

JA Solar Technology Co., Ltd.

ENGLISH TRANSLATION OF CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEAR 1 JANUARY 2023 TO 31 DECEMBER 2023
IF THERE IS ANY CONFLICT BETWEEN THE CHINESE
VERSION AND ITS ENGLISH TRANSLATION,
THE CHINESE VERSION WILL PREVAIL



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AUDITOR'S REPORT

毕马威华振审字第 2409455 号

To the shareholders of JA Solar Technology Co., Ltd.:

Opinion

We have audited the accompanying financial statements of JA Solar Technology Co., Ltd. ("JA Solar Technology"), which comprise the consolidated and company balance sheets as at 31 December 2023, the consolidated and company income statements, the consolidated and company cash flow statements, the consolidated and company statements of changes in shareholders' equity for the year then ended, and notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company financial position of JA Solar Technology as at 31 December 2023, and the consolidated and company financial performance and cash flows of JA Solar Technology for the year then ended in accordance with Accounting Standards for Business Enterprises issued by the Ministry of Finance of the People's Republic of China.

Basis for Opinion

We conducted our audit in accordance with China Standards on Auditing for Certified Public Accountants ("CSAs"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of JA Solar Technology in accordance with the China Code of Ethics for Certified Public Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Revenue recognition	
Please refer to the accounting policy described in Note 25 under “III. Significant accounting policies and accounting estimates”, as well as Note 48 under “V. Notes to the consolidated financial statements” and Note 4 under “XVIII. Notes to the Company’s financial statements” to JA Solar Technology’s financial statements.	
The Key Audit Matter	How the matter was addressed in our audit
<p>The revenue of JA Solar Technology is mainly derived from the sales of solar modules and other products across the domestic and overseas market. For the year ended 31 December 2023, JA Solar Technology’s consolidated operating income amounted to RMB 81,556,177,236.98, representing an increase of 11.74% on a year-on-year basis.</p> <p>For the sales of solar modules, JA Solar Technology recognizes revenue when the customer obtains control of relevant goods or services. According to the sales contract entered into between JA Solar Technology and customers, trading terms, delivery method and business arrangements, sales revenue is recognized: (1) when the relevant goods are delivered and the customer signs for acceptance for sales to domestic customers in China; (2) when the relevant goods are delivered and the bill of lading is obtained or when the customer signs for acceptance according to the trading terms of the orders for sales to overseas customers.</p> <p>We identified revenue recognition as a key audit matter because revenue, as one of the key performance indicators of JA Solar Technology, involves significant amounts, and has an inherent risk that revenue may be recognized in an incorrect period or could be manipulated to reach the goals.</p>	<p>Our audit procedures related to revenue recognition included the following:</p> <ul style="list-style-type: none"> • Understanding and evaluating the design and operating effectiveness of the key internal controls over financial reporting related to revenue recognition; • Selecting sales contracts/orders to identify clauses related to the transfer of control of goods, and evaluating whether the accounting policies for revenue recognition meet the requirements of the Accounting Standards for Business Enterprises; • On a sampling basis, reconcile the revenue transactions to relevant supporting files such as relevant contracts or orders, bills of lading, delivery receipts, sales invoices, etc. to evaluate whether revenue is recognized in accordance with the revenue accounting policy; • On a sampling basis, inspecting the revenue before and after the balance sheet date against relevant supporting files such as relevant contracts or orders, bills of lading, delivery receipts, sales invoices, etc. to evaluate whether revenue is recorded in the appropriate period;

AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Key Audit Matters (continued)

Revenue recognition (continued)	
Please refer to the accounting policy described in Note 25 under “III. Significant accounting policies and accounting estimates”, as well as Note 48 under “V. Notes to the consolidated financial statements” and Note 4 under “XVIII. Notes to the Company’s financial statements” to JA Solar Technology’s financial statements.	
The Key Audit Matter	How the matter was addressed in our audit
	<ul style="list-style-type: none"> • Select customers and perform confirmation letter procedures on the balance as at the balance sheet date and the sales transaction during the current year; • Select major customers, check the public information on registration time, registered capital and business scope through the National Enterprise Credit Information Publicity System, to evaluate whether there is any anomalies in the relevant transactions; • Check whether significant sales returns exist in sales record after the balance sheet date, select sales return records (if any) and check them against relevant supporting files, in order to evaluate whether the relevant revenue is recorded in the appropriate period; • Select revenue accounting entries that meet specific risk criteria, inquire the management about the reasons for making these accounting entries, and check related supporting documents.

AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Key Audit Matters (continued)

Provision for impairment of inventories	
Please refer to the accounting policy described in Note 12 under "III. Significant accounting policies and accounting estimates", as well as Note 8 under "V. Notes to the consolidated financial statements".	
The Key Audit Matter	How the matter was addressed in our audit
<p>The inventories of JA Solar Technology mainly consist of solar modules, relevant raw materials and Semi-finished goods. As at 31 December 2023, the book value of inventories in JA Solar Technology's consolidated balance sheet is RMB15,943,908,781.95, and RMB1,472,057,052.67 has been recognised for impairment provision of inventories.</p> <p>At the balance sheet date, inventories are carried at the lower of cost and net realisable value. Net realisable value is the estimated selling price less the estimated costs of completion (if any) and the estimated costs necessary to make the sale and relevant taxes. When determining net realisable value, the management judges and estimates the expected selling price, selling expense rate and costs of completion based on internal and external information.</p> <p>We have identified the provision for impairment of inventories as a key audit matter due to the significant value of inventories and the determination of provision for of inventory impairment. The determination of the provision involves significant management judgement and estimation, and management judgement is inherently uncertain and subject to bias.</p>	<p>Our audit procedures to provision for impairment of inventories included the following:</p> <ul style="list-style-type: none"> • Understand and evaluate the design and operating effectiveness of key internal controls of financial reporting over the inventory management (including provision for impairment of inventories); • Evaluate whether management's inventory impairment policies are in compliance with the Accounting Standards for Business Enterprises and verify the accuracy of the year-end inventory impairment provision based on the above policies; • Perform a stocking procedure over JA Solar Technology's year-end inventory. On a sampling basis, review the quantity and condition, pay special attention to any damages; • Select inventory items, compare the expected selling price with the actual selling price, and compare the expected selling expense rate with the actual selling expense rate. Actual prices and expense rates must near or after the balance sheet date. This is to evaluate the reasonableness of relevant estimates used in the calculation of net realizable value; • Select inventory items and evaluate the reasonableness of management's estimate of the remaining costs to completion by comparing similar work in process in the past; and • Select inventory items at the beginning of the period, compare management's estimation from the previous year with actual results of the net realizable value, and evaluate whether there is any indication of management bias.

AUDITOR’S REPORT (continued)

毕马威华振审字第 2409455 号

Key Audit Matters (continued)

Impairment of fixed assets	
Please refer to the accounting policy described in Note 16 under “III. Significant accounting policies and accounting estimates”, as well as Note 15 under “V. Notes to the consolidated financial statements”.	
The Key Audit Matter	How the matter was addressed in our audit
<p>The revenue stream of JA Solar Technology is primarily derived from the production and sale of photovoltaic modules. The profitability of different production lines varies due to the ongoing evolution of relevant production technology. As at 31 December 2023, the carrying amount of fixed assets in the consolidated balance sheet of JA Solar Technology is RMB47,017,673,515.96, and RMB1,708,316,167.92 has been recognised as provision for impairment of fixed assets.</p> <p>The carrying amounts of fixed assets are reviewed at each balance sheet date to determine whether there is any indication of impairment. In case of indications of impairment, JA Solar Technology compares the carrying amount of the asset group to which the asset belongs with the related recoverable amount to determine the asset impairment loss. The recoverable amount of an asset group is the higher of its fair value less costs of disposal and the present value of its expected future cash flows. Management uses significant judgement and estimation when determining the recoverable amount of fixed assets, particularly those involving key assumptions including residue ratio, estimated income and discount rates.</p>	<p>Our audit procedures to provision for impairment of inventories included the following:</p> <ul style="list-style-type: none"> • Understand and evaluate the design and operating effectiveness of key internal controls of financial reporting over the impairment testing of fixed assets; • In light of our understanding of JA Solar Technology’s business, evaluate whether the followings are in accordance with Accounting Standards for Business Enterprises: 1) basis used by management on identifying impairment indication of fixed assets, 2) the methods used on identifying asset groups, and 3) the methods used on allocating impairment losses to each asset in the asset group; • In light of our understanding of the industry in which JA Solar Technology operates, and the historical performance of relevant asset groups as well as related industry research information, evaluate the reasonableness of assumptions made by management in impairment testing of fixed assets, including expected income; • Evaluate the competency, professionalism and objectivity of external valuation experts engaged by management; • With the assistance of our valuation experts, evaluate the appropriateness of the methods for fixed assets’ impairment testing adopted by management and valuation experts, as well as the reasonableness of key assumptions such as residue ratio, depreciation rate and discount rate;



AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Key Audit Matters (continued)

Impairment of fixed assets (continued)	
Please refer to the accounting policy described in Note 16 under "III. Significant accounting policies and accounting estimates", as well as Note 15 under "V. Notes to the consolidated financial statements".	
The Key Audit Matter	How the matter was addressed in our audit
We identified the impairment of fixed assets as a key audit matter due to the significant carrying amount involved, and the significant judgements and estimations made by the management relating to impairment testing of fixed assets. These judgements and estimations are inherently uncertain, and maybe affected by management bias.	<ul style="list-style-type: none">• Perform sensitivity analysis on key assumption (such as residue ratio, expected income and discount rates), and evaluate the impact of changes in key assumptions (individually or as a group) on the conclusion of the impairment test and whether there are indications of management bias; and• Evaluate whether the disclosure of impairment of fixed assets in the financial statements is in accordance with Accounting Standards for Business Enterprises.

AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Other Information

JA Solar Technology's management is responsible for the other information. The other information comprises all the information included in 2023 annual report of JA Solar Technology, other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

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

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

Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing JA Solar Technology's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate JA Solar Technology or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing JA Solar Technology's financial reporting process.

AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with CSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with CSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on JA Solar Technology's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause JA Solar Technology to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

AUDITOR'S REPORT (continued)

毕马威华振审字第 2409455 号

Auditor's Responsibilities for the Audit of the Financial Statements (continued)

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within JA Solar Technology to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



Certified Public Accountants
Registered in the People's Republic of China

Fu Qiang (Engagement Partner)

Handwritten signature of Fu Qiang in black ink.



Beijing, China

Zhang Xinhua

29 April 2024

Handwritten signature of Zhang Xinhua in black ink.



