exercise;
- (4) payments for terminating the lease provided that the lease term reflects that the Company will exercise the termination option;
- (5) amounts expected to be payable by the Company under residual value guarantees.

In calculating the present value of lease payments, the Company uses the interest rate implicit in the lease as the discount rate; if the rate cannot be determined, the Company uses its incremental borrowing rate.

After the commencement date of lease, the Company uses a fixed periodical interest rate to calculate the interest on the lease liability over each period in the lease term and recognizes it into current profit and loss or relevant costs of asset. After the commencement date of lease, the Company will re-measure the lease liability at the present value of changed lease payments in the event of any change in-substance fixed payments change, in the amounts expected to be payable under residual value guarantees, the index or rate used for determining the lease payments, the assessment result or actual exercise of purchase option, renewal option or termination option.

35. Estimated liabilities

Applicable" Not applicable"

An estimated liability is recognized when an obligation occurs with respect to a contingency and meets the following three criteria.

- (1) It is a present obligation of the Company;
- (2) Its performance probably causes outflow of economic benefits;
- (3) The amount of the obligation can be reliably measured.

If the payment needed for an estimated liability is expected to be compensated wholly or partially by a third party or other parties or when the Company basically ascertains that the compensation can be received, the compensation is recognized as an asset to the extent that the amount is not higher than the carrying value of the recognized liability.

On the balance sheet date, the Company reviews the carrying value of an estimated liability, and adjust the carrying value at the current best estimate if conclusive evidence indicates that the carrying value cannot truly reflect the current best estimate.

Given that the Company has planned to expand its module business, in order to provide assured after-sales service for module customers, the Company provides module quality guarantee deposit at 1% of module sales revenue in accordance with the relevant provisions of Accounting Standard for Enterprises No. 13 - Contingencies, and with reference to practices of major peer companies. These deposits are recognized as an estimated liability when the aforesaid conditions for recognition of estimated liabilities are met.

36. Share-based payment

Applicable" Not applicable"

37. Other financial instruments including preference share and perpetual bond

Applicable" Not applicable"

38. Revenue**(1). Accounting policies for revenue recognition and measurement**

Applicable" Not applicable"

- (1) principles for recognition of revenues

Revenue is the total inflow of economic benefits formed in the daily operating activities of the Company, which will lead to the increase of owner's equity and is not related to the capital invested by owners.

The Company recognizes a revenue when it satisfies the performance obligation in the contract, i.e., the customer obtains control of the good or service.

Where two or more performance obligations are included in the contract, the Company allocates the transaction price to each performance obligation on the basis of the relative stand-alone selling prices of each distinct good or service promised in the contract, and then measures revenue at the transaction price allocated to each performance obligation.

The transaction price is the amount of consideration to which the Company expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties. The Company recognizes the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Amounts expected to be refunded to a customer is not included into the transaction price. For a contract with a significant financing component, the Company calculates the transaction price as the amounts payable in cash by the customer when it would obtain control of the good or service. The difference between such amount and the contract consideration is amortized over the contract term with effective interest method. The significant financing component is not considered if on the start date of the contract Company expects that the period from the customer obtains control over the good or service to the customer pays the price is no longer than one year.

A performance obligation is satisfied over a period if one of the following criteria is met, otherwise, it is satisfied at a point of time:

- 1) customer receives and consumes the economic benefits from the Company's satisfaction of the performance obligation as it is satisfied by the Company;
- 2) customer is able to control work-in-process created by the Company in satisfying the performance obligation;
- 3) goods created by the Company during the obligation performance does not have an alternative use

and the Company has an enforceable right to payment for performance completed to date.

For a performance obligation satisfied over a period of time, the Company recognizes the revenue based on the performance progress over the period. If no reasonable and reliable measure of progress can be made, revenue is generally recognized to the extent of costs incurred until a reasonable method can be determined if the costs incurred are expected to be compensated.

The Company recognizes a revenue when it satisfies the performance obligation at the point in time when control of the good or service is transferred to the customer. A customer obtains control of a good or service if the following indicators are met:

- 1) the Company presents right to payment for the good or service;
- 2) the Company has transferred physical possession of the good or service to the customer;
- 3) the Company has transferred to the customer the significant risks and rewards of ownership of the good;
- 4) customer has accepted the good or services.

The Company's unconditional right (only conditional on the passage of time) to consideration is presented as an account receivable. The Company's right to consideration in exchange for goods or services that the Company has transferred to a customer, when that right is conditioned on something other than the passage of time is presented as a contract asset; a provision for impairment on a contract asset is established at the expected credit loss. The Company's obligation to transfer goods or services to a customer when it has received the consideration is presented as a contract liability.

(2) Recognition methods

1) Revenue from sale of goods

A revenue is recognized when control of goods is transferred to a customer.

The Company mainly produces and sells high-purity polysilicon, cells and modules, polyvinyl chloride, sodium hydroxide and cement, feed, fish, pigs, ducks and other products, which belong to the performance obligations satisfied at a point in time.

Criteria for revenue recognition for products sold in Chinese mainland: the Company has delivered products to the purchaser under the contract and the products have been received via signature by the purchaser or the shipping company engaged by the purchase; the sale amount is determined; the collection has occurred or the Company has received the certificate of right to collect; relevant inflow economic benefits are probable; and the cost of products can be reliably measured.

Criteria for revenue recognition for products sold outside Chinese mainland: under International Rules for the Interpretation of Trade Term and given revenue recognition principles and the Civil Code, a revenue is recognized at the point in time when control of the products is transferred to a customer.

The Company sells electricity generated by PV powerplants and recognizes a revenue when the electricity connected to the grid is confirmed with the grid company.

2) Revenue from rendering of services

The Company renders services including construction and equipment installation that fall into the scope of performance obligations over a period of time. The Company recognizes revenue over time by measuring the progress toward complete satisfaction of that performance obligation, with the progress calculated at the percent of costs incurred to the budget costs. Revenue should be recognized only to the extent of costs incurred are expected to be compensated. Otherwise, the costs incurred are carried into current profit and loss.

3) Revenue from transfer of right-of-use assets

The revenue is recognized over the period of a right-of-use asset under the straight line method.

(2). Accounting policies for revenue recognition of the same class of operating activities differ by operating models

Applicable" Not applicable"

39. Contract costs

Applicable" Not applicable"

Contract costs are classified into costs to obtain a contract and costs to fulfill a contract.

(1) Costs to fulfill a contract

The costs to fulfill a contract is recognized as an asset when the following criteria are met:

1) The costs relate directly to a contract or an anticipated contract, including direct labor, direct materials, manufacturing costs (or similar costs), costs that are explicitly chargeable to the customer under the contract and other costs that are incurred only because the Company entered into the contract.

2) The costs enhance resources of the Company that will be used in satisfying performance obligations

in the future.

3) The costs are expected to be recovered.

The asset is presented in either inventories or other current assets depending on whether the amortization period determined upon initial recognition is over a normal operating cycle.

(2) Costs to obtain a contract

The costs of obtain a contract is recognized as an asset if the Company expects to recover the incremental costs of obtaining a contract.

The incremental costs are those costs that the Company incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, a sales commission). The costs are carried into current profit and loss when incurred if the amortization period is not over a year.

(3) Amortization of contract costs

The asset recognized for contract costs is amortized on a systematic basis consistent with the pattern of the transfer of the goods or services to which the asset relates, at the point in time or over a period of time, and carried into current profit and loss.

(4) Impairment on contract costs

The Company shall recognize an impairment loss in profit or loss to the extent that the carrying value of an asset relating to contract costs exceeds: the amount of consideration that the Company expects to receive in the future and that the Company has received but not yet recognized as revenue, in exchange for the goods or services to which the asset relates ("the consideration"), less the costs that relate directly to providing those goods or services and that have not been recognized as expenses, and further considers whether it is necessary to establish an estimated liability relating to a contract that leads to loss:

1) the amount of consideration that the Company expects to receive in the future and that the Company has received but not yet recognized as revenue, in exchange for the goods or services to which the asset relates;

2) the costs that relate directly to providing those goods or services and that have not been recognized as expenses.

After the impairment provision is established, if change in impairment factors from the previous period causes that the difference between the above two amounts is higher than the carrying value of the asset, the impairment provision is reversed and carried into current profit and loss to the extent that the carrying value after the reversal does not exceed its carrying value on the reversal date should the provision was not established.

40. Government grants

"√ Applicable" "□ Not applicable"

(1) Judgment basis for and accounting treatment for grants related to assets

Grants related to assets are government grants which the Company obtains to purchase, construct or otherwise acquire long-term assets; if the subjects of a grant are not explicitly stated in the government document, the basis for classifying the grant into a grant related to assets or a grant related to income is explained in sub items.

Accounting treatment: The Company recognizes the grant as deferred income that is evenly carried into current profit and loss over the useful life of the asset (i.e., the depreciation and amortization period) from the asset reaches the its intended use condition. The remaining deferred income is recognized into current profit and loss if the asset is disposed before its useful life expires. But a grant measured at its nominal amount is directly recognized into current profit and loss.

(2) Judgment basis for and accounting treatment for grants related to income

Grants related to income are government grants other than those related to assets.

Accounting treatment:

1) Grants related to income are recognized as deferred income if they are used to compensate relevant expenses or losses to be incurred; and they are carried into current profit and loss or to write down relevant costs when relevant expenses are recognized.

2) Grants related to income are directly carried into current profit and loss or to write down relevant costs if they are used to compensate relevant expenses or losses that the Company has incurred.

3) When should grants are recognized

A government grant is recognized when the Company complies with the conditions attaching to it and the grant will be received.

4) Measurement of grants

If a grant is a monetary asset, it is measured at the amount received or receivable; if a government grant is a non-monetary asset, it is measured at fair value, or at nominal value if the fair value cannot be

obtained reliably.

41. Deferred tax assets/ deferred tax liabilities

Applicable" Not applicable"

Income tax is accounted for under the balance sheet liability method.

A deferred tax asset is recognized for deductible temporary differences to the extent that it is probable that such temporary differences will reverse in the foreseeable future and that taxable profit will be available against which the temporary difference will be utilized.

On balance sheet date, current tax assets and tax liabilities for the current and prior periods are measured at the amount expected to be paid to (recovered from) taxation authorities; deferred tax assets and deferred tax liabilities are measured on the balance sheet date at tax rates applicable to the periods during which such assets are expected to be recovered or such liabilities are expected to be discharged.

The carrying values of deferred tax assets and deferred tax liabilities are reviewed on the balance sheet date. Current and deferred tax is recognized as income or expense and included in profit or loss for the period, except to the extent that the tax arises from transactions or events that are recognized directly in owner's equity and business combinations.

42. Lease

(1). Accounting for operating leases

Applicable" Not applicable"

(2). Accounting for financial leases

Applicable" Not applicable"

(3). Determination of and accounting for lease under new lease standards

Applicable" Not applicable"

A lease is a contract under which the lessor agrees to allow a lessee to control the use of one or more identified assets for a stated period of time in exchange for consideration. The Company assesses whether a contract is a lease or contains a lease on the commencement date of the contract.

(1) Company as lessee

1) Initial measurement

On the commencement date of a lease, the Company recognizes a right-of-use asset for the asset that it can use over the lease period and a lease liability for the present value of lease payments that it has not made, short-term leases and low-value leases are exempted. In calculating the present value of lease payments, the Company uses the interest rate implicit in the lease as the discount rate; if the rate cannot be determined, the Company uses its incremental borrowing rate.

The amount of initial measurement of a right-of-use asset includes:

① the amount of the initial measurement of the lease liability;

② payments made at or before the commencement date of the lease, less any lease incentives received (if any);

③ any initial direct costs incurred by the Company;

④ an estimate of costs to be incurred when the Company removes the asset, restore the place where the asset is installed or restore the asset to the condition agreed by the lease terms (excluding costs incurred to produce inventories).

The amount of the initial measurement of the lease liability includes:

① fixed payments (including in-substance fixed payments), less any lease incentives receivable (if any);

② variable lease payments that depend on an index or a rate;

③ the purchase exercise price of a purchase option that the Company is reasonably certain to exercise;

④ payments for terminating the lease provided that the lease term reflects that the Company will exercise the termination option;

⑤ amounts expected to be payable by the Company under residual value guarantees.

2) Subsequent measurement

The depreciation of right-of-use assets are established under Accounting Standard for Business Enterprises No. 4 - Fixed Assets. Depreciation of a lease asset is provided over remaining useful life of a right-of-use asset if the Company is able to reasonably determine that it will obtain the ownership of the asset upon the lease term expires. Otherwise, the depreciation is provided over the shorter of the remaining useful life and the lease term.

The Company uses a fixed periodical interest rate to calculate the interest on the lease liability over each period in the lease term and recognizes it into current profit and loss or relevant costs of asset. The variable lease payments not included into the measurement of a lease measurement is included into current profit and loss or relevant costs of asset when incurred.

After the commencement date of lease, the Company will re-measure the lease liability at the present value of changed lease payments in the event of any change in-substance fixed payments change, in the amounts expected to be payable under residual value guarantees, the index or rate used for determining the lease payments, the assessment result or actual exercise of purchase option, renewal option or termination option, and the carrying value of the right-of-use asset is adjusted accordingly. The remaining amount is included into current profit and loss if the lease liability needs to be further reduced after the carrying value of the right-of-use asset has been written down to zero.

3) Short-term leases and low-value leases

A short-term lease is a lease that, at the date of commencement, has a term of 12 months or less, and does not contain any purchase option; a low-value lease is a lease for which the underlying asset, when new, is not over 50,000.00 yuan.

4) Lease modification

A lease modification is a change in the scope of a lease, or the consideration for a lease, that was not part of the original terms and conditions of the lease, including adding or removing the right to use one or more underlying assets, shortening or extending the contractual lease term, and so on. The effective date of a lease modification is the date on which both parties agree to the lease modification.

The Company accounts for a lease modification as a separate lease if both of the following conditions exist:

- ① the modification increases the scope of the lease or extends the lease term by adding the right to use one or more underlying assets; and
- ② the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope or for the extension in the lease term, as adjusted for the particular circumstances of the contract.

For a modification that is not a separate lease, the Company re-allocates the consideration after the modification, re-determine the lease term, and re-measure the lease liability using a revised discount rate and the revised term payments determined at the modification date. In calculating the present value of the revised lease payments, the Company uses the interest rate implicit in the remaining lease as the discount rate; if the rate cannot be determined, the Company uses its incremental borrowing rate on the effective date of the lease modification.

If a lease modification leads to a decreased lease scope or a shortened lease term, the Company adjusts the carrying value of the right-of-use asset to reflect the partial or whole termination of the lease, and include the gain or loss from the partially or wholly terminated lease into current profit and loss. The Company adjusts the carrying value of the right-of-use asset if any other lease modification leads to the re-measurement of the lease liability.

(2) Company as lessor

A lease is classified into either a financial lease or an operating lease on the commencement of the date depending on the substance of the transaction. A financial lease is a type of lease in which all risks and rewards relating to ownership of the lease asset are substantially transferred. All other leases are operating leases.

1) Operating lease

The Company recognizes lease payments as the rental income over the lease term on a straight line basis. Variable lease payments not included into the lease payments that are related to an operating lease are included into current profit and loss when incurred.

2) Financial lease

The Company recognizes the lease payments and de-recognizes the lease asset on commencement date of the lease. Lease payments receivable are initially measured at net investment in the lease (the sum of the un-guaranteed residual value and the present value of the lease payments that are not yet received on commencement date of the lease discounted at the interest rate implicit in the lease), and the interest income over the lease term is recognized at the fixed periodical interest rate. The variable lease payments

not included into the measurement of the net investment in a lease is included into current profit and loss when incurred.

(3) Leaseback

1) Company as seller and lessee

The Company determines whether the transfer of the asset in a leaseback qualifies as a sale.

① If the transfer does not qualify as a sale, the Company continues to recognize the asset on its balance sheet and accounts the received cash as a financial liability subject to the Accounting Standard for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments (2017).

② If the transfer qualifies as a sale, the Company measures the right-of-use asset from the leaseback at the proportion of the previous carrying value that is retained for use by the Company and recognizes a gain or loss only to the extent that the right is transferred to the buyer and lessor. The Company makes the following adjustments if the fair value of the consideration for the sale of an asset does not equal the fair value of the asset, or if the payments for the lease are not at market rates;

A. Any below-market terms shall be accounted for as a prepayment of lease payments; and

B. Any above-market terms shall be accounted for as additional financing provided by the buyer-lessor to the seller-lessee. At the same time, the lesser adjusts its sale gain or loss at fair value and the lessor adjusts the rental income at market rates.

The Company makes the adjustment by one of the following amounts that is easier to be determined:

A. difference between the fair value of the consideration for the sale of the asset and the fair value of the asset;

B. difference between the present value of the payments for the lease and the present value of the rent at market rates.

2) Company as buyer and lessor

If the transfer does not qualify as a sale, the Company does not recognize the asset, but accounts the cash paid as a financial asset subject to the Accounting Standards for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments (2017).

43. Other significant accounting policies and accounting estimates

Applicable" Not applicable"

44. Changes in significant accounting policies and accounting estimates

(1). Changes in significant accounting policies

Applicable" Not applicable"

Changes in accounting policies and reasons	Approval procedures	Notes (names and amounts significantly impacted)
The Ministry of Finance issued the "Interpretation No. 15 of Accounting Standard for Business Enterprises" (Cai Kuai [2021] No. 35) ("Interpretation No. 15") on December 31, 2021, which clarifies the accounting treatment of products or by-products produced by enterprises for sales before the fixed assets reach the intended usable state or during the research and development process. According to relevant provisions of Interpretation No. 15, the Company implemented the relevant provisions of Interpretation No. 15 and make retrospective adjustments from January 1, 2022.	28th meeting of the 7th board of directors, and 27th meeting of the 7th supervisory committee	Refer to other notes for details
On December 13, 2022, the Ministry of Finance and the Ministry of Emergency Management jointly issued the Management Measures for Workplace Safety Costs (Cai Zi [2022] No. 136), which expanded the scope of application and revised some of the standards for providing safety costs for companies. The Company implemented the latest requirement on provision and use of workplace safety costs from December 2022.	7th meeting of the 8th board of directors, and 6th meeting of the 8th supervisory committee	The newly revised Management Measures for Workplace Safety Costs by the Ministry of Finance and the Ministry of Emergency Management shall be implemented from the date of issuance. This requires a prospective application without the need for

		retrospective adjustments, and will not affect the Company's financial status and operating results in previous years.
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Other notes

Prior to the change in accounting policies, for the sale of products or by-products produced and sold before the fixed assets reached their planned usable state, the Company recognized these fixed assets as "construction in progress"; after the change, the sale revenue and sale cost will be separately recognized as "operating revenue" and "operating cost". Prior to the change in accounting policies, the Company recognized costs of sale of products or by-products from research and development process as "R&D cost"; after the change, such costs will be recognized as "operating cost".

The said changes in accounting policies have no impact on the comparative financial statements of the parent company for previous periods. The retrospective adjustments of comparative consolidated financial statements are as follows:

(1) Consolidated balance sheet

Unit: Yuan Currency: CNY

Item	Balance on December 31, 2021		
	Before adjustment	After adjustment	Adjustment
Fixed assets	37,299,171,038.78	36,958,671,998.09	-340,499,040.69
Construction in progress	10,636,400,885.06	10,610,819,753.03	-25,581,132.03
Deferred tax assets	600,832,119.58	612,117,399.13	11,285,279.55
Undistributed profit	15,544,604,417.32	15,225,053,765.81	-319,550,651.51
Minority interest	4,154,029,179.80	4,118,784,938.14	-35,244,241.66

(2) Consolidated profit statement

Unit: Yuan Currency: CNY

Item	2021 amount		
	Before adjustment	After adjustment	Adjustment
Operating revenue	63,491,070,520.12	64,829,996,083.91	1,338,925,563.79
Operating cost	45,918,101,338.17	48,382,829,594.08	2,464,728,255.91
Sales expense	918,970,450.73	919,009,792.93	39,342.20
Management expense	2,947,649,906.71	2,951,233,971.46	3,584,064.75
R&D cost	2,035,847,045.43	1,025,715,488.68	-1,010,131,556.75
Income tax expense	1,647,522,380.67	1,648,944,454.00	1,422,073.33
Net profit attributable to owners of the parent	8,207,920,822.18	8,109,125,091.40	-98,795,730.78
Gain and loss of minatory interest	534,298,848.66	512,377,963.79	-21,920,884.87

(3) Consolidated cash flow statement

Unit: Yuan Currency: CNY

Item	2021 amount		
	Before adjustment	After adjustment	Adjustment
Cash received from sales of goods and rendering of services	56,533,317,822.08	57,872,243,385.87	1,338,925,563.79
Cash paid for purchase of goods and services	44,658,781,109.98	46,141,587,117.16	1,482,806,007.18
Cash paid for acquisition or construction of fixed assets, intangible assets and other long-term assets	13,975,125,087.15	13,831,244,643.76	-143,880,443.39

No other changes in significant accounting policies occurred in the reporting period except for the said change.

(2). Changes in significant accounting estimates

"√Applicable" "□Not applicable"

Changes in accounting estimates and reasons for change	Approval procedures	Starting time of application	Notes (names and amounts significantly impacted)
Due to updated photovoltaic industry with accelerated technological upgrading, the current depreciation period applied to machinery and equipment used by the Company no longer properly reflects the actual usage status of fixed assets. In order to more fairly reflect the financial status and operating results, and improve the quality of accounting information, out of prudence, the Company has adjusted the depreciation period applied to machinery and equipment in the solar cell and related processes from 10 years to 6 years, effective from January 1, 2022.	28th meeting of the 7th board of directors, and 27th meeting of the 7th supervisory committee	January 1, 2022	For this change in accounting estimate, the prospective application will be used. This change will not have any impact on the financial position and operating results of the Company for prior years, and therefore, there is no need for retrospective adjustments.
Against the backdrop of global carbon neutrality, leveraging on the leading advantages in high-purity polysilicon and solar cell areas, as well as the accumulated technology and market foundation in solar modules over the years, the Company is aligned with national dual-carbon targets and industry development trends, planning to make appropriate expansions in the module area, so as to further enhance its overall competitiveness. Given that the Company has planned to expand its module business, in order to provide assured after-sales service for module customers, the Company provides module quality guarantee deposit at 1% of module sales revenue in accordance with the relevant provisions of Accounting Standard for Business Enterprises No. 13 - Contingencies, and with reference to practices of major peer companies.	4th meeting of the 8th board of directors, and 3th meeting of the 8th supervisory committee	September 22, 2022	For this change in accounting estimate, the prospective application will be used. This change will not have any impact on the financial position and operating results of the Company for prior years and for prior months, and therefore, there is no need for retrospective adjustments.

(3). Adjustments of financial statements at the beginning of the year for which new accounting standards or interpretations are applied for the first time in 2022

"□ Applicable" "√ Not applicable"

45. Others

"□ Applicable" "√ Not applicable"

VI. Taxes**1. Major tax types and tax rates**

Major tax types and tax rates

"√ Applicable" "□ Not applicable"

Tax type	Tax basis	Tax rate
VAT	Sales amount	0%, 3%-5%, 6%, 9%, 13%
Urban construction and maintenance tax	Turnover tax payable	1%-7%
Corporate income tax	Turnover tax payable	15%, 16.5%, 17%, 20%, 25%

Education surcharge	Turnover tax payable	3%
Local education surcharge	Turnover tax payable	2%
Land use tax	Area of used land	Local provisions
Property tax	Original value x 70%, rent	1.2%, 12%

Disclose the circumstance when different corporate income tax payers exist

Applicable Not applicable

2. Tax preferences

Applicable Not applicable

(1) VAT

Sale of feed by domestic companies is exempt from value added tax under the Cai Shui [2001] No. 121 document from the Ministry of Finance and the State Taxation Administration.

Sale of cement by Sichuan Yongxiang New Materials Co., Ltd. is entitled to an immediate refund of 70% VAT exempted from value added tax under the Cai Shui [2015] No. 78 document from the Ministry of Finance and the State Taxation Administration.

Sale of agricultural products directly produced by some subsidiaries in livestock farming business including Nanjing Tongwei Aquaculture Technology Co., Ltd. and Hainan Haiyi Aquatic Seed Co., Ltd. is exempt from value-added tax under the Temporary Regulations on VAT of the People's Republic of China (No. 538 order from the State Council) and the Implementation Rules on the Temporary Regulations on VAT of the People's Republic of China (No. 50 order from the Ministry of Finance and the State Taxation Administration).

The Company's transfer of the right of use of land to agricultural producers for the purpose of agricultural production is exempted from value added tax from May 1, 2016 under the Cai Shui [2016] No. 36 document from the Ministry of Finance and the State Taxation Administration.

(2) Corporate income tax

1) Consolidated tax payment for cross-region operations

The collection provisions for corporate income tax in respect of the parent company (including the head office administration and all branches), Tongwei Agriculture Development Co., Ltd. and its branches are "untied calculations, tiered administration, local prepayments, consolidated clearing, and treasury adjustment" in accordance with the Corporate Income Tax Law and the Procedures for Collection of Consolidated Corporate Income Tax for Cross-region Operations ((2012) No. 57 Announcement of the State Taxation Administration).

2) Units entitled to corporate income tax preference for enterprises for China Western Development

The Announcement on Continuing the Corporate Income Tax for Enterprises for China Western Development ((2020) No.23 Announcement of the National Development and Reform Commission) jointly released by the Ministry of Finance, the State Taxation Administration and the National Development and Reform Commission provided for that enterprises in encouraged industries established in west China are entitled to income tax rate of 15% from January 1, 2021 to December 31, 2030. Tongwei Agricultural Finance Guarantee Co., Ltd., Sichuan Tongwei Sanlian Aquatic Products Co., Ltd., Sichuan Yongxiang Polysilicon Co., Ltd., Sichuan Yongxiang New Materials Co., Ltd., Sichuan Yongxiang New Energy Co., Ltd., Sichuan Yongxiang Silicon Materials Co., Ltd., Sichuan Yongxiang PV Technology Co., Ltd., Inner Mongolia Tongwei high-purity polysilicon Company Co., Ltd., Yunnan Tongwei high-purity polysilicon Company Limited, Tongwei Solar (Chengdu) Co., Ltd., Tongwei Solar (Meishan) Co., Ltd., Tongwei Solar (Jintang) Co., Ltd., Tonghe New Energy (Jintang) Co., Ltd. and PV powerplant companies are entitled to this reduction.

3) Subsidiaries approved as high-tech enterprises that are entitled to income tax rate of 15%

Guangdong Tongwei Feed Co., Ltd. was approved as a high-tech enterprise in 2020 (No. GR202044000114).

Jieyang Tongwei Feed Co., Ltd. was approved as a high-tech enterprise in 2021 (No. GR202144000333).

Zhuhai Haiyi Aquatic Products Feed Co., Ltd. was approved as a high-tech enterprise in 2021 (No. GR202144012792).

Sichuan Willtest Technology Co., Ltd. was approved as a high-tech enterprise in 2021 (No. GR202151001355).

Sichuan Fusion Link Co., Ltd. was approved as a high-tech enterprise in 2020 (No. GR202051001569).

Chengdu Tongwei Automation Equipment Co., Ltd. was approved as a high-tech enterprise in 2021

(No. GR202151001846).

Chengdu Tongwei Animal Nutrition Technology Co., Ltd. was approved as a high-tech enterprise in 2022 (No. GR202251001505).

Tongwei Solar (Hefei) Co., Ltd. was approved as a high-tech enterprise in 2021 (No. GR202134000919).

Tongwei Solar (Anhui) Co., Ltd. was approved as a high-tech enterprise in 2020 (No. GR202034000630).