JA Solar Technology Co., Ltd.
 Consolidated balance sheet
 as at 31 December 2023
 (Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
Assets			
Current assets			
Cash at bank and on hand	V.1	15,988,433,550.07	12,183,639,319.53
Derivative financial assets	V.2	11,847,761.02	-
Bills receivable	V.3	180,154,843.08	148,759,402.41
Accounts receivable	V.4	9,165,987,673.61	8,347,013,437.97
Receivables under financing	V.5	831,601,690.24	738,795,367.11
Prepayments	V.6	1,989,910,973.26	2,551,103,070.39
Other receivables	V.7	911,046,783.30	661,179,286.98
Inventories	V.8	14,471,851,729.28	11,909,306,432.71
Contract assets	V.9	65,858,189.43	89,527,410.91
Non-current assets due within one year	V.10	2,668,540,265.43	268,477,657.97
Other current assets	V.11	2,846,806,290.02	1,258,795,637.00
Total current assets		49,132,039,748.74	38,156,597,022.98
Non-current assets			
Long-term receivables	V.12	376,551,329.63	-
Long-term equity investments	V.13	899,155,598.20	773,754,028.19
Investments in other equity instruments	V.14	99,664,681.07	32,500,800.00
Fixed assets	V.15	36,865,874,794.59	21,448,674,514.09
Construction in progress	V.16	9,740,436,205.07	2,655,791,360.16
Right-of-use assets	V.17	1,553,847,034.24	1,326,978,356.82
Intangible assets	V.18	2,262,783,873.95	1,389,460,109.57
Long-term deferred expenses	V.19	423,435,975.75	376,591,076.08
Deferred tax assets	V.20	932,781,800.67	866,974,911.68
Other non-current assets	V.21	4,302,895,031.61	5,408,513,642.28
Total non-current assets		57,457,426,324.78	34,279,238,798.87
Total assets		106,589,466,073.52	72,435,835,821.85

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Consolidated balance sheet
 as at 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
Liabilities and shareholders' equity			
Current liabilities			
Short-term loans	V.23	978,591,075.08	1,787,142,065.32
Derivative financial liabilities	V.24	-	113,064,066.74
Bills payable	V.25	18,609,296,613.85	13,418,146,649.03
Accounts payable	V.26	8,816,378,706.33	5,155,050,686.52
Contract liabilities	V.27	4,872,292,085.69	5,388,228,068.95
Employee benefits payable	V.28	1,075,756,878.36	816,003,539.78
Taxes payable	V.29	491,239,907.18	446,969,566.27
Other payables	V.30	14,369,723,054.48	5,659,249,722.01
Non-current liabilities due within one year	V.31	824,307,166.77	1,905,042,645.70
Other current liabilities	V.32	228,496,447.73	365,369,574.18
Total current liabilities		50,266,081,935.47	35,054,266,584.50
Non-current liabilities			
Long-term loans	V.33	1,476,851,872.71	1,776,587,646.24
Debentures payable	V.34	8,359,739,960.81	-
Lease liabilities	V.35	1,153,292,043.48	727,474,886.18
Long-term payables	V.36	3,995,002,982.90	2,143,100,955.31
Provisions	V.37	1,518,973,691.70	1,230,138,074.57
Deferred income	V.38	1,006,703,824.20	716,089,717.41
Deferred tax liabilities	V.20	724,812,864.31	410,631,415.65
Other non-current liabilities	V.39	83,875,914.00	183,875,914.00
Total non-current liabilities		18,319,253,154.11	7,187,898,609.36
Total liabilities		68,585,335,089.58	42,242,165,193.86

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Consolidated balance sheet
as at 31 December 2023 (continued)
(Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
Liabilities and shareholders' equity (continued)			
Shareholders' equity			
Share capital	V.40	3,316,259,833.00	2,356,345,036.00
Other equity instruments	V.41	515,408,280.06	-
Capital reserve	V.42	13,750,618,152.38	13,999,288,512.26
Less: Treasury shares	V.43	396,088,524.11	154,494,371.80
Other comprehensive income	V.44	48,443,829.06	(13,390,368.67)
Specific reserve	V.45	25,935,682.38	19,144,079.90
Surplus reserve	V.46	783,484,265.87	531,983,909.75
Retained earnings	V.47	17,072,121,825.73	10,795,828,997.51
Total equity attributable to shareholders of the Company		35,116,183,344.37	27,534,705,794.95
Non-controlling interests		2,887,947,639.57	2,658,964,833.04
Total shareholders' equity		38,004,130,983.94	30,193,670,627.99
Total liabilities and shareholders' equity		106,589,466,073.52	72,435,835,821.85

These financial statements were approved by the Board of Directors on 29 April 2024.



Jin Baofang
Legal Representative

(Signature and stamp)



Li Shaohui
The person in charge
of accounting affairs

(Signature and stamp)



Fang Degang
The head of the
accounting
department

(Signature and stamp)



The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company balance sheet
 as at 31 December 2023
 (Expressed in Renminbi Yuan)

	Note	2023	2022
Assets			
Current assets			
Cash at bank and on hand		1,382,614,791.83	1,868,416,452.29
Bills receivable		15,023,099.52	26,916,282.31
Accounts receivable	XVIII.1	694,225,722.17	1,321,853,522.84
Receivables under financing		153,501,033.40	116,573,292.01
Prepayments		190,221,589.04	3,045,632,696.93
Other receivables	XVIII.2	5,125,453,888.79	529,294,532.86
Non-current assets due within one year		-	200,000,000.00
Other current assets		627,819.69	38,445,150.22
Total current assets		7,561,667,944.44	7,147,131,929.46
Non-current assets			
Long-term equity investments	XVIII.3	27,773,355,680.94	18,039,556,375.79
Investments in other equity instruments		55,861,000.00	27,500,800.00
Fixed assets		30,564.29	8,849.56
Right-of-use assets		106,311.54	144,938.43
Other non-current assets		41,780,277.73	42,712,222.21
Total non-current assets		27,871,133,834.50	18,109,923,185.99
Total assets		35,432,801,778.94	25,257,055,115.45

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company balance sheet
 as at 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	2023	2022
Liabilities and shareholders' equity		
Current liabilities		
Short-term loans	-	99,823,512.65
Bills payable	1,093,000,000.00	1,749,223,421.98
Accounts payable	815,090,426.62	10,722,892.06
Contract liabilities	785,091,947.29	1,823,876,237.19
Employee benefits payable	2,585,404.99	3,425,376.24
Taxes payable	59,727,022.23	7,312,217.88
Other payables	155,459,122.47	163,192,117.33
Non-current liabilities due within one year	8,213,004.41	-
Other current liabilities	101,687,376.06	236,497,066.41
Total current liabilities	3,020,854,304.07	4,094,072,841.74
Non-current liabilities		
Debentures payable	8,359,739,960.81	-
Lease liabilities	-	99,770.07
Provision	1,097,157.21	648,488.22
Deferred tax liabilities	154,610,027.91	1,872,700.00
Total non-current liabilities	8,515,447,145.93	2,620,958.29
Total liabilities	11,536,301,450.00	4,096,693,800.03

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company balance sheet
 as at 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	2023	2022
Liabilities and shareholders' equity (continued)		
Shareholders' equity		
Share capital	3,316,259,833.00	2,356,345,036.00
Other equity instruments	515,408,280.06	-
Capital reserve	17,546,077,968.19	18,014,312,366.48
Less: Treasury shares	396,088,524.11	154,494,371.80
Other comprehensive income	26,888,250.00	5,618,100.00
Surplus reserve	425,673,185.77	174,172,829.65
Retained earnings	2,462,281,336.03	764,407,355.09
Total shareholders' equity	23,896,500,328.94	21,160,361,315.42
Total liabilities and shareholders' equity	35,432,801,778.94	25,257,055,115.45

These financial statements were approved by the Board of Directors on 29 April 2024.



Jin Baofang
 Legal Representative

(Signature and stamp)



Li Shaohui
 The person in charge
 of accounting affairs

(Signature and stamp)




Fang Degang
 The head of the
 accounting
 department

(Signature and stamp)



(Company
 stamp)

The notes on pages 22 to 183 form part of these financial statements.


 JA Solar Technology Co., Ltd.
 Consolidated income statement
 for the year ended 31 December 2023
 (Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
I. Operation income	V.48	81,556,177,236.98	72,989,400,575.18
Less: Operating costs	V.48	66,773,075,559.67	62,204,704,732.46
Taxes and surcharges	V.49	421,626,870.29	242,449,285.42
Selling and distribution expenses	V.50	1,380,055,285.54	1,050,008,147.01
General and administrative expenses	V.51	2,345,294,394.91	1,707,904,487.87
Research and development expenses	V.52	1,142,079,441.86	1,006,731,118.21
Financial expenses ("-" for income)	V.53	(359,870,372.75)	(529,372,206.25)
Including: Interest expenses		506,284,435.17	441,407,590.04
Interest income		364,837,863.67	354,629,082.95
Add: Other income	V.54	733,371,268.20	343,086,239.63
Investment income ("-" for losses)	V.55	(70,506,597.73)	317,223,969.92
Including: Income from investment in associates and joint ventures		277,063,417.49	186,717,689.89
Gains from changes in fair value ("-" for losses)	V.56	125,640,705.84	(198,899,064.91)
Credit losses ("-" for losses)	V.57	(112,330,432.80)	(35,226,746.25)
Impairment losses ("-" for losses)	V.58	(2,306,180,736.94)	(1,108,828,944.48)
Gains from asset disposals ("-" for losses)	V.59	(109,697,286.56)	(157,522,406.96)

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Consolidated income statement
 for the year ended 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
II. Operating profit		8,114,212,977.47	6,466,808,057.41
Add: Non-operating income	V.60	20,624,155.03	49,925,778.59
Less: Non-operating expenses	V.60	92,018,283.59	200,186,925.22
III. Profit before income tax		8,042,818,848.91	6,316,546,910.78
Less: Income tax expenses	V.61	850,459,295.18	776,089,812.59
IV. Net profit for the year		7,192,359,553.73	5,540,457,098.19
(1) Net profit classified by continuity of operations:			
1. Net profit from continuing operations		7,192,359,553.73	5,540,457,098.19
(2) Net profit classified by ownership:			
1. Equity shareholders of the Company		7,039,490,537.23	5,533,792,625.25
2. Non-controlling interests		152,869,016.50	6,664,472.94
V. Other comprehensive income, net of tax	V.44	61,834,197.73	138,320,184.50
(1) Other comprehensive income (net of tax) attributable to shareholders of the Company		61,834,197.73	138,320,184.50
1. Items that will not be reclassified to profit or loss		27,872,910.80	-
a. Changes in fair value of investments in other equity instruments		27,872,910.80	-
2. Items that may be reclassified to profit or loss		33,961,286.93	138,320,184.50
a. Translation differences arising from translation of foreign currency financial statements		33,961,286.93	138,320,184.50
(2) Other comprehensive income (net of tax) attributable to non-controlling interests		-	-





The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Consolidated income statement
 for the year ended 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
VI. Total comprehensive income for the year		7,254,193,751.46	5,678,777,282.69
(1) Attributable to shareholders of the Company		7,101,324,734.96	5,672,112,809.75
(2) Attributable to non-controlling interests		152,869,016.50	6,664,472.94
VII. Earnings per share:			
(1) Basic earnings per share	V.62	2.14	1.71
(2) Diluted earnings per share	V.62	2.10	1.70

Note: The Group had a business combination under common control in February 2023, and the net loss of the acquiree before the merger was RMB64,717.16, and for the year 2022 was RMB541,083.10.

These financial statements were approved by the Board of Directors on 29 April 2024.

			
Jin Baofang Legal Representative	Li Shaohui The person in charge of accounting affairs	Fang Degang The head of the accounting department	(Company stamp)
(Signature and stamp)	(Signature and stamp)	(Signature and stamp)	

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company income statement
 for the year ended 31 December 2023
 (Expressed in Renminbi Yuan)

	Note	2023	2022
I. Operation income	XVIII.4	10,947,300,885.91	15,257,795,106.55
Less: Operating costs	XVIII.4	10,650,056,290.77	15,063,465,180.70
Taxes and surcharges		12,080,477.94	16,207,515.58
Selling and distribution expenses		49,183,710.31	10,818,061.93
General and administrative expenses		38,943,900.56	24,712,386.19
Financial expenses ("-" for income)		123,184,854.18	(20,922,187.31)
Including: Interest expenses		134,280,613.85	5,743,134.73
Interest income		24,924,301.83	29,473,694.26
Add: Other income		1,172,074.44	1,266,786.92
Investment income ("-" for losses)	XVIII.5	2,421,653,400.11	312,668,889.08
Including: Income from investment in associates and joint ventures		221,653,400.11	212,668,889.08
Credit losses ("-" for losses)		(14,607,370.95)	(564,885.61)
Gains from asset disposals ("-" for losses)		-	95.81

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company income statement
 for the year ended 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	2023	2022
II. Operating profit	2,482,069,755.75	476,885,035.66
Add: Non-operating income	1,276.81	7.58
Less: Non-operating expenses	2,042,844.80	10,000,000.00
III. Profit before income tax	2,480,028,187.76	466,885,043.24
Less: Income tax expenses	(34,975,373.46)	-
IV. Net profit for the year	2,515,003,561.22	466,885,043.24
(1) Net profit from continuing operations	2,515,003,561.22	466,885,043.24
V. Other comprehensive income, net of tax	21,270,150.00	-
(1) Items that will not be reclassified to profit or loss	21,270,150.00	-
1. Changes in fair value of investments in other equity instruments	21,270,150.00	-
VI. Total comprehensive income for the year	2,536,273,711.22	466,885,043.24

These financial statements were approved by the Board of Directors on 29 April 2024.



Jin Baofang
 Legal Representative

(Signature and stamp)



Li Shaohui
 The person in charge of accounting affairs

(Signature and stamp)



Fang Degang
 The head of the accounting department

(Signature and stamp)



The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Consolidated cash flow statement
 for the year ended 31 December 2023
 (Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
I. Cash flows from operating activities:			
Proceeds from sale of goods and rendering of services		71,531,278,678.12	62,908,047,130.64
Refund of taxes		3,456,175,477.83	4,868,094,673.27
Proceeds from other operating activities	V.63(1)	7,686,743,185.47	5,735,687,994.48
Sub-total of cash inflows		82,674,197,341.42	73,511,829,798.39
Payment for goods and services		54,493,537,725.74	53,657,056,925.89
Payment to and for employees		5,524,106,560.53	3,708,661,900.46
Payment of various taxes		2,899,948,992.30	1,872,820,691.28
Payment for other operating activities	V.63(2)	7,342,458,677.10	6,091,013,005.64
Sub-total of cash outflows		70,260,051,955.67	65,329,552,523.27
Net cash inflows from operating activities	V.64(1)	12,414,145,385.75	8,182,277,275.12
II. Cash flows from investing activities:			
Proceeds from disposal of investments		-	7,644,276.53
Investment returns received		126,939,424.65	20,439,746.10
Net proceeds from disposal of fixed assets, intangible assets and other long-term assets		100,746,882.39	93,049,181.73
Net proceeds from disposal of subsidiaries	V.64(2)	256,538,105.74	128,082,398.34
Proceeds from other investing activities	V.63(3)	461,825,025.92	540,093,580.32
Sub-total of cash inflows		946,049,438.70	789,309,183.02
Payment for acquisition of fixed assets, intangible assets and other long-term assets		17,878,179,552.07	7,764,947,961.53
Payment for acquisition of investments		30,000,000.00	186,500,000.00
Payment for other investing activities	V.63(4)	831,353,064.32	65,146,302.03
Sub-total of cash outflows		18,739,532,616.39	8,016,594,263.56
Net cash outflows from investing activities		(17,793,483,177.69)	(7,227,285,080.54)

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Consolidated cash flow statement
for the year ended 31 December 2023 (continued)
(Expressed in Renminbi Yuan)

	Note	2023	2022 (Restated)
III. Cash flows from financing activities:			
Proceeds from investors		1,194,556,697.66	7,910,503,820.81
Including: Proceeds from non-controlling shareholders of subsidiaries		1,003,682,500.00	2,712,025,362.32
Proceeds from borrowings		6,514,967,134.26	10,402,711,462.22
Proceeds from issuance of convertible bonds		8,934,413,091.98	-
Proceeds from other financing activities	V.63(5)	-	358,623,712.73
Sub-total of cash inflows		16,643,936,923.90	18,671,838,995.76
Repayments of borrowings		7,467,823,339.57	15,449,028,581.21
Payment for dividends, profit distributions or interest		853,948,766.29	492,431,411.32
Including: Profits paid to non-controlling shareholders of subsidiaries		148,745,715.75	13,589,730.11
Payment for other financing activities	V.63(6)	2,361,811,913.87	4,191,336,085.20
Sub-total of cash outflows		10,683,584,019.73	20,132,796,077.73
Net cash inflow/(outflow) from financing activities		5,960,352,904.17	(1,460,957,081.97)
IV. Effect of foreign exchange rate changes on cash and cash equivalents		61,597,078.54	94,739,817.33
V. Net increase/(decrease) in cash and cash equivalents	V.64(1)	642,612,190.77	(411,225,070.06)
Add: Cash and cash equivalents at the beginning of the year		6,120,476,584.90	6,531,701,654.96
VI. Cash and cash equivalents at the end of the year	V.64(3)	6,763,088,775.67	6,120,476,584.90

These financial statements were approved by the Board of Directors on 29 April 2024.



Jin Baofang
Legal Representative

(Signature and stamp)



Li Shaohui
The person in charge
of accounting affairs

(Signature and stamp)



Fang Degang
The head of the
accounting
department

(Signature and stamp)



(Company
stamp)

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company cash flow statement
 for the year ended 31 December 2023
 (Expressed in Renminbi Yuan)

	2023	2022
I. Cash flows from operating activities:		
Proceeds from sale of goods and rendering of services	6,014,033,275.50	10,050,078,321.13
Refund of taxes	175,482,815.05	12,982,673.86
Proceeds from other operating activities	1,634,210,780.46	736,062,832.65
Sub-total of cash inflows	7,823,726,871.01	10,799,123,827.64
Payment for goods and services	2,629,377,738.00	10,590,831,972.11
Payment to and for employees	9,436,733.71	10,857,711.97
Payment of various taxes	229,599,290.98	100,668,771.88
Payment for other operating activities	1,588,194,122.06	2,178,780,990.25
Sub-total of cash outflows	4,456,607,884.75	12,881,139,446.21
Net cash inflow/(outflow) from operating activities	3,367,118,986.26	(2,082,015,618.57)
II. Cash flows from investing activities:		
Investment returns received	218,304,406.01	300,000,000.00
Net proceeds from disposal of subsidiaries	-	372,000,000.00
Proceeds from other investing activities	1,021,319,787.88	1,482,502,569.65
Sub-total of cash inflows	1,239,624,193.89	2,154,502,569.65
Payment for acquisition of fixed assets and other long-term assets	146,100.00	169,262.39
Payment for acquisition of investments	9,331,168,662.97	4,660,000,000.00
Payment for other investing activities	3,848,000,000.00	-
Sub-total of cash outflows	13,179,314,762.97	4,660,169,262.39
Net cash outflow from investing activities	(11,939,690,569.08)	(2,505,666,692.74)

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
 Company cash flow statement
 for the year ended 31 December 2023 (continued)
 (Expressed in Renminbi Yuan)

	2023	2022
III. Cash flows from financing activities:		
Proceeds from investors	190,874,197.66	5,198,478,458.49
Proceeds from borrowings	1,000,000,000.00	414,086,925.01
Proceeds from issuance of convertible bonds	8,934,413,091.98	-
Proceeds from other financing activities	-	206,034,333.32
Sub-total of cash inflows	10,125,287,289.64	5,818,599,716.82
Repayments of borrowings	1,000,000,000.00	-
Payment for dividends or interest	569,650,613.05	251,567,168.41
Payment for other financing activities	262,251,749.38	207,338,776.62
Sub-total of cash outflows	1,831,902,362.43	458,905,945.03
Net cash inflow from investing activities	8,293,384,927.21	5,359,693,771.79
IV. Effect of foreign exchange rate changes on cash and cash equivalents	-	-
V. Net (decrease)/increase in cash and cash equivalents	(279,186,655.61)	772,011,460.48
Add: Cash and cash equivalents at the beginning of the year	1,087,038,884.25	315,027,423.77
VI. Cash and cash equivalents at the end of the year	807,852,228.64	1,087,038,884.25

These financial statements were approved by the Board of Directors on 29 April 2024.



Jin Baofang
 Legal Representative

(Signature and stamp)



Li Shaohui
 The person in charge of accounting affairs

(Signature and stamp)



Fang Degang
 The head of the accounting department

(Signature and stamp)



(Company stamp)

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Consolidated statement of changes in shareholders' equity
for the year ended 31 December 2023
(Expressed in Renminbi Yuan)



	Note	Equity attributable to shareholders of the Company										Non-controlling interests	Total
		Share capital	Other equity instruments	Capital reserve	Less: treasury shares	Other comprehensive income	Specific reserve	Surplus reserve	Retained earnings	Sub-total			
I. Balance at the beginning of the year		2,356,345,036.00	-	13,949,288,512.26	154,484,371.80	(13,390,368.67)	19,144,079.90	531,983,909.75	10,615,830,846.99	27,504,707,644.43	2,658,864,833.04	30,163,672,477.47	
Add: Business combination under common control		-	-	50,000,000.00	-	-	-	-	(20,883,103.49)	29,116,886.51	-	29,116,886.51	
Changes in accounting policies		-	-	-	-	-	-	-	861,254.01	861,254.01	-	861,254.01	
Adjusted balance at the beginning of the year		2,356,345,036.00	-	13,999,288,512.26	154,484,371.80	(13,390,368.67)	19,144,079.90	531,983,909.75	10,795,828,997.51	27,534,705,794.95	2,658,864,833.04	30,193,670,627.99	
II. Changes in equity during the year		959,914,797.00	515,408,280.06	(248,670,359.88)	241,594,152.31	61,894,197.73	6,791,602.48	251,500,356.12	6,276,292,828.22	7,581,477,549.42	228,892,906.53	7,810,460,355.95	
1. Total comprehensive income for the year		-	-	-	-	61,834,197.73	-	-	7,039,430,537.23	7,101,324,734.96	152,869,016.50	7,254,193,751.46	
2. Shareholders' contributions and decrease of capital		17,199,424.00	515,408,280.06	686,742,840.41	241,594,152.31	-	-	-	977,756,392.16	977,756,392.16	461,967,573.27	1,439,723,965.43	
(1) Shareholders' contributions of capital	V40	17,215,966.00	-	479,709,934.53	-	-	-	-	496,925,800.53	496,925,800.53	461,967,573.27	958,893,473.80	
(2) Equily-settled share-based payments	V40	-	-	263,078,561.80	-	-	-	-	-	263,078,561.80	-	263,078,561.80	
(3) Repurchase and cancellation of restricted shares	V40	(16,542.00)	-	(45,655.92)	(62,197.92)	-	-	-	-	-	-	-	
(4) Others		-	515,408,280.06	(56,000,000.00)	241,656,350.23	-	-	-	217,751,929.83	217,751,929.83	(385,853,783.24)	(897,551,136.13)	
3. Appropriation of profits	V47	-	-	-	-	-	-	251,500,356.12	(763,197,709.01)	(511,697,352.89)	-	-	
(1) Appropriation for surplus reserve		-	-	-	-	-	-	251,500,356.12	(251,500,356.12)	-	-	-	
(2) Distributions to shareholders		-	-	-	-	-	-	-	(565,629,224.16)	(565,629,224.16)	-	(951,483,007.40)	
(3) Others		-	-	-	-	-	-	-	53,931,871.27	53,931,871.27	-	53,931,871.27	

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.