4) Subsidiaries engaged in seawater mariculture and inland aquaculture with entitlement in 50% reduction of income tax

The Article 86 of the Implementation Regulations on the Enterprise Income Tax of the People's Republic of China issued on December 6, 2007, the income from in mariculture and inland aquaculture is subject to 50% reduction in income tax. Subsidiaries including Hainan Haiyi Aquatic Seed Co., Ltd., Zhanjiang Haiyi Aquatic Seed Co., Ltd., Tongwei Aquaculture-Photovoltaic Integration (Rudong) Co., Ltd. Chengdu Tongwei Aquatic Seed Co., Ltd., Qingdao Hairen Aquatic Seed Industry Technology Co., Ltd., and Nanjing Tongwei Aquaculture Technology Co., Ltd. are entitled to this tax preference.

5) Overseas subsidiaries entitled to tax preferences

The 218/2013/N-CP document issued by the Government of Vietnam on December 26, 2013, the statutory rate of corporate income tax in Vietnam was reduced to 20% from January 1, 2016. The tax preferences to which Heping Tongwei Co., Ltd. is entitled: a 10-year preference period for its feed business from the start of the production and operation, exemption from income tax for two years and 50% income tax for four years from the start of the profitability period. The tax preferences to which Qianjiang Tongwei Co., Ltd. is entitled: a 15-year preference period for its feed business from the start of the production and operation during which the tax rate is 10%, exemption from income tax for four years and 50% income tax for nine years from the start of the profitability period.

For Tongwei Feed Mill Bangladesh Ltd., the interest income on bank deposits out of its total profit is subject to an income tax rate of 35% (10% is withheld by banks), net income from non-operating activities is subject to an income tax rate of 35%. The profit net of interest income and non-operating income is subject to multi-level income tax rate: 0% for the amount less than (including) 1 million BDT; 5% for the amount between 1 and 2 million BDT (including 2 million); 10% for the amount between 2 million and 3 million BDT (including 3 million); and 15% for the amount over 3 million BDT.

6) Tax preferences for public infrastructure projects with key national supports

According to the Notice of the Ministry of Finance of the People's Republic of China and State Taxation Administration on Relevant Issues Concerning the Implementation of the Preferential Catalog of Enterprise Income Tax for Public Infrastructure Projects (Cai Shui 2008 [46]), the income from investment and operation of enterprises engaged in public infrastructure projects supported by the State are exempt from enterprise income tax from the first to the third year starting from the tax year in which the first production and operation income of the project is obtained, and the enterprise income tax is halved from the fourth to the sixth year.

According to the provisions of Cai Shui [2008] No. 116, new solar power generation projects approved by the competent investment department of the government are public infrastructure projects. Now, new PV power plants of the subsidiaries of Tongwei New Energy Co., Ltd. have been connected to the grid for power generation, are entitled to the three-year exemption and three-year 50% reduction of income tax.

3. Others

Applicable" Not applicable"

VII. Notes to items in consolidated financial statements

1. Cash at bank and on hand

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Cash on hand	152,905.98	109,314.50
Cash at bank	36,810,223,406.34	2,894,022,360.61
Other cash at bank and on hand	31,195,817.69	107,799,207.27
Total	36,841,572,130.01	3,001,930,882.38
Including: total deposits overseas	104,247,603.68	205,052,603.96

Other notes

For details on cash at bank and on hand that are restricted at the end of the period, refer to “Assets with restricted ownership or use right”.

The cash at bank and on hand of 1,622,156,249.99 yuan, which are not restricted in their use and have not been used as cash and cash equivalents, are fixed-term deposits held by the Company that are intended to be held until maturity and accrue interest at the fixed deposit rate. Such deposits are not classified as cash and cash equivalents because the purpose of the Company holding such deposits is not to meet short-term liquidity needs for external payments, but rather to earn interest income.

2. Held-for-trading financial assets

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Financial assets measured at fair value through current profit and loss	4,298,524,475.70	10,617,668.58
Including:		
Debt investments	4,278,667,572.63	
Derivative financial assets	19,856,903.07	10,617,668.58
Total	4,298,524,475.70	10,617,668.58

Other notes:

Applicable" Not applicable"

Note 1: Debt instrument investments refer to bank structured deposits and wealth management products purchased by the Company.

Note 2: The derivative financial assets refer to paper gains resulting from the difference between the locked exchange rate in the undelivered forward foreign exchange contract and the central parity rate at the end of the period.

3. Derivative financial assets

Applicable" Not applicable"

4. Notes receivable**(1). Presentations of notes receivable**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Banker's acceptance		
Commercial acceptance		200,000,000.00
Letters of credit	2,450,913,663.89	1,376,925,682.02
Total	2,450,913,663.89	1,576,925,682.02

(2). Notes receivable pledged by the Company as of the end of the period

Applicable" Not applicable"

(3). Notes receivable endorsed or discounted by the Company as of the end of the period that have not been due on the balance sheet date

Applicable" Not applicable"

(4). Notes that have been converted by the Company to other receivables due to non-performance of issuers as of the end of the period

Applicable" Not applicable"

(5). Disclosure by method for creation of provision for bad debts

Applicable" Not applicable"

Creation of provision for a single bad debt:

Applicable" Not applicable"

Creation of provision for a group of bad debts:

Applicable" Not applicable"

Refer to disclosure of other receivables if the provision for bad debts is created under the general model for expected credit loss:

Applicable" Not applicable"

(6). Provision for bad debts

Applicable" Not applicable"

(7). Notes receivable written off in the current period

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

5. Accounts receivable**(1). Disclosure by age**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Age	Closing book balance
Within 1 year	
In which: Within 1 year	
Within 1 year	3,791,028,295.86
Within 1 year	3,791,028,295.86
1- 2 years	402,092,947.42
2- 3 years	401,470,215.73
Over 3 years	210,301,102.61
Total	4,804,892,561.62

(2). Disclosure by method for creation of provision for bad debts

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Category	Closing balance					Opening balance				
	Book balance		Provision for bad debts		Carrying value	Book balance		Provision for bad debts		Carrying value
	amount	Percent (%)	amount	Provision (%)		amount	Percent (%)	amount	Provision (%)	
Creation of provision for a single bad debt	67,797,723.02	1.41	2,048,007.32	3.02	65,749,715.70	103,540,864.18	3.27	1,035,408.64	1.00	102,505,455.54
Creation of provision for a group of bad debts	4,737,094,838.60	98.59	301,481,924.16	6.36	4,435,612,914.44	3,064,741,941.20	96.73	251,720,247.66	8.21	2,813,021,693.54
Including:										
Group 2	1,416,738,083.83	29.49	65,681,707.01	4.64	1,351,056,376.82	1,435,401,418.99	45.30	68,054,324.68	4.74	1,367,347,094.31
Group 3						17,350.00	0.00			17,350.00
Group 4	3,320,356,754.77	69.10	235,800,217.15	7.10	3,084,556,537.62	1,629,323,172.21	51.43	183,665,922.98	11.27	1,445,657,249.23
Total	4,804,892,561.62	/	303,529,931.48	/	4,501,362,630.14	3,168,282,805.38	/	252,755,656.30	/	2,915,527,149.08

Creation of provision for a single bad debt:

Applicable" Not applicable"

Unit: Yuan Currency: CNY

name	Closing balance			
	Book balance	Provision for bad debts	Provision (%)	Provision reason
Price of feed delivered to overseas customers secured by banks	66,002,392.49	660,023.92	1.00	Note 1
Other accounts receivable with individual provision for bad debts	1,795,330.53	1,387,983.40	77.31	
Total	67,797,723.02	2,048,007.32	3.02	/

Note on creation of individual provision for bad debts:

Applicable" Not applicable"

Note 1: Price of feed delivered to overseas customers are fully secured by local banks. The security banks will make payments unconditionally when the payments are due, which are at a low risk, the provision percentage is set as 1% accordingly.

Creation of provision for a group of bad debts:

Applicable" Not applicable"

Creation of provision for groups: Group 2

Unit: Yuan Currency: CNY

name	Closing balance		
	Accounts receivable	Provision for bad debts	Provision (%)
Power supply companies (desulfurization electricity price)	188,857,569.41		
Electricity price subsidies	1,227,880,514.42	65,681,707.01	5.35
Total	1,416,738,083.83	65,681,707.01	4.64

Criteria for recognizing accounts receivables regarding the creation of provision for a group of bad debts:

Applicable" Not applicable"

The desulfurization electricity prices are recovered within the settlement period for no risk, no provision for bad debts is created; electricity price subsidies have been included into the national subsidy catalog, the subsidies that have not been included into the catalog are presented in contract assets.

Creation of provision for groups: Group 4

Unit: Yuan Currency: CNY

name	Closing balance		
	Accounts receivable	Provision for bad debts	Provision (%)
Within 1 year	3,129,134,642.32	156,456,732.12	5.00
1- 2 years	107,530,228.27	10,753,022.83	10.00
2- 3 years	30,202,843.97	15,101,421.99	50.00
Over 3 years	53,489,040.21	53,489,040.21	100.00
Total	3,320,356,754.77	235,800,217.15	7.10

Criteria for recognizing accounts receivables regarding the creation of provision for a group of bad debts:

Applicable" Not applicable"

Refer to disclosure of other receivables if the provision for bad debts is created under the general model for expected credit loss:

Applicable" Not applicable"

(3). Provision for bad debts

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Category	Opening balance	Change in current period				Closing balance
		Provision	Recovered or reversed	Cleared or written off	Other changes	
Creation for a single debt	1,035,408.64	1,012,598.68				2,048,007.32
Risk group	251,720,247.66	103,162,845.27	247,038.82	51,298,405.38	-2,349,802.21	301,481,924.16
Total	252,755,656.30	104,175,443.95	247,038.82	51,298,405.38	-2,349,802.21	303,529,931.48

Note: Other changes are due to the difference in foreign currency translation and the impact of exchange rate fluctuations on financial statements.

Significant amounts recovered or reversed in the current period:

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Entity name	Recovered or reversed amount	Recovery method
Customer 1	125,000.00	Recovery of bad debts in prior period
Customer 2	10,000.00	Recovery of bad debts in prior period
Customer 3	15,129.60	Recovery of bad debts in prior period
Customer 4	28,373.29	Recovery of bad debts in prior period
Customer 5	68,535.93	Recovery of bad debts in prior period
Total	247,038.82	/

(4). Accounts receivable written off in the current period

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Written off amount
Accounts receivable written off	51,298,405.38

Significant accounts receivable written off

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Entity name	Nature of accounts receivable	Written off amount	Write-off reason	Write-off procedure	Whether the amount is generated from a related-party transaction
Customer 1	Loan	22,070,798.37	The payment is expected unrecoverable	Approval under due procedures	No
Customer 2	Loan	4,825,857.88	The payment is expected unrecoverable	Approval under due procedures	No
Customer 3	Loan	2,989,682.17	The payment is expected unrecoverable	Approval under due procedures	No
Customer 4	Loan	2,739,105.00	The payment is expected unrecoverable	Approval under due procedures	No
Customer 5	Loan	2,516,227.31	The payment is expected unrecoverable	Approval under due procedures	No
Customer 6	Loan	2,296,713.28	The payment is expected unrecoverable	Approval under due procedures	No
Customer 7	Loan	1,634,033.44	The payment is expected unrecoverable	Approval under due procedures	No
Customer 8	Loan	1,471,954.85	The payment is expected unrecoverable	Approval under due procedures	No
Customer 9	Loan	1,432,973.03	The payment is expected unrecoverable	Approval under due procedures	No
Customer 10	Loan	1,106,988.82	The payment is expected unrecoverable	Approval under due procedures	No
Other 78 customers	Loan	8,214,071.23	The payment is expected unrecoverable	Approval under due procedures	No
Total	/	51,298,405.38	/	/	/

Note on write-off of accounts receivable:

"□ Applicable" "√ Not applicable"

(5). Top five entities in accounts receivable at the end of the current period

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Entity name	Closing balance	Percent in the total accounts receivable at the end of the period (%)	Closing balance of provision for bad debts
Pig farming company under Tech-bank Note	1,826,730,589.19	38.02	91,336,529.46
Customer 1	655,267,190.12	13.64	32,763,359.51
Customer 2	173,154,105.91	3.60	9,240,931.28
Customer 3	142,908,726.75	2.97	9,017,016.16
Customer 4	115,712,664.21	2.41	6,383,987.23
Total	2,913,773,276.18	60.64	148,741,823.64

Other notes

Note: the age of accounts receivable from the pig farming company under Tech-bank Food Co., Ltd. ("Tech-bank") is within the 1 year and the amount is within the payment term agreed in the contract.

(6). Accounts receivable de-recognized due to transfer of financial assets

"□ Applicable" "√ Not applicable"

(7). Amounts of assets and liabilities generated due to transfer of accounts receivable and continuing involvement

"□ Applicable" "√ Not applicable"

Other notes:

"□ Applicable" "√ Not applicable"

6. Receivables financing

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Banker's acceptances	13,066,496,368.98	11,406,947,347.71
Total	13,066,496,368.98	11,406,947,347.71

Change in receivable financing and change in fair value in the current period:

"□ Applicable" "√ Not applicable"

Refer to disclosure of other receivables if the provision for bad debts is created under the general model for expected credit loss:

"□ Applicable" "√ Not applicable"

Other notes:

"√ Applicable" "□ Not applicable"

(1) The banker's acceptances pledged by the Company at the end of the period totaled 9,665,638,659.50 yuan.

(2) The banker's acceptances endorsed as of the end of the period that have not been due on the balance sheet date totaled 10,192,859,326.46 yuan.

(3) The banker's acceptances discounted as of the end of the period that have not been due on the balance sheet date totaled 31,445,606,956.18 yuan.

The acceptors of the said banker's acceptances are banks with a very low possibility of non-performance, so these banker's acceptances have been de-recognized. The Company will be liable jointly and severally with banks for bearers under the Law of Notes if the notes are not paid when they due.

7. Prepayments**(1). Prepayments by age**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Age	Closing balance		Opening balance	
	Amount	Percent (%)	Amount	Percent (%)
Within 1 year	1,477,431,107.85	99.35	1,592,976,378.78	99.15
1- 2 years	7,294,527.86	0.49	9,894,205.53	0.62
2- 3 years	802,288.11	0.05	1,238,495.57	0.08
Over 3 years	1,645,068.90	0.11	2,435,960.95	0.15
Total	1,487,172,992.72	100.00	1,606,545,040.83	100.00

Note on the reason for significant prepayments over 1 year:

None.

(2). Top five entities in prepayments at the end of the current period

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

The total amount of prepayments from top five entities for the current period is 829,451,693.13 yuan, taking up 55.77% of the total amount of prepayments at the end of the period.

8. Other receivables**Presentation of items**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Interest receivable		
Dividend receivable		
Other receivables	477,514,347.63	611,985,134.57
Total	477,514,347.63	611,985,134.57

Other notes:

Applicable" Not applicable"

Interest receivable**(1). Types of interest receivable**

Applicable" Not applicable"

(2). Significant overdue interest

Applicable" Not applicable"

(3). Provision for bad debts

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

Dividend receivable**(1). Dividend receivable**

Applicable" Not applicable"

(2). Significant interest receivable over 1 year

Applicable" Not applicable"

(3). Provision for bad debts

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

Other receivables**(1). Disclosure by age**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Age	Closing book balance
Within 1 year	
In which: Within 1 year	
Within 1 year	313,924,039.39
Within 1 year	313,924,039.39
1- 2 years	85,395,361.21
2- 3 years	48,547,965.01
Over 3 years	120,425,876.85
Total	568,293,242.46

(2). Classification by nature of payment

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Payment type	Closing book balance	Opening book balance
Performance bond	422,137,512.78	444,273,452.92
Asset disposal		76,665,987.95
Advances	41,079,914.03	38,008,377.28
Government grants		17,593,568.84
Insurance claims	22,111,905.64	4,702.00
Others	82,963,910.01	106,044,683.63
Total	568,293,242.46	682,590,772.62

(3). Provision for bad debts

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Provision for bad debts	Stage I	Stage II	Stage III	Total
	12-Month expected credit loss	Lifetime expected credit loss (without credit impairment)	Lifetime expected credit loss (with credit impairment)	
Balance on January 01, 2022	39,260,833.08	31,344,804.97		70,605,638.05
The Jan 1, 2022 balance during the current period				
-- converted into stage II				
-- converted into stage III	-11,642,054.49		11,642,054.49	
-- reversed into stage II				
-- reversed into stage I				
Creation in the current period	-14,511,197.26	46,104,487.46		31,593,290.20
Reversal in the current period				
Clear in the current period				
Write-off in the current period			11,642,054.49	11,642,054.49
Other changes	222,021.07			222,021.07
Balance on December 31, 2022	13,329,602.40	77,449,292.43		90,778,894.83

Note on significant changes in balances of other receivables for which their provisions were changed in the current period:

Applicable" Not applicable"

Other changes are due to the in foreign currency translation.

Provisions for bad debts and basis for determining significant increases in credit risks of financial instruments for the current period:

Applicable" Not applicable"

(4). Provision for bad debts

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Category	Opening balance	Change in current period				Closing balance
		Provision	Recovered or reversed	Cleared or written off	Other changes	
Other receivables	70,605,638.05	31,593,290.20		11,642,054.49	222,021.07	90,778,894.83
Total	70,605,638.05	31,593,290.20		11,642,054.49	222,021.07	90,778,894.83

Significant amounts recovered or reversed in the current period:

Applicable" Not applicable"

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

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Written off amount
Other receivables written off in the current period	11,642,054.49

Significant receivable written off:

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Entity name	Nature of other receivables	Written off amount	Write-off reason	Write-off procedure	Whether the amount is generated from a related-party transaction
Entity 1	Lease payments for water surface (land)	9,153,117.99	The payment is expected unrecoverable	Approval under due procedures	No
Entity 3	Current account	1,217,024.00	The payment is expected unrecoverable	Approval under due procedures	No
Entity 4	Performance bond	390,000.00	The payment is expected unrecoverable	Approval under due procedures	No
Other entities		881,912.50	The payment is expected unrecoverable	Approval under due procedures	No
Total	/	11,642,054.49	/	/	/

Note on write-off of other receivables:

Applicable" Not applicable"

(6). Top five entities in other receivables at the end of the current period

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Entity name	Payment type	Closing balance	Age	Percent in the total other receivables at the end of the period (%)	Provision for bad debts Closing balance
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Entity 1	Performance bond	76,190,000.00	Within 1 year	13.41	
Entity 2	Performance bond	56,681,911.77	Note 1	9.97	
Entity 3	Performance bond	30,000,000.00	1- 2 years	5.28	
Entity 4	Insurance claims	22,100,000.00	Within 1 year	3.89	
Entity 5	Performance bond	20,400,000.00	2- 3 years	3.59	
Total	/	205,371,911.77	/	36.14	

Note 1: The closing balance for entity 2: 34,496,451.77 yuan within 1 year, and 22,185,460.00 yuan between 1 and 2 years.

(7). Grants receivable

Applicable" Not applicable"

(8). Other receivables de-recognized due to transfer of financial assets

Applicable" Not applicable"

(9). Amounts of assets and liabilities generated due to transfer of other receivables and continuing involvement

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

9. Inventories**(1). Classification of inventories**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance			Opening balance		
	Book balance	Provision for obsolete inventory/provision for impairment on fulfillment costs	Carrying value	Book balance	Provision for obsolete inventory/provision for impairment on fulfillment costs	Carrying value
Raw materials	3,933,801,975.56	76,889,145.51	3,856,912,830.05	2,567,707,745.26	9,983,945.22	2,557,723,800.04
Work-in-process	472,567,045.48		472,567,045.48	286,891,070.52		286,891,070.52
Goods in stock	3,583,696,215.78	252,067,262.23	3,331,628,953.55	924,876,172.89	27,417,517.64	897,458,655.25
Materials for repeated use	59,575,288.33		59,575,288.33	48,917,893.98		48,917,893.98
Consumable biological assets	51,893,637.87	7,843,337.72	44,050,300.15	63,370,049.03	7,843,337.72	55,526,711.31
Costs to fulfill contracts	49,524,009.90		49,524,009.90	13,936,566.22		13,936,566.22
Packing materials	33,585,149.60		33,585,149.60	31,170,648.04		31,170,648.04
Materials in transit	13,153,709.97		13,153,709.97	9,318.11		9,318.11
Materials for processing on consignment	664,990,947.31	7,357,102.19	657,633,845.12	847,765,826.97		847,765,826.97
Goods in transit	2,598,930,595.62	114,912,619.39	2,484,017,976.23	948,652,713.69	5,261,636.09	943,391,077.60
Total	11,461,718,575.42	459,069,467.04	11,002,649,108.38	5,733,298,004.71	50,506,436.67	5,682,791,568.04

(2). Provision for obsolete inventory and provision for impairment on fulfillment costs

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase		Current decrease		Closing balance
		Provision	Others	Reversed or cleared	Others	
Raw materials	9,983,945.22	66,905,200.29				76,889,145.51
Work-in-process						
Goods in stock	27,417,517.64	266,282,040.98		41,632,296.39		252,067,262.23
Materials for repeated use						
Consumable biological assets	7,843,337.72	1,274,000.00		1,274,000.00		7,843,337.72
Costs to fulfill contracts						
Goods in transit	5,261,636.09	127,133,447.21		17,482,463.91		114,912,619.39
Materials for processing on consignment		7,357,102.19				7,357,102.19
Total	50,506,436.67	468,951,790.67		60,388,760.30		459,069,467.04

(3). Note on closing balance of inventories containing capitalized amount of borrowing costs

"□ Applicable" "√ Not applicable"

(4). Note on amount of fulfillment costs amortized in the current period

"□ Applicable" "√ Not applicable"

Other notes

"□ Applicable" "√ Not applicable"

10. Contract assets**(1). Contract assets**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Carrying value	Book balance	Impairment provision	Carrying value
Electricity price subsidies	630,254,246.71	32,323,051.12	597,931,195.59	758,955,932.09	43,852,907.79	715,103,024.30
Total	630,254,246.71	32,323,051.12	597,931,195.59	758,955,932.09	43,852,907.79	715,103,024.30

(2). Significant changes in carrying values in the reporting period and reasons for the changes

"□ Applicable" "√ Not applicable"

(3). Impairment provision for contract assets in the current period

"□ Applicable" "√ Not applicable"

Refer to disclosure of other receivables if the provision for bad debts is created under the general model for expected credit loss:

"□ Applicable" "√ Not applicable"

Other notes:

"√ Applicable" "□ Not applicable"

(1) Impairment provision for contract assets

Unit: Yuan Currency: CNY

Category	Closing balance			Closing balance		
	Book balance	Impairment provision	Provision (%)	Book balance	Impairment provision	Provision (%)
Electricity price subsidies	630,254,246.71	32,323,051.12	5.13	758,955,932.09	43,852,907.79	5.78

(2) Changes in impairment provision for contract assets

Unit: Yuan Currency: CNY

Category	Opening balance	Change in current period			Closing balance
		Provision	Recovered or reversed	Cleared or written off	
Electricity price subsidies	43,852,907.79		11,529,856.67		32,323,051.12

11. Assets held for sale Applicable" Not applicable"**12. Non-current assets due within one year** Applicable" Not applicable"

Significant debt investments and other debt investments at the end of the current period:

 Applicable" Not applicable"

Other notes

None.

13. Other current assets Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Costs to obtain contracts		
Costs of returns receivable		
Input tax credit	680,785,868.61	1,192,394,602.16
Corporate income tax prepayment	105,330,225.62	25,773,110.65
Costs of issuing convertible bond to be deducted		1,140,203.28
Other tax prepayments	291,639.83	1,335,221.74
Total	786,407,734.06	1,220,643,137.83

14. Debt investments**(1). Debt investments** Applicable" Not applicable"**(2). Significant debt investments at the end of the current period** Applicable" Not applicable"**(3). Impairment provision** Applicable" Not applicable"

Impairment provisions created in the current period and basis for determining significant increases in credit risks of financial instruments for the current period

 Applicable" Not applicable"

Other notes

 Applicable" Not applicable"**15. Other debt investments****(1). Other debt investments** Applicable" Not applicable"**(2). Other significant debt investments at the end of the current period** Applicable" Not applicable"**(3). Impairment provision** Applicable" Not applicable"

Impairment provisions created in the current period and basis for determining significant increases in credit risks of financial instruments for the current period

 Applicable" Not applicable"

Other notes:

 Applicable" Not applicable"

16. Long-term receivables

(1). Long-term receivables

Applicable Not applicable

(2). Provision for bad debts

Applicable Not applicable

Provisions for bad debts and basis for determining significant increases in credit risks of financial instruments for the current period

Applicable Not applicable

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

Applicable Not applicable

(4). Amounts of assets and liabilities generated due to transfer of long-term receivables and continuing involvement

Applicable Not applicable

Other notes

Applicable Not applicable

17. Long-term equity investments

"√Applicable" "□Not applicable"

Unit: Yuan Currency: CNY

Investee	Opening balance	Change in current period								Closing balance	Closing balance of impairment provision
		Additi onal invest ments	Decrea sed invest ments	Investment gain or loss under equity method	Adjustment of other comprehen sive income	Other changes in equity	Declared cash dividend or profit	Impairment provision	Others		
I. Joint ventures											
Maoming Tongwei Jiuding Feed Co., Ltd.	6,411,699.14			-902,593.03			233,020.64			5,276,085.47	
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	105,106,774.23			-2,947,930.43						102,158,843.80	
Sub-total	111,518,473.37			-3,850,523.46			233,020.64			107,434,929.27	
II. Associates											
Bohai Aquaculture Co., Ltd.	99,603,329.66			2,136,863.18	-682,837.29	-166,628.78				100,890,726.77	
Haimao Seed Industry Technology Co., Ltd.	136,707,219.24			-57,308,947.49	-437,728.97			24,673,524.79		54,287,017.99	24,673,524.79
Anhui Tech-bank Feed Technology Co., Ltd.	59,356,017.38			1,795,335.25						61,151,352.63	
Anhui Tech-bank Biotechnology Co., Ltd.	23,402,678.61			338,944.91						23,741,623.52	
Suzhou Taiyangjing New Energy Co., Ltd.	25,210,607.32			-5,939,032.23		23,809,924.94				43,081,500.03	
Sub-total	344,279,852.21			-58,976,836.38	-1,120,566.26	23,643,296.16		24,673,524.79		283,152,220.94	24,673,524.79
Total	455,798,325.58			-62,827,359.84	-1,120,566.26	23,643,296.16	233,020.64	24,673,524.79		390,587,150.21	24,673,524.79

18. Other equity investments**(1). Other equity investments**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Chengdu Tongwei Property Co., Ltd.	154,196,557.28	153,551,598.71
Total	154,196,557.28	153,551,598.71

(2). Non-trading equity investments

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Dividend income recognized in the current period	Cumulative gain	Cumulative loss	Amount converted from other comprehensive income to retained earnings	Reasons for designation as measurement at fair value through other comprehensive income	Reasons for conversion from other comprehensive income to retained earnings
Chengdu Tongwei Property Co., Ltd.		7,508,757.28			Management mode	

Other notes:

"□ Applicable" "√ Not applicable"

19. Other non-current financial assets

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Sichuan Electricity Trading Center Co., Ltd.	3,146,248.25	3,146,248.25
Total	3,146,248.25	3,146,248.25

Other notes:

"□ Applicable" "√ Not applicable"

20. Investment properties

Measurement models for investment properties

(1). Investment properties measured at cost

Unit: Yuan Currency: CNY

Item	Premises and buildings	Land use rights	Construction in progress	Total
I. Original carrying value				
1. Opening balance	162,080,432.71	21,630,000.00		183,710,432.71
2. Current increase				
(1) Purchased				
(2) Conversion from stock/fixed assets/construction in progress				
(3) Increase from business combination				
3. Current decrease				
(1) Disposal				
(2) Others				
4. Closing balance	162,080,432.71	21,630,000.00		183,710,432.71