Consolidated statement of changes in shareholders' equity
for the year ended 31 December 2022
(Expressed in Renminbi Yuan)

	Note	Equity attributable to shareholders of the Company								Non-controlling interests	Total
		Share capital	Capital reserve	Less: Treasury shares	Other comprehensive income	Specific reserve	Surplus reserve	Retained earnings	Sub-total		
I. Balance at the beginning of the year		1,599,371,806.00	9,025,101,076.76	59,717,644.00	(151,710,553.17)	14,701,285.45	485,295,405.42	5,581,219,747.20	16,494,261,123.66	223,254,841.23	16,717,515,964.89
Add: Changes in accounting policies		-	-	-	-	-	-	(585,681.82)	(585,681.82)	-	(585,681.82)
Business combination under common control		-	50,000,000.00	-	-	-	-	(20,342,020.39)	29,657,979.61	-	29,657,979.61
Adjusted balance at the beginning of the year		1,599,371,806.00	9,075,101,076.76	59,717,644.00	(151,710,553.17)	14,701,285.45	485,295,405.42	5,560,292,044.99	16,523,333,421.45	223,254,841.23	16,746,588,262.68
II. Changes in equity during the year (“-” for decreases)		756,979,230.00	4,924,187,435.50	94,776,727.80	138,320,184.50	4,442,794.45	46,688,504.33	5,235,536,952.52	11,011,372,373.50	2,435,709,991.81	13,447,082,365.31
1. Total comprehensive income for the year (Restated)		-	-	-	138,320,184.50	-	-	5,533,792,625.25	5,672,112,809.75	6,664,472.94	5,678,777,282.69
2. Shareholders' contributions and decrease of capital		86,127,448.00	5,594,700,288.07	94,776,727.80	-	-	-	-	5,586,051,008.27	2,429,045,518.87	8,015,096,527.14
(1) Shareholders' contributions of capital	V.40	86,178,450.00	5,394,581,527.37	-	-	-	-	-	5,480,759,977.37	2,429,045,518.87	7,909,805,496.24
(2) Equity-settled share-based payments	V.40	-	200,367,366.26	-	-	-	-	-	200,367,366.26	-	200,367,366.26
(3) Repurchase and cancellation of restricted shares	V.40	(51,002.00)	(248,605.56)	-	-	-	-	-	(299,607.56)	-	(299,607.56)
(4) Others		-	-	94,776,727.80	-	-	-	-	(94,776,727.80)	-	(94,776,727.80)
3. Appropriation of profits	V.47	-	-	-	-	-	46,688,504.33	(288,255,672.73)	(251,567,168.40)	-	(251,567,168.40)
(1) Appropriation for surplus reserve		-	-	-	-	-	46,688,504.33	(46,688,504.33)	-	-	-
(2) Distributions to shareholders		-	-	-	-	-	-	(251,567,168.40)	(251,567,168.40)	-	(251,567,168.40)

The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Consolidated statement of changes in shareholders' equity
for the year ended 31 December 2022 (continued)
(Expressed in Renminbi Yuan)

	Note	Equity attributable to shareholders of the Company							Non-controlling interests	Total	
		Share capital	Capital reserve	Less: Treasury shares	Other comprehensive income	Specific reserve	Surplus reserve	Retained earnings			Sub-total
II. Changes in equity during the year (continued) ("-" for decreases)											
4. Transfers within equity		670,845,782.00	(670,845,782.00)	-	-	-	-	-	-	-	-
(1) Share capital increased by capital reserve transfer	V.42	670,845,782.00	(670,845,782.00)	-	-	-	-	-	-	-	-
5. Specific reserve		-	-	-	-	4,442,794.45	-	-	4,442,794.45	-	4,442,794.45
(1) Appropriation during the year		-	-	-	-	7,800,187.05	-	-	7,800,187.05	-	7,800,187.05
(2) Utilization during the year		-	-	-	-	(3,357,392.60)	-	-	(3,357,392.60)	-	(3,357,392.60)
6. Others		-	332,929.43	-	-	-	-	-	332,929.43	-	332,929.43
III. Balance at the end of the year		2,356,345,036.00	13,999,288,512.26	154,494,371.80	(13,390,368.67)	19,144,079.90	531,983,909.75	10,795,828,997.51	27,534,705,794.95	2,658,964,833.04	30,193,670,627.99

These financial statements were approved by the Board of Directors on 29 April 2024.

 Jin Baofang
Legal Representative
(Signature and stamp)

Li Shaohui
The person in charge of
accounting affairs
(Signature and stamp)

 Li Shaohui
The person in charge of
accounting affairs
(Signature and stamp)

Fang Degang
The head of the accounting
department
(Signature and stamp)

 Fang Degang
The head of the accounting
department
(Signature and stamp)



The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Company statement of changes in shareholders' equity
for the year ended 31 December 2023
(Expressed in Renminbi Yuan)

	Share capital	Other equity instruments	Capital reserve	Less: Treasury shares	Other comprehensive income	Surplus reserve	Retained earnings	Total
I. Balance at the beginning of the year	2,356,345,036.00	-	18,014,312,366.48	154,494,371.80	5,618,100.00	174,172,829.65	764,407,355.09	21,160,361,315.42
II. Changes in equity during the year ("-" for decreases)	959,914,797.00	515,408,280.06	(468,234,398.29)	241,594,152.31	21,270,150.00	251,500,356.12	1,697,873,980.94	2,736,139,013.52
1. Total comprehensive income for the year	-	-	-	-	21,270,150.00	-	2,515,003,551.22	2,536,273,711.22
2. Shareholders' contributions and decrease of capital	17,199,424.00	515,408,280.06	473,714,175.93	241,594,152.31	-	-	-	764,727,727.68
(1) Contribution by ordinary shareholders	17,215,966.00	-	166,997,342.41	-	-	-	-	184,213,308.41
(2) Equity-settled share-based payments	-	-	306,762,489.44	-	-	-	-	306,762,489.44
(3) Repurchase and cancellation of restricted shares	(16,542.00)	-	(45,655.92)	(62,197.92)	-	-	-	-
(4). Others	-	515,408,280.06	-	241,656,350.23	-	-	-	273,751,929.83
3. Appropriation of profits	-	-	-	-	-	251,500,356.12	(817,129,580.28)	(565,629,224.16)
(1) Appropriation for surplus reserve	-	-	-	-	-	251,500,356.12	(251,500,356.12)	-
(2) Distributions to shareholders	-	-	-	-	-	-	(565,629,224.16)	(565,629,224.16)
4. Transfers within equity	942,715,373.00	-	(942,715,373.00)	-	-	-	-	-
(1) Share capital increased by capital reserve transfer	942,715,373.00	-	(942,715,373.00)	-	-	-	-	-
5. Others	-	-	766,798.78	-	-	-	-	766,798.78
III. Balance at the end of the year	3,316,259,833.00	515,408,280.06	17,546,077,968.19	396,088,524.11	26,888,250.00	425,673,185.77	2,462,281,336.03	23,896,500,328.94

These financial statements were approved by the Board of Directors on 29 April 2024.

芳新
印保

Jin Baofang
Legal Representative
(Signature and stamp)

李少
印少

Li Shaohui
The person in charge of
accounting affairs
(Signature and stamp)

刚房
印德

Fang Degang
The head of the accounting
department
(Signature and stamp)



The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Company statement of changes in shareholders' equity
for the year ended 31 December 2022 (continued)
(Expressed in Renminbi Yuan)

	Share capital	Capital reserve	Less: Treasury shares	Other comprehensive income	Surplus reserve	Retained earnings	Total
I. Balance at the beginning of the year	1,599,371,806.00	13,340,927,107.52	59,717,644.00	5,618,100.00	127,484,325.32	595,777,984.58	15,609,451,679.42
II. Changes in equity during the year ("-" for decreases)	756,973,230.00	4,673,385,258.96	94,776,727.80	-	46,688,504.33	168,629,370.51	5,550,899,636.00
1. Total comprehensive income for the year	-	-	-	-	-	466,885,043.24	466,885,043.24
2. Shareholders' contributions and decrease of capital	86,127,448.00	5,343,898,111.53	94,776,727.80	-	-	-	5,335,248,831.73
(1) Contribution by ordinary shareholders	86,178,450.00	5,111,601,683.91	-	-	-	-	5,197,780,133.91
(2) Equity-settled share-based payments	-	232,545,033.18	-	-	-	-	232,545,033.18
(3) Repurchase and cancellation of restricted shares	(51,002.00)	(248,605.56)	-	-	-	-	(299,607.56)
(4) Others	-	-	94,776,727.80	-	-	-	(94,776,727.80)
3. Appropriation of profits	-	-	-	-	46,688,504.33	(298,255,672.73)	(251,567,168.40)
(1) Appropriation for surplus reserve	-	-	-	-	46,688,504.33	(46,688,504.33)	-
(2) Distributions to shareholders	-	-	-	-	-	(251,567,168.40)	(251,567,168.40)
4. Transfers within equity	670,845,762.00	(670,845,762.00)	-	-	-	-	-
(1) Share capital increased by capital reserve transfer	670,845,762.00	(670,845,762.00)	-	-	-	-	-
5. Others	-	332,929.43	-	-	-	-	332,929.43
III. Balance at the end of the year	2,356,345,036.00	18,014,312,366.48	154,494,371.80	5,618,100.00	174,172,829.65	764,407,355.09	21,160,361,315.42

These financial statements were approved by the Board of Directors on 29 April 2024.


Jin Baofang
Legal Representative
(Signature and stamp)


Li Shaohui
The person in charge of
accounting affairs
(Signature and stamp)


Fang Degang
The head of the accounting
department
(Signature and stamp)



The notes on pages 22 to 183 form part of these financial statements.

JA Solar Technology Co., Ltd.
Notes to the financial statements
(Expressed in Renminbi Yuan unless otherwise indicated)

I Basic Information of the Company

JA Solar Technology Co., Ltd. (hereinafter referred to as “the Company”), formerly known as Qinhuangdao Tianye Tonglian Heavy Industry Co., Ltd. (hereinafter referred to as “Tian Ye Tong Lian”), the predecessor of the Company is Qinhuangdao Beidaihe Tonglian Road and Bridge Machinery Co., Ltd., which was founded on October 20, 2000, after several capital increase and equity transfer, in July 2008, the Company was changed to a joint stock company with May 31, 2008 as the benchmark date, and the share capital of the Company was RMB120 million after the change. The Company went through the formalities for industrial and commercial registration change at the Qinhuangdao City Administration for Industry and Commerce of Hebei Province on July 18, 2008. On August 10, 2010, Tian Ye Tong Lian successfully listed in Shenzhen Stock Exchange. On November 15, 2019, JA Solar Co., Ltd. (hereinafter referred to as "JA Solar") has successfully back door listed in Shenzhen Stock Exchange through Tian Ye Tong Lian. On December 11, 2019, Tian Ye Tong Lian completed the industrial and commercial change and officially changed its name to "JA Solar Technology Co., Ltd.". On December 13, 2019, the abbreviation of Tian Ye Tong Lian securities was officially changed to "JA Technology". As of December 31, 2023, the Company's total share capital is RMB 3,316,259,833.00, and par value of each share is RMB 1.

As of 31 December 2023, the registered capital of the Company was RMB 2,356,514,564.00. Registered address: No. 123. Xinxing Road, Ningjin County, Hebei Province. Office address: Building No. 8, Noble Center, Automobile Museum East Road, Fengtai District, Beijing. Uniform social credit code: 91130300601142274F.

The parent company of the Company is Dongtai Jingtaifu Technology Co., Ltd. (formerly known as Ningjin Jingtaifu Technology Co., Ltd.), and the actual controller is Jin Baofang.

The principal business activities of the Company and its subsidiaries (referred to as “the Group”) are: production and processing of monocrystalline silicon rods and monocrystalline silicon wafers; production of solar cells and modules; research and develop solar products; sales of solar cells, modules and related products and raw materials; solar photovoltaic grid-connected power generation, electricity sales; development, construction, operation, management and maintenance of solar photovoltaic power plants; import and export of goods and technology; engaged in technology development and technology transfer in the field of solar cells; workshop lease; space lease; electrical equipment rental (those involving administrative licensing shall be operated with permits). (For any item subject to approval according to the law, relevant business activities shall be conducted upon approval by the relevant departments). For information about the subsidiaries of the Company, refer to Note VIII.

During the reporting period, the information about increases and decreases in the Group’s subsidiaries is disclosed in Note VII.

II Basis of preparation

1 Basis of preparation

This financial statement is in accordance with the “Accounting Standards for Business Enterprises - Basic Standard” and relevant specific standards, application materials, interpretations (together hereinafter referred to as “Accounting Standards for Business Enterprises”) issued by the Ministry of Finance, and the disclosure requirements relating to financial statements and notes from “Information Disclosure Rules for Companies of securities for public issuance No. 15 - General Regulations for Financial Statements” amended by the China Securities Regulatory Commission (hereinafter referred to as “CSRC”) in 2023.

2 Going concern

As at 31 December 2023, the Group’s current liabilities exceeded current assets by RMB1,134,042,186.73. After taking into account the Group’s expected operating cash flow and available bank facilities, the Group will also seek long-term loans and repay current debts by carrying out financing activities, and considers alternative sources of financing when appropriate and necessary. It is the opinion of management that the Group will be able to meet its financial commitments as they fall due within the next twelve months. Accordingly, these financial statements have been prepared on a going concern basis.