II. Accumulated depreciation and accumulated amortization				
1. Opening balance	32,373,457.85	9,301,444.64		41,674,902.49
2. Current increase	3,964,328.84	666,408.39		4,630,737.23
(1) Depreciation or amortization	3,964,328.84	666,408.39		4,630,737.23
3. Current decrease				
(1) Disposal				
(2) Others				
4. Closing balance	36,337,786.69	9,967,853.03		46,305,639.72
II. Impairment provision				
1. Opening balance	29,692,565.20			29,692,565.20
2. Current increase				
(1) Provision				
3. Current decrease				
(1) Disposal				
(2) Others				
4. Closing balance	29,692,565.20			29,692,565.20
IV. Carrying value				
1. Closing carrying value	96,050,080.82	11,662,146.97		107,712,227.79
2. Opening carrying value	100,014,409.66	12,328,555.36		112,342,965.02

(2). Investment properties for which title certificates are not obtained

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

21. Fixed assets**Presentation of items**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Fixed assets	53,291,583,073.49	36,953,602,608.30
Disposal of fixed assets	385,795.71	5,069,389.79
Total	53,291,968,869.20	36,958,671,998.09

Other notes:

Applicable" Not applicable"

Fixed assets**(1). Fixed assets**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Premises and buildings	Machinery equipment	PV generation equipment	Transportation equipment	Office equipment	Total
I. Original carrying value:						
1. Opening balance	11,272,217,776.88	24,162,239,256.40	10,831,731,685.90	318,616,312.57	355,222,948.04	46,940,027,979.79
2. Current increase	5,162,903,579.60	18,292,125,909.28	2,637,504,831.29	122,727,795.27	50,414,649.37	26,265,676,764.81
(1) Purchase		554,370,355.91	1,105,823.98	121,590,896.08	40,552,438.83	717,619,514.80
(2) Conversion from construction in progress	5,300,235,310.78	16,245,692,632.31	2,554,041,622.96		9,730,641.91	24,109,700,207.96
(3) Increase from business combination						
(4) Conversion from right-of-use assets		1,471,361,284.91				1,471,361,284.91
(5) Adjustment from final accounts of construction completion	-145,747,000.24	10,185,379.98	82,357,384.35	572,422.94	-818,610.69	-53,450,423.66
(6) Effect of foreign currency translation	8,415,269.06	10,516,256.17		564,476.25	950,179.32	20,446,180.80
3. Current decrease	230,575,857.43	4,520,613,799.75	656,194.57	35,451,100.30	40,762,126.55	4,828,059,078.60
(1) Disposal or scrap	136,713,554.21	1,846,021,208.80	656,194.57	35,451,100.30	40,762,126.55	2,059,604,184.43
(2) Conversion to construction in progress	93,862,303.22	2,674,592,590.95				2,768,454,894.17
4. Closing balance	16,204,545,499.05	37,933,751,365.93	13,468,580,322.62	405,893,007.54	364,875,470.86	68,377,645,666.00
II. Accumulated depreciation						
1. Opening balance	2,438,247,994.47	5,583,990,212.97	1,137,438,071.30	162,768,214.41	197,491,395.68	9,519,935,888.83
2. Current increase	559,384,218.39	4,063,066,114.71	437,312,287.34	53,080,713.35	49,534,102.03	5,162,377,435.82
(1) Provision	566,607,801.56	3,730,357,989.30	428,181,678.13	52,649,267.01	48,909,773.41	4,826,706,509.41
(2) Conversion from right-of-use assets		324,828,173.03				324,828,173.03
(3) Adjustment from final accounts of construction completion	-10,720,797.96	1,590,188.75	9,130,609.21			
(3) Effect of foreign currency translation	3,497,214.79	6,289,763.63		431,446.34	624,328.62	10,842,753.38
3. Current decrease	70,808,249.03	1,480,600,344.26	225,918.27	24,002,716.35	36,076,972.16	1,611,714,200.07

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(1) Disposal or scrap	50,477,658.24	699,761,044.48	225,918.27	24,002,716.35	36,076,972.16	810,544,309.50
(9) Conversion to construction in progress	20,330,590.79	780,839,299.78				801,169,890.57
4. Closing balance	2,926,823,963.83	8,166,455,983.42	1,574,524,440.37	191,846,211.41	210,948,525.55	13,070,599,124.58
II. Impairment provision						
1. Opening balance	153,494,696.78	47,207,099.06	265,252,962.50	10,219.13	524,505.19	466,489,482.66
2. Current increase		1,215,166,752.04	367,725,502.52	8,388.29	8,018.87	1,582,908,661.72
(1) Provision		1,215,166,752.04	367,725,502.52	8,388.29	8,018.87	1,582,908,661.72
3. Current decrease	6,110,206.34	27,311,375.08		10,219.13	502,875.90	33,934,676.45
(1) Disposal or scrap	6,110,206.34	27,311,375.08		10,219.13	502,875.90	33,934,676.45
4. Closing balance	147,384,490.44	1,235,062,476.02	632,978,465.02	8,388.29	29,648.16	2,015,463,467.93
IV. Carrying value						
1. Closing carrying value	13,130,337,044.78	28,532,232,906.49	11,261,077,417.23	214,038,407.84	153,897,297.15	53,291,583,073.49
2. Opening carrying value	8,680,475,085.63	18,531,041,944.37	9,429,040,652.10	155,837,879.03	157,207,047.17	36,953,602,608.30

Note 1: Adjustment from final accounts of construction completions mainly refers to the adjustment of fixed assets pre-converted to fixed assets from final accounts for phase 1 project of Tongwei Solar (Meishan) Co., Ltd.

Note 2: As stated in “changes in significant accounting policies”, the retrospective adjustments of the opening balances of fixed assets are as below:

Unit: Yuan Currency: CNY

Category	Item	Opening balance		
		Before adjustment	Adjustment amount	After adjustment
Premises and buildings	Original carrying value	11,273,521,319.87	-1,303,542.99	11,272,217,776.88
	Accumulated depreciation	2,438,346,397.86	-98,403.39	2,438,247,994.47
	Impairment provision	153,494,696.78		153,494,696.78
	Carrying value	8,681,680,225.23	-1,205,139.60	8,680,475,085.63
Machinery equipment	Original carrying value	24,632,305,612.33	-470,066,355.93	24,162,239,256.40
	Accumulated depreciation	5,714,762,667.81	-130,772,454.84	5,583,990,212.97
	Impairment provision	47,207,099.06	-	47,207,099.06
	Carrying value	18,870,335,845.46	-339,293,901.09	18,531,041,944.37
PV generation equipment	Original carrying value	10,831,731,685.90		10,831,731,685.90
	Accumulated depreciation	1,137,438,071.30		1,137,438,071.30
	Impairment provision	265,252,962.50		265,252,962.50
	Carrying value	9,429,040,652.10		9,429,040,652.10
Transportation equipment	Original carrying value	318,616,312.57		318,616,312.57
	Accumulated depreciation	162,768,214.41		162,768,214.41
	Impairment provision	10,219.13		10,219.13
	Carrying value	155,837,879.03		155,837,879.03
Office equipment	Original carrying value	355,222,948.04		355,222,948.04

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	Accumulated depreciation	197,491,395.68		197,491,395.68
	Impairment provision	524,505.19		524,505.19
	Carrying value	157,207,047.17		157,207,047.17
Total	Original carrying value	47,411,397,878.71	-471,369,898.92	46,940,027,979.79
	Accumulated depreciation	9,650,806,747.06	-130,870,858.23	9,519,935,888.83
	Impairment provision	466,489,482.66		466,489,482.66
	Carrying value	37,294,101,648.99	-340,499,040.69	36,953,602,608.30

(2). Fixed assets in temporary idleness

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Original carrying value	Accumulated depreciation	Impairment provision	Carrying value	Notes
Premises and buildings	729,275.97	289,893.32		439,382.65	
Machinery equipment	1,173,024.70	918,422.67		254,602.03	
Total	1,902,300.67	1,208,315.99		693,984.68	

(3). Fixed assets acquired by financial lease

"□ Applicable" "√ Not applicable"

(4). Fixed assets leased out by operating lease

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing carrying value
Premises and buildings	119,365,144.59
Machinery equipment	14,096,207.87
Transportation equipment	70,508.47
Office equipment	214,268.91
Total	133,746,129.84

(5). Fixed assets for which title certificates are not obtained

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Carrying value	Reason for not obtaining title certificate
Premises of Tongwei (Hainan) Aquatic Products Co., Ltd.	17,990,405.42	In progress
Premises of Huaian Tongwei Feed Co., Ltd.	17,709,274.76	In progress
Premises of Xiamen Tongwei Feed Co., Ltd.	2,305,825.10	In progress
Premises of Nanchang Tongwei Biotechnology Co., Ltd.	32,394,060.19	In progress
Premises of Hainan Tongwei Biotechnology Co., Ltd.	1,528,086.69	In progress
Premises of Hainan Haiyi Aquatic Products Feed Co., Ltd.	61,621.36	In progress
Premises of Qianxi Tongwei Feed Co., Ltd.	5,124,208.04	In progress
Premises of Fuzhou Tongwei William Feed Co., Ltd.	125,333,729.24	In progress
Premises of Shenyang Tongwei Biotechnology Co., Ltd.	34,276,771.66	In progress
Premises of Huizhou Tongwei Biotechnology Co., Ltd.	10,717,625.01	In progress
Premises of Inner Mongolia Tongwei High-purity Crystalline Silicon Company	514,257,581.47	In progress
Premises of Yunnan Tongwei High-purity Crystalline Silicon Company	720,591,473.62	In progress
Premises of Sichuan Yongxiang PV Technology Co., Ltd.	801,604,223.16	In progress
Premises of Tonghe New Energy (Jintang) Co., Ltd.	974,231,354.94	In progress
Premises of Sichuan Yongxiang Energy Technology Co., Ltd.	207,476,446.41	In progress
Premises of Tongwei Solar (Hefei) Co., Ltd.	362,417,681.97	In progress
Premises of Tongwei Solar (Meishan) Co., Ltd.	798,432,847.79	In progress
Premises of Tongwei Solar (Jintang) Co., Ltd.	858,629,617.68	In progress
Premises of Tongwei Solar (Chengdu) Co., Ltd.	814,281,002.00	In progress
Total	6,299,363,836.51	

Other notes:

Applicable" Not applicable"

Disposal of fixed assets

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Disposal of fixed assets	385,795.71	5,069,389.79
Total	385,795.71	5,069,389.79

Other notes:

None.

22. Construction in progress

Presentation of items

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Construction in progress	3,752,450,983.65	10,250,325,529.08
Construction materials	244,946,016.27	360,494,223.95
Total	3,997,396,999.92	10,610,819,753.03

Other notes:

Applicable" Not applicable"

Construction in progress**(1). Construction in progress**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Carrying value	Book balance	Impairment provision	Carrying value
Phase I High-purity Polysilicon Project of Yongxiang Energy Technology	581,846,907.06		581,846,907.06	2,629,615.55		2,629,615.55
15 GW Monocrystalline Rod Pulling and Cutting Project of Yongxiang PV Technology	94,842,688.37		94,842,688.37	746,198,554.03		746,198,554.03
Yongxiang Technological Renovation for Production	52,302,278.30		52,302,278.30	29,930,785.31		29,930,785.31
20,000-Ton High-purity Polysilicon Rod Pulling and Cutting Project of Yongxiang PV Technology	54,273,623.61		54,273,623.61			
Phase I 50,000-ton High-purity Polysilicon Project of Yunnan Tongwei	45,978,767.94		45,978,767.94	3,409,911,750.01		3,409,911,750.01
Inner Mongolia Tongwei Technological Renovation for Production	21,123,010.82		21,123,010.82	48,968,660.93		48,968,660.93
Phase II 200,000-ton High-purity Polysilicon Project of Yunnan Tongwei	19,012,818.39		19,012,818.39			
Yongxiang New Energy Technological Renovation for Production	20,313,734.26		20,313,734.26	5,061,605.83		5,061,605.83
Phase II High-purity Polysilicon Project of Inner Mongolia Tongwei				1,192,138,830.18		1,192,138,830.18
Phase II High-purity Polysilicon Project of Yongxiang New Energy				21,508,913.81		21,508,913.81
Phase I 7.5 GW High-efficiency Solar Cell Project in Meishan				115,621,150.20		115,621,150.20
Phase II 7.5 GW High-efficiency Solar Cell Project in Meishan				809,599.56		809,599.56
Phase III 9 GW High-efficiency Solar Cell Project in Meishan	1,907,004,489.28		1,907,004,489.28			
Phase I 7.5 GW High-efficiency Solar Cell Project in Jintang				1,964,042.72		1,964,042.72

Micro-crystalline Technology Upgrading for the High-efficiency HJT Half-cut and Double-sided Solar Cells 210mm in Jintang	348,162,426.96		348,162,426.96			
Jintang S2_Demonstration Project for Application of Core Technologies in Domestic Equipment for High-efficiency Solar Cells	2,061,184.60		2,061,184.60	2,606,601.33		2,606,601.33
Tonghe 15 GW High-Efficiency Solar Cell Project				2,274,672,207.79		2,274,672,207.79
Tonghe 15 GW Wafer Slicing Project				550,360,995.61		550,360,995.61
Hefei Phase III 5GW High-efficiency Module Project	3,929,203.56		3,929,203.56	7,549,250.11		7,549,250.11
Technological Upgrading Project for the 8 GW Solar Intelligent Factory in Hefei	13,104,798.68		13,104,798.68	20,001.98		20,001.98
25 GW High-efficiency Solar Modules Project in Yancheng	14,423,633.63		14,423,633.63			
Phase II 250 MW Aquaculture-Photovoltaic Integration Powerplant Project in Chenhu for Tongwei Tianmen	17,698,462.02		17,698,462.02			
Other constructions	556,372,956.17		556,372,956.17	1,845,655,227.03	5,282,262.90	1,840,372,964.13
Total	3,752,450,983.65		3,752,450,983.65	10,255,607,791.98	5,282,262.90	10,250,325,529.08

Note 1: As stated in “changes in significant accounting policies”, the retrospective adjustments of the opening balances of construction in progress are as below:

Unit: Yuan Currency: CNY

Project	Opening balance		
	Before adjustment	Adjustment amount	After adjustment
15 GW Monocrystalline Rod Pulling and Cutting Project of Yongxiang PV Technology	755,030,527.90	-8,831,973.87	746,198,554.03
Tonghe 15 GW High-Efficiency Solar Cell Project	2,281,757,633.72	-7,085,425.93	2,274,672,207.79
Tonghe 15 GW Wafer Slicing Project	560,024,727.84	-9,663,732.23	550,360,995.61
Total	3,596,812,889.46	-25,581,132.03	3,571,231,757.43

(2). Changes in significant construction in progress in current period

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Project name	Budget	Opening balance	Current increase	Amount converted to fixed assets in current period	Other current decreases	Closing balance	Cumulative cost to budget (%)	Construction in progress	Cumulative interest capitalized	Including: interest capitalized in current period	Interest capitalization rate in current period (%)	Sources of funds
Phase I High-purity Polysilicon Project of Yongxiang Energy Technology	6,000,000,000.00	2,629,615.55	650,074,356.56		70,857,065.05	581,846,907.06	10.88	15.00	4,083,044.26	4,083,044.26	3.62	Self-funding

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15 GW Monocrystalline Rod Pulling and Cutting Project of Yongxiang PV Technology	4,103,929,600.00	746,198,554.03	2,397,952,907.66	3,036,155,340.13	13,153,433.19	94,842,688.37	76.61	95.00				Raising fund and self-funding
Yongxiang Technological Renovation for Production	160,822,200.00	29,930,785.31	85,805,257.43	63,433,764.44		52,302,278.30	71.97	70.00				Self-funding
20,000-Ton High-purity Polysilicon Rod Pulling and Cutting Project of Yongxiang PV Technology	104,849,000.00		54,273,623.61			54,273,623.61	51.76	45.00				Self-funding
Phase I 50,000-ton High-purity Polysilicon Project of Yunnan Tongwei	3,963,900,000.00	3,409,911,750.01	48,949,923.85	3,412,882,905.92		45,978,767.94	111.63	95.00	8,080,960.21	1,221,893.14	4.69	Self-funding
Inner Mongolia Tongwei Technological Renovation for Production	120,019,700.00	48,968,660.93	31,292,839.37	59,138,489.48		21,123,010.82	66.87	65.00				Self-funding
Phase II 200,000-ton High-purity Polysilicon Project of Yunnan Tongwei	10,079,410,000.00		19,012,818.39			19,012,818.39	0.19	Preparation				Self-funding
Yongxiang New Energy Technological Renovation for Production	430,080,000.00	5,061,605.83	95,602,058.09	80,349,929.66		20,313,734.26	23.41	20.00				Self-funding
Phase II High-purity Polysilicon Project of Inner Mongolia Tongwei	4,016,290,000.00	1,192,138,830.18	3,498,484,813.71	4,679,831,025.63	10,792,618.26		119.51	100.00	16,193,920.61	15,583,107.19	4.30	Raising fund and self-funding
Phase II High-purity Polysilicon Project of Yongxiang New Energy	3,893,700,000.00	21,508,913.81	53,543,080.73	75,051,994.54			97.29	100.00				Raising fund and self-funding
Phase I 7.5 GW efficient solar cell project in Meishan	2,500,000,000.00	115,621,150.20	23,917,402.29	139,538,552.49			93.64	100.00				Self-funding
Phase II 7.5 GW efficient solar cell project in Meishan	2,200,000,000.00	809,599.56	26,542,589.55	27,425,785.57	-73,596.46		73.77	100.00				Raising fund and self-funding
Phase III 9 GW High-efficiency Solar Cell Project in Meishan	2,200,000,000.00		1,907,004,489.28			1,907,004,489.28	86.68	90.00				Self-funding
Phase I 7.5 GW High-efficiency Solar Cell Project in Jintang	2,500,359,400.00	1,964,042.72	50,059,015.31	51,680,726.05	342,331.98		100.71	100.00	9,299,363.05	3,978,773.61	5.20	Raising fund and self-funding
Micro-crystalline Technology Upgrading for the High-efficiency HJT Half-cut and Double-sided Solar Cells 210mm in Jintang	120,000,000.00		348,162,426.96			348,162,426.96	3.45	3.00				Self-funding
Jintang S2 Demonstration Project for Application of Core Technologies in Domestic Equipment for High-efficiency Solar Cells	2,000,000,000.00	2,606,601.33	1,649,641,379.98	1,589,837,582.20	60,349,214.51	2,061,184.60	95.68	99.00				Self-funding
Tonghe 15 GW High-Efficiency Solar Cell Project	4,500,000,000.00	2,274,672,207.79	1,033,895,738.51	3,306,454,676.32	2,113,269.98		73.52	100.00	2,619,263.77	2,619,263.77	4.62	Self-funding
Tonghe 15 GW Wafer Slicing Project	1,500,000,000.00	550,360,995.61	209,980,788.12	757,343,733.73	2,998,050.00		50.69	100.00				Self-funding
Hefei Phase III 5GW High-efficiency Module Project	370,700,000.00	7,549,250.11	354,264,204.30	356,893,684.82	990,566.03	3,929,203.56	97.60	99.99				Self-funding
Technological Upgrading Project for the 8 GW Solar Intelligent Factory in Hefei	1,119,320,000.00	20,001.98	730,131,009.40	712,538,294.62	4,507,918.08	13,104,798.68	65.23	80.00				Self-funding
25 GW High-efficiency Solar Modules Project in Yancheng	4,500,000,000.00		14,423,633.63			14,423,633.63	0.32	0.75				Self-funding
Phase II 250 MW Aquaculture-Photovoltaic Integration Powerplant Project in Chenhu for Tongwei Tianmen	1,541,934,500.00		796,897,321.98	779,198,859.96		17,698,462.02	51.68	49.83	5,614,885.81	5,614,885.81	4.39	Self-funding
Other constructions		1,845,655,227.03	3,769,809,976.78	4,981,944,862.40	77,147,385.24	556,372,956.17			111,587,285.45	19,528,927.40		
Total	57,925,314,400.00	10,255,607,791.98	17,849,721,655.49	24,109,700,207.96	243,178,255.86	3,752,450,983.65	/	/	157,478,723.16	52,629,895.18	/	/

(3). Impairment provision for construction in progress in current period

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

Construction materials**(1). Construction materials**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Carrying value	Book balance	Impairment provision	Carrying value
Special equipment	152,590,656.82		152,590,656.82	155,963,464.57		155,963,464.57
Special materials	92,355,359.45		92,355,359.45	204,530,759.38		204,530,759.38
Total	244,946,016.27		244,946,016.27	360,494,223.95		360,494,223.95

Other notes:

None.

23. Productive biological assets**(1). Productive biological assets measured at cost**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Aquaculture		Total
	Male fish	Male pawn	
I. Original carrying value			
1. Opening balance	145,460.00	13,985,535.85	14,130,995.85
2. Current increase		16,801,702.14	16,801,702.14
(1) Purchased		16,801,702.14	16,801,702.14
(2) Self-cultivated			
3. Current decrease	105,171.45		105,171.45
(1) Disposal	105,171.45		105,171.45
(2) Others			
4. Closing balance	40,288.55	30,787,237.99	30,827,526.54
II. Accumulated depreciation			
1. Opening balance	138,187.04	10,355,136.90	10,493,323.94
2. Current increase		11,364,719.87	11,364,719.87
(1) Provision		11,364,719.87	11,364,719.87
3. Current decrease	99,912.88		99,912.88
(1) Disposal	99,912.88		99,912.88
(2) Others			
4. Closing balance	38,274.16	21,719,856.77	21,758,130.93
II. Impairment provision			
1. Opening balance			
2. Current increase			
(1) Provision			
3. Current decrease			
(1) Disposal			
(2) Others			
4. Closing balance			
IV. Carrying value			
1. Closing carrying value	2,014.39	9,067,381.22	9,069,395.61
2. Opening carrying value	7,272.96	3,630,398.95	3,637,671.91

(2). Productive biological assets measured at fair value

"□ Applicable" "√ Not applicable"

Other notes

"□ Applicable" "√ Not applicable"

24. Oil and gas assets

"□ Applicable" "√ Not applicable"

25. Right-of-use assets

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Premises and buildings	Machinery equipment	Land and water surface	Total
I. Original carrying value				
1. Opening balance	231,755,303.04	2,166,786,175.15	3,278,047,224.94	5,676,588,703.13
2. Current increase	-28,664,827.11	782,510,106.34	620,073,128.26	1,373,918,407.49
(1) Lease in current period	7,840,052.17	824,759,340.05	620,064,251.19	1,452,663,643.41
(2) Adjustment from modifications of terms of lease contracts	-36,504,879.28	-401,200.20	8,877.07	-36,897,202.41
(3) Conversion from construction in progress				
(4) Other increase		-41,848,033.51		-41,848,033.51
3. Current decrease	42,263,199.67	1,471,361,284.91	338,019,863.67	1,851,644,348.25
(1) Written-off upon lease expiry	35,952,516.29		133,017,269.38	168,969,785.67
(2) Scrap or disposal	6,310,683.38		205,002,594.29	211,313,277.67
(3) Conversion to fixed assets		1,471,361,284.91		1,471,361,284.91
4. Closing balance	160,827,276.26	1,477,934,996.58	3,560,100,489.53	5,198,862,762.37
II. Accumulated depreciation				
1. Opening balance	47,060,888.07	317,105,969.66	936,179,582.10	1,300,346,439.83
2. Current increase	23,292,238.00	91,644,850.77	280,238,764.67	395,175,853.44
(1) Provision	23,292,238.00	91,644,850.77	280,238,764.67	395,175,853.44
3. Current decrease	36,674,557.65	324,828,173.03	198,577,932.10	560,080,662.78
(1) Disposal	722,041.36		65,560,662.72	66,282,704.08
(2) Written-off upon lease expiry	35,952,516.29		133,017,269.38	168,969,785.67
(3) Conversion to fixed assets		324,828,173.03		324,828,173.03
4. Closing balance	33,678,568.42	83,922,647.40	1,017,840,414.67	1,135,441,630.49
II. Impairment provision				
1. Opening balance				
2. Current increase				
(1) Provision				
3. Current decrease				
(1) Disposal				
4. Closing balance				
IV. Carrying value				
1. Closing carrying value	127,148,707.84	1,394,012,349.18	2,542,260,074.86	4,063,421,131.88
2. Opening carrying value	184,694,414.97	1,849,680,205.49	2,341,867,642.84	4,376,242,263.30

Other notes:

Note 1: The "other increase" for "machinery equipment" in current period is due to the adjustment made for this year on the basis of amount excluding tax because the PV generation equipment directly leased in 2021 was initially recognized on the price (including tax), and it was confirmed in 2022 by the leaser that special VAT invoice was allowed.

Note 2: "Conversion to fixed assets" means the Company has obtained the ownership of machinery equipment acquired under financial lease upon the lease expires or through its early exercising the purchase option.

26. Intangible assets**(1). Intangible assets**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Land use rights	Patents	Non-patented technologies	Software	Trademarks	Right to use transmission lines	Franchises	Total
I. Original carrying value								
1. Opening balance	2,126,519,847.06	149,599,396.20	193,842,742.73	163,929,885.07	97,251,107.50	56,069,470.78	29,981,500.00	2,817,193,949.34
2. Current increase	199,990,164.56	86,603.77	46,555.43	35,159,849.65	82,610.00	22,573.20	2,301,231.00	237,689,587.61
(1) Purchase	52,896,430.78	86,603.77	46,555.43	15,049,516.46	82,610.00		2,301,231.00	70,462,947.44
(2) Internal research and development								
(3) Increase from business combination								
(4) Conversion from construction in progress	144,286,817.34			17,682,976.86				161,969,794.20
(5) Adjustment from final accounts of construction completion				2,427,356.33		22,573.20		2,449,929.53
(6) Effect of foreign currency translation	2,806,916.44							2,806,916.44
3. Current decrease	1,447,340.76			11,751,705.19				13,199,045.95
(1) Disposal	1,447,340.76			11,751,705.19				13,199,045.95
4. Closing balance	2,325,062,670.86	149,685,999.97	193,889,298.16	187,338,029.53	97,333,717.50	56,092,043.98	32,282,731.00	3,041,684,491.00
II. Accumulated amortization								
1. Opening balance	260,243,423.29	15,022,413.42	36,814,491.52	73,638,407.67	10,842,586.23	8,321,005.00	1,469,732.05	406,352,059.18
2. Current increase	48,486,442.54	10,593,133.35	19,858,202.54	21,219,091.41	82,258,599.60	2,087,907.51	1,584,811.26	186,088,188.21
(1) Provision	47,840,243.85	10,593,133.35	19,858,202.54	21,219,091.41	82,258,599.60	2,087,907.51	1,584,811.26	185,441,989.52
(2) Adjustment from final accounts of construction completion								
(3) Effect of foreign currency translation	646,198.69							646,198.69
3. Current decrease	895,227.29			5,689,029.48				6,584,256.77
(1) Disposal	895,227.29			5,689,029.48				6,584,256.77
4. Closing balance	307,834,638.54	25,615,546.77	56,672,694.06	89,168,469.60	93,101,185.83	10,408,912.51	3,054,543.31	585,855,990.62
II. Impairment provision								
1. Opening balance								

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2. Current increase								
(1) Provision								
3. Current decrease								
(1) Disposal								
4. Closing balance								
IV. Carrying value								
1. Closing carrying value	2,017,228,032.32	124,070,453.20	137,216,604.10	98,169,559.93	4,232,531.67	45,683,131.47	29,228,187.69	2,455,828,500.38
2. Opening carrying value	1,866,276,423.77	134,576,982.78	157,028,251.21	90,291,477.40	86,408,521.27	47,748,465.78	28,511,767.95	2,410,841,890.16

Intangible assets generated from internal research and development accounts for 0% of the closing balance of intangible assets.

(2). Land use rights for which title certificates are not obtained

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Carrying value	Reason for not obtaining title certificate
Land used by Huizhou Tongwei Biotechnology Co., Ltd.	7,017,013.41	In progress
Land used by Huaian Tongwei Feed Co., Ltd.	575,295.08	In progress
Land used by Xiamen Tongwei Feed Co., Ltd.	3,701,738.09	In progress
Land used by Tongwei Solar (Chengdu) Co., Ltd.	49,916,888.91	In progress
Land used by Gao'an Tongwei Fishery-PV Technology Co., Ltd.	126,316.67	In progress
Total	61,337,252.16	

Other notes:

"□ Applicable" "√ Not applicable"

27. R&D cost

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase		Current decrease			Closing balance
		Internal R&D cost	Others	Recognized as intangible assets	Converted into current profit and loss	Converted to operating cost	
R&D projects for silicon materials		2,066,616,172.22			97,841,714.74	1,968,774,457.48	
R&D projects for solar cells and modules		1,729,881,805.72			1,002,788,501.48	727,093,304.24	
Others		604,085,366.95			363,813,327.62	240,272,039.33	
Total		4,400,583,344.89			1,464,443,543.84	2,936,139,801.05	

28. Goodwill**(1). Original carrying value of goodwill**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Investee or event generating goodwill	Opening balance	Current increase		Current decrease	Closing balance
		From business combination	Others	Disposal	
Hainan Haiyi Aquatic Products Feed Co., Ltd.	22,461,157.77				22,461,157.77
Zhuhai Haiyi Aquatic Products Feed Co., Ltd.	21,814,691.67				21,814,691.67
Chengdu Chunyuan Food Company Limited	17,886,370.20				17,886,370.20
Hainan Haiyi Aquatic Seed Co., Ltd.	2,911,456.80				2,911,456.80
Sichuan Chunyuan Ecological Farming Co., Ltd.	1,486,979.12				1,486,979.12
Tongwei Solar (Hefei) Co., Ltd.	591,542,868.55				591,542,868.55
Tech-bank Feed Co., Ltd.	139,528,632.05			3,304,451.85	142,833,083.90
Total	797,632,156.16			3,304,451.85	800,936,608.01

Note: The goodwill increase for Tech-bank Feed Co., Ltd. is due to the acquisition consideration determined by facts such as accounts receivable of Tech-bank Feed Co., Ltd. that had existed before the purchase date (combination date) were recovered within 12 months after the purchase date (combination date), so that the Company paid an acquisition consideration of 3,304,451.85 yuan in the current period.

(2). Impairment provision for goodwill

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Investee or event generating goodwill	Opening balance	Current increase		Current decrease		Closing balance
		Provision		Disposal		
Chengdu Chunyuan Food Company Limited	17,886,370.20					17,886,370.20
Hainan Haiyi Aquatic Seed Co., Ltd.	2,911,456.80					2,911,456.80

Sichuan Chunyuan Ecological Farming Co., Ltd.	1,486,979.12				1,486,979.12
Tongwei Solar (Hefei) Co., Ltd.	24,020,900.00	86,073,100.00			110,094,000.00
Goodwill of Tech-bank Feed Co., Ltd.	4,753,172.31	60,798,136.56			65,551,308.87
Total	51,058,878.43	146,871,236.56			197,930,114.99

(3). Information relating to asset group or combination of asset groups where the goodwill belongs

Applicable" Not applicable"

Products of above companies that generated goodwill have active markets. Main cash flow into these companies are independent from the cash flow into other asset groups or combinations of asset groups. These companies are determined as separate asset groups. Such asset group is identical to the combination of asset groups recognized when the goodwill impairment test was performed on the acquisition date.

(4). Note on the process, key parameters (such as forecast growth rate used for expecting present value of future cash flow, growth rate in stable period, profit margin rate, discount rate, forecast period, applicable) of goodwill impairment test as well as the recognition of goodwill impairment loss

Applicable" Not applicable"

① Core goodwill

The recoverable amount is determined by asset group on the basis of expected future cash flow. Future cash flow is determined according to the financial budget 2023 and financial forecast 2024-2027 approved by the management. The cash flow over 5 years for the asset group is calculated as perpetual cash flow. Other key assumptions used for expecting future cash flow include: estimate the expected revenue, gross margin, costs, depreciation and amortization and increase in investments into long-term assets according to track record of assets, industry trend and management expectation for the market development. Determination of discount rate: The comparable company analysis is used for this test with the expected return on investments estimated under weighted average costs of capital model. Under this approach, the first step is to select comparable companies from listed companies, and estimate the systemic risk coefficient β (Levered Beta) of the comparable companies; the second step is to estimate the expected return on investments before tax according to the capital structure and β of comparable companies and the capital structure of the Company. This expected return on investments is then taken as the discount rate. The management believes that any reasonable change in the said assumptions would not cause the carrying value of any asset group that shares the goodwill to be greater than its recoverable amount except that the impairment provision for core goodwill from Tongwei Solar (Hefei) Co., Ltd. and Tech-bank Feed Co., Ltd.

② Non-core goodwill

Referring to the case study 5-1 "Goodwill and its impairment issues arising from the recognition of deferred tax liabilities due to asset valuation appreciation during acquisition", from Chapter 5 of the Analysis of Cases of Listed Companies Implementing Accounting Standard for Enterprises (2020) published by the Accounting Department of the China Securities Regulatory Commission in June 2020. For non-core goodwill, the deferred tax liability is reversed, and the future income tax expenses is reduced. The recoverable amount of this portion of goodwill is essentially the amount of future income tax expenses that have been reduced. As the fair value increment of assets due to acquisition is amortized in the consolidated financial statements, the corresponding deferred tax liability is reversed and a provision for impairment of non-core goodwill is recognized accordingly.

(5). Effects of goodwill impairment test

Applicable" Not applicable"

Goodwill impairment test has indicated that the goodwill impairment in 2022 caused a goodwill impairment loss of 146,871,200 yuan in the consolidated financial statements of the Company.

Other notes

Applicable" Not applicable"

29. Deferred expenses

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Amortization in current period	Other decrease	Closing balance
Expense for	105,933,322.75	120,457,216.53	64,599,436.69		161,791,102.59

improvements of long-term assets					
Decoration expense	122,814,222.70	86,065,941.44	51,016,899.17		157,863,264.97
Others	33,062,991.97	48,787,632.62	41,940,092.08		39,910,532.51
Total	261,810,537.42	255,310,790.59	157,556,427.94		359,564,900.07

30. Deferred tax assets/deferred tax liabilities

(1). Deferred tax assets not offset

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance		Opening balance	
	Deductible temporary difference	Deferred income tax Assets	Deductible temporary difference	Deferred income tax Assets
Provision for asset impairment	2,256,674,882.39	402,795,236.91	759,649,485.88	151,104,304.39
Unrealized gain on internal transactions	2,751,537,922.22	423,457,310.00	1,308,235,055.38	203,294,395.80
Deductible loss	58,023,069.45	9,282,943.58	127,368,220.47	19,811,869.18
Claims reserve	17,774,435.23	4,443,608.81		
Amortization of fixed assets greater than the amortization under tax laws	83,228,601.01	12,484,290.15	89,054,507.33	13,358,176.10
Decrease in depreciation of fixed assets due to provision for asset impairment	-39,266,319.74	-4,603,953.08	-72,121,613.64	-10,729,826.87
Employee benefits	3,964,862,186.96	594,729,328.04	753,695,409.29	113,354,311.39
Deferred income	692,274,458.64	111,129,338.65	724,500,421.51	115,775,526.75
Deduction of gain at consolidation on increase in assessed value of land	24,755,230.47	3,713,284.57	25,565,344.73	3,834,801.71
Lease interest amortization			15,425,604.51	2,313,840.68
Estimated liabilities	177,993,077.06	26,698,961.56		
Paper loss of held-for-trading financial liabilities	64,230,257.65	9,635,384.04		
Total	10,052,087,801.34	1,593,765,733.23	3,731,372,435.46	612,117,399.13

(2). Deferred tax liabilities not offset

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance		Opening balance	
	Taxable temporary difference	Deferred income tax Liabilities	Taxable temporary difference	Deferred income tax Liabilities
Increase in assessed value from business combinations under	360,307,872.46	84,508,900.31	486,551,435.76	114,919,145.64

different control				
Change in fair value of other debt investments				
Change in fair value of other equity investments				
Effects of one-time pre-tax deduction for equipment and appliance less than 5 million yuan	6,650,967,370.42	1,007,325,075.89	2,379,425,585.71	356,913,837.86
Discounted income from interest-free debts	5,760,114.68	864,017.20	18,955,505.36	2,843,325.80
Amortization of fixed assets less than the amortization under tax laws	856,150,608.82	128,422,591.32	1,372,249,974.84	205,837,496.23
Paper gain on held-for-trading financial assets	7,788,828.24	1,368,775.83	10,617,668.58	2,198,830.87
Total	7,880,974,794.62	1,222,489,360.55	4,267,800,170.25	682,712,636.40

(3). Net amount after offsetting deferred tax assets or liabilities

Applicable" Not applicable"

(4). Details of un-recognized deferred tax assets

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Deductible temporary difference		
Deductible loss	6,055,471,972.83	2,176,875,369.80
Provision for asset impairment	698,856,020.00	159,535,463.69
Employee benefits	335,981,978.32	59,273,714.10
Deferred income		490,652.78
Change in fair value of held-for-trading financial liabilities	120,856.83	
Total	7,090,430,827.98	2,396,175,200.37

(5). Deductible losses on deferred tax assets not recognized that will be due in the following years

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Year	Closing amount	Opening amount	Notes
2022		95,747,614.75	
2023	116,616,691.24	100,189,511.81	
2024	201,981,863.88	230,356,593.24	
2025	426,453,093.92	354,691,177.91	
2026	1,107,701,974.53	1,395,890,472.09	
2027	4,202,718,349.26		
Total	6,055,471,972.83	2,176,875,369.80	/

Other notes:

Applicable" Not applicable"

31. Other non-current assets

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
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	Book balance	Impairment provision	Carrying value	Book balance	Impairment provision	Carrying value
Costs to obtain contracts						
Costs to fulfill contracts						
Costs of returns receivable						
Contract assets						
Input tax credit under VAT	129,047,943.34		129,047,943.34	620,859,210.32		620,859,210.32
Prepayments for engineering equipment	2,554,289,711.33		2,554,289,711.33	1,819,767,455.00		1,819,767,455.00
Land prepayments	19,362,354.02		19,362,354.02			
Others	884,768.56		884,768.56			
Total	2,703,584,777.25		2,703,584,777.25	2,440,626,665.32		2,440,626,665.32

Other notes:

Input tax credit under VAT whose deduction is expected to be over a year is presented under other non-current assets.

32. Short-term borrowings

(1). Classification of short-term borrowings

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Pledge borrowings		
Mortgage borrowings		200,042,222.22
Guarantee borrowings	32,275,024.55	734,950,572.25
Credit borrowings	20,015,972.23	40,032,625.01
Discount of commercial acceptances		200,000,000.00
Guarantee + mortgage borrowings		200,204,722.22
Trade finance loan	35,476,127.44	
Total	87,767,124.22	1,375,230,141.70

(2). Overdue short-term borrowings

Applicable Not applicable

Significant overdue short-term borrowings:

Applicable Not applicable

Other notes

Applicable Not applicable

Refer to “related-party guarantees” for details on guarantees provided by Tongwei Group for the Company.

Guarantees between the Company and its subsidiaries are as below:

Unit: Yuan Currency: CNY

Guarantor	Guaranteed party	Guaranteed amount	Guarantee commencement date	Guarantee expiry date
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	871,205.97	October 01, 2022	January 13, 2023
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	2,707,967.41	October 05, 2022	January 13, 2023
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	2,852,178.23	October 13, 2022	January 31, 2023
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	2,776,209.98	October 17, 2022	January 31, 2023
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	3,101,462.12	November 08, 2022	February 06, 2023
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	1,772,264.07	November 09, 2022	February 07, 2023
Tongwei Holdings PTE. Ltd.	PT. Tongwei Indonesia	2,658,396.10	December 14, 2022	March 14, 2023
Vietnam Tongwei Feed Co.,	Qianjiang Tongwei Co.,	1,238,543.21	October 10, 2022	January 06, 2023

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Ltd.	Ltd.			
Vietnam Tongwei Feed Co., Ltd.	Qianjiang Tongwei Co., Ltd.	1,740,989.61	October 11, 2022	January 09, 2023
Vietnam Tongwei Feed Co., Ltd.	Qianjiang Tongwei Co., Ltd.	832,914.05	October 13, 2022	January 11, 2023
Vietnam Tongwei Feed Co., Ltd.	Qianjiang Tongwei Co., Ltd.	2,154,266.82	October 17, 2022	January 13, 2023
Vietnam Tongwei Feed Co., Ltd.	Qianjiang Tongwei Co., Ltd.	3,055,870.92	October 27, 2022	January 25, 2023
Vietnam Tongwei Feed Co., Ltd.	Qianjiang Tongwei Co., Ltd.	2,585,195.99	October 28, 2022	January 26, 2023
Vietnam Tongwei Feed Co., Ltd.	Qianjiang Tongwei Co., Ltd.	3,927,560.07	November 22, 2022	February 20, 2023

33. Held-for-trading financial liabilities

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
Held-for-trading financial liabilities				
Including:				
Financial liabilities designated to be measured at fair value through current profit and loss				
Including:				
Derivative financial liabilities		64,351,114.48		64,351,114.48
Total		64,351,114.48		64,351,114.48

Other notes:

"√ Applicable" "□ Not applicable"

The derivative financial liabilities refer to paper losses resulting from the difference between the locked exchange rate in the undelivered forward foreign exchange contract and the central parity rate at the end of the period.

34. Derivative financial liabilities

"□ Applicable" "√ Not applicable"

35. Notes payable**(1). Presentation of notes payable**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Type	Closing balance	Opening balance
Commercial acceptances		124,448,544.24
Banker's acceptances	8,840,732,429.14	9,761,984,458.33
Letters of credit	10,690,936.81	71,490,068.10
Total	8,851,423,365.95	9,957,923,070.67

Total amount of overdue notes payable as of the end of the period is 0 yuan.

36. Accounts payable**(1). Presentation of accounts payable**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Within 1 year	9,158,290,478.11	7,686,622,841.17
1- 2 years	1,696,665,608.81	388,134,629.62
2- 3 years	127,094,781.97	42,680,870.30
Over 3 years	36,110,668.41	33,831,735.12
Total	11,018,161,537.30	8,151,270,076.21

(2). Significant accounts payable with an age over 1 year

"□ Applicable" "√ Not applicable"

Other notes

"√ Applicable" "□ Not applicable"

1) Accounts payable with an age over 1 year are mainly equipment and construction prices payable by the Company;

2) Classification by nature of payment:

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Payable on operating activities	4,171,159,587.56	2,586,374,768.27
Payable on non-operating activities	6,847,251,082.48	5,564,895,307.94
Total	11,018,410,670.04	8,151,270,076.21

37. Advances from customers**(1). Presentation of advances from customers**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Within 1 year	26,743,540.63	97,237,950.05
1- 2 years	5,902,926.55	2,630,455.22
2- 3 years	1,973,487.73	728,229.39
Over 3 years	1,847,939.73	1,663,190.63
Total	36,467,894.64	102,259,825.29

(2). Significant advances from customers with an age over 1 year

Applicable" Not applicable"

Other notes

Applicable" Not applicable"

38. Contract liabilities**(1). Contract liabilities**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Customer advances	5,405,872,108.61	3,112,027,804.79
Total	5,405,872,108.61	3,112,027,804.79

(2). Significant changes in carrying values in the reporting period and reasons for the changes

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

39. Employee benefits payable**(1). Presentation of employee benefits payable**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
I. Short-term benefits	1,388,757,870.41	7,333,858,281.76	5,581,551,563.25	3,141,064,588.92
II. Post-employment benefits - defined contribution plans		270,931,739.31	270,931,739.31	
III. Termination benefits		7,566,789.48	7,566,789.48	
IV. Other benefits due within one year				
Total	1,388,757,870.41	7,612,356,810.54	5,860,050,092.03	3,141,064,588.92

Note: The balance of salaries, bonuses, allowances and subsidies payable is the December salaries and annual bonus that had been established and would be paid in the next month. No delay in employee payment exists.

(2). Presentation of short-term benefits

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
I. Salaries, bonuses, allowances and subsidies	1,323,924,230.34	6,784,349,035.51	5,071,326,247.76	3,036,947,018.09
II. Employee benefit expense		225,495,265.83	225,495,265.83	
III. Social insurance expense		151,292,403.51	151,292,403.51	

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Including: Medical insurance expense		133,125,331.45	133,125,331.45	
Work injury insurance expense		15,939,071.41	15,939,071.41	
Maternity insurance expense		2,228,000.65	2,228,000.65	
IV. House provident fund		64,353,943.40	64,353,943.40	
V. Union funds and education expense	64,833,640.07	108,367,633.50	69,083,702.74	104,117,570.83
VI. Short-term paid leave				
VII. Short-term profit sharing plan				
Total	1,388,757,870.41	7,333,858,281.76	5,581,551,563.25	3,141,064,588.92

(3). Presentation of defined contribution plans

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
1. Basic pension insurance		261,648,124.01	261,648,124.01	
2. Unemployment insurance expense		9,283,615.30	9,283,615.30	
3. Enterprise annuity expense				
Total		270,931,739.31	270,931,739.31	

Other notes:

Applicable Not applicable

40. Taxes payable

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
VAT	437,308,048.59	248,318,107.38
Corporate income tax	2,423,575,096.10	496,865,750.99
Personal income tax	39,520,951.40	24,877,403.26
Urban construction and maintenance tax	14,363,121.16	15,889,519.06
Stamp duty	32,256,582.08	7,637,857.31
Property tax	6,104,220.08	6,773,632.40
Land use tax	3,361,264.48	3,309,489.18
Others	17,591,719.68	12,315,148.98
Total	2,974,081,003.57	815,986,908.56

41. Other payables**Presentation of items**

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Interest payable		
Dividend payable		
Other payables	2,142,680,307.16	761,620,932.59
Total	2,142,680,307.16	761,620,932.59

Other notes:

Applicable Not applicable

Interest payable**(1). Presentation by category**

Applicable Not applicable

Dividend payable**(1). Presentation by category**

Applicable Not applicable

Other payables**(1). Other payable by nature**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Current accounts with related-parties	2,853,250.00	3,801,160.00
Performance bond	1,879,416,612.15	511,772,262.14
Others	260,410,445.01	246,047,510.45
Total	2,142,680,307.16	761,620,932.59

(2). Other significant payables with an age over 1 year

"□ Applicable" "√ Not applicable"

Other notes:

"□ Applicable" "√ Not applicable"

42. Liabilities held for sale

"□ Applicable" "√ Not applicable"

43. Non-current liabilities due within one year

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Long-term borrowings due within 1 year	1,054,189,602.55	981,675,606.47
Bonds payable due within 1 year	167,792,353.66	
Long-term accounts payable due within 1 year	522,191,207.59	1,039,544,910.06
Lease liabilities due within 1 year	467,925,405.65	465,808,746.76
Total	2,212,098,569.45	2,487,029,263.29

Other notes:

(1) Long-term borrowings due within one year

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Credit borrowings	4,602,899.29	67,722,242.68
Guarantee borrowings	110,163,681.11	455,298,240.87
Mortgage borrowings	100,329,999.99	1,499,305.06
Pledge + guarantee borrowings	138,459,263.10	124,603,755.53
Mortgage + guarantee borrowings	472,227,132.22	107,591,505.55
Mortgage + pledge + guarantee borrowings	228,406,626.84	224,960,556.78
Total	1,054,189,602.55	981,675,606.47

Note 1: Guarantees provided by Tongwei Group for the Company are detailed in "related-party guarantees". Guarantees provided by the Company for its subsidiaries:

Unit: Yuan Currency: CNY

Guarantor	Guaranteed party	Guaranteed amount	Guarantee commencement date	Guarantee expiry date
The Company	Tongwei New Energy Co., Ltd.	7,348,254.11	March 18, 2019	November 20, 2023
The Company	Panzhuhua Tongwei Huijin New Energy Co., Ltd.	11,083,826.11	June 28, 2019	April 10, 2023
The Company	Sihong Tongli New Energy Co., Ltd.	70,679,194.35	October 20, 2019	October 20, 2023
The Company	Aohanqi Xinhua New Energy Co., Ltd.	40,443,437.50	March 27, 2020	September 30, 2023
The Company	Gao'an Tongwei Fishery-PV Technology Co., Ltd.	9,818,798.93	April 01, 2020	December 21, 2023
The Company	Tianjin Binhai Tongli New Energy Co., Ltd.	24,133,327.60	June 30, 2020	December 10, 2023
The Company	Changde Dingcheng Tongwei New Energy Co., Ltd.	19,231,215.45	September 11, 2020	December 20, 2023

The Company	Xichan Tongwei New Energy Co., Ltd.	6,691,315.28	September 27, 2020	December 21, 2023
The Company	Binzhou Zhanhua Tonghui Marine Technology Co., Ltd.	46,455,780.45	December 30, 2020	December 20, 2023
The Company	Bengbu Tongwei New Energy Co., Ltd.	48,562,933.91	March 11, 2021	November 20, 2023
The Company	Gong'an Tongwei Fishery-PV Technology Co., Ltd.	25,197,633.33	March 26, 2021	September 21, 2023
The Company	Binyang Jingchuang New Energy Co., Ltd.	9,621,166.88	December 10, 2021	December 10, 2023
The Company	Binyang Jingchuang New Energy Co., Ltd.	11,643,542.36	December 10, 2021	December 10, 2023
The Company	Qinzhou Tongwei Huijin New Energy Co., Ltd.	12,565,702.78	October 27, 2021	December 15, 2023
The Company	Dongying Tongli New Energy Co., Ltd.	20,238,944.44	March 04, 2021	August 22, 2023
The Company	Tongwei Fishery-PV Technology (Jiangmen) Co., Ltd.	399,197.09	October 28, 2022	October 26, 2023
The Company	Lianjiang Tongwei Fishery-PV Technology Co., Ltd.	459,585.67	October 25, 2022	October 20, 2023
The Company	Tianmen Tongli Fishery-PV Technology Co., Ltd.	13,665,555.56	December 27, 2022	December 26, 2023
The Company	Xide Tongwei Huijin New Energy Co., Ltd.	3,049,885.00	December 23, 2022	December 20, 2023
The Company	Zhaoyuan Tongwei New Energy Technology Co., Ltd.	171,999.89	May 27, 2022	November 26, 2023
The Company	Binyang Jingchuang New Energy Co., Ltd.	2,519,230.90	July 29, 2022	December 10, 2023
The Company	Tonghe New Energy (Jintang) Co., Ltd.	980,765.85	May 12, 2022	November 12, 2023
The Company	Tongwei Solar (Meishan) Co., Ltd.	2,000,000.00	September 27, 2022	December 21, 2023
The Company	Tongwei Solar (Meishan) Co., Ltd.	24,000,000.00	December 26, 2022	December 21, 2023
The Company	Yunnan Tongwei High-purity Crystalline Silicon Company	115,578,151.60	November 24, 2021	December 31, 2023
Total		526,539,445.04		

Note 2: Pledges and mortgage are detailed in "assets with restricted ownership or use right".

Note 3: There is no overdue long-term borrowings due within one year.

(2) Long-term accounts due within one year are detailed in "long-term payables".

44. Other current liabilities

Other current liabilities

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Short-term bonds payable		
Sale returns payable		
Output VAT to be converted	405,605,864.73	190,563,712.84
Reserve established by guarantor	17,774,435.23	16,976,803.56
Including: undue claims reserve	2,516,102.90	3,012,100.99
Compensation reserve established by guarantor	15,258,332.33	13,964,702.57
Total	423,380,299.96	207,540,516.40

Increase/decrease in short-term bonds:

Applicable Not applicable

Other notes:

Applicable Not applicable

45. Long-term borrowings

(1). Classification of long-term borrowings

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Mortgage borrowings	300,000,000.00	
Guarantee borrowings	8,928,810,054.34	5,462,279,024.22
Credit borrowings	2,377,710,000.00	1,220,980,000.00
Pledge + guarantee borrowings	1,292,458,536.98	1,388,907,338.52
Mortgage + guarantee borrowings	727,550,000.00	1,364,310,000.00
Mortgage + pledge + guarantee borrowings	1,782,807,404.35	2,004,553,497.42
Total	15,409,335,995.67	11,441,029,860.16

Note on classification of long-term borrowings:

(1) Refer to “related-party guarantees” for details on guarantees provided by Tongwei Group for the Company. Guarantees provided by the Company for its subsidiaries are as below:

Unit: Yuan Currency: CNY

Guarantor	Guaranteed party	Guaranteed amount	Guarantee commencement date	Guarantee expiry date
The Company	Tianmen Tongli Fishery-PV Technology Co., Ltd.	786,666,666.66	December 27, 2022	December 26, 2042
The Company	Sichuan Yongxiang New Energy Co., Ltd.	705,000,000.00	July 30, 2021	August 24, 2028
The Company	Tonghe New Energy (Jintang) Co., Ltd.	589,800,000.00	August 31, 2022	August 30, 2027
The Company	Sihong Tongli New Energy Co., Ltd.	547,554,450.00	October 20, 2019	April 20, 2031
The Company	Tongwei Solar Hong Kong Co., Ltd.	544,810,195.88	December 01, 2021	November 30, 2024
The Company	Tongwei Solar Hong Kong Co., Ltd.	417,876,000.00	December 01, 2021	November 30, 2024
The Company	Tongwei Solar Hong Kong Co., Ltd.	417,876,000.00	December 01, 2021	November 30, 2024
The Company	Binzhou Zhanhua Tonghui Marine Technology Co., Ltd.	412,770,400.00	December 30, 2020	December 03, 2032
The Company	Bengbu Tongwei New Energy Co., Ltd.	361,224,128.35	March 11, 2021	December 29, 2031
The Company	Tongwei Solar (Hefei) Co., Ltd.	300,000,000.00	December 14, 2021	December 13, 2024
The Company	Tongwei Solar (Meishan) Co., Ltd.	300,000,000.00	October 20, 2021	October 19, 2024
The Company	Tianjin Binhai Tongli New Energy Co., Ltd.	272,895,000.00	June 30, 2020	June 10, 2032
The Company	Aohanqi Xinhua New Energy Co., Ltd.	260,000,000.00	March 27, 2020	March 26, 2030
The Company	Tongwei Solar (Meishan) Co., Ltd.	250,000,000.00	December 27, 2022	December 26, 2029
The Company	Tongwei Solar (Jintang) Co., Ltd.	233,000,000.00	December 24, 2021	December 21, 2026
The Company	Changde Dingcheng Tongwei New Energy Co., Ltd.	222,888,630.97	September 11, 2020	August 10, 2032
The Company	Binyang Jingchuang New Energy Co., Ltd.	218,575,000.00	December 10, 2021	December 08, 2032
The Company	Tongwei Solar (Meishan) Co., Ltd.	216,000,000.00	December 26, 2022	December 25, 2027
The Company	Tongwei Solar (Meishan) Co., Ltd.	198,000,000.00	September 27, 2022	September 26, 2025
The Company	Tongwei Solar (Meishan) Co., Ltd.	192,000,000.00	July 26, 2021	July 25, 2025
The Company	Dongying Tongli New Energy Co., Ltd.	150,000,000.00	March 04, 2021	February 21, 2031
The Company	Gao'an Tongwei Fishery-PV Technology Co., Ltd.	144,112,876.00	April 01, 2020	December 21, 2034
The Company	Gong'an Tongwei Fishery-PV Technology Co., Ltd.	143,000,000.00	March 26, 2021	September 21, 2029
The Company	Tongwei Solar (Meishan) Co., Ltd.	128,000,000.00	January 01, 2022	July 31, 2025

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Company				
The Company	Qinzhou Tongwei Huijin New Energy Co., Ltd.	115,200,000.00	October 27, 2021	October 27, 2032
The Company	Tongwei Solar (Meishan) Co., Ltd.	100,000,000.00	September 27, 2021	September 26, 2024
The Company	Tongwei Solar (Jintang) Co., Ltd.	95,000,000.00	December 24, 2021	December 21, 2026
The Company	Xide Tongwei Huijin New Energy Co., Ltd.	90,200,000.00	December 23, 2022	December 05, 2035
The Company	Tongwei New Energy Co., Ltd.	86,600,000.00	March 18, 2019	March 18, 2036
The Company	Tongwei Solar (Meishan) Co., Ltd.	64,000,000.00	September 10, 2021	July 31, 2025
The Company	Xichan Tongwei New Energy Co., Ltd.	62,900,000.00	September 27, 2020	September 27, 2033
The Company	Panzhuhua Tongwei Huijin New Energy Co., Ltd.	47,000,000.00	June 28, 2019	June 10, 2027
The Company	Binyang Jingchuang New Energy Co., Ltd.	21,250,000.00	July 29, 2022	December 08, 2032
The Company	Yunnan Tongwei High-purity Crystalline Silicon Company	11,550,000.00	November 24, 2021	June 30, 2025
The Company	Tongwei Fishery-PV Technology (Jiangmen) Co., Ltd.	9,611,191.80	October 28, 2022	October 26, 2037
The Company	Tongwei Solar (Hefei) Co., Ltd.	5,000,000.00	March 31, 2022	March 30, 2028
The Company	Zhaoyuan Tongwei New Energy Technology Co., Ltd.	4,750,000.01	May 27, 2022	May 25, 2037
The Company	Lianjiang Tongwei Fishery-PV Technology Co., Ltd.	4,545,456.00	October 25, 2022	October 25, 2034
The Company	Tonghe New Energy (Jintang) Co., Ltd.	4,000,000.00	May 12, 2022	May 11, 2026
Total		8,733,655,995.67		

(2) Guarantees from external entities

Unit: Yuan Currency: CNY

Guarantor	Guaranteed party	Guaranteed amount	Guarantee commencement date	Guarantee expiry date
Chongqing Branch, Ping An Bank Co., Ltd.	The Company	496,000,000.00	September 21, 2022	September 20, 2025
Total		496,000,000.00		

(3) Pledges and mortgage are detailed in “assets with restricted ownership or use right”.