III Significant accounting policies and accounting estimates

1 Statement of compliance with China Accounting Standards for Business Enterprises

The financial statements present the requirements of the Accounting Standards for Business Enterprises promulgated by the Ministry of Finance. It truly and completely reflects the Company’s merger on December 31, 2023 and the financial position of the parent company, as well as the 2023 merger and the operating results and cash flow of the parent company.

2 Accounting year

The Accounting year is from 1 January to 31 December.

3 Operating period

The operating period is twelve months.

4 Functional currency

The Company and its domestic subsidiaries use RMB as the functional currency. The foreign subsidiaries of the Company determine their functional currency according to the currency of the main economic environment in which they operate and the main currency of business income and expenditure.

5 Method used to determine the materiality threshold and the basis for selection

<i>Item</i>	<i>Materiality threshold</i>
Significant receivables for which provisions for bad and doubtful debts are individually assessed	equals to or more than RMB5 million
Significant construction in progress	has an ongoing financing project; or its amount incurred for the period/balance exceeds 10% of the total fixed assets.
Significant joint arrangements or associates	the carrying amount of the investment in the joint venture or associate is greater than 0.2% of total assets in the consolidated balance sheet; or the profit (loss, expressed in absolute terms) from the investment in the joint venture or associate is greater than 0.2% of operating profit in the consolidated balance sheet.
Significant non-wholly-owned subsidiaries	its profit represents 10% of the Group's net profit (loss, expressed in absolute terms).
Significant cash flow from investing activities	amount of the individual cash inflow or outflow represents 0.2% of the total assets.
Significant contract liabilities with ageing of more than one year	amount of the individual contract liability represents 0.2% of the total assets.

6 Accounting treatments for business combinations involving entities under common control and not under common control

Business combinations involving entities under common control

The assets and liabilities that the Group acquired in a business combination shall be measured on the basis of their carrying amount of acquiree's assets, liabilities (as well as the goodwill arising from the business combination) in the consolidated financial statement of the ultimate controller on the combining date. As for the balance between the carrying amount of the net assets obtained by the Group and the carrying amount of the consideration paid by it (or the total par value of the shares issued), capital reserve needs to be adjusted. If the capital reserve is not sufficient, any excess shall be adjusted against retained earnings.

Business combinations involving entities not under common control

The Group shall, on the acquisition date, measure the assets given and liabilities incurred or assumed by an enterprise for a business combination in light of their fair values, and shall record the balances between them and their carrying amounts into the profits and losses at the current period. The Group shall recognize the positive balance between the combination costs and the fair value of the identifiable net assets it obtains from the acquiree as goodwill. The Group shall treat the negative balance between the combination costs and the fair value of the identifiable net assets it obtains from the acquiree into the profits and losses of the current period.

The intermediary costs and relevant fees for the business combination paid by the acquirer, including the expenses for audit, assessment and legal services, shall be recorded into the profits and losses at the current period. The transaction expenses for the issuance of equity securities for the business combination shall be recorded into the initial recognition amount of equity securities.

7 Criteria of control and preparation of consolidated financial statements

Criteria for control

Control exists when the investor has all of the following: power over the investee; variable returns from its involvement with the investee; and the ability to affect those returns through its power over the investee. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

Consolidation of Financial Statements

(1) Scope of consolidation

The scope of consolidation of consolidated financial statements is determined based on control. All the subsidiaries (including separable sections of the investees controlled by the Company) have been consolidated into the scope of consolidation for this period ended.

(2) Procedure of consolidation

The consolidated financial statements shall be presented by the parent based on the financial statements of both the parent and its subsidiaries according to the related information. When preparing consolidated financial statements, the parent shall consider the entire group as an accounting entity, adopt uniform accounting policies and apply the requirements of Accounting Standard for Business Enterprises related to recognition, measurement and presentation. The consolidated financial statements shall reflect the overall financial position, operating results and cash flows of the Group.

The accounting policy and accounting period of the subsidiaries within the consolidation scope shall be in accordance with those of the Company. If not, it is necessary to make the adjustment according to the Company's accounting policies and accounting period when preparing the consolidated financial statements. For subsidiaries through acquisition that are now under common control, the financial statements are adjusted according to fair value of identifiable net assets on the acquisition date. For subsidiaries through acquisition that are under common control, the assets, liabilities (as well as the goodwill arising from purchasing the subsidiary by the ultimate controller) are adjusted according to book value of net assets in the financial statements of the ultimate controller.

The owners' interests, profit or loss, and comprehensive income of the subsidiary attributable to the non-controlling shareholders shall be presented separately in the shareholders' equity of the consolidated balance sheet and under the item of net profit of the consolidated statement of comprehensive income and under the item of total comprehensive income. Where losses assumed by the minority exceed the minority's interests in the beginning equity of a subsidiary, the excess shall be charged against the minority's interests.

(a) Increasing new subsidiaries or businesses

If the Company has a new subsidiary due to business combination under common control during the reporting period, it shall adjust the beginning amount in the consolidated statement of financial position when preparing consolidated statement of financial position. The revenue, expenses and profits of the subsidiaries from the acquisition date to the end of the reporting period are included in the Company's consolidated statement of comprehensive income. The cash flow of the subsidiaries from the acquisition date to the end of the reporting period is included in the Company's consolidated statement of cash flows. And meanwhile the Company shall adjust the relevant items of the comparative financial statements as if the reporting entity for the purpose of consolidation has been in existence since the date the ultimate controlling party first obtained control.

When the Company becomes capable of exercising control over an investee under common control due to additional investment or other reasons, adjustment shall be made as if the reporting entity after the combination has been in existence since the date the ultimate controlling party first obtained control. The investment income recognized between date of previously obtaining equity investment and the date the acquiree and acquirer are under common control, which is later, and the combining date, other comprehensive income and other changes of net assets arising from the equity investment previously-held before obtaining the control the acquiree shall be adjusted against the prior retained earnings of the comparative financial statements and the current profit or loss respectively.

During the reporting period, if a subsidiary or business is added due to a business combination not under the same control, the beginning balance of the consolidated balance sheet shall not be adjusted. The revenue, expenses and profits of the subsidiaries from the acquisition date to the end of the reporting period are included in the parent company's consolidated statement of comprehensive income. The cash flow of the subsidiaries from the acquisition date to the end of the reporting period is included in the Company's consolidated statement of cash flows.

When the Company becomes capable of exercising control over an investee not under common control due to additional investment or other reasons, the acquirer shall remeasure its previously held equity interest in the acquiree to its fair value at the acquisition date. The difference between the fair value and the carrying amount shall be recognized as investment income for the period when the acquisition takes place. When the previously-held equity investment is accounted for under the equity method, any other comprehensive income previously recognized in relation to the acquiree's equity changes, and other equity changes rather than changes from net profit, other comprehensive income and profit distribution shall be transferred to profit or loss for the current period when the acquisition takes place. Other comprehensive income arising from remeasurement of defined benefit plan is excluded.

(b) Disposing subsidiaries or businesses

General treatment

If the Company disposes a subsidiary during the reporting period, the revenue, expenses and profits of the subsidiary from the beginning of the reporting period to disposal date are included in the Company's consolidated statement of comprehensive income. The cash flow of the subsidiaries from the beginning of the reporting period to disposal date is included in the Company's consolidated statement of cash flows.

When the Company loses control over an investee due to partial disposal or other reasons, the acquirer shall re-measure the remaining equity interests in the acquiree to its fair value at the acquisition date. The difference, between sums of consideration received for disposal equity shares and fair value of the remaining shares, and sums of share of net assets of the subsidiary calculated continuously from the acquisition date or the combination date based on the previous shareholding proportion and goodwill, shall be recognized as investment income for the period when the Company loses control over acquiree. When the previously-held equity investment is accounted for under the equity method, any other comprehensive income previously recognized in relation to the acquiree's equity changes, and other equity changes rather than changes from net profit, other comprehensive income and profit distribution, shall be transferred to investment income for the current period when the Company loses control over acquiree. Other comprehensive income arising from re-measurement of defined benefit plan is excluded.

When the Company loses control over a subsidiary due to the increase of capital from other investors and thus the shareholding ratio of the Company declines, accounting treatment shall be in accordance with the above-mentioned principles.

Disposing subsidiaries by multiple transactions

Where the Company loses control of a subsidiary in multiple transactions in which it disposes of its subsidiary in stages, in determining whether to account for the multiple transactions as a single transaction, the Company shall consider all of the terms and conditions of the transactions and their economic effects. One or more of the following may indicate that the Company shall account for the multiple arrangements as a single transaction:

- Arrangements are entered into at the same time or in contemplation of each other;
- Arrangements work together to achieve an overall commercial effect;
- The occurrence of one arrangement is dependent on the occurrence of at least one other arrangement; and
- One arrangement considered on its own is not economically justified, but it is economically justified when considered together with other arrangements.

If each of the multiple transactions forms part of a bundled transaction which eventually results in loss of control of the subsidiary, these multiple transactions shall be accounted for as a single transaction. In the consolidated financial statements, the difference between the consideration received and the corresponding proportion of the subsidiary's net assets in each transaction prior to the loss of control shall be recognized in other comprehensive income and transferred to the profit or loss when the Company eventually loses control of the subsidiary.

If each of the multiple transactions which eventually results in loss of control of the subsidiary do not form part of a bundled transaction, apply the treatment of disposing partial long-term equity investments in a subsidiary without loss of control prior to the loss of control. After the loss of control, apply the treatment of disposing the subsidiary in common cases.

(c) Acquiring the subsidiaries' equity interest held by non-controlling shareholders

Where the Company has acquired a subsidiary's equity interest held by non-controlling shareholders, the difference between the increase in the cost of long-term investments as a result of acquisition of non-controlling interests and the share of net assets of the subsidiary calculated continuously from the acquisition date or the combination date based on the new shareholding proportion shall be adjusted to the capital reserve (capital premium or share premium) in the consolidated financial statements. If the balance of the capital reserve is not sufficient, any excess shall be adjusted against retained earnings.

(d) Disposing portion of equity investments in subsidiaries without losing control

When the Company disposes of a portion of the long-term equity investments in a subsidiary without loss of control, the difference between the amount of the consideration received and the corresponding portion of the net assets of the subsidiary calculated continuously from the acquisition date or the combination date related to the disposal of the long-term equity investments shall be adjusted to the capital reserve (capital premium or share premium) in the consolidated financial statements. If the balance of the capital reserve is not sufficient, any excess shall be adjusted against retained earnings.

8 Cash and cash equivalents

For the purpose of preparing the statement of cash flows, the term "cash" refers to the cash on hand and the unrestricted deposit. And the term "cash equivalents" refers to short-term (maturing within three months from acquisition) and highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

9 Foreign currency transaction and translation of foreign currency financial statements

(1) Foreign currency transaction

Foreign currency transactions are translated into RMB at the current exchange rate and approximate exchange rate at the day of transactions.

The foreign currency monetary items shall be translated at the spot exchange rate on the balance sheet date. The balance of exchange arising from the difference between the spot exchange rate on the balance sheet date and the spot exchange rate at the time of initial recognition or prior to the balance sheet date, except those arising from the raising of special foreign debt for the purchase or construction of capitalizable assets thus shall be capitalized according to the borrowing costs capitalization principle, shall be recorded into the profits and losses at the current period.

(2) Translation of foreign currency financial statements

The asset and liability items in the statement of financial position shall be translated at a spot exchange rate on the balance sheet date. Among the owner's equity items, except the ones as "undistributed profits", others shall be translated at the spot exchange rate at the time when they are incurred. The income and expense items in the income statement are converted using the average exchange rate during the transaction period.