Other note (including interest rate range):

" Applicable" Not applicable"

46. Bonds payable**(1). Bonds payable**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
2020 Middle-Term Note Series 1	147,817,803.66	410,493,072.19
Tong22 Convertible Bonds	10,296,919,111.67	
Less: Bonds payable due within one year	167,792,353.66	
Total	10,276,944,561.67	410,493,072.19

(2). Increase/decrease in bonds payable: (excluding other financial instruments such as preference share and perpetual bond classified as financial liabilities)

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Bond name	Face value	New date	Bond duration	New amount	Opening balance	Current New	Interest established by face value	Amortization of premium or discount	Current repayment	Closing balance
2020 Middle-Term Note Series 1	100	June 17, 2020	3 Years	400,000,000.00	410,493,072.19		12,720,000.00	404,731.47	275,800,000.00	147,817,803.66
Tong22 Convertible Bonds	100	February 24, 2022	6 Years	12,000,000,000.00		12,000,000,000.00	19,974,550.00	-1,707,785,438.33	15,270,000.00	10,296,919,111.67
Total	/	/	/	12,400,000,000.00	410,493,072.19	12,000,000,000.00	32,694,550.00	-1,707,380,706.86	291,070,000.00	10,444,736,915.33

Note 1: Amortization of premium or discount on "Tong22 Convertible Bonds" is as below:

Unit: Yuan Currency: CNY

Composition of amortization of premium or discount	Amortized premium or discount
Initially recognized amount of debt part of Tong22 Convertible Bonds	-2,048,613,255.07
Current amortization of adjusted interest for Tong22 Convertible Bonds	338,508,525.45
Reversal of adjusted interest due to conversion of Tong22 Convertible Bonds	2,319,291.29
Total	-1,707,785,438.33

Note 2: Of the closing balance of bonds payable, those re classed into non-current liabilities due within one year are presented as below:

Unit: Yuan Currency: CNY

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Item	Book balance	Amount of non-current liability due within one year	Amount of bonds payable
2020 Middle-Term Note Series 1	147,817,803.66	147,817,803.66	
Tong22 Convertible Bonds	10,296,919,111.67	19,974,550.00	10,276,944,561.67
Total	10,444,736,915.33	167,792,353.66	10,276,944,561.67

Note 3: The amount payable for the current period regarding “Tong22 Convertible Bonds” was paid through conversion of the bonds to shares. In the current period, a total of 152,700 bonds were converted to the Company's A-shares for a total amount of 15,270,000.00 yuan.

(3). Note on conversion conditions and conversion time on convertible bonds

Applicable" Not applicable"

The conversion period for the convertible bonds issued this time is from the 1st trading day 6 months after the issuance was completed (March 2, 2022, T+4) to the maturity date of the convertible bonds - that is from September 2, 2022 to February 23, 2028.

(4). Note on other financial instruments classified as financial liabilities

Basic information of other financial instruments (including preference share and perpetual bond) outstanding as of the end of the period

Applicable" Not applicable"

Changes in other financial instruments (including preference share and perpetual bond) outstanding as of the end of the period

Applicable" Not applicable"

Note on basis for classification of other financial instruments as financial liabilities:

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

47. Lease liabilities

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Lease liabilities	3,374,637,088.14	2,966,450,212.56
Less: Lease liabilities due within one year	467,925,405.65	465,808,746.76
Total	2,906,711,682.49	2,500,641,465.80

Other notes:

Note 1: Information on leases where the Company is the lessee is detailed in "other important matters - leases".

Note 2: Guarantees provided by the Company for its subsidiaries:

(1) The Company has provided guarantees for the net financial lease of 519,000,442.22 yuan taken by Sichuan Yongxiang Energy Technology Co., Ltd. and Yunnan Tongwei High-purity Crystalline Silicon Company.

(2) The Company and Tongwei New Energy Co., Ltd. have provided guarantees for the net financial lease of 1,637,635,172.73 yuan taken by Dongxing Tonghui New Energy Co., Ltd., Fuqing Tongwei Huijin New Energy Co., Ltd., Pingdu Tongwei New Energy Co., Ltd., Qian'an Tongwei Huijin New Energy Co., Ltd., Suihua Tongli Fishery-PV Technology Co., Ltd., Tongli Fishery-PV Technology (Nanjing) Co., Ltd., Tongwei Fishery-PV (Tangshan) Co., Ltd., Tongwei Fishery-PV (Nanchang) Co., Ltd., Tongwei Fishery-PV (Rudong) Co., Ltd., Chongqing Tongwei New Energy Co., Ltd., and Zibo Huixiang New Energy Co., Ltd.

(3) The Company has provided guarantees for the net financial lease of 156,527,451.66 yuan taken by Tongwei Solar (Jintang) Co., Ltd.

48. Long-term payables**Presentation of items**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Long-term payables	973,541,127.03	1,647,453,239.69
Special payables	850,000.00	850,000.00
Total	974,391,127.03	1,648,303,239.69

Other notes:

Applicable" Not applicable"

Long-term payables**(1). Presentation of other payable by nature**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Financial lease payments payable (sale-leaseback does not constitute of a sale)	807,596,681.47	1,315,358,937.56
Others	165,944,445.56	332,094,302.13
Total	973,541,127.03	1,647,453,239.69

Note: As of December 31, 2022, PV powerplant companies under the Company acquired a net amount of 1,129,390,844.93 yuan under leaseback for which the Company acts as the guarantor with joint and several liability. These companies have their right to electricity price income pledged and the leaseback of the underlying assets pledged, shareholders of these companies have their shares pledged.

Special payables**(1). Presentation of special payables by nature**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance	Reason
Special funds used as guarantees by Tongwei Agriculture Financing Guarantee	850,000.00			850,000.00	Note
Total	850,000.00			850,000.00	/

Other notes:

Note: The special funds used as guarantees by Tongwei Agriculture Financing Guarantee (a subsidiary of the Company) are 2,480,000.00 yuan consisting of risk support funds (1,630,000.00 yuan) and funds for reward in place of subsidy (850,000.00 yuan). The use of these funds is subject to Sichuan Management Procedures on Provincial-level Special Fiscal Subsidy for Agriculture-related Credit Guarantee issued by the Department of Finance of Sichuan province on August 28, 2012. Article 18 of the Procedures provides for that: funds for reward in place of subsidy are injected as state-owned capital to increase the registered capital of the guarantor; every time when the cumulative funds for reward in place of subsidy received by the guarantor is or over 10 million yuan, the guarantor must timely report to relevant authority under relevant provisions for approval and then complete the change registration of its registered capital. Risk support funds are to compensate the loss from guarantee risk if the risk reserve created by the guarantor is insufficient to compensate the loss; the balance of the risk support funds (if any) is carried over to the next year. The funds received by the Company were used in 2018 to compensate a loss of 1,630,000.00 yuan resulted from the unrecovered repayments made for behalf of the guaranteed parties, with a balance of 850,000.00 yuan.

49. Long-term employee benefits payable

"√ Applicable" "□ Not applicable"

(1). Long-term employee benefits payable

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
I. Post-employment benefits - net defined benefit liability		
II. Termination benefits		
III. Other long-term benefits	3,805,815,900.20	649,891,600.00
Total	3,805,815,900.20	649,891,600.00

Note: Other long-term employee benefits refer to the bonus to be paid one year later.

(2). Change in defined benefit plan

Present value of defined benefit plan

"□ Applicable" "√ Not applicable"

Plan asset:

"□ Applicable" "√ Not applicable"

Net defined benefit liability (asset)

Applicable" Not applicable"

Note on the defined benefit plan and risks relating thereto, and their impact on the Company's future cash flow, time and uncertainty:

Applicable" Not applicable"

Note on significant actuarial assumptions for defined benefit plan and result of sensitivity analysis

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

50. Estimated liabilities

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Closing balance	Reason
Outward guarantee			
Pending litigation			
Product warranty		177,993,077.06	
Reorganization obligation			
Loss contracts to be enforced			
Sale returns payable			
Others			
Total		177,993,077.06	/

Other notes including notes on important assumptions and estimates relating to significant estimated liabilities:

The Company provides module quality guarantee deposit at 1% of module sales revenue with reference to practices of major peer companies.

51. Deferred income

Deferred income

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance	Reason
Government grants	900,673,699.85	189,943,587.50	223,087,090.85	867,530,196.50	
Total	900,673,699.85	189,943,587.50	223,087,090.85	867,530,196.50	/

Items relating to grants:

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Liability item	Opening balance	Increased grant in current period	Amount carried into non-operating revenue in current period	Amount carried into other income in current period	Other changes	Closing balance	Relating to asset/income
Subsidy for fixed asset investment	412,616,407.45	68,643,300.00		127,188,678.61		354,071,028.84	Relating to asset
Infrastructure support fund for Global Innovation Base project	63,072,000.00					63,072,000.00	Relating to asset
Subsidy for land investment	56,542,372.77			1,220,339.04		55,322,033.73	Relating to asset
Special funds for infrastructure construction	49,878,746.72			9,653,950.97		40,224,795.75	Relating to asset
State public service platform	26,830,588.24	27,150,000.00		15,042,086.81		38,938,501.43	Relating to asset
Compensation for relocation	30,393,248.73			9,550,397.52		20,842,851.21	Relating to asset
Technological renovation project for the 2 GW intelligent factory	24,750,820.29			5,514,363.57		19,236,456.72	Relating to asset
2021 annual advanced manufacturing policy		20,000,000.00		1,944,444.46		18,055,555.54	Relating to asset
Special funds for uniform It-enabled service platform in the industrial park (digital fishery)		18,000,000.00				18,000,000.00	Relating to asset
Fiscal subsidy for emerging strategies	19,097,222.26			2,083,333.32		17,013,888.94	Relating to asset
Other amounts relating to asset	208,968,775.21	42,990,287.50		47,229,010.15		204,730,052.56	Relating to asset
Other amounts relating to income	8,523,518.18	13,160,000.00		3,660,486.40		18,023,031.78	Relating to income
Total	900,673,699.85	189,943,587.50		223,087,090.85		867,530,196.50	

Other notes:

"□ Applicable" "√ Not applicable"

52. Other non-current liabilities

Applicable" Not applicable"

53. Share capital

Applicable" Not applicable"

Unit: Yuan Currency: CNY

	Opening balance	Change (+, -)					Closing balance
		New issue	Bonus issue	Capital reserve Converted to share capital	Others	Sub-total	
Total shares	4,501,548,184				397,913	397,913	4,501,946,097

Note: Other increase means the conversion of Tong22 Convertible Bonds to shares in the current period.

54. Other equity instruments**(1). Basic information of other financial instruments (including preference share and perpetual bond) outstanding as of the end of the period**

Applicable" Not applicable"

Approved by the CSRC in the CSRC Permit [2021] No. 4028, on February 24, 2022, the Company issued convertible bonds publicly valued 12 billion yuan for a term of 6 years. The coupon rate arrangements for these convertible bonds: 0.20% in the 1st year, 0.40% in the 2nd year, 0.60% in the 3rd year, 1.50% in the 4th year, 1.80% in the 5th year, and 2.00% in the 6th year. Interest payments are made annually and the principal and interest for the last year will be paid on maturity.

(2). Changes in other financial instruments (including preference share and perpetual bond) outstanding as of the end of the period

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Financial instruments outstanding	Opening		Current increase		Current decrease		Closing	
	Number	Carrying value	Number	Carrying value	Number	Carrying value	Number	Carrying value
Tong22 Convertible Bonds			120,000,000	1,967,589,416.96	152,700	2,503,757.53	119,847,300	1,965,085,659.43
Total			120,000,000	1,967,589,416.96	152,700	2,503,757.53	119,847,300	1,965,085,659.43

Note on changes in other equity instruments and the reasons as well as basis for relevant accounting treatment

Applicable" Not applicable"

Note: The current decrease is due to the accumulative conversion of Tong22 Convertible Bonds with a nominal value of 15,270,000.00 yuan to the Company's shares, which resulted in the conversion of other equity instruments into capital reserve.

Other notes:

Applicable" Not applicable"

55. Capital reserve

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
Capital premium (share premium)	16,108,230,834.72	21,207,139.65	8,407,758.12	16,121,030,216.25
Other capital reserves	-371,113.32	23,809,924.94	166,628.78	23,272,182.84
Total	16,107,859,721.40	45,017,064.59	8,574,386.90	16,144,302,399.09

Other notes including changes in current period and reasons:

Note 1: Current change in capital reserve is from:

Unit: Yuan Currency: CNY

Item	Current increase	Current decrease
I. Share premium	21,207,139.65	8,407,758.12
1. "Tong22 Convertible Bonds" converted to share capital	15,050,495.92	
2. Equity transactions with minority interest	6,156,643.73	8,407,758.12
II. Other capital reserves	23,809,924.94	166,628.78
1. Other changes in equity of Suzhou Taiyangjing New Energy Co., Ltd. (an associate of the Company) recognized by the shareholding percentage	23,809,924.94	
2. Other changes in equity of Bohai Aquaculture Co., Ltd. (an associate of the Company) recognized by the shareholding percentage		166,628.78
Total	45,017,064.59	8,574,386.90

Note 2: Equity transactions with minority interest are detailed in "Equity in other entities - Transactions resulting in changes in ownership interest without loss of control". The share premium is adjusted as below according to the difference between the Company's share of the net assets of the investee and the acquisition consideration/disposal consideration:

Unit: Yuan Currency: CNY

No.	Investee	Change in equity percentage before and after the transaction			Adjustment of capital reserve
		Before transaction	Shareholding percentage under transaction	After transaction	
1	Sichuan Willtest Technology Co., Ltd.	85.04%	0.36%	85.40%	4,813.50
2	Sichuan Yongxiang Silicon Materials Co., Ltd.	92.75%	7.25%	100.00%	-8,407,758.12
3	Tongwei (Hainan) Aquatic Products Co., Ltd.	100.00%	-20.00%	80.00%	6,151,830.23
	Total				-2,251,114.39

56. Treasury shares

Applicable Not applicable

57. Other comprehensive income

Applicable Not applicable

Unit: Yuan Currency: CNY

Item	Opening balance	Current period amount						Closing balance
		Current period amount before tax	Less: amount carried into other comprehensive income in prior periods that is converted into current profit and loss	Less: amount carried into other comprehensive income in prior periods that is converted into retained earnings	Less: Income tax expense	After-tax income attributable to the parent company	After-tax income attributable to minority shareholders	
I. Other comprehensive income that cannot be reclassified into profit or loss	6,863,798.71	644,958.57				644,958.57		7,508,757.28
Including: Changed in re-measured defined benefit plan								
Other comprehensive income that cannot be converted into profit and loss under equity method								
Change in fair value of other equity investments	6,863,798.71	644,958.57				644,958.57		7,508,757.28
Change in fair value of the company's own credit risk								

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II. Other comprehensive income that will be reclassified into profit or loss	-89,171,202.67	-26,418,368.81				-27,197,357.90	778,989.09	-116,368,560.57
Including: other comprehensive income that can be converted into profit and loss under equity method	259,086.76	-1,120,566.26				-1,120,566.26		-861,479.50
Change in fair value of other debt investments								
Amount of financial asset reclassified into other comprehensive income								
Provision for credit impairment of other debt investments								
Cash flow hedge reserve								
Foreign currency translation	-89,430,289.43	-25,297,802.55				-26,076,791.64	778,989.09	-115,507,081.07
Total other comprehensive income	-82,307,403.96	-25,773,410.24	-	-		-26,552,399.33	778,989.09	-108,859,803.29

Other notes including the adjustment of the initially recognized amount of a hedged item converted from the effective portion of cash flow hedge: None.

58. Special reserve

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
Work safety expense	15,918,034.03	140,169,711.16	122,335,772.05	33,751,973.14
Total	15,918,034.03	140,169,711.16	122,335,772.05	33,751,973.14

Other notes including changes in current period and reasons:
None.

59. Surplus reserve

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Opening balance	Current increase	Current decrease	Closing balance
Statutory surplus reserve	1,414,948,005.57	992,407,579.88		2,407,355,585.45
Discretionary surplus reserve				
Reserve fund				
Enterprise development fund				
Others				
Total	1,414,948,005.57	992,407,579.88		2,407,355,585.45

Surplus reserve notes, including notes on changes in current period and reasons for the changes:
None.

60. Undistributed profit

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current period	Prior period
Unadjusted undistributed profit at the end of the prior period	15,544,604,417.32	9,066,353,854.50
Total adjustment of opening undistributed profit (+ for increase and - for decrease)	-319,550,651.51	-375,926,424.61
Adjusted opening undistributed profit	15,225,053,765.81	8,690,427,429.89
Add: net current profit attributable to owners of parent company	25,726,447,236.27	8,109,125,091.40
Less: Withdrawal from statutory surplus	992,407,579.88	489,625,643.13
Withdrawal from discretionary surplus reserve		
Withdrawal from general risk reserve		
Common dividend payable	4,105,411,943.81	1,084,873,112.35

Common dividend converted to share capital		
Closing undistributed profit	35,853,681,478.39	15,225,053,765.81

Details on adjustment of opening undistributed profit:

1. Retrospective adjustment made under the Accounting Standard for Business Enterprises and relevant new provisions had an effect of -319,550,651.51 yuan on the opening undistributed profit.
2. Changes in accounting policies had an effect of 0 yuan on the opening undistributed profit.
3. Corrections of material accounting errors had an effect of 0 yuan on opening undistributed profit.
4. Change in the scope of the consolidation due to business combination under common control had an effect of 0 yuan on the opening undistributed profit.
5. The total effect of other adjustments on the opening undistributed profit was 0 yuan.

61. Operating revenue and operating cost

(1). Operating revenue and operating cost

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount		Prior amount	
	Revenue	Cost	Revenue	Cost
Main operating activities	141,472,384,388.51	87,254,634,514.11	64,109,894,648.73	47,707,872,705.20
Other operating activities	950,133,606.48	805,326,665.12	720,101,435.18	674,956,888.88
Total	142,422,517,994.99	88,059,961,179.23	64,829,996,083.91	48,382,829,594.08

(2). Revenue from contracts with customers

Applicable" Not applicable"

Note on revenue from contracts with customers

Applicable" Not applicable"

(3). Note on performance obligations

Applicable" Not applicable"

(4). Note on allocation to remaining performance obligations

Applicable" Not applicable"

62. Tax and surcharge

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Urban construction and maintenance tax	377,178,795.41	70,012,995.86
Education surcharge	163,166,551.01	30,168,484.84
Property tax	89,394,957.45	58,097,775.48
Land use tax	52,628,305.98	35,038,174.67
Stamp duty	94,650,742.15	46,710,678.44
Local education surcharge	108,780,536.29	20,103,271.22
Others	25,575,237.38	15,823,859.87
Total	911,375,125.67	275,955,240.38

63. Sales expense

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Employee benefits	770,817,518.67	528,231,438.62
Estimated loss from product warranty	182,911,569.17	
Business travel cost	113,684,620.81	99,407,130.03
Advertising costs	149,568,889.24	80,254,400.11
Marketing and promotion costs	80,378,401.05	111,456,577.28
After-sale costs	25,658,311.95	34,614,317.63
Others	111,751,581.98	65,045,929.26
Total	1,434,770,892.87	919,009,792.93

64. Management expense

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Employee benefits	6,343,786,628.08	2,064,751,080.97
Depreciation expense	263,277,201.43	204,677,855.44
Amortization of intangible assets	169,676,417.53	75,297,475.40
Work safety expense	163,287,723.11	69,318,823.96
Consulting expense (including advisory expense)	107,243,742.53	66,490,767.62
Others	820,642,991.69	470,697,968.07
Total	7,867,914,704.37	2,951,233,971.46

65. R&D cost

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Costs of materials	740,997,184.57	544,172,230.59
Labor cost	342,122,319.57	264,910,724.79
Fuel and power	172,464,460.31	96,754,339.59
Depreciation expense	71,625,073.77	59,155,137.92
Other expense	137,234,505.62	60,723,055.79
Total	1,464,443,543.84	1,025,715,488.68

66. Financial expense

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Interest expense	960,173,341.35	469,390,027.14
Add: Fiscal interest subsidy	655,131.16	12,516,147.44
Less: Interest income	458,574,423.96	111,780,056.77
Add: Exchange loss	304,701,078.39	107,665,859.41
Less: Exchange gain	362,325,267.48	50,678,301.83
Add: Amortization of unrecognized financing costs	212,094,771.40	223,712,325.17
Add: Long-term interest on employee benefits payable	13,209,811.77	
Add: Financial institution fees	20,523,031.76	11,366,982.70
Total	689,147,212.07	637,160,688.38

67. Other income

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Government grants relating to everyday activities	397,490,494.89	359,499,729.72
Total	397,490,494.89	359,499,729.72

Other notes:

Government grants relating to everyday activities are detailed below:

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount	Relating to asset/income
Special reward funds	68,299,113.00	14,398,300.00	Relating to income
Subsidy for employment stabilization	10,099,574.85	2,977,131.25	Relating to income
Government supports	10,000,000.00	20,880,000.00	Relating to income
Tax refund	3,187,034.78	20,154,724.40	Relating to income
Amount relating to asset that is converted from deferred income	219,999,271.08	168,293,435.91	Relating to asset
Amount relating to income that is	3,087,819.77	1,479,897.53	Relating to income

converted from deferred income			
Other amounts relating to income	82,817,681.41	131,316,240.63	Relating to income
Total	397,490,494.89	359,499,729.72	

68. Investment gain

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Gain on long-term equity investment under equity method	-62,827,359.84	-14,159,521.52
Gain on disposal of long-term equity investment	1,122,402.01	386,473.17
Investment gain on held-for-trading financial assets in the holding period		
Dividend income on other equity investments in the holding period		
Interest income on debt investments in the holding period		
Interest income on other debt investments in the holding period		
Gain on disposal of held-for-trading financial assets		497,846.62
Investment gain on disposal of other equity investments		
Investment gain on disposal of debt investments		
Investment gain on disposal of other debt investments		
Debt restructuring gain		
Gain on other non-current financial assets		-12,271.90
Discount interest on receivable financing	-374,197,220.05	-15,695,856.14
Gain on wealth management products purchased from banks	89,935,380.67	23,368,421.89
Gain on forward exchange settlement	-75,037,183.70	48,151,494.55
Total	-421,003,980.91	42,536,586.67

Other notes:

(1) Gain on long-term equity investment under equity method

Unit: Yuan Currency: CNY

Investee	Current amount	Prior amount
Bohai Aquaculture Co., Ltd.	2,136,863.18	1,030,906.22
Anhui Tech-bank Feed Technology Co., Ltd.	1,795,335.25	-643,982.62
Anhui Tech-bank Biotechnology Co., Ltd.	338,944.91	402,678.61
Maoming Tongwei Jiuding Feed Co., Ltd.	-902,593.03	-655,071.22
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	-2,947,930.43	3,881,464.81
Suzhou Taiyangjing New Energy Co., Ltd.	-5,939,032.23	-3,339,026.67
Haimao Seed Industry Technology Co., Ltd.	-57,308,947.49	-13,461,047.10
Huangmei Tongwei Jiuding Feed Co., Ltd.		-93,859.57
Shaoxing Tongwei Jiuding Feed Co., Ltd.		-196,132.16
Hefei Tongwei Jiuding Feed Co., Ltd.		-1,085,451.82
Total	-62,827,359.84	-14,159,521.52

(2) Gain on disposal of long-term equity investment

Unit: Yuan Currency: CNY

Investee	Current amount	Prior amount
Hefei Tongwei Jiuding Feed Co., Ltd. Note	990,241.92	141,666.67
Shaoxing Tongwei Jiuding Feed Co., Ltd. Note	132,160.09	118,750.00
Lijiang Longji Silicon Materials Co., Ltd.		116,781.50
Huangmei Tongwei Jiuding Feed Co., Ltd.		9,275.00
Total	1,122,402.01	386,473.17

Note: Hefei Tongwei Jiuding Feed Co., Ltd. and Shaoxing Tongwei Jiuding Feed Co., Ltd. (two joint ventures) were dis-registered in 2021, the gain on distribution of remaining assets of the two joint ventures after the dis-registration was recognized as gain on investment in the current period.

(3) Gain on disposal of held-for-trading financial assets

Unit: Yuan Currency: CNY

Investee	Current amount	Prior amount
Disposal of the equity in Chengdu Tongwei Industrial Co., Ltd.		497,846.62
Total		497,846.62

(4) Gain on other non-current financial assets

Unit: Yuan Currency: CNY

Investee	Current amount	Prior amount
Sichuan Electricity Trading Center Co., Ltd.		-12,271.90
Total		-12,271.90

69. Gain on hedge of net exposure Applicable" Not applicable"**70. Fair value gain** Applicable" Not applicable"

Unit: Yuan Currency: CNY

Source of gains	Current amount	Prior amount
Held-for-trading financial assets	20,117,978.88	5,754,600.46
Including: Gain on change in fair value of derivate financial instruments	1,450,406.25	5,754,600.46
Gain on change in fair value of structured deposits and wealth management products	18,667,572.63	
Held-for-trading financial liabilities	-56,562,286.24	
Investment properties measured at fair value		
Total	-36,444,307.36	5,754,600.46

71. Credit impairment loss Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Bad debt loss from notes receivable		
Bad debt loss from accounts receivable	-104,175,443.95	-92,018,130.84
Bad debt loss from other receivables	-31,593,290.20	-31,637,916.41
Impairment loss from debt investments		
Impairment loss from other debt investments		
Bad debt loss from long-term receivables		
Impairment loss from contract assets		
Total	-135,768,734.15	-123,656,047.25

72. Asset impairment loss Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
I. Bad debt loss		
II. Obsolete inventory loss and impairment loss on fulfillment costs	-468,951,790.67	-43,333,695.97
III. Impairment loss from long-term equity investments	-24,673,524.79	
IV. Impairment loss from investment properties		
V. Impairment loss from fixed assets	-1,582,908,661.72	-43,375,936.90
VI. Impairment loss from construction materials		
VII. Impairment loss from construction in progress		
VIII. Impairment loss from productive biological assets		
IX. Impairment loss from gas and oil assets		

X. Impairment loss from intangible assets		
XI. Goodwill impairment loss	-146,871,236.56	-28,774,072.31
XII. Others		
XIII. Impairment loss from contract assets	11,529,856.67	-13,637,378.90
Total	-2,211,875,357.07	-129,121,084.08

73. Gain on asset disposal

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Gain on disposal of fixed assets	-9,233,490.26	-99,013,550.58
Gain on disposal of intangible assets	3,128,786.74	15,823,037.54
Gain on disposal of right-of-use assets	-7,486,618.82	5,007,050.34
Gain on disposal of construction in progress		-47,169.81
Gain on disposal of productive biological assets	153,161.13	
Total	-13,438,161.21	-78,230,632.51

74. Non-operating revenue

Non-operating revenue

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount	Amount carried into current non-recurring gain or loss
Total gain on disposal of non-current assets	230,421.30	257,617.59	230,421.30
In which: Gain on disposal of fixed assets	230,421.30	257,617.59	230,421.30
Gain on disposal of intangible assets			
Gain on non-monetary exchange			
Receipt of donations			
Government grants			
Payables that cannot be paid	17,811,097.71	11,220,621.89	17,811,097.71
Income relating to damages for breach	12,262,136.16	7,891,108.73	12,262,136.16
Others	1,115,736.17	570,562.18	1,115,736.17
Total	31,419,391.34	19,939,910.39	31,419,391.34

Grants carried into current gain and loss

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

75. Non-operating cost

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount	Amount carried into current non-recurring gain or loss
Total loss on disposal of non-current assets	1,189,771,474.52	451,946,658.93	1,189,771,474.52
In which: Loss on disposal of fixed assets	1,189,771,474.52	451,946,658.93	1,189,771,474.52
Loss on disposal of intangible assets			
Loss on non-monetary exchange			
Outward donations	57,889,843.28	2,205,539.82	57,889,843.28
Damages	14,225,476.46	4,856,884.84	14,225,476.46
Others	4,587,735.07	5,357,778.62	4,587,735.07
Total	1,266,474,529.33	464,366,862.21	1,266,474,529.33

76. Income tax expense**(1). Income tax expense**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Current income tax	6,407,796,222.28	1,568,558,449.66
Deferred income tax	-441,871,609.95	80,386,004.34
Total	5,965,924,612.33	1,648,944,454.00

(2). Adjustment of accounting profit and income tax expense

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount
Total profit	38,338,810,153.14
Income tax expense under legal/applicable tax rate	9,584,702,538.28
Effect of different tax rates applied to subsidiaries	-3,739,754,419.63
Effect of periods prior to adjustment	-17,084,155.10
Effect of non-taxable income	-265,667,288.52
Effect of nondeductible cost, expense and loss	79,202,156.25
Effect of use of deductible loss from prior unrecognized deferred tax assets	-21,109,109.37
Effect of deductible temporary difference or deductible loss from deferred tax assets not recognized in current period	557,090,177.01
Effect of recognition of deferred tax asset in current period for the deductible loss/deductible temporary difference from deferred tax assets not recognized in prior period	-4,978,114.49
Effect of the reversal of deductible loss/deductible temporary difference from prior recognized deferred tax assets	36,747,737.42
Effect of taxable income deduction	-153,471,003.21
Effect of tax credit	-91,301,334.72
Deferred income tax expense impacted by changes in tax rates	1,853,442.37
Income tax expense	5,965,924,612.33

Other notes:

"□ Applicable" "√ Not applicable"

77. Other comprehensive income

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
1. Other comprehensive income attributable to owners of the parent company	-26,552,399.33	-8,393,182.24
In which: Change in fair value of other equity investments	644,958.57	106,497.86
Other comprehensive income that can be converted to profit or loss under equity method	-1,120,566.26	259,086.76
Foreign currency translation	-26,076,791.64	-8,758,766.86
2. Other comprehensive income attributable to minatory shareholders	778,989.09	-269,478.66
In which: Change in fair value of other equity investments		
Other comprehensive income that can be converted to profit or loss under equity method		
Foreign currency translation	778,989.09	-269,478.66
Total	-25,773,410.24	-8,662,660.90

78. Cash flow statement**(1). Other cash received relating to operating activities**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Performance bond	860,757,228.02	216,063,316.45
Interest on bank deposits	381,361,028.20	111,381,985.30
Government grants	387,782,690.24	505,800,189.28
Reserve and current accounts		14,433,073.85
Rent income	20,764,119.65	13,703,889.84
Damages for breach	5,757,415.65	5,691,790.25
Insurance claims	3,686,436.65	304,741,143.61
Others	7,251,801.87	2,661,344.67
Total	1,667,360,720.28	1,174,476,733.25

Other cash received relating to operating activities:

None.

(2). Other cash paid relating to operating activities

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Other cash paid relating to operating activities	975,744,124.58	851,207,059.21
Performance bond	442,975,203.98	136,890,264.51
Reserve and current accounts		27,699,083.31
Prepaid distribution from PV powerplants in poverty alleviation program	4,258,494.94	12,432,390.37
Total	1,422,977,823.50	1,028,228,797.40

Other cash paid relating to operating activities:

None.

(3). Other cash received relating to investing activities

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Construction bid bonds	702,279,499.81	461,244,114.22
Construction account funds unlocked		6,400,835.68
Total	702,279,499.81	467,644,949.90

Other cash received relating to investing activities:

None.

(4). Other cash paid relating to investing activities

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Refunded construction bid bonds	501,949,500.23	506,985,472.09
Reclamation deposit paid	5,059,692.00	
Total	507,009,192.23	506,985,472.09

Other cash paid relating to investing activities:

None.

(5). Other cash received relating to financing activities

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Cash received from sale-leaseback (which does not constitute of a sale)	420,000,000.00	
Recovered borrowings, letters of guarantee, and bills of guarantee deposit	18,563,287.33	167,104,080.27
Funds coordinated to joint ventures	16,181,517.10	52,701,735.98
Recovered lease risk reserve	3,144,221.04	
Income including interest on financing margin	66,625.00	400,362.32
Debt investments from minority shareholders of subsidiaries		122,975,000.00
Total	457,955,650.47	343,181,178.57

Notes on other cash received relating to financing activities:

None.

(6). Other cash paid relating to financing activities

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Lease payments	2,303,848,382.42	2,028,127,474.39
In which: Lease payments for sale-leaseback (which does not constitute of a sale)	1,509,098,738.01	1,341,397,284.46
Principal repayment for interest-free debts	185,087,917.55	185,087,917.55
Financial lease risk reserve	34,496,451.77	22,549,598.12
Funds coordinated to joint ventures	16,181,517.10	52,701,735.99
Purchase of minority shareholding	8,520,015.17	1,534,258.73
Financing charges	3,270,000.00	9,179,990.00
Intermediary costs including attorney costs and accountant costs for issuing convertible bonds	2,579,796.72	
Paid notes, letters of credit and deposits for borrowings		7,503,287.33
Investment withdrawn by minority shareholders		1,689,178.73
Total	2,553,984,080.73	2,308,373,440.84

Notes on other cash paid relating to investing activities:

None.

79. Additional information on cash flow statement**(1). Additional information on cash flow statement**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Additional information	Current amount	Prior amount
1. Net profit adjusted as cash flow from operating activities		
Net income	32,372,885,540.81	8,621,503,055.19
Add: provision for asset impairment	2,211,875,357.07	129,121,084.08
Credit impairment loss	135,768,734.15	123,656,047.25
Depreciation of fixed assets, depletion of oil and gas assets and depreciation of productive biological assets	4,842,701,966.51	2,595,470,227.61
Amortization of right-of-use assets	395,175,853.44	436,570,018.21
Amortization of intangible assets	185,441,989.52	92,013,927.02
Amortization of long term prepaid expenses	157,556,427.94	103,368,124.71

Loss from disposal of fixed assets, intangible assets and other long-term assets (“-” for gain)	13,438,161.21	78,230,632.51
Loss from scrap of fixed assets (“-” for gain)	1,189,541,053.22	451,689,041.34
Loss from change in fair value (“-” for gain)	36,444,307.36	-5,754,600.46
Financial expense (“-” for gain)	1,105,568,202.87	704,955,202.62
Investment loss (“-” for gain)	421,003,980.91	-42,536,586.67
Decrease in deferred tax assets (“-” for increase)	-981,648,334.10	-170,385,098.15
Increase in deferred tax liabilities (“-” for decrease)	539,776,724.15	250,771,102.49
Decrease in inventories (“-” for increase)	-5,788,809,331.01	-2,796,868,142.01
Decrease in operating receivables (“-” for increase)	-6,104,015,351.83	-7,394,759,888.49
Increase in operating receivables (“-” for decrease)	13,085,204,349.48	4,297,349,286.08
Others		
Net cash flow generated from operating activities	43,817,909,631.70	7,474,393,433.33
2. Significant investing and financing activities not related to cash receipt and payment:		
Debt for equity swap	12,950,708.71	
Convertible bonds due within one year		
Fixed assets acquired by financial lease		
3. Net changes in cash and cash equivalents:		
Closing balance of cash	35,194,041,631.11	2,903,078,719.63
Less: Opening balance of cash	2,903,078,719.63	5,986,042,619.46
Add: Closing balance of cash equivalents		
Less: Opening balance of cash equivalents		
Net increase in cash and cash equivalents	32,290,962,911.48	-3,082,963,899.83

(2). Net cash paid by subsidiaries in current period

Applicable" Not applicable"

(3). Net cash received in current period for disposal of subsidiary

Applicable" Not applicable"

(4). Components of cash and cash equivalents

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
I. Cash	35,194,041,631.11	2,903,078,719.63
Including: Cash on hand	152,905.98	109,314.50
Bank deposits available for payment	35,171,465,208.91	2,872,458,634.04
Other cash available for payment	22,423,516.22	30,510,771.09
Central bank deposits available for payment		
Interbank deposits		
Interbank borrowings		
II. Cash equivalents		
Including: Bond investments due within three months		
II. Closing cash and cash equivalents	35,194,041,631.11	2,903,078,719.63
Including: Restricted cash and cash equivalents available for use by parent company or subsidiaries		

Other notes:

Applicable" Not applicable"

80. Notes to statement of owner's equity

Note on “other” items and adjusted amounts for adjustment of closing balance of prior period:

Applicable" Not applicable"

81. Assets with restricted ownership or use right

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing carrying value	Restriction reasons
Cash at bank and on hand	25,374,248.91	Provide guarantees for financing and operating activities of the Company
Receivables financing	9,665,638,659.50	Provides pledges for the bank acceptance bills issued by the Company
Accounts receivable	715,625,583.47	Provide collaterals for financing of the Company
Contract assets	355,864,692.87	Provide collaterals for financing of the Company
Fixed assets	5,957,339,958.31	Provide securities for financing of the Company and financial lease
Right-of-use assets	1,392,343,524.16	Provide collaterals for financing of the Company
Intangible assets	445,149,567.28	Provide collaterals for financing of the Company
Investment properties	72,509,754.87	Provide collaterals for financing of the Company
Total	18,629,845,989.37	/

82. Foreign currency monetary items**(1). Foreign currency monetary items**

"√ Applicable" "□ Not applicable"

Unit: Yuan

Item	Closing foreign currency balance	Exchange rates for translation	Closing converted CNY balance
Cash at bank and on hand	-	-	
Including: USD	52,165,598.43	6.9646	363,312,526.88
VND	186,436,434,592.84	0.0002952	55,028,463.57
BDT	341,859,501.11	0.0730199	24,962,540.88
IDR	11,622,323,637.03	0.0004431	5,149,456.64
EUR	6,500,588.19	7.4229	48,253,216.08
HKD	2,173,601.96	0.8933000	1,941,678.63
Notes receivable			
USD	253,151,673.51	6.9646	1,763,100,145.35
EUR	92,661,024.47	7.4229	687,813,518.54
Accounts receivable	-	-	
Including: USD	13,447,964.89	6.9646	93,659,696.27
VND	371,273,280,684.83	0.0002952	109,584,793.59
BDT	25,534,533.98	0.0730199	1,864,528.70
IDR	121,315,998,102.01	0.0004431	53,750,996.06
Short-term borrowings			
USD	6,415,829.92	6.9646000	44,683,689.04
VND	52,633,734,200.00	0.0002952	15,535,340.66
IDR	17,000,000,000.00	0.0004431	7,532,122.29
Notes payable			
USD	1,192,650.00	6.9646	8,306,330.19
EUR	321,250.00	7.4229	2,384,606.62
Accounts payable			
USD	1,308,701.32	6.9646	9,114,581.19
VND	156,596,951,194.71	0.0002952	46,221,059.96
BDT	276,812,011.55	0.0730199	20,212,780.78
IDR	43,053,236,032.25	0.0004431	19,075,425.81
EUR	1,738,795.15	7.4229	12,906,930.24
Employee benefits payable			

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VND	13,140,244,969.32	0.0002952	3,878,466.62
BDT	47,711,618.55	0.0730199	3,483,896.82
IDR	563,250,000.00	0.0004431	249,556.93
Taxes payable			
USD	41,252,996.57	6.9646	287,310,619.88
VND	10,143,711,306.70	0.0002952	2,994,011.59
BDT	961,063.17	0.0730199	70,176.72
IDR	5,897,546,827.00	0.0004431	2,613,002.58
EUR	1,658,393.26	7.4229	12,310,087.35
Other payables			
USD	41,252,996.57	6.9646	287,310,619.88
VND	10,143,711,306.70	0.0002952	2,994,011.59
BDT	961,063.17	0.0730199	70,176.72
IDR	5,897,546,827.00	0.0004431	2,613,002.58
EUR	1,658,393.26	7.4229	12,310,087.35
Non-current liabilities due within one year			
USD	1,193,612.42	6.9646	8,313,033.06
Long-term borrowings	-	-	-
Including: USD	198,225,626.15	6.9646	1,380,562,195.88

(2). Note on overseas operating entities, including for important overseas operating entities, the principal business locations overseas, reporting currencies and basis, as well as reasons for changes in reporting currencies

"√ Applicable" "□ Not applicable"

Entity name	Principal business location	Reporting currency	Basis for reporting currency
Tongwei Holdings PTE. Ltd.	Singapore	USD	Currency for main operating activities
Tongwei Solar (Singapore) PTE. Ltd.	Singapore	USD	Currency for main operating activities
Tongwei Feed Mill Bangladesh Ltd.	Bangladesh	BDT	Local main currency
Vietnam Tongwei Co., Ltd.	Vietnam	VND	Local main currency
Haiyang Tongwei Co., Ltd.	Vietnam	VND	Local main currency
Heping Tongwei Co., Ltd.	Vietnam	VND	Local main currency
PT. Tongwei Indonesia	Indonesia	IDR	Local main currency
Qianjiang Tongwei Co., Ltd.	Vietnam	VND	Local main currency
Tongta Tongwei Co., Ltd.	Vietnam	VND	Local main currency
Vietnam Tech-bank Co., Ltd.	Vietnam	VND	Local main currency
Tongwei Solar Hong Kong Co., Ltd.	Hong Kong	USD	Currency for main operating activities
Tongwei Solar (Germany) GmbH	Germany	EUR	Local main currency

83. Hedge

"□ Applicable" "√ Not applicable"

84. Government grants

(1). Overview of government grants

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Type	Amount	Presentation item	Amount carried into current profit and loss
Grants related to assets	1,068,933,769.17	Deferred income	219,426,604.45

Grants related to income	21,683,518.18	Deferred income	3,660,486.40
Grants related to income	177,181,223.81	Other income	177,181,223.81
Grants related to income	5,837,894.16	Operating cost	5,837,894.16
Grants related to income	655,131.16	Financial expense	655,131.16
Total	1,274,291,536.48	Total	406,761,339.98

(2). Return of grants

Applicable" Not applicable"

Other notes:

None.

85. Others

Applicable" Not applicable"

VIII. Changes in the scope of consolidation**1. Business combinations under different control**

Applicable" Not applicable"

2. Business combinations under common control

Applicable" Not applicable"

3. Reverse acquisition

Applicable" Not applicable"

4. Subsidiary disposal

Disposal of subsidiary with on transaction leading to losing control

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

5. Changes in scope of consolidation for other reasons

Note on changes in scope of consolidation for other reasons (such as new subsidiary or liquidation of subsidiary) and relevant circumstances:

Applicable" Not applicable"

(1) The 10 first-level subsidiaries newly established through investment in current period are listed as follows:

Subsidiary name	Subsidiary name
Tongwei Solar (Hainan) Co., Ltd.	Huizhou Tongwei Biotechnology Co., Ltd.
Tongwei Solar (Singapore) PTE. Ltd.	Changde Tongwei Biotechnology Co., Ltd.
Tongwei Agriculture Development Co., Ltd.	Huanggang Tongwei Biotechnology Co., Ltd.
Hefei Tongwei Biotechnology Co., Ltd.	Nanchang Tongwei Feed Co., Ltd.
Shaoxing Tongwei Biotechnology Co., Ltd.	Chengdu Tongwei Biotechnology Co., Ltd.

(2) The 2 first-level subsidiaries canceled in current period are listed as follows:

Subsidiary name	Subsidiary name
Tongwei Industrial (Tibet) Co., Ltd.	Hengshui Tongwei Feed Co., Ltd.

(3) 55 first-level subsidiaries were converted to second-level ones in the current period

① Tongwei (Hainan) Aquatic Products Co., Ltd. become a subsidiary of Sichuan Tongwei Food Co., Ltd.

② The following 54 subsidiaries were converted to the subsidiaries of Tongwei Agriculture Development Co., Ltd. in the current period:

Subsidiary name	Subsidiary name	Subsidiary name
Chongqing Tongwei Feed Co., Ltd.	Chongqing Changshou Tongwei Feed Co., Ltd.	Sichuan Willtest Technology Co., Ltd.
Shandong Tongwei Feed Co., Ltd.	Nantong Bada Feed Co., Ltd.	Wuxi Tongwei Biotechnology Co., Ltd.
Shashi Tongwei Feed Co., Ltd.	Zibo Tongwei Feed Co., Ltd.	Sichuan Tongwei Feed Co., Ltd.

Chengdu Tongwei Animal Nutrition Technology Co., Ltd.	Kunming Tongwei Feed Co., Ltd.	Qingdao Hairen Aquatic Seed Industry Technology Co., Ltd.
Yuanjiang Tongwei Feed Co., Ltd.	Foshan Gaoming Tongwei Feed Co., Ltd.	Zhanjiang Haixianfeng Bio-tech Co., Ltd.
Changchun Tongwei Feed Co., Ltd.	Tianmen Tongwei Biotechnology Co., Ltd.	Nanchang Tongwei Biotechnology Co., Ltd.
He'nan Tongwei Feed Co., Ltd.	Binyang Tongwei Feed Co., Ltd.	Yangjiang Haiyi Biotechnology Co., Ltd.
Guangdong Tongwei Feed Co., Ltd.	Chengdu Tongwei Sanxin Pharmaceutical Co. Ltd.	Nanning Tongwei Biotechnology Co., Ltd.
Xiamen Tongwei Feed Co., Ltd.	Tongwei Agricultural Finance Guarantee Co., Ltd.	Maoming Tongwei Biotechnology Co., Ltd.
Wuhan Tongwei Feed Co., Ltd.	Chengdu Tongwei Automation Equipment Co., Ltd.	Ningbo Tech-bank Feed Technology Co., Ltd.
Tianjin Tongwei Feed Co., Ltd.	Haerbin Tongwei Feed Co., Ltd.	Qingdao Qihao Biotechnology Co., Ltd.
Huaian Tongwei Feed Co., Ltd.	Zhuhai Haiyi Aquatic Products Feed Co., Ltd.	Ningbo Tech-bank Biotechnology Co., Ltd.
Jieyang Tongwei Feed Co., Ltd.	Hainan Haiyi Aquatic Seed Co., Ltd.	Yancheng Tech-bank Feed Technology Co., Ltd.
Chengdu Ronglai Tongwei Feed Co., Ltd.	Tongwei Holdings PTE. Ltd.	Nanning Aigefei Feed Co., Ltd.
Langfang Tongwei Feed Co., Ltd.	Chizhou Tongwei Feed Co., Ltd.	Bengbu Tech-bank Feed Technology Co., Ltd.
Hainan Haiyi Aquatic Products Feed Co., Ltd.	Honghu Tongwei Feed Co., Ltd.	Hubei Tech-bank Feed Co., Ltd.
Yangzhou Tongwei Feed Co., Ltd.	Hainan Tongwei Biotechnology Co., Ltd.	Dongying Tech-bank Feed Technology Co., Ltd.
Lianyungang Tongwei Feed Co., Ltd.	Hanshou Tongwei Feed Co., Ltd.	Guangdong Tongwei Biotechnology Co., Ltd.

6. Others

" Applicable" " Not applicable"

IX. Interest in other entities

1. Interest in subsidiaries

(1). Corporate group structure

" Applicable" " Not applicable"

Subsidiary name	Principal business location	Registered location	Business nature	Equity percent (%)		Obtaining method
				Direct	Indirect	
Yongxiang Co., Ltd.	Leshan	Leshan	Chemical engineering and PV	99.9999	0.0001	Business combination under common control
Tongwei Solar (Hefei) Co., Ltd.	Hefei	Hefei	Production and operation of solar cells and modules	100		Business combination under common control
Tongwei New Energy Co., Ltd.	Chengdu	Chengdu	PV electricity operation	100		Business combination under common control
Tongwei Solar (Hainan) Co., Ltd.	Chengmai County, Hainan	Chengmai County, Hainan	Sale of modules	100		Establishment through investment
Tongwei Solar (Singapore) PTE. Ltd.	Singapore	Singapore	Sale of modules	100		Establishment through investment
Sichuan Tongwei Food Co., Ltd.	Chengdu	Chengdu	Food processing	80		Establishment through investment
Tongwei Agriculture Development Co., Ltd.	Chengdu	Chengdu	Feed production and operation	100		Establishment through investment
Panzhuhua Tongwei Feed Co., Ltd.	Panzhuhua	Panzhuhua	Feed production and operation	100		Establishment through investment
Zaozhuang Tongwei Feed Co., Ltd.	Zaozhuang	Zaozhuang	Feed production and operation	100		Business combination under common control
Nanning Tongwei Feed Co., Ltd.	Nanning	Nanning	Feed production and operation	100		Establishment through investment
Qianxi Tongwei Feed Co., Ltd.	Qianxi	Qianxi	Feed production and operation	100		Establishment through investment
Foshan Tongwei Feed Co., Ltd.	Foshan	Foshan	Feed production and operation	100		Establishment through investment
Tongwei (Dafeng) Feed Co., Ltd.	Yancheng	Yancheng	Feed production and operation	51		Establishment through investment
Fuzhou Tongwei William Feed Co.,	Fuzhou	Fuzhou	Feed production and	65		Establishment through

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Ltd.			operation		investment
Ningxia Yinchuan Tongwei Feed Co., Ltd.	Yinchuan	Yinchuan	Feed production and operation	100	Establishment through investment
Sichuan Tongguang Construction Engineering Co., Ltd.	Chengdu	Chengdu	Construction	100	Establishment through investment
Qingyuan Tongwei Feed Co., Ltd.	Yingde	Yingde	Feed production and operation	100	Establishment through investment
Chengdu Tongwei Fishery-PV Technology Co., Ltd.	Chengdu	Xinjin	Others	100	Establishment through investment
Shenyang Tongwei Biotechnology Co., Ltd.	Shenyang	Shenyang	Feed production and operation	100	Establishment through investment
Zhejiang Tongwei Solar Technology Co., Ltd.	Zhejiang	Zhejiang	PV	100	Establishment through investment
Sichuan Chunyuan Ecological Farming Co., Ltd.	Chengdu	Qionglai	Farming	100	Business control under different control
Zibo Tongwei Food Co., Ltd.	Zibo	Zibo	Food processing	100	Establishment through investment
Tianmen Tongwei Aquaculture Technology Co., Ltd.	Tianmen	Tianmen	PV electricity operation	100	Establishment through investment
Sichuan Fusion Link Co., Ltd.	Chengdu	Chengdu	Others	60	Establishment through investment
Chengdu Tongwei Aquaculture Technology Co., Ltd.	Chengdu	Chengdu	Farming	100	Business combination under common control
Nanjing Tongwei Aquaculture Technology Co., Ltd.	Nanjing	Nanjing	Farming and feed sale	100	Establishment through investment
Foshan Nanhai Tongwei Aquatic Products Technology Co., Ltd.	Guangzhou	Guangzhou	Farming	100	Establishment through investment
Chengdu Tongwei Aquatic Seed Co., Ltd.	Chengdu	Chengdu	Farming	100	Establishment through investment
Hefei Tongwei Biotechnology Co., Ltd.	Hefei	Hefei	Feed production and operation	100	Establishment through investment
Shaoxing Tongwei Biotechnology Co., Ltd.	Shaoxing	Shaoxing	Feed production and operation	100	Establishment through investment
Huizhou Tongwei Biotechnology Co., Ltd.	Huizhou City	Huizhou City	Feed production and operation	100	Establishment through investment
Changde Tongwei Biotechnology Co., Ltd.	Changde	Changde	Feed production and operation	100	Establishment through investment
Huanggang Tongwei Biotechnology Co., Ltd.	Huanggang City	Huanggang City	Feed production and operation	100	Establishment through investment
Nanchang Tongwei Feed Co., Ltd.	Nanchang	Nanchang	Feed production and operation	100	Establishment through investment
Chengdu Tongwei Biotechnology Co., Ltd.	Chengdu	Chengdu	Feed production and operation	100	Establishment through investment
Tongwei Industrial (Tibet) Co., Ltd.	Lhasa	Lhasa	Trade	100	Establishment through investment
Hengshui Tongwei Feed Co., Ltd.	Hebei	Hebei	Feed production and operation	100	Establishment through investment

Note on equity percent different from voting right percent:

None.

Basis for cases when the Company has control of investee in which it only holds 50% or less voting rights and when the Company has no control of investee in which it holds over 50% voting rights:

None.

Basis for the Company's control of important structured entities included into scope of consolidation:

None.

Basis for determining whether the Company is the agent or trustor

None.

Other notes:

10 first-level subsidiaries were newly established, 2 first-level were catcalled, and 55 were turned to second-level subsidiaries in the current period.

(2). Important non-wholly-owned subsidiaries

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Subsidiary name	Minority equity Percentage	Current profit or loss attributable to minority	Current dividend declared to minority	Closing minority interest balance
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		shareholders	shareholders	
Sichuan Yongxiang New Energy Co., Ltd.	15.00%	2,292,876,227.14	325,500,000.00	2,761,655,928.93
Inner Mongolia Tongwei High-purity Crystalline Silicon Company	20.00%	1,232,601,295.27		1,792,601,295.27
Yunnan Tongwei High-purity Crystalline Silicon Company	49.00%	2,753,393,109.87		3,888,851,743.50

Note on minority shareholders' equity percent is different from their percent of voting rights:

Applicable Not applicable

Other notes:

Applicable Not applicable

(3). Main financial information of important non-wholly owned subsidiaries

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Subsidiary name	Closing balance						Opening balance					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
Sichuan Yongxiang New Energy Co., Ltd.	18,350,818,358.97	6,015,580,249.11	24,366,398,608.08	2,945,904,867.86	2,317,028,437.67	5,262,933,305.53	3,577,128,981.61	6,318,559,026.43	9,895,688,008.04	2,550,821,147.39	2,030,145,996.60	4,580,967,143.99
Inner Mongolia Tongwei High-purity Crystalline Silicon Company	7,050,201,465.49	7,374,629,015.39	14,424,830,480.88	3,440,885,204.37	1,738,279,450.49	5,179,164,654.86	2,873,221,927.26	5,192,361,709.88	8,065,583,637.14	2,365,006,622.69	1,240,863,384.23	3,605,870,006.92
Yunnan Tongwei High-purity Crystalline Silicon Company	5,938,916,629.59	4,853,156,274.80	10,792,072,904.39	2,056,775,497.20	798,865,277.60	2,855,640,774.80	517,638,329.26	4,171,961,361.12	4,689,599,690.38	2,635,557,680.20	454,042,010.18	3,089,599,690.38

Subsidiary name	Current amount				Prior amount			
	Operating revenue	Net income	Total comprehensive income	Cash flow from operating activities	Operating revenue	Net income	Total comprehensive income	Cash flow from operating activities
Sichuan Yongxiang New Energy Co., Ltd.	26,901,512,100.82	15,958,744,438.50	15,958,744,438.50	16,878,564,935.55	6,909,496,192.32	3,531,078,979.98	3,531,078,979.98	3,083,528,871.28
Inner Mongolia Tongwei High-purity Crystalline Silicon Company	17,558,954,593.62	9,806,952,195.80	9,806,952,195.80	10,663,010,692.14	6,596,764,472.94	3,496,533,270.77	3,496,533,270.77	3,479,298,068.24
Yunnan Tongwei High-purity Crystalline Silicon Company	10,090,209,647.84	5,619,169,611.98	5,619,169,611.98	3,994,695,927.84	-	-	-	-175,888,103.79

(4). Significant restrictions on use of group assets and service of group liabilities

Applicable Not applicable

(5). Financial or other supports provided for structured entities within the scope of consolidation

Applicable Not applicable

Other notes:

Applicable Not applicable

2. Transactions resulting in changes in ownership interest without loss of control

Applicable Not applicable

(1). Notes on changes in equity interest in subsidiaries

Applicable Not applicable

In May 2022, the Company acquired 0.36% of ownership in Sichuan Willtest Technology Co., Ltd. from minority shareholders with a consideration of 112,257.05 yuan. After the acquisition, the Company's ownership interest in Sichuan Willtest Technology Co., Ltd. was changed from 85.04% to 85.40%.