When disposing an overseas business, the Company shall shift the balance, which is presented under the items of the owner's equities in the statement of financial position and arises from the translation of foreign currency financial statements related to this overseas business, into the disposal profits and losses of the current period. If the overseas business is disposed of partially, the Company shall calculate the balance arising from the translation of foreign currency statements of the part of disposal based on the disposal rate and shall shift them into the profits and losses of the current period.

10 Financial instruments

When the Company becomes a party to a financial instrument contract, it recognizes a financial asset, financial liability or equity instrument.

(1) Classification of financial instruments

The Company shall classify financial assets on the basis of both the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset as: financial assets measured at amortised cost, financial assets measured at fair value through other comprehensive income (debt instrument) and financial assets measured at fair value through profit or loss at initial measurement.

A financial asset shall be measured at amortised cost if both of the following conditions are met. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. A financial asset shall be measured at fair value through other comprehensive income if both of the following conditions are met. The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding . Other financial assets other than these are classified as financial assets measured at fair value through profit or loss.

The Company may make an election at initial recognition for non-trading equity instrument investments whether it is designated as a financial asset (equity instrument) that is measured at fair value through other comprehensive income. At the initial recognition, in order to eliminate or significantly reduce accounting mismatches, financial assets can be designated as financial assets measured at fair value through profit or loss.

The Company shall classify financial liabilities as financial liabilities measured at amortised cost and financial liabilities measured at fair value through profit or loss at initial measurement.

The Company may, at initial recognition, designate a financial liability as measured at fair value through profit or loss because either:

- (a) it eliminates or significantly reduces an accounting mismatch;
- (b) a group of financial liabilities or financial assets and financial liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the Group is provided internally on that basis to the entity's key management personnel;
- (c) the financial liability contains embedded derivatives that need to be separated.

(2) Recognition and measurement of financial instruments

(a) Financial assets measured at amortised cost

Financial assets measured at amortized cost include notes receivables, accounts receivables, other receivables, long-term receivables, debt investments, etc. At initial recognition, the Company shall measure a financial asset at its fair value plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset. The Company shall measure account receivables at their transaction price if the account receivables do not contain a significant financing component and accounts receivables that the Company has decided not to consider for a financing component of no more than one year.

Interests calculated by using the effective interest method during the holding period shall be recognized in profit or loss.

When recovering or disposing the receivables, the difference between the price obtained and the carrying value shall be recognized in current profit or loss.

(b) Financial assets measured at fair value through other comprehensive income (debt instruments)

Financial assets measured at fair value through other comprehensive income (debt instruments) include receivables financing, other debt investments, etc. At initial recognition, the Company shall measure a financial asset at its fair value plus transaction costs that are directly attributable to the acquisition or issuance of the financial asset. The financial assets are subsequently measured at fair value. Changes in fair value are included in other comprehensive income except for interest calculated using the effective interest method, impairment losses or gains and exchange gains and losses.

When the financial assets are derecognized, the accumulated gain or loss previously recognized in other comprehensive income is transferred from other comprehensive income and recognized in profit or loss.

(c) Financial assets at fair value through other comprehensive income (equity instruments)

Financial assets at fair value through other comprehensive income (equity instruments) include other equity instrument investments, etc. At initial recognition, the Company shall measure a financial asset at its fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset. The financial assets are subsequently measured at fair value. Changes in fair value are included in other comprehensive income. The dividends obtained are recognised in profit and loss.

When the financial assets are derecognized, the accumulated gain or loss previously recognised in other comprehensive income is transferred from other comprehensive income and recognised in retained earnings.

(d) Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include transactional financial assets, derivative financial assets, other non-current financial assets, etc. The Company shall measure the financial assets at fair value at initial recognition. Transaction costs are recognised in profit or loss. Changes in fair value are included in profit or loss.

(e) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include current financial liabilities, derivative financial liabilities, etc. The Company shall measure the financial assets at fair value at initial recognition. Transaction costs are recognised in profit or loss. Changes in fair value are included in profit or loss.

(f) Financial liabilities measured at amortised cost

Financial liabilities measured at amortised cost include short-term borrowings, notes payables, accounts payables, other payables, long-term borrowings, bonds payables, long-term payables. At initial recognition, the Company shall measure a financial liability at its fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset.

Interests calculated by using the effective interest method during the holding period shall be recognized in profit or loss.

When the financial liabilities are derecognized, the difference between the price obtained and the carrying value shall be recognised in profit and loss.

(3) Derecognition of financial assets and transfer of financial assets

Where the Company has transferred nearly all of the risks and rewards related to the ownership of the financial asset to the transferee, it shall stop recognizing the financial asset. If it retained nearly all of the risks and rewards related to the ownership of the financial asset, it shall not stop recognizing the financial asset.

To judge whether the transfer of a financial asset can satisfy the conditions as prescribed in these Standards for stopping the recognition of a financial asset, the Company shall follow the principle of the substance over form. Transfer of an entire financial asset can be divided into partial financial assets transfer and entire financial asset transfer. If the transfer of an entire financial asset satisfies the conditions for de-recognition, the difference between the amounts of the following two items shall be recorded in the profits and losses of the current period:

- The book value of the transferred financial asset; and
- The sum of consideration received from the transfer, and the accumulative amount of the changes of the fair value originally recorded in the owners' equities (in the event that the financial asset involved in the transfer is available-for-sale financial asset).

If the transfer of partial financial asset satisfies the conditions to derecognize, the entire book value of the transferred financial asset shall, between the portion whose recognition has been stopped and the portion whose recognition has not been stopped (under such circumstance, the service asset retained shall be deemed as a portion of financial asset whose recognition has not been stopped), be apportioned according to their respective relative fair value, and the difference between the amounts of the following 2 items shall be included into the profits and losses of the current period :

- The book value of the portion whose recognition has been stopped; and
- The sum of consideration of the portion whose recognition has been stopped, and the portion of the accumulative amount of the changes in the fair value originally recorded in the owner's equities which is corresponding to the portion whose recognition has been stopped (in the event that the financial asset involved in the transfer is a financial asset Available-for-sale).

If the transfer of financial assets does not satisfy the conditions to stop the recognition, it shall continue to be recognized as financial assets and the consideration received shall be recognized as financial liabilities.

(4) Derecognition of financial liabilities

Only when the prevailing obligations of a financial liability are relieved in all or in part may the recognition of the financial liability be terminated in all or partly. Where the Company (debtor) enters into an agreement with a creditor so as to substitute the existing financial liabilities by way of any new financial liability, and if the contractual stipulations regarding the new financial liability is substantially different from that regarding the existing financial liability, it shall terminate the recognition of the existing financial liability, and shall at the same time recognize the new financial liability.

Where the Company makes substantial revisions to part or all of the contractual stipulations of the existing financial liability, it shall terminate the recognition of the existing financial liability or part of it, and at the same time recognize the financial liability after revising the contractual stipulations as a new financial liability.

Where the recognition of a financial liability is totally or partially terminated, the Company shall include into the profits and losses of the current period the difference between the carrying amount which has been terminated from recognition and the considerations it has paid (including the non-cash assets it has transferred out and the new financial liabilities it has assumed).

Where the Company buys back part of its financial liabilities, it shall distribute, on the date of repurchase, the carrying amount of the whole financial liabilities in light of the comparatively fair value of the part that continues to be recognized and the part whose recognition has already been terminated. The gap between the carrying amount which is distributed to the part whose recognition has terminated and the considerations it has paid (including the noncash assets it has transferred out and the new financial liabilities it has assumed) shall be recorded into the profits and losses of the current period.

(5) Determination of the fair value of the financial assets (liabilities)

If active markets for the financial instruments exist, the fair value shall be measured by quoted prices in the active markets. If active markets for the financial instruments do not exist, valuation techniques shall be applied for the measurement. The Company uses valuation techniques appropriate in the circumstances and for which sufficient data are available to measure fair value. The Company chooses relevant observable inputs for identical or similar assets or liabilities. Only when relevant observable inputs are unavailable or should the Company use unobservable inputs for the asset or liability.

(6) Testing methods and accounting treatment methods for impairment of financial assets

The Company considers all reasonable and relevant information, including forward-looking information, to recognize the expected credit loss on financial assets measured at amortized cost, and financial assets measured at fair value through other comprehensive income (debt instruments) on the individual or portfolio basis. The measurement of expected credit loss depends on whether there is a significant increase in credit risk of financial assets since the initial recognition.

If the credit risk of the financial instrument has increased significantly since the initial confirmation, the Company shall measure the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Company shall measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. The increase or reversal amount of loss allowance thus formed shall be included in the current profits and losses as impairment losses or gains.

Generally, the Company believes that the credit risk of the financial instrument has significantly increased over 30 days after the due date, unless there is solid evidence that the credit risk of the financial instrument has not increased significantly since initial recognition.

If the credit risk of a financial instrument at the reporting date is relatively low, the Company considers that the credit risk of the financial instrument has not increased significantly since the initial recognition.

If there is objective evidence indicating that a certain financial asset has been impaired, the Company shall recognize provision for impairment of the financial asset individually.

For account receivables, whether a significant financing component is contained or not, the Company shall always measure the loss allowance at an amount equal to lifetime expected credit losses. For the receivables from Energy Performance Contracting, long-term receivables formed by the Company through the sale of goods or rendering of services, the Company chooses to measure the expected credit loss at an amount equal to 12-month expected credit losses (stage one).

When individual financial assets that cannot be used to estimate expected credit losses at reasonable cost, the Company shall divide receivables based on the credit risk characteristics into different portfolio and calculate expected credit loss based on portfolios. The criteria for the portfolio are as follows:

Bills receivable	The Group classifies bills receivable into bank and commercial acceptance bills based on the credit risk characteristics of the acceptor.
Accounts receivable	According to the historical experience of the Group, there are differences in the losses of different customer groups. As a result, the Group classifies accounts receivable into receivables from companies within the scope of consolidation, electricity fees due from Power Grid Companies and accounts receivable due from external customers (excluding power grid companies).
Receivables under financing	Receivables under financing held by the Group for dual purpose are bank acceptance bills receivable and accounts receivable. The Group classifies receivables under financing into bank acceptance bill portfolio and commercial acceptance bill portfolio, based on the credit risk characteristics of the acceptor.
Other receivables	According to the nature of receivables and the credit risk characteristics of different counterparties, the Group classifies other receivables into amounts due from related parties, deposits and warranties, equity transfer receivable, amounts due from other entities, export rebates receivables and subsidies receivable.
Contract assets	According to the historical experience of the Group, this portfolio is based on power bills receivables due from Power Grid Companies.
Long-term receivables	The Group's long-term receivables are composed primarily of receivables from Energy Performance Contracting and Installment sale. According to the credit risk characteristics of different counterparties, the Group classifies long-term receivables as amounts due from companies within the scope of consolidation, and other current accounts.

For the accounts receivable and contract assets divided into portfolios, the Group shall, based on past events, current conditions and forecasts of future economic conditions, calculate expected credit losses using comparison table of the other receivables aging analysis and lifetime expected credit loss ratio.

For the notes receivable and account receivable financing formed by daily business activities such as sales of goods and service, which are divided into portfolios, the Group shall, based on past events, current conditions and forecasts of future economic conditions, calculate expected credit losses using the default risk exposure and the expected credit loss rate of the whole lifetime. Besides, notes receivable, account receivable financing and other receivables will be divided into portfolios, the Group shall, based on past events, current conditions and forecasts of future economic conditions, calculate expected credit losses using the default risk exposure and the expected credit loss rate within the next 12 months or the whole lifetime.

The Group shall recognize the amount of expected credit losses or reversal in profit or loss. For debt instruments measured at fair value through other comprehensive incomes, the Group shall recognize the amount of expected credit losses or gains in profit or loss and adjust other comprehensive income.

(7) Equity instruments

The consideration received from the issuance of equity instruments net of transaction costs is recognized in shareholders' equity. Consideration and transaction costs paid by the Group for repurchasing self-issued equity instruments are deducted from shareholders' equity.