In June 2022, Yongxiang Co., Ltd. (a wholly-owned subsidiary of the Company) acquired 7.25% of ownership interest in Sichuan Yongxiang Silicon Materials Co., Ltd. from minority shareholders with a consideration of 8,407,758.12 yuan. After the acquisition, the ownership interest of Yongxiang Co., Ltd. in Sichuan Yongxiang Silicon Materials Co., Ltd. was changed from 92.75% to 100.00%.

In August 2022, the Company transferred a portion of its shares in Tongwei (Hainan) Aquatic Products Co., Ltd. where it previously held 100.00% shares to Sichuan Tongwei Food Co., Ltd. where it directly held 80.00% shares for a consideration of 188,470,100.00 yuan. As such, the equity percentage of the Company in Tongwei (Hainan) Aquatic Products Co., Ltd. decreased from 100.00% to 80.00%.

(2). Effects of transactions on minority interest and interest attributable to owners of parent company

Applicable Not applicable

Unit: Yuan Currency: CNY

	Sichuan Willtest Technology Co., Ltd.	Sichuan Yongxiang Silicon Materials Co., Ltd.	Tongwei (Hainan) Aquatic Products Co., Ltd.
Acquisition cost/disposal consideration	112,257.05	8,407,758.12	37,694,020.00
--Cash	112,257.05	8,407,758.12	37,694,020.00
--Fair value of non-cash assets			
Total acquisition cost/disposal consideration	112,257.05	8,407,758.12	37,694,020.00
Less: Share of subsidiary's net assets based on the ownership interest acquired or disposed	117,070.55	-	31,542,189.77
Difference	-4,813.50	8,407,758.12	6,151,830.23
Including: Adjustment of capital reserve	4,813.50	-8,407,758.12	6,151,830.23
Adjustment of surplus reserve			
Adjustment of undistributed profit			

Other notes

Applicable Not applicable

3. Interest in joint ventures or associates

Applicable Not applicable

4. Important joint operations

Applicable" Not applicable"

5. Interest in structured entities outside of the scope of consolidation

Note on structured entities outside of the scope of consolidation:

Applicable" Not applicable"

6. Others

Applicable" Not applicable"

X. Risks relating to financial instruments

Applicable" Not applicable"

(I) Credit risk

Credit risk is the risk of one party to the financial instrument incurs a loss due to the non-performance of the other party. The main credit risk to which the Company is exposed to the customer credit risk due to selling on credit. Before signing a new contract, the Company assesses the credit risk of the new customer including its external credit rating, and in some cases, the creditworthiness certificate from bank (when available). The Company sets a credit limit for each customer, this is the maximum limit that requires no additional approval. On each balance sheet date, the carrying value of receivables of the Company presents the maximum credit exposure.

By applying credit monitoring and managing accounts receivable via aging analysis for existing customers, with weekly reports on changes in accounts receivable from key customers submitted by the Financial Department, the Company ensures the overall credit risk within a controllable range. Customers are grouped by their credit feature when the Company monitors their credit risks. "High-risk" customers are placed into the list of restricted customers who are required to make advances.

In addition, the Company creates adequate provision for expected credit loss depending on the recovery of accounts receivable on each balance sheet date. As such, the Company management believes that the credit risk the Company bears has been reduced hugely.

Current funds of the Company are placed into banks with high credit rating and therefore exposed to a low credit risk.

The Company's credit exposure covers customers a variety of contract parties and customers from different regions, relating to PV generation, silicon materials and wafers, solar cells, modules and relevant chemical engineering, feed and food processing. No systematic risk is detected in these industries. Therefore, the Company is not exposed to significant concentrated credit risk. On December 31, 2022, the balance of accounts receivable from top five customers was 2,913,773,300 yuan accounting for 60.64% of the period-end total balance of accounts receivable.

(II) Market risk

It is the risk the fair value of future cash flow of financial instrument volatilizes due to changes in market price, including foreign exchange risk, interest rate risk and other price risks.

1. Interest rate risk

It is the risk that fair value of future cash flow of financial instrument volatilizes due to changes in market interest rate. The main interest rate risk to which the Company is exposed is from bank borrowings.

The Company keeps a good credit status in banks and effectively controls its interest rate risk by controlling its debt structure with funds from domestic branches and subsidiaries coordinated by the head office, enhancing the liquidity and eliminating overdue borrowings.

2. Foreign exchange risk

It is the risk that fair value of future cash flow of financial instrument volatilizes due to changes in exchange rates. The Company spares no effort to match its foreign currency income with foreign currency expenditure, to lower this risk. The main exchange risks for the Company include financial assets and financial liabilities denominated in foreign currencies such as the USD, VND, BDT, INR, SGD, EUR and HKD. The amounts translated from foreign currency assets and foreign currency liabilities into CNY are detailed in "Notes: Foreign currency monetary items".

(III) Liquidity risk

It is the risk of incurring losses resulting from the inability to meet payment obligations via delivery of cash or other financial assets. The Company follows a policy to ensure it has adequate cash to pay debts when they become due. Liquidity risk is centrally managed by the Company's Financial Department. By monitoring cash balance, marketable securities readily for realization and the 12-month rolling forecast of

cash flow, the Financial Department ensures the Company keeps adequate cash to pay debts under all reasonably expected conditions.

As of December 31, 2022, the breakdown of financial liabilities held by the Company by remaining contract obligations is as below:

Unit: 10,000 Yuan Currency: CNY

Item	Within 1 year	1- 2 years	2- 5 years	Over 5 years	Total
Short-term borrowings	8,776.71				8,776.71
Held-for-trading financial liabilities	6,435.11				6,435.11
Notes payable	885,142.34				885,142.34
Accounts payable	1,101,816.15				1,101,816.15
Other payables	214,268.03				214,268.03
Long-term borrowings	139,136.06	663,159.40	772,649.60	266,933.38	1,841,878.44
Bonds payable	17,360.95	4,793.89	46,740.45	1,222,442.46	1,291,337.75
Lease liabilities	58,061.52	55,426.31	92,218.55	247,529.04	453,235.42
Long-term payables	57,325.87	35,573.87	59,173.65	11,949.04	164,022.43
Total	2,488,322.74	758,953.47	970,782.25	1,748,853.92	5,966,912.38

XI. Fair value disclosure

1. Closing fair value of assets and liabilities measured at fair value

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Closing fair value			Total
	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	
I. Continuous measurement at fair value				
(I) Held-for-trading financial assets		19,856,903.07	4,278,667,572.63	4,298,524,475.70
1. Financial assets measured at fair value through current profit and loss		19,856,903.07	4,278,667,572.63	4,298,524,475.70
(1) Debt investments			4,278,667,572.63	4,278,667,572.63
(2) Equity investments				
(3) Derivative financial assets		19,856,903.07		19,856,903.07
2. Financial assets designated to be measured at fair value through current profit and loss				
(1) Debt investments				
(2) Equity investments				
(II) Other debit investments				
(III) Other equity investments			154,196,557.28	154,196,557.28
(IV) Investment				

properties				
1. Land use right for lease				
2. Buildings for lease				
3. Land use right held for transfer after its value is increased				
(V) Biological assets				
1. Consumable biological assets				
2. Productive biological assets				
Receivables financing			13,066,496,368.98	13,066,496,368.98
Other non-current financial assets			3,146,248.25	3,146,248.25
Total assets continuously measured at fair value		19,856,903.07	17,502,506,747.14	17,522,363,650.21
(VI) Held-for-trading financial liabilities		64,351,114.48		64,351,114.48
1. Financial liabilities measured at fair value through current profit and loss		64,351,114.48		64,351,114.48
Including: trading bonds issued				
Derivative financial liabilities		64,351,114.48		64,351,114.48
Others				
2. Financial liabilities designated to be measured at fair value through current profit and loss				
Total liabilities continuously measured at fair value		64,351,114.48		64,351,114.48
II. Non-continuous measurement at fair value				
(I) Assets held for sale				
Total assets non-continuously measured at fair value				
Total liabilities non-continuously measured at fair value				

2. The basis for recognizing the market value of projects measured at first-level fair value on a continuing and non-continuing basis

Applicable" Not applicable"

3. Qualitative and quantitative information on valuation techniques and important parameters for projects measured at second-level fair value on a continuing and non-continuing basis

Applicable" Not applicable"

Debt instruments investments are structure deposits and wealth management products purchased by the Company. The market value of projects measured at fair value on a continuing and non-continuing basis is recognized based on the value calculated according to the yield observable at commonly quoted

intervals.

Derivative financial assets and derivative financial liabilities are paper gains and losses from FX forward contracts. The market value of projects measured at fair value on a continuing and non-continuing basis is recognized based on the gains and loss calculated according to the observable parameters published by the banks with which the contracts are signed.

4. Qualitative and quantitative information of valuation techniques and important parameters used for level 3 items continuously and non-continuously measured at fair value

Applicable" Not applicable"

Remaining term of receivables financing is short, which means its carrying value is close to the fair value, therefore, the carrying value is used as fair value.

For other equity investments, the closing net assets of investee is used as the important basis for its fair value valuation. Where certain valuation techniques are used to determine fair value, the important parameters include interest rate that cannot be directly observed.

The investment costs of other non-current financial assets are used as their fair values because no significant changes occurred in the operating environment, operation and financial status of the investees and these amounts are not significant.

5. Reconciliation between opening and closing carrying values and sensitivity analysis for unobservable parameters for level 3 items continuously and non-continuously measured at fair value

Applicable" Not applicable"

6. Reasons for and policies at level conversion for items continuously measured at fair value

Applicable" Not applicable"

7. Changes in valuation techniques and reasons

Applicable" Not applicable"

8. Fair value of financial assets and financial liabilities not measured at fair value

Applicable" Not applicable"

9. Others

Applicable" Not applicable"

XII. Related parties and related-party transactions

1. Parent company

Applicable" Not applicable"

Unit: 10,000 Yuan Currency: CNY

Parent company name	Registered location	Business nature	Registered capital	Parent's ownership percentage in the Company (%)	Parent's voting right percentage in the Company (%)
Tongwei Group Co., Ltd.	Sichuan	Mixed operation	20,000.00	43.85	43.85

Description of the Company's parent company

Tongwei Group Co., Ltd. is a limited liability company whose registered office and business office are both at No. 588, Middle Section Tianfu Avenue, High-Tech Zone, Chengdu, legally represented by Guan Yamei, with a registered capital of 200 million yuan. Scope of activities: (The following items do not include those requiring prior licenses, items requiring post licenses are subject to licenses or approvals) Feed processing; manufacturing of equipment specially for electronic industry; manufacturing of PV equipment and modules; cell manufacturing; manufacturing of gas-fired, solar and similar-fueled home appliances; aquaculture (the above items are limited to branches and subsidiaries); wholesale and retail of goods; livestock husbandry; services for promoting and applying technologies; services for software and information technology; import and export; development and operation of real properties; property management; lease; advertising; PV generation. (Any activity that requires approval under laws may not be

conducted until such approval is obtained from relevant authorities)

The ultimate controller of the Company is Liu Hanyuan.

2. Subsidiaries of the Company

Refer to Notes for details.

Applicable" Not applicable"

Details of subsidiaries are in Note IX. Interest in other entities.

3. Joint ventures and associates

Details of important joint ventures and associates are in Notes.

Applicable" Not applicable"

None.

Other joint ventures or associates that concluded related-party transactions with the Company in the current period or in prior periods that had caused balances

Applicable" Not applicable"

Name of joint venture or associate	Relationship with the Company
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	Joint venture
Anhui Tech-bank Feed Technology Co., Ltd.	Associate
Anhui Tech-bank Biotechnology Co., Ltd.	Associate
Bohai Aquaculture Co., Ltd.	Associate
Suzhou Taiyangjing New Energy Co., Ltd.	Associate

Other notes

Applicable" Not applicable"

4. Other related parties

Applicable" Not applicable"

Name	Relationship with the Company
Chengdu Haozhuren Pet Food Co., Ltd.	Common ultimate control
Chengdu Tongwei Culture Media Co., Ltd.	Common ultimate control
Chengdu Tongwei Property Co., Ltd.	Common ultimate control
Chengdu Tongyu Property Management Co., Ltd.	Common ultimate control
Chengdu Xinrui Technology Development Co., Ltd.	Common ultimate control
Meishan Tongwei Property Co., Ltd.	Common ultimate control
Chengdu Low-carbon Urban Investment Co., Ltd.	Common ultimate control
Chengdu Tongwei Business Management Co., Ltd.	Common ultimate control
Sichuan Tongwei Shidi Property Co., Ltd.	Common ultimate control
Tongwei Microelectronics Co., Ltd.	Common ultimate control
Zhuhai Haiwei Feed Co., Ltd.	The wholly-owned subsidiary of BioMar Tongwei (Wuxi) Biotech Co., Ltd., the Company's joint venture

5. Related-party transactions

(1). Related-party transactions on sale and purchase of goods and rendering and receipt of services

Purchase of goods/receipt of services

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Related party	Related-party transaction	Current amount	Prior amount
Anhui Tech-bank Feed Technology Co., Ltd.	Raw materials, feed and others	280,736,973.22	

Chengdu Tongyu Property Management Co., Ltd.	Property management and service fees	54,388,845.77	40,633,560.03
Chengdu Xinrui Technology Development Co., Ltd.	Machinery equipment, raw materials and others	63,540,825.44	38,560,074.17
Anhui Tech-bank Biotechnology Co., Ltd.	Raw materials, feed and others	41,527,937.80	
Zhuhai Haiwei Feed Co., Ltd.	Feed, packaging materials and others	15,638,890.03	29,054,160.65
Suzhou Taiyangjing New Energy Co., Ltd.	Equipment, raw materials and others	15,166,701.94	
Chengdu Tongwei Culture Media Co., Ltd.	Tongwei Newspaper, and related goods	14,389,212.92	19,657,805.03
Chengdu Tongwei Business Management Co., Ltd.	Spirits and beverages, gifts	1,930,085.00	2,889,642.18
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	Feed, pre-mixed feed and others	1,352,304.04	199,789.47
Chengdu Haozhuren Pet Food Co., Ltd.	Feed and pet supplies	39,906.75	1,725.61
Chengdu Tongwei Property Co., Ltd.	Others	11,428.57	

Sale of goods/rendering of services

"√ Applicable" □ Not applicable"

Unit: Yuan Currency: CNY

Related party	Related-party transaction	Current amount	Prior amount
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	Feed, pre-mixed feed and others	27,935,807.89	20,103,851.67
Bohai Aquaculture Co., Ltd. and its subsidiaries	Feed, pre-mixed feed and others	27,309,672.32	
Zhuhai Haiwei Feed Co., Ltd.	Feed, pre-mixed feed and others	23,507,534.89	90,079,786.26
Anhui Tech-bank Feed Technology Co., Ltd.	Raw materials, feed and others	3,777,900.77	
Tongwei Group Co., Ltd.	Accessories, food and others	1,221,676.18	1,519,237.15
Chengdu Tongwei Business Management Co., Ltd.	Accessories, food and others	1,043,945.36	533,148.01
Chengdu Haozhuren Pet Food Co., Ltd.	Feed, pre-mixed feed and others	500,845.04	285,335.10
Sichuan Tongwei Shidi Property Co., Ltd.	Accessories, food and others	479,042.85	1,690,814.66
Chengdu Tongwei Culture Media Co., Ltd.	Accessories, food and others	309,273.00	
Tongwei Microelectronics Co., Ltd.	Accessories, food and others	47,025.84	
Suzhou Taiyangjing New Energy Co., Ltd.	Cells, raw materials and others	26,548.68	
Other subsidiaries of Tongwei Group Co., Ltd.	Others	21,354.20	32,550.37
Meishan Tongwei Property Co., Ltd.	Food, and coupon cards	4,627.52	51,613.79
Anhui Tech-bank Biotechnology Co., Ltd.	Feed	4,099.20	

Chengdu Tongyu Property Management Co., Ltd.	Equipment, and technical services		191,818.34
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Note on related-party transactions on sale and purchase of goods and rendering and receipt of services
 Applicable Not applicable"

(2). Related-party management/Entrusted management and contract-based operation/outsourcing

Entrusted management/contract-based operation by the Company:

Applicable Not applicable"

Note on related-party management/contract-based operation

Applicable Not applicable"

Entrusted management/contract-based operation from the Company

Applicable Not applicable"

Note on related-party management/contract-based operation for the Company

Applicable Not applicable"

(3). Related-party leases

The Company as lessor:

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Lessee name	Type of leased asset	Lease income recognized in current period	Lease income recognized in prior period
Chengdu Haozhuren Pet Food Co., Ltd.	Premises, buildings and machinery equipment	5,888,379.75	6,285,474.88
Tongwei Microelectronics Co., Ltd.	Premises and buildings	1,988,885.68	

The Company as lessee:
 Applicable" Not applicable"

Unit: Yuan Currency: CNY

Lessor name	Type of leased asset	Lease payments for short-term leases and low-value leases under a simplified approach (if applicable)		Variable lease payments not included into the measurement of lease liabilities (if applicable)		Paid rents		Interest expense on lease liabilities		Increased right-of-use assets	
		Current amount	Prior amount	Current amount	Prior amount	Current amount	Prior amount	Current amount	Prior amount	Current amount	Prior amount
Chengdu Tongwei Property Co., Ltd.	Premises and buildings	7,687,842.36	4,613,688.60			15,669,690.79	15,087,274.23	4,908,883.02	5,503,281.85		3,213,254.39
Tongwei Group Co., Ltd.	Premises and buildings	110,194.28	16,325.26			1,121,075.99	1,121,075.99	119,371.34	154,119.01		
Chengdu Tongyu Property Management Co., Ltd.	Premises and buildings	88,073.40				95,119.27					

Note on related-party leases
 Applicable" Not applicable"

(4). Related-party guarantees

The Company as guarantor

 Applicable Not applicable

Unit: Yuan Currency: CNY

Guaranteed party	Guaranteed amount	Guarantee commencement date	Guarantee expiry date	Guarantee fulfilled completely or not
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	19,000,000.00	August 12, 2022	March 24, 2023	No
Sichuan Tongwei Green Electricity Co., Ltd.	18,634,514.60	January 17, 2022	January 13, 2023	No

The Company has provided a guarantee limited to 55 million yuan for the debt of BioMar Tongwei (Wuxi) Biotech Co., Ltd. (one of its joint ventures) made from HSBC Bank (China) Co., Ltd. As of December 31, 2022, the borrowing balance in HSBC Bank (China) Co., Ltd. was 19 million yuan.

The Company has provided a guarantee limited to 90 million yuan for the debt incurred in a period by Sichuan Tongwei Green Electricity Co., Ltd. (one of its subsidiaries). As of December 31, 2022, the debt owned by Sichuan Tongwei Green Electricity Co., Ltd. to its trading partners was 18,634,500 yuan.

As of December 31, 2022, the Company had no related-party guarantees other than the above ones and the financing guarantees to its subsidiaries.

The Company as guaranteed party

 Applicable Not applicable

Unit: Yuan Currency: CNY

Guarantor	Guaranteed amount	Guarantee commencement date	Guarantee expiry date	Guarantee fulfilled completely or not
Tongwei Group Co., Ltd.	100,119,698.27	April 28, 2022	January 31, 2023	No
Tongwei Group Co., Ltd.	254,304,033.62	September 27, 2022	October 26, 2023	No
Tongwei Group Co., Ltd.	20,652,277.82	October 19, 2022	September 20, 2023	No
Tongwei Group Co., Ltd.	455,407.94	June 01, 2022	December 01, 2023	No
Tongwei Group Co., Ltd.	30,258,194.44	August 26, 2022	August 26, 2023	No
Tongwei Group Co., Ltd.	2,704,825.01	August 18, 2022	December 21, 2023	No
Tongwei Group Co., Ltd.	200,000,000.00	April 16, 2021	April 15, 2024	No
Tongwei Group Co., Ltd.	300,000,000.00	April 28, 2022	April 27, 2024	No
Tongwei Group Co., Ltd.	480,000,000.00	October 19, 2022	October 18, 2025	No
Tongwei Group Co., Ltd.	235,000,000.00	April 07, 2022	April 07, 2025	No
Tongwei Group Co., Ltd.	499,970,000.00	June 01, 2022	May 30, 2024	No
Tongwei Group Co., Ltd.	230,000,000.00	August 26, 2022	May 29, 2025	No
Tongwei Group Co., Ltd.	590,000,000.00	August 05, 2022	July 29, 2025	No
Tongwei Group Co., Ltd.	270,000,000.00	September 26, 2022	September 26, 2025	No
Tongwei Group Co., Ltd.	697,000,000.00	August 18, 2022	August 17, 2025	No
Tongwei Group Co., Ltd.	100,000,000.00	September 27, 2021	September 26, 2024	No

Note on related-party guarantees

 Applicable Not applicable**(5). Related-party lending** Applicable Not applicable**(6). Related-party asset transfer and debt restructuring** Applicable Not applicable**(7). Key management personnel compensation** Applicable Not applicable

Unit: 10,000 Yuan Currency: CNY

Item	Current amount	Prior amount
Key management personnel compensation	15,586.42	3,009.97

(8). Other related-party transactions Applicable Not applicable

6. Accounts receivable and payable from and to related parties**(1). Receivable**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Related party	Closing balance		Opening balance	
		Book balance	Provision for bad debts	Book balance	Provision for bad debts
Accounts receivable	BioMar Tongwei (Wuxi) Biotech Co., Ltd.			12,800.00	
Accounts receivable	Chengdu Tongwei Business Management Co., Ltd.			4,550.00	
Advances to suppliers	Anhui Tech-bank Feed Technology Co., Ltd.	6,376,445.84		532,545.20	

(2). Payable

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Related party	Closing book balance	Opening book balance
Accounts payable	Chengdu Xinrui Technology Development Co., Ltd.	46,532,808.36	35,843,000.82
Accounts payable	Suzhou Taiyangjing New Energy Co., Ltd.	15,717,420.87	
Accounts payable	Chengdu Tongwei Culture Media Co., Ltd.	4,386,999.62	6,851,067.39
Accounts payable	Anhui Tech-bank Feed Technology Co., Ltd.	2,426,111.30	4,920,062.20
Accounts payable	Anhui Tech-bank Biotechnology Co., Ltd.	800,840.00	2,122,411.00
Accounts payable	Chengdu Tongyu Property Management Co., Ltd.	142,900.00	
Accounts payable	Zhuhai Haiwei Feed Co., Ltd.		11,712.20
Contract liabilities	Meishan Tongwei Property Co., Ltd.	36,728.00	50,000.00
Contract liabilities	Chengdu Low-carbon Urban Investment Co., Ltd.	2,870.00	2,870.00
Contract liabilities	Anhui Tech-bank Feed Technology Co., Ltd.		88,843.13
Contract liabilities	Chengdu Tongyu Property Management Co., Ltd.		2,099.81
Other payables	Chengdu Tongwei Culture Media Co., Ltd.	2,853,250.00	40,000.00
Other payables	Chengdu Xinrui Technology Development Co., Ltd.		3,757,800.00
Other payables	Chengdu Tongwei Business Management Co., Ltd.		3,360.00
Lease liabilities (including those due within one year)	Chengdu Tongwei Property Co., Ltd.	103,407,308.75	145,395,418.74
Lease liabilities (including those due within one year)	Tongwei Group Co., Ltd.	2,630,318.79	3,464,362.08

The Company coordinates funds of joint ventures and calculates interest according to the benchmark rate on one-year loan specified by the People's Bank of China. The interest paid by the Company is as below:

Related party	Current amount	Prior amount
BioMar Tongwei (Wuxi) Biotech Co., Ltd.		1,994.51
Total		1,994.51

7. Related-party commitments

Applicable" Not applicable"

8. Others

Applicable" Not applicable"

XIII. Share-based payment**1. Overview of share-based payments**

Applicable" Not applicable"

2. Equity-settled share-based payments

Applicable" Not applicable"

3. Cash-settled share-based payments

Applicable" Not applicable"

4. Modification and termination of share-based payments

Applicable" Not applicable"

5. Others

Applicable" Not applicable"

XIV. Commitments and contingencies**1. Important commitments**

Applicable" Not applicable"

2. Contingencies**(1). Important contingencies on balance sheet date**

Applicable" Not applicable"

Outward guarantees

As of December 31, 2022, the Company had the following outward guarantees and the post-date repayments of guaranteed borrowings and recovery of guaranteed sales on credit:

- 1) Guarantees for farmers who borrowed money from financial institutions for purchasing Tongwei Feed and building rooftop powerplants:

Unit: 10,000 Yuan Currency: CNY

Item	Guarantee commencement date	Guarantee expiry date	Balance of guaranteed amount	Post-date repayment or recovery
Tongwei Agricultural Finance Guarantee Co., Ltd. provided guarantees for farmers who borrowed money from financial institutions for purchasing Tongwei feed	January 01, 2022	December 16, 2023	12,985.20	8,743.19
Tongwei Agricultural Finance Guarantee Co., Ltd. Provided guarantees for farmers who borrowed money from financial institutions for building rooftop powerplants	September 15, 2017	May 31, 2028	1,792.11	75.51
Total			14,777.31	8,818.70

Note: As of December 31, 2022, the balance of repayment made by Tongwei Agricultural Finance

Guarantee Co., Ltd. for behalf of guaranteed parties was 18,552,000 yuan. It was trying to recover the balance.

2) Tongwei Co., Ltd. has provided the following guarantees for its strategic partners:

Unit: 10,000 Yuan Currency: CNY

Guarantor	Guaranteed party	Guaranteed amount	Guarantee commencement date	Guarantee expiry date	Guarantee fulfilled completely or not
The Company	Guangdong Dajia Food Co., Ltd.	3,500.00	October 13, 2022	March 01, 2023	No
The Company	Jiangxi Junshanhu Ecologic Agriculture Development Co., Ltd.	1,900.00	July 13, 2022	April 15, 2023	No

The Company had no important matters or contingences other than the above- mentioned ones that required disclosure as of December 31, 2022.