(8) Convertible instruments

- Convertible instruments containing an equity component

Convertible instruments issued by the Group that can be converted to equity instruments of the Group, where a fixed number of equity instruments is issued in exchange for a fixed amount of consideration at the time of conversion, are accounted for as compound financial instruments containing both liability and equity components.

The initial carrying amount of a compound financial instrument is allocated to its equity and liability components. The Group first determines the fair value of the liability component which includes the fair value of any embedded derivatives other than the equity component. The amount allocated to the equity component is the residual amount after deducting the fair value of the liability component from the fair value of the entire compound instrument. Transaction costs that relate to the issue of a compound financial instrument are allocated to the liability and equity components of the instrument in proportion to the allocation of proceeds.

Subsequent to initial recognition, the liability component is measured at amortised cost using the effective interest method, unless it is designated upon recognition as measured at fair value through profit or loss. The equity components will not be re-measured.

If the convertible instrument is converted, the liability component, together with the equity component, is transferred to equity. If the convertible instrument is redeemed, the consideration paid for the redemption, together with the transaction costs that relate to the redemption, are allocated to the liability and equity components. The method used to allocate the consideration and transaction costs is the same as that used for issuance. After allocating the consideration and transaction costs, the difference between the allocated and carrying amounts is charged to profit and loss if it relates to the liability component or is directly recognised in equity if it relates to the equity component.

- Convertible instruments without equity component

For other convertible instruments issued by the Group which do not contain an equity component, at initial recognition, the derivative component is measured at fair value, and any excess of proceeds over the derivative component is recognised as the liability component.

The derivative component is subsequently measured at fair value through profit or loss. The host liability component is subsequently carried at amortised cost using the effective interest method.

Upon conversion, the carrying amounts of the derivative and host liability components are transferred to the relevant captions in equity. If the instrument is redeemed, any difference between the redemption amount paid and the carrying amounts of both components is recognised in profit or loss.

11 Contract assets and contract liabilities

(1) Confirmation methods and standards of contract assets and contract liabilities

The Company lists contract assets or contract liabilities on the balance sheet based on the relationship between performance obligations and customer payments. The Company has the right to receive consideration for the transfer of goods or services to customers (and the right depends on other factors other than the passage of time) listed as contract assets. Contract assets and contract liabilities under the same contract are presented in net terms. The Company's unconditional (only depends on the passage of time) right to collect consideration from customers are separately listed as receivables.

(2) Determination methods and accounting treatment methods of expected credit loss of contract assets

The methods for determining the expected credit loss of contract assets and the accounting treatment methods are detailed in this Note III 10(6). Testing methods and accounting treatment methods for impairment of financial assets.

12 Inventories

(1) Classification and cost of inventories

Inventories include material procurement, raw material, low-valued consumables, finished goods, work in process, materials for consigned processing, goods in transit, etc.

(2) Valuation method for inventories dispatched

The weighted average method is used to confirm the actual cost of the inventories dispatched.

(3) Inventory count system

The Group uses perpetual inventory system.

(4) Amortisation method for low-value consumables and packaging materials

- Low-valued consumables shall be amortized in full amount on issuance.
- Packing materials shall be amortized in full amount on issuance.

(5) Criteria and method for provision for impairment of inventories

At the balance sheet date, inventories are carried at the lower of cost and net realisable value.

The net realizable value of inventories (finished products, stock commodity, material, etc.) held for direct selling in the daily business activity shall be calculated by deducting the estimated sale expense and relevant taxes from the estimated sale price of inventories; The net realizable value of inventories for further processing in the daily business activity shall be calculated by deducting the estimated cost of completion, estimated sale expense and relevant taxes from the estimated sale price of inventories; The net realizable value of inventories held for the execution of sales contracts or labor contracts shall be calculated on the ground of the contract price. If the Company holds more inventories than the quantities subscribed in the sales contract, the net realizable value of the excessive part of the inventories shall be calculated on the ground of the general sales price.

The Company shall make provision for loss on decline in value of inventories on the ground of each item of inventories at the year end. For inventories with large quantity and relatively low unit prices, the provision for loss on decline in value of inventories shall be made on the ground of the categories of inventories. For the inventories related to the series of products manufactured and sold in the same area, and of which the final use or purpose is identical or similar thereto, and if it is difficult to measure them by separating them from other items, the provision for loss on decline in value of inventories shall be made on a combination basis.

Unless clear evidence shows that the market price is exceptionally fluctuating, the net realizable value of inventories is based on the market price at the balance sheet date.

The net realizable value of inventories at the year-end is based on the market price at the balance sheet date.

13 Assets held for sale and discontinued operations

(1) Non-current assets or disposal groups held for sale

The Company classifies non-current assets or disposal asset groups when the assets meet the following criterion into holding categories for sale simultaneously:

- According to the practice of selling such assets or disposal asset groups in similar transactions, they can be sold immediately under current conditions;
- The sale of assets is highly probable, as the Company has already made a resolution on a sale plan and obtained a certain purchase commitment, and the transaction is expected to be completed within one year. The relevant regulations that the assets can be sold have been approved by relevant authorities or regulatory authorities of the Company.

Non-current assets or disposal groups held for sale are stated at the lower of carrying amount and fair value less costs to sell (except financial assets (see Note III.10) and deferred tax assets (see Note III.28)) initially and subsequently. Any excess of the carrying amount over the fair value less costs to sell is recognized as an impairment loss in profit or loss.

In case of any subsequent reversals of the above impairment losses of assets, a reversal of an impairment loss will not result in the asset's carrying amount exceeding what the carrying amount at the date of impairment reversal would have been had no impairment loss been recognized in prior years.

(2) Discontinued operations

Discontinuing operation is a component that has been disposed or classified as held for sale by the Company, and can be distinguished separately in operating and preparing financial statements when one of the following conditions is met:

- The component stands for an independent main business or a major business area;
- The component is a part of disposal plan of an independent main business or a major business area;
- The component is a subsidiary which is acquired only for sale again.

Where an operation is classified as discontinued in the current period, profit or loss from continuing operations and profit or loss from discontinued operations are separately presented in the income statement for the current period. The comparative information for profit or loss from discontinued operations, which used to present as profit or loss from continuing operations in the prior period, is re-presented as profit or loss from discontinued operations in the comparative income statement.

14 Long-term equity investment

(1) Criteria of joint control and significant influence

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. If the Company and other joint venture have joint control of the investee and have rights to the net assets of the investee, the investee is a joint venture of the Company.

Significant influence is the power to participate in the financial and operating policy decisions of the investee but not control or joint control of those policies. If the Company could exert significant influence over the investee, the investee is the associate of the Company.

(2) The initial cost of long-term equity investment from business acquisition

(a) Long-term equity investment from business acquisition

For a business combination under common control, if the consideration of the combination is satisfied by paying cash, transfer of non-cash assets or assumption of liabilities and issue of equity securities, the initial investment cost of the long-term equity investment shall be the absorbing party's share of the carrying amount of the owner's equity of the party being absorbed in the consolidated financial statements of the ultimate controlling party at combination date. When an investor becomes capable of exercising control over an investee under common control due to additional investment or other reasons, the initial investment cost shall be the absorbing party's share of the carrying amount of the owner's equity of the party being absorbed in the consolidated financial statements of the ultimate controlling party at combination date. The difference between the initial investment cost and the carrying amount of the previously-held equity investment, together with the additional investment cost for new shares at combination date, shall be adjusted to the capital reserve. If the balance of capital reserve is not sufficient, any excess shall be adjusted to retained earnings.

For a business combination not under common control, the initial investment cost of the long-term equity investment shall be the acquisition cost at the acquisition date. When an investor becomes capable of exercising control over an investee due to additional investment or other reasons, the initial investment cost under the cost method shall be the carrying amount of previously-held equity investment together with the additional investment cost.

(b) The initial cost of the long-term equity investment other than from business acquisition

The initial cost of a long-term equity investment obtained by making payment in cash shall be the purchase cost which is actually paid.

The initial cost of a long-term equity investment obtained on the basis of issuing equity securities shall be the fair value of the equity securities issued.

If the exchange of non-monetary assets is commercial in nature and the fair values of both the assets received and surrendered can be reliably measured, the fair value of the assets surrendered shall be used as the basis for determining the cost of the assets received, unless there is any exact evidence showing that the fair value of the assets received is more reliable. Where any non-monetary assets transaction does not meet the conditions as prescribed above, the carrying value and relevant payable taxes of the assets surrendered shall be the initial cost of the assets received.

The initial cost of a long-term equity investment obtained by debt restructuring shall be ascertained on the basis of fair values.

(3) Subsequent measurement and profit or loss recognition

(a) Cost method

The Company adopts cost method for the long-term investment in subsidiary company. Under the cost method, an investing enterprise shall, in accordance with the attributable share of the net profits or losses of the invested entity, recognize the investment profits or losses except the dividend declared but unpaid, which is included in the payment when acquiring the investment.

(b) Equity method

A long-term equity investment in an associate or a joint venture shall be accounted for using the equity method. Where the initial investment cost of a long-term equity investment exceeds an investor's interest in the fair values of an investee's identifiable net assets at the acquisition date, no adjustment shall be made to the initial investment cost. Where the initial cost is less than the investor's interest in the fair values of the investee's identifiable net assets at the acquisition date, the difference shall be credited to profit or loss for the current period.

The Company shall recognize its share of the investee's net profits or losses, as well as its share of the investee's other comprehensive income, as investment income or losses and other comprehensive income, and adjust the carrying amount of the investment accordingly. The carrying amount of the investment shall be reduced by the portion of any profit distributions or cash dividends declared by the investee that is attributable to the investor. The investor's share of the investee's owners' equity changes, other than those arising from the investee's net profit or loss, other comprehensive income or profit distribution, and the carrying amount of the long-term equity investment shall be adjusted accordingly.

The investor shall recognize its share of the investee's net profits or losses after making appropriate adjustments according to the Company's accounting principles and operating period based on the fair values of the investee's identifiable net assets at the acquisition date. During the holding period, if the investee makes consolidated financial statements, the Company shall calculate its share based on the investee's net profit, other comprehensive income and the amount of other owners' equity attribute to the investee in the consolidated financial statements.

The unrealized profits or losses resulting from transactions between the investor and its associate or joint venture shall be eliminated in proportion to the investor's equity interest in the investee, based on which investment income or losses shall be recognized. Any losses resulting from transactions between the investor and investee which are attributable to asset impairment shall be recognized in full. If the transaction of investment or sale of assets among the Company and associate and joint venture and the assets is a business, it shall apply the treatment mentioned in Note III 5 "The accounting treatment for Business combination under/not under common control" and Note III 6 "Consolidation of Financial Statements".

When the Company recognizes the losses of invested enterprise, it shall follow the following sequence: First of all, offset the book value of long-term equity investment. If the book value of long-term equity is insufficient to dilute, the investing enterprise shall recognize the net losses of the invested enterprise until the book value of the long-term equity investment and other long-term rights and interests which substantially form the net investment made to the invested entity are reduced to zero. If the Company still has the obligation to undertake extra losses per contract, and then estimated liabilities shall be recognized into current profit and loss accordingly to the estimated obligation.

(c) Disposal of long-term equity investment

When disposing long-term equity investment, the difference between the proceeds actually received and the carrying amount shall be recognized in profit or loss for the current period.

When the previously-held equity investment is accounted for under the equity method, any other comprehensive income previously recognized shall be accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities. Those owner's equity recognized other than the change of net profits or loss, other comprehensive income, profit distribution of the invested entity shall be transferred proportionally into profit or loss of current period, other comprehensive income arising from the re-measurement of defined benefit plan is excluded.

When an investor can no longer exercise joint control of or significant influence over an investee due to partial disposal of equity investment or other reasons, the remaining equity investment shall be accounted for in accordance with "Accounting Standard for Business Enterprises No. 22-Financial instruments: recognition and measurement". The difference between the fair value and the carrying amount at the date of the loss of joint control or significant influence shall be charged to profit or loss for the current period. When the previously-held equity investment is accounted for under the equity method, any other comprehensive income previously recognized shall be accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities for the current period upon discontinuation of the equity method. Those owner's equity recognized other than the change of net profits or loss, other comprehensive income, profit distribution of the invested entity shall be transferred into profit or loss of current period in full when the Company cease to adopt the equity method.