(2). Note on no important contingencies that require disclosure

Applicable" Not applicable"

3. Others

Applicable" Not applicable"

XV. Post balance sheet events

1. Important non-adjusting events

Applicable" Not applicable"

2. Profit distribution

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Proposed profit or dividend distribution	12,866,561,945.23
Declared profit or dividend	

The Company will distribute profit for the year 2022 based on the its total share capital on the record date. A cash dividend of 28.58 yuan per 10 shares (including tax) will be distributed to all shareholders. As of December 31, 2022, the total share capital of the Company was 4,501,946,097 shares, based on which the total cash dividend to be distributed is 12,866,561,945.23 yuan (including tax). If there is any change in the total share capital before the record date, the total dividend amount will remain unchanged, and the dividend per share will be adjusted accordingly. The above profit distribution proposal will be submitted to the Company's general meeting for approval before execution.

3. Sales return

Applicable" Not applicable"

4. Note on other post balance sheet events

Applicable" Not applicable"

XVI. Other important matters

1. Prior error corrections

(1). Retrospective restatement

Applicable" Not applicable"

(2). Prospective application

Applicable" Not applicable"

2. Debt restructuring

Applicable" Not applicable"

3. Asset exchange**(1). Non-monetary exchange**

Applicable" Not applicable"

(2). Other asset exchange

Applicable" Not applicable"

4. Annuity plan

Applicable" Not applicable"

5. Discontinued operations

Applicable" Not applicable"

6. Segments**(1). Basis for determining reporting segments and accounting policies applicable to reporting segments**

Applicable" Not applicable"

The Company classifies operating segments given its organizational structure, management requirements and internal reporting policies. An operating segment is a component that meets the following conditions: ① it can earn revenues and incur expenses in daily activities; ② its operating results are reviewed regularly by the management to make decisions about resources to be allocated to the component and assess its performance; ③ accounting information relating to financial position, operating results and cash flow about the component are available to the Company through analysis. Two or more operating segments that bear similar economic characteristics and meet certain conditions can be combined into one operating segment.

The Company classifies reporting segments based on operating segments with operating revenue, operating cost, assets and liabilities classified by the same type of operating entities.

(2). Financial information of reporting segments

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Management head office	Agriculture and animal husbandry	PV	Offsets among segments	Total
Total assets	87,829,523,481.54	11,335,603,425.76	119,853,940,150.79	-73,775,273,426.90	145,243,793,631.19
Total liabilities	49,732,811,639.21	6,218,360,071.36	68,757,053,082.09	-52,709,664,977.23	71,998,559,815.43
Operating revenue		31,646,055,679.69	109,826,328,708.82		141,472,384,388.51
Operating cost		29,147,668,534.83	58,106,965,979.28		87,254,634,514.11

(3). Note on reasons why the Company has no reporting segments or cannot disclose the total assets and total liabilities of each reporting segment

Applicable" Not applicable"

(4). Other notes

Applicable" Not applicable"

7. Important transactions or events with influence on decisions of investors

Applicable" Not applicable"

8. Others

Applicable" Not applicable"

(1) Pledge of the Company's shares held by the controlling shareholder:

As of December 31, 2022, Tongwei Group Co., Ltd. held 1,974,022,515 shares in the Company of which, 437,000,000 were pledged for financing purpose.

(2) Impact of bill pool on the Company's assets and liabilities:

Bill-based settlement is a common practice in PV industry where the Company operates. With the growing business of Tongwei and the introduction of bill pool service, banker's acceptance that are undue are pledged by the Company for issuing banker's acceptances payable to pay suppliers, leading to significance increase in banker's acceptances payable and receivable. At the end of 2022, the balances of banker's acceptances receivable and payable reached 13,066,496,400 yuan and 8,840,732,400 yuan respectively, accounting for 9.00% of total assets and 12.28% of total liabilities, having impacted the L/A ratio by 3.27 ppts. Refer to the following table for details (unit: 10,000 yuan).

Item	Consolidated amount	Effect	Amount net of effect
Total current assets	7,551,054.46	-884,073.24	6,666,981.22
Total non-current assets	6,973,324.90		6,973,324.90
Total assets	14,524,379.36	-884,073.24	13,640,306.12
Total current liabilities	3,635,734.79	-884,073.24	2,751,661.55
Total non-current liabilities	3,564,121.19		3,564,121.19
Total liabilities	7,199,855.98	-884,073.24	6,315,782.74
L/A ratio	49.57%		46.30%

(3) Loss from scrap of non-current assets

In order to improve asset utilization, the Company eliminated some production equipment that could not be used normally due to aging, high failure rate, and damage. In 2022, the Company incurred a fixed asset scrap loss of 118,977.15 yuan, mainly due to the upgrading and renovation of some production lines for small-sized solar cells to adapt to market demand. During the upgrading process, equipment that was dismantled and could no longer be used was scrapped.

(4) Impairment of fixed assets

If the carrying value of a fixed asset is greater than its recoverable amount, an impairment provision equaling to the difference of the two shall be established. Assessments showed that the recoverable amount of production lines for small sized solar cells and other relevant fixed assets was lower than the carrying value, a total provision for important of fixed assets of 1,582,908,700 was established.

The photovoltaic industry is developing rapidly, with technology, products, and market demand evolving quickly. Since 2022, the market share of small-sized solar cells has been decreasing with the profitability declining. Large-sized solar cells have become the mainstream product sought after in the market. There is great uncertainty about the expected future profitability and survival space of small-sized solar cells. Based on the principle of prudence, the Company evaluated production lines for small-sized solar cells in the middle and at the end of 2022. For the difference between the expected future recoverable amount and the lower carrying value, the Company provided fixed asset impairment.

(5) Leases

The Company as lessee:

Unit: 10,000 Yuan Currency: CNY

Item	Amount
Interest expense on lease liabilities	13,841.70
Short-term lease expense subject to simplified treatment carried into relevant assets or current profit and loss	3,197.84
Low-value lease expense subject to simplified treatment carried into relevant assets or current profit and loss (excluding short-term lease expense from low-value assets)	
Variable lease payments not included into the measurement of lease liabilities carried into relevant assets or current profit and loss	
Income received from subleases of right-of-use rights	22,187.67
Total cash outflows relating to leases	79,474.96
Relevant gain or loss on leasebacks	

XVII. Notes to main items of parent's financial statements**1. Accounts receivable****(1). Disclosure by age**

Applicable" Not applicable"

(2). Disclosure by method for creation of provision for bad debts

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Category	Closing balance					Opening balance				
	Book balance		Provision for bad debts		Carrying value	Book balance		Provision for bad debts		Carrying value
	Amount	Percent (%)	Amount	Provision (%)		Amount	Percent (%)	Amount	Provision (%)	
Creation of provision for a single bad debt										
Including:										
Creation of provision for a group of bad debts						43,717,676.11	100.00	3,022,016.86	6.91	40,695,659.25
Including:										
Group 4						43,717,676.11	100.00	3,022,016.86	6.91	40,695,659.25
Total		/		/		43,717,676.11	100.00	3,022,016.86	6.91	40,695,659.25

Creation of provision for a single bad debt:

Applicable" Not applicable"

Creation of provision for a group of bad debts:

Applicable" Not applicable"

Refer to disclosure of other receivables if the provision for bad debts is created under the general model for expected credit loss:

Applicable" Not applicable"

(3). Provision for bad debts

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Category	Opening balance	Change in current period			Closing balance
		Provision	Recovered or reversed	Cleared or written off	
Bad debt provision for accounts receivable	3,022,016.86	3,357,100.25			-6,379,117.11
Total	3,022,016.86	3,357,100.25			-6,379,117.11

Note: Other changes are due to conversion of branches to subsidiaries.

Significant amounts recovered or reversed in the current period:

Applicable" Not applicable"

(4). Accounts receivable written off in the current period

Applicable" Not applicable"

Significant accounts receivable written off

Applicable" Not applicable"

(5). Top five entities in accounts receivable at the end of the current period

Applicable" Not applicable"

(6). Accounts receivable de-recognized due to transfer of financial assets

Applicable" Not applicable"

(7). Amounts of assets and liabilities generated due to transfer of accounts receivable and continuing involvement

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

2. Other receivables**Presentation of items**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance	Opening balance
Interest receivable		
Dividend receivable		
Other receivables	22,391,469,716.10	20,560,977,497.02
Total	22,391,469,716.10	20,560,977,497.02

Other notes:

Applicable" Not applicable"

Interest receivable**(1). Types of interest receivable**

Applicable" Not applicable"

(2). Significant overdue interest

Applicable" Not applicable"

(3). Provision for bad debts

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

Dividend receivable**(4). Dividend receivable**

Applicable" Not applicable"

(5). Significant interest receivable over 1 year

Applicable" Not applicable"

(6). Provision for bad debts

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

Other receivables**(1). Disclosure by age**

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Age	Closing book balance
Within 1 year	
In which: Within 1 year	
Within 1 year	23,202,309,572.09
Within 1 year	23,202,309,572.09
1- 2 years	1,046,705.41
2- 3 years	
Over 3 years	157,882.00
Total	23,203,514,159.50

(2). Classification by nature of payment

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Payment type	Closing book balance	Opening book balance
Current accounts with related parties	23,201,234,084.93	21,267,261,376.21
Performance bond	1,403,687.41	43,495,417.81
Others	876,387.16	11,410,166.54
Total	23,203,514,159.50	21,322,166,960.56

(3). Provision for bad debts

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Provision for bad debts	Stage I	Stage II	Stage III	Total
	12-Month expected credit loss	Lifetime expected credit loss (without credit impairment)	Lifetime expected credit loss (with credit impairment)	
Balance on January 01, 2022	761,189,463.54			761,189,463.54
The Jan 1, 2022 balance during the current period				
-- converted into stage II				
-- converted into stage III				
-- reversed into stage II				

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-- reversed into stage I				
Creation in the current period	53,642,310.18		-113,076.30	53,529,233.88
Reversal in the current period				
Clear in the current period				
Write-off in the current period			113,076.30	113,076.30
Other changes	-2,561,177.72			-2,561,177.72
Balance on December 31, 2022	812,044,443.40			812,044,443.40

Note on significant changes in balances of other receivables for which their provisions were changed in the current period:

Applicable" Not applicable"

Provisions for bad debts and basis for determining significant increases in credit risks of financial instruments for the current period:

Applicable" Not applicable"

(4). Provision for bad debts

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Category	Opening balance	Change in current period				Closing balance
		Provision	Recovered or reversed	Cleared or written off	Other changes	
Other receivables	761,189,463.54	53,529,233.88		113,076.30	-2,561,177.72	812,044,443.40
Total	761,189,463.54	53,529,233.88		113,076.30	-2,561,177.72	812,044,443.40

Significant amounts recovered or reversed in the current period:

Applicable" Not applicable"

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

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Item	Written off amount
Other receivables written off in the current period	113,076.30

Significant receivable written off:

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Entity name	Nature of other receivables	Written off amount	Write-off reason	Write-off procedure	Whether the amount is generated from a related-party transaction
Customer 1	Others	113,076.30	The payment is expected unrecoverable	Approval under due procedures	No
Total	/	113,076.30	/	/	/

Note on write-off of other receivables:

Applicable" Not applicable"

(6). Top five entities in other receivables at the end of the current period

Applicable" Not applicable"

Unit: Yuan Currency: CNY

Entity name	Payment type	Closing balance	Age	Percent in the total other receivables at the end of the period (%)	Provision for bad debts Closing balance
Tongwei Solar Co., Ltd.	Current accounts with related parties	3,781,666,877.72	Within 1 year	16.30	

Tongwei Solar (Hefei) Co., Ltd.	Current accounts with related parties	2,879,719,274.78	Within 1 year	12.41	
Tongwei Solar (Jintang) Co., Ltd.	Current accounts with related parties	996,997,747.79	Within 1 year	4.30	
Bengbu Tech-bank Feed Technology Co., Ltd.	Current accounts with related parties	972,129,646.04	Within 1 year	4.19	14,617,801.17
Tongwei Holdings PTE. Ltd.	Current accounts with related parties	922,162,472.40	Within 1 year	3.97	
Total	/	9,552,676,018.73	/		14,617,801.17

(7). Grants receivable

Applicable" Not applicable"

(8). Other receivables de-recognized due to transfer of financial assets

Applicable" Not applicable"

(9). Amounts of assets and liabilities generated due to transfer of other receivables and continuing involvement

Applicable" Not applicable"

Other notes:

Applicable" Not applicable"

3. Long-term equity investments

"√Applicable" "□Not applicable"

Unit: Yuan Currency: CNY

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Carrying value	Book balance	Impairment provision	Carrying value
Investments into subsidiaries	21,201,717,905.80	126,454,000.00	21,075,263,905.80	17,022,660,757.00	43,292,356.80	16,979,368,400.20
Investments into associates and joint ventures	106,166,812.24		106,166,812.24	430,587,718.26		430,587,718.26
Total	21,307,884,718.04	126,454,000.00	21,181,430,718.04	17,453,248,475.26	43,292,356.80	17,409,956,118.46

(1). Investments into subsidiaries

"√Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Investee	Opening balance	Current increase	Current decrease	Closing balance	Impairment provision in current period	Closing balance of impairment provision
Chongqing Tongwei Feed Co., Ltd.	23,074,213.76		23,074,213.76			
Shandong Tongwei Feed Co., Ltd.	703,760.04		703,760.04			
Shashi Tongwei Feed Co., Ltd.	21,851,065.30		21,851,065.30			
Chengdu Tongwei Animal Nutrition Technology Co., Ltd.	11,605,910.79		11,605,910.79			
Yuanjiang Tongwei Feed Co., Ltd.	70,858,072.03		70,858,072.03			
Changchun Tongwei Feed Co., Ltd.	10,585,208.09		10,585,208.09			
He'nan Tongwei Feed Co., Ltd.	6,518,994.97		6,518,994.97			
Guangdong Tongwei Feed Co., Ltd.	59,994,628.41		59,994,628.41			
Xiamen Tongwei Feed Co., Ltd.	13,752,585.43		13,752,585.43			
Wuhan Tongwei Feed Co., Ltd.	16,479,438.23		16,479,438.23			
Zaozhuang Tongwei Feed Co., Ltd.	18,987,038.58			18,987,038.58		
Nanning Tongwei Feed Co., Ltd.	28,978,368.63			28,978,368.63		
Tianjin Tongwei Feed Co., Ltd.	14,700,000.00	55,000,000.00	69,700,000.00			
Huaian Tongwei Feed Co., Ltd.	10,599,481.76		10,599,481.76			
Jieyang Tongwei Feed Co., Ltd.	50,000,000.00		50,000,000.00			
Chengdu Ronglai Tongwei Feed Co., Ltd.	16,000,000.00		16,000,000.00			
Langfang Tongwei Feed Co., Ltd.	15,000,000.00		15,000,000.00			
Tongwei (Hainan) Aquatic Products Co., Ltd.	151,859,769.84		151,859,769.84			
Hainan Haiyi Aquatic Products Feed Co., Ltd.	85,711,797.01		85,711,797.01			
Yangzhou Tongwei Feed Co., Ltd.	20,000,000.00		20,000,000.00			
Panzhuhua Tongwei Feed Co., Ltd.	20,000,000.00			20,000,000.00		

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Qianxi Tongwei Feed Co., Ltd.	30,000,000.00			30,000,000.00		
Lianyungang Tongwei Feed Co., Ltd.	80,000,000.00		80,000,000.00			
Chongqing Changshou Tongwei Feed Co., Ltd.	30,000,000.00		30,000,000.00			
Nantong Bada Feed Co., Ltd.	57,372,600.00		57,372,600.00			
Foshan Tongwei Feed Co., Ltd.	30,095,100.00			30,095,100.00		
Zibo Tongwei Feed Co., Ltd.	3,800,000.00		3,800,000.00		-	
Tongwei (Dafeng) Feed Co., Ltd.	49,900,133.00			49,900,133.00		
Kunming Tongwei Feed Co., Ltd.	20,000,000.00		20,000,000.00			
Foshan Gaoming Tongwei Feed Co., Ltd.	100,000,000.00		100,000,000.00			
Tianmen Tongwei Biotechnology Co., Ltd.	15,000,000.00		15,000,000.00			
Binyang Tongwei Feed Co., Ltd.	20,000,000.00		20,000,000.00			
Fuzhou Tongwei William Feed Co., Ltd.	32,500,000.00			32,500,000.00		
Ningxia Yinchuan Tongwei Feed Co., Ltd.	30,000,000.00			30,000,000.00		
Chengdu Tongwei Aquaculture Technology Co., Ltd.	9,245,867.39	10,000,000.00		19,245,867.39		
Chengdu Tongwei Sanxin Pharmaceutical Co. Ltd.	7,000,000.00		7,000,000.00			
Foshan Nanhai Tongwei Aquatic Products Technology Co., Ltd.	10,000,000.00			10,000,000.00		3,940,000.00
Zibo Tongwei Food Co., Ltd.	50,000,000.00	20,736,000.00		70,736,000.00		12,420,000.00
Sichuan Tongguang Construction Engineering Co., Ltd.	20,000,000.00			20,000,000.00		
Tongwei Agricultural Finance Guarantee Co., Ltd.	100,000,000.00		100,000,000.00			
Chengdu Tongwei Automation Equipment Co., Ltd.	12,103,854.14		12,103,854.14			
Haerbin Tongwei Feed Co., Ltd.	20,000,000.00	25,000,000.00	45,000,000.00			
Nanjing Tongwei Aquaculture Technology Co., Ltd.	10,000,000.00	160,000,000.00		170,000,000.00		
Zhuhai Haiyi Aquatic Products Feed Co., Ltd.	31,897,204.89		31,897,204.89			
Hainan Haiyi Aquatic Seed Co., Ltd.	20,763,456.80		20,763,456.80			
Tongwei Holdings PTE. Ltd.	61,605,594.60		61,605,594.60			
Tongwei Industrial (Tibet) Co., Ltd.	100,000,000.00		100,000,000.00			
Chizhou Tongwei Feed Co., Ltd.	50,000,000.00		50,000,000.00			
Honghu Tongwei Feed Co., Ltd.	90,164,469.77		90,164,469.77			
Chengdu Tongwei Aquatic Seed Co., Ltd.	5,000,000.00	12,000,000.00		17,000,000.00		
Hengshui Tongwei Feed Co., Ltd.	5,000,000.00		5,000,000.00		-	
Qingyuan Tongwei Feed Co., Ltd.	5,000,000.00			5,000,000.00		
Sichuan Tongwei Food Co., Ltd.	64,000,000.00			64,000,000.00		
Hainan Tongwei Biotechnology Co., Ltd.	50,000,000.00		50,000,000.00			
Hanshou Tongwei Feed Co., Ltd.	27,900,000.00	17,100,000.00	45,000,000.00			
Yongxiang Co., Ltd.	6,388,060,739.07	2,299,000,000.00		8,687,060,739.07		
Tongwei Solar (Hefei) Co., Ltd.	2,884,624,940.43			2,884,624,940.43	86,073,100.00	110,094,000.00
Tianmen Tongwei Aquaculture Technology Co., Ltd.	25,939,300.00			25,939,300.00		
Sichuan Fusion Link Co., Ltd.	1,200,000.00			1,200,000.00		
Sichuan Willtest Technology Co., Ltd.	21,448,836.49	112,257.05	21,561,093.54			
Wuxi Tongwei Biotechnology Co., Ltd.	150,007,603.05		150,007,603.05			
Tongwei New Energy Co., Ltd.	4,055,911,940.76			4,055,911,940.76		

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Zhejiang Tongwei Solar Energy Co., Ltd.	8,000,000.00			8,000,000.00		
Sichuan Tongwei Feed Co., Ltd.	100,000,000.00		100,000,000.00			
Qingdao Hairen Aquatic Seed Industry Technology Co., Ltd.	50,685,000.00		50,685,000.00			
Sichuan Chunyuan Ecological Farming Co., Ltd.	15,146,640.74			15,146,640.74		
Zhanjiang Haixianfeng Bio-tech Co., Ltd.	765,000.00		765,000.00			
Nanchang Tongwei Biotechnology Co., Ltd.	96,000,000.00		96,000,000.00			
Yangjiang Haiyi Biotechnology Co., Ltd.	50,000,000.00		50,000,000.00			
Nanning Tongwei Biotechnology Co., Ltd.	50,000,000.00		50,000,000.00			
Maoming Tongwei Biotechnology Co., Ltd.	40,000,000.00		40,000,000.00			
Ningbo Tech-bank Feed Technology Co., Ltd.	941,052,018.29	2,099,038.85	943,151,057.14			
Qingdao Qihao Biotechnology Co., Ltd.	76,369,224.71		76,369,224.71			
Ningbo Tech-bank Biotechnology Co., Ltd.	18,340,900.00		18,340,900.00			
Yancheng Tech-bank Feed Technology Co., Ltd.	61,200,000.00		61,200,000.00			
Nanning Aigefei Feed Co., Ltd.	29,000,000.00		29,000,000.00			
Bengbu Tech-bank Feed Technology Co., Ltd.	28,300,000.00		28,300,000.00			
Hubei Tech-bank Feed Co., Ltd.	4,400,000.00		4,400,000.00			
Dongying Tech-bank Feed Technology Co., Ltd.	10,600,000.00		10,600,000.00			
Shenyang Tongwei Biotechnology Co., Ltd.		46,000,000.00		46,000,000.00		
Tongwei Agriculture Development Co., Ltd.		4,463,391,837.20		4,463,391,837.20		
Tongwei Solar (Hainan) Co., Ltd.		100,000,000.00		100,000,000.00		
Guangdong Tongwei Biotechnology Co., Ltd.		1,000,000.00	1,000,000.00			
Hefei Tongwei Biotechnology Co., Ltd.		38,000,000.00		38,000,000.00		
Shaoxing Tongwei Biotechnology Co., Ltd.		50,000,000.00		50,000,000.00		
Huanggang Tongwei Biotechnology Co., Ltd.		30,000,000.00		30,000,000.00		
Changde Tongwei Biotechnology Co., Ltd.		20,000,000.00		20,000,000.00		
Huizhou Tongwei Biotechnology Co., Ltd.		80,000,000.00		80,000,000.00		
Nanchang Tongwei Feed Co., Ltd.		20,000,000.00		20,000,000.00		
Chengdu Tongwei Biotechnology Co., Ltd.		60,000,000.00		60,000,000.00		
Total	17,022,660,757.00	7,509,439,133.10	3,330,381,984.30	21,201,717,905.80	86,073,100.00	126,454,000.00

Note 1: The decrease in the long-term equity investment in Tongwei (Hainan) Aquatic Food Co., Ltd. was due to the transfer of the Company's equity to Sichuan Tongwei Food Co., Ltd., a subsidiary for which the Company is the controlling shareholder; the decrease in the long-term equity investment in Tongwei Industry (Tibet) Co., Ltd. and Hengshui Tongwei Feed Co., Ltd. was due to the cancellation of these two companies in the current period; and the decrease in the long-term equity investment in other companies was due to the transfer of the Company's equity to Tongwei Agriculture Development Co., Ltd., a wholly-owned subsidiary of the Company.

Note 2: The opening provision for impairment of the long-term equity investment in Hainan Haiyi Aquatic Seed Co., Ltd., i.e., 2,911,456.80 yuan, which has been transferred together with the equity to Tongwei Agriculture Development Co., Ltd.

(2). Investments into associates and joint ventures

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

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Investment Unit	Opening balance	Change in current period							Closing balance	Closing balance of impairment provision	
		Additional investments	Decreased investments	Investment gain or loss under equity method	Adjustment of other comprehensive income	Other changes in equity	Declared cash dividend or profit	Impairment provision			Others
I. Joint ventures											
Maoming Tongwei Jiuding Feed Co., Ltd.	6,411,699.14			-902,593.03			233,020.64			5,276,085.47	
BioMar Tongwei (Wuxi) Biotech Co., Ltd.	105,106,774.23			-1,283,158.59					-103,823,615.64		
Sub-total	111,518,473.37			-2,185,751.62			233,020.64		-103,823,615.64	5,276,085.47	
II. Associates											
Bohai Aquaculture Co., Ltd.	99,603,329.66			2,136,863.18	-682,837.29	-166,628.78				100,890,726.77	
Haimao Seed Industry Technology Co., Ltd.	136,707,219.24			-1,052,635.98					-135,654,583.26		
Anhui Tech-bank Feed Technology Co., Ltd.	59,356,017.38			824,225.02					-60,180,242.40		
Anhui Tech-bank Biotechnology Co., Ltd.	23,402,678.61			1,284,053.99					-24,686,732.60		
Sub-total	319,069,244.89			3,192,506.21	-682,837.29	-166,628.78			-220,521,558.26	100,890,726.77	
Total	430,587,718.26			1,006,754.59	-682,837.29	-166,628.78	233,020.64		-324,345,173.90	106,166,812.24	

Other notes:

Other changes are due to the Company's transfer of a portion of its equity to Tongwei Agriculture Development Co., Ltd.

4. Operating revenue and operating cost**(1). Operating revenue and operating cost**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount		Prior amount	
	Revenue	Cost	Revenue	Cost
Main operating activities	3,346,595,726.56	2,972,307,955.86	4,554,199,847.43	3,998,297,572.06
Other operating activities	20,614,932.76	8,876,652.28	190,862,521.70	139,776,936.95
Total	3,367,210,659.32	2,981,184,608.14	4,745,062,369.13	4,138,074,509.01

(2). Revenue from contracts with customers

"□ Applicable" "√ Not applicable"

(3). Note on performance obligations

"□ Applicable" "√ Not applicable"

(4). Note on allocation to remaining performance obligations

"□ Applicable" "√ Not applicable"

Other notes:

None.

5. Investment gain

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Current amount	Prior amount
Long-term equity investment gains under cost method	10,781,212,600.00	5,047,065,159.73
Gain on long-term equity investment under equity method	1,006,754.59	-10,820,494.85
Gain on disposal of long-term equity investment	45,402,735.74	82,577,082.35
Investment gain on held-for-trading financial assets in the holding period		
Dividend income on other equity investments in the holding period		
Interest income on debt investments in the holding period		
Interest income on other debt investments in the holding period		
Gain on disposal of held-for-trading financial assets		
Investment gain on disposal of other equity investments		
Investment gain on disposal of debt investments		
Investment gain on disposal of other debt investments		
Debt restructuring gain		
Gain on wealth management products purchased from banks	89,935,380.67	23,368,421.89
Discount interest on accounts receivable financing	-111,156,141.57	-15,207,023.08
Total	10,806,401,329.43	5,126,983,146.04

Other notes:

None.

6. Others

"□ Applicable" "√ Not applicable"

XVIII. Additional information**1. Current non-recurring gains and losses**

"√ Applicable" "□ Not applicable"

Unit: Yuan Currency: CNY

Item	Amount	Remarks
Profit and loss on disposal of non-current assets	-12,315,759.20	
Government subsidies included in current profit and loss (excluding ration or quota-based on-gonging government subsidies closely related to the normal operating businesses of the Company)	387,940,097.37	
In addition to the effective hedging business related to the normal business	-130,149,063.69	

operations of the Company, the fair value gain and loss from held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, and derivative financial liabilities, as well as investment returns from disposal of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities, and other debt investments		
Non-operating revenue and expenses other than aforementioned items	-1,235,055,137.99	
Less: Effects of income tax	-156,512,227.43	
Effects of minority interest	-12,141,142.59	
Total	-820,926,493.49	

Where the Company lists the non-recurring gain and loss items defined in the Explanatory Announcement on Information Disclosure for Companies Offering Their Securities to the Public No.1 - Non-Recurring Gain and Loss Items as recurring gain and loss items, notes should be provided.

Applicable" Not applicable"

2. Net yield on assets and earnings per share

Applicable" Not applicable"

Profit in reporting period	Weighted average return on net assets (%)	Earnings per share	
		Basic earnings per share	Diluted earnings per share
Net profit attributable to common shareholders of the Company	52.36	5.7149	5.4889
Net profit excluding non-recurring profits and losses attributable to common shareholders of the Company	54.03	5.8973	5.6623

3. Differences between accounting data under domestic and foreign accounting standards

Applicable" Not applicable"

4. Others

Applicable" Not applicable"

Chair: Liu Shuqi

Submission date approved by the board of directors: April 21,2023

Revision

Applicable" Not applicable"