When the Company can no longer exercise control over an investee due to partial disposal of equity investment or due to decrease of shareholding ratio because of additional investment by other investors, and with the retained interest, still has joint control of, or significant influence over, the investee, when preparing the individual financial statements, the investor shall change to the equity method and adjust the remaining equity investment as if the equity method had been applied from the date of the first acquisition. If the investor cannot exercise joint control of or significant influence over the investee after partial disposal of equity investment, the remaining equity investment shall be accounted for in accordance with “Accounting Standard for Business Enterprises No.22-Financial instruments: Recognition and Measurement”, and the difference between the fair value and carrying amount at the date of the loss of control shall be charged to profit or loss for the current period.

When the equity investment disposed is acquired through business combination due to additional investment or other reasons, in preparing stand-alone financial statement, the remaining equity investment shall adopt cost method or equity method, any other comprehensive income and other owner’s interests previously recognized of the previously-held equity investment under the equity method shall be transferred proportionally. For those remaining equity investments accounted for in accordance with “Accounting Standard for Business Enterprises No.22-Financial instruments: Recognition and Measurement” after disposal, other comprehensive income and other owner’s interests previously recognized shall be transferred to profit or loss in full.

15 Investment property

Investment property refers to real estate held for the purpose of earning rent or capital appreciation, or both, including leased land use rights, land use rights held and prepared for transfer after appreciation, and leased buildings (Buildings that are leased after completion of self-construction or development activities and buildings that are being used for rental in the future during construction or development).

Subsequent expenditures related to investment property are included in the cost of investment property when the relevant economic benefits are likely to flow in and their costs can be reliably measured. Otherwise, they are included in the current profit and loss when incurred.

The Company uses the cost model to measure the existing investment property. For investment property measured according to the cost model, that is, the rental building adopts the same depreciation policy as the fixed assets of the Company, and the land use right for rental is amortized according to the same amortization policy as the intangible assets.

16 Fixed assets

(1) Recognition of Fixed assets

The term “fixed assets” refers to the tangible assets held for the sake of producing commodities, rendering labor service, renting or business management and of which useful life is in excess of one fiscal year. No fixed asset may be recognized unless it simultaneously meets the conditions as follows:

- The economic benefits pertinent to the fixed asset are likely to flow into the enterprise; and
- The cost of the fixed asset can be measured reliably.

(2) Fixed assets depreciation

Fixed assets are depreciated under the straight-line method . The depreciation rate is determined according to the category of assets, the useful life and the expected residual rate. If the components of the fixed assets have different useful lives or provide the economic benefits in a different way, then different depreciation rate or method shall be applied and the depreciation of the components shall be calculated separately.

Details of classification, depreciation period, residual value rate and annual depreciation rate are as follows:

<i>Category</i>	<i>Depreciation method</i>	<i>Depreciation Period (year)</i>	<i>Residual Value Rate (%)</i>	<i>Depreciation Rate (%)</i>
Plants and Buildings	Straight-line method	20	0 - 5	4.75 - 5.00
Photovoltaic power station	Straight-line method	20	0 - 10	4.50 - 5.00
Machinery	Straight-line method	5 - 10	0 - 5	9.50 - 20.00
Transportation	Straight-line method	4 - 5	0 - 5	19.00 - 25.00
IT and office equipment	Straight-line method	3 - 5	0 - 5	19.00 - 33.33

At least at the end of each year, the Company will review the service life, estimated net salvage value and depreciation method of fixed assets.

(3) Disposal of fixed assets

When a fixed asset is disposed of, or it is expected that no economic benefits will be generated through use or disposal, the fixed asset should be derecognized. The amount of disposable income from the sale, transfer, scrap or damage of fixed assets after deducting its book value and related taxes included in the current profit and loss.

17 Construction in progress

The cost of fixed assets transferred from a construction in progress includes all the necessary expenses incurred for bringing the asset to the expected conditions for use. Construction in progress is transferred to fixed asset when it has reached its working condition for its intended use. In case the final project accounts have not been completed or approved, the asset shall be transferred to fixed assets at an estimated value by considering project budget, cost or actual cost of the project and etc., and the depreciation of the said fixed assets shall be provided in accordance with the Company's accounting policy since it has reached its working condition for its intended use. After the project accounts have been approved, the estimated values shall be adjusted based on the actual cost, but those provided depreciation shall not be adjusted.

Criteria and timing for reclassification of construction in progress to fixed assets:

Category	Criteria and timing for reclassification of construction in progress to fixed assets
Plant & buildings	When main and supporting constructions are completed substantially, and are ready for their intended uses.
Machinery & equipment	When (1) the relevant equipment and its supporting facilities have been installed; (2) the equipment is able to maintain a normal and steady operation for a period of time after tuning and testing; (3) the production equipment can consistently produce good quality products for a certain period of time.
Photovoltaic power station	When the performance of the power plant has been verified and accepted after connection to the power grid.

When an enterprise sells products or by-products produced before a fixed asset is available for its intended use, the proceeds and related cost are accounted for in accordance with CAS 14 - Revenue and CAS 1 - Inventories respectively, and recognized in profit or loss for the current period.

18 Borrowing costs

(1) Principle of the recognition of capitalized borrowing costs

The borrowing costs shall include interest on borrowings, amortization of discounts or premiums on borrowings, ancillary expenses, and exchange balance on foreign currency borrowings.

Where the borrowing costs incurred to an enterprise can be directly attributable to the acquisition and construction or production of assets eligible for capitalization, it shall be capitalized and recorded into the costs of relevant assets. Other borrowing costs shall be recognized as expenses on the basis of the actual amount incurred, and shall be recorded into the current profits and losses.

Assets eligible for capitalization refer to the fixed assets, investment real estate, inventories and other assets, of which the acquisition and construction or production may take quite a long time to get ready for its intended use or for sale.

The borrowing costs shall not be capitalized unless they simultaneously meet the following requirements:

- The asset disbursements have already incurred, which shall include cash, transferred non-cash assets or interest-bearing debts paid for the acquisition and construction or production activities for preparing assets eligible for capitalization;
- The borrowing costs has already incurred; and
- The acquisition and construction or production activities which are necessary to prepare the asset for its intended use or sale have already started.

(2) The capitalization period of borrowing costs

The capitalization period shall refer to the period from the commencement to the cessation of capitalization of the borrowing costs, excluding the period of suspension of capitalization of the borrowing costs.

When the qualified asset under acquisition and construction or production is ready for the intended use or sale, the capitalization of the borrowing costs shall be ceased.

Where each part of a qualified asset under acquisition and construction or production is completed separately and is ready for use, the capitalization of the borrowing costs in relation to this part of asset shall be ceased.

Where each part of an asset under acquisition and construction or production is completed separately and is ready for use or sale during the continuing construction of other parts, but it cannot be used or sold until the asset is entirely completed, the capitalization of the borrowing costs shall be ceased when the asset is completed entirely.

(3) The suspension of capitalization of borrowing costs

Where the acquisition and construction or production of a qualified asset is interrupted abnormally and the interruption period lasts for more than 3 months, the capitalization of the borrowing costs shall be suspended. If the interruption is a necessary step for making the qualified asset under acquisition and construction or production ready for the intended use or sale, the capitalization of the borrowing costs shall continue. The borrowing costs incurred during such period shall be recognized as expenses, and shall be recorded into the profits and losses of the current period, till the acquisition and construction or production of the asset restarts.

(4) Method of calculating the capitalization rate and capitalized amount of borrowing costs

For interest expense (minus the income of interests earned on the unused borrowing loans as a deposit in the bank or investment income earned on the loan as a temporary investment) and the ancillary expense incurred to a specifically borrowed loan, those incurred before a qualified asset under acquisition, construction or production is ready for the intended use or sale shall be capitalized at the incurred amount when they are incurred, and shall be recorded into the costs of the asset eligible for capitalization.

The Company shall calculate and determine the to-be-capitalized amount of interests on the general borrowing by multiplying the weighted average asset disbursement of the part of the accumulative asset disbursements minus the general borrowing by the capitalization rate of the general borrowing used. The capitalization rate shall be calculated and determined in light of the weighted average interest rate of the general borrowing.

19 Intangible Assets

(1) Useful life and the basis for its determination, estimation, amortization methods or review procedures

(i) Measurement of Intangible Assets

(a) Initial measurement is based on cost upon acquisition

The cost of an intangible asset on acquisition include the purchase price, relevant taxes and other necessary disbursements which may be directly attributable to bringing the intangible asset to the conditions for the expected purpose. If the payment for an intangible asset is delayed beyond the normal credit conditions and it is of the financing nature, the cost of the intangible asset shall be determined on the basis of the present value of the purchase price.

For intangible assets obtained from debt restructuring as settlement of liabilities from debtors, initial recognition is based on its fair value of the abandoned equity and other costs such as taxes that can be directly attributable to the asset's intended use, and the difference between the fair value and book value of the debt are recognized in the current profit and loss.

For intangible assets obtained from non-monetary transactions with commercial substance, and the fair value of the assets obtained or surrendered can be reliably measured, the initial recognition of the asset obtained is based on the fair value of the asset surrendered, unless there is strong evidence that the fair value of the asset obtained is more reliable. For intangible assets obtained through non-monetary transactions which do not meet the above criteria, the initial recognition is based on the book value of the assets surrendered and the relevant taxes payable. No gain or loss will be recognized.

(b) Subsequent measurement

The Company shall analyze and judge the beneficial period of intangible assets upon acquisition.

Intangible assets with finite beneficial period shall be amortized under the straight-line method during the period when the intangible asset can bring economic benefits to the enterprise. If it is unable to estimate the beneficial period of the intangible asset, it shall be regarded as an intangible asset with uncertain service life and shall not be amortized.

(ii) Estimated useful lives of intangible assets with limited useful lives

<i>Item</i>	<i>Estimated useful life</i>	<i>Criteria</i>
Land use right	40 - 50 years	Estimated useful life
Patent right	5 - 10 years	Estimated useful life
Non-patented technology	5 - 10 years	Estimated useful life
Software	3 - 10 years	Estimated useful life
Other intangible assets	5 - 10 years	Estimated useful life

The Company shall review the useful lives and amortization methods of intangible assets with limited useful lives at each year end.

After review, there is no difference between the useful lives and amortization method of intangible assets at the end of this year and previous estimates .

(iii) Determination of intangible assets with uncertain useful lives

As at the balance sheet date, the useful lives of intangible assets which are uncertain have been reviewed. If there is evidence that the period during which the intangible assets bring economic benefits to the Company is foreseeable, its useful life will be estimated and amortized according to the amortization policy for intangible assets with limited service life.

- (2) The scope of research and development expenditures and the related accounting treatments
- (i) The scope of research and development expenditures and the related accounting treatments

The Group classifies research and development expenditures mainly as material expenses, salaries and benefits, fuel expenses, and others according to the research and development projects.

Expenditures on internal research and development projects are classified into expenditures incurred during the research phase and expenditures incurred during the development phase. Expenditures during the research phase are expensed when incurred. Expenditures during the development phase are recognized as intangible assets when meeting the capitalization criteria.

- (ii) Classification criteria for internal research phase and development phase

Research phase refers to the phase of creative and planned investigation to acquire and study to acquire and understand new scientific or technological knowledge.

Development phase refers to the phase during which the result of research phase or other knowledge is applied into certain projects or designs for the manufacturing of new or substantially improved material, device and product.

- (iii) Specific conditions for capitalization of expenditure for development phase

Expenditures of internal research and project development phase shall be recognized as intangible assets when the following conditions are met simultaneously:

- It is technically feasible to complete the intangible assets so that they can be used or sold;
- Have the intention to complete the intangible assets and use or sell them;
- The ways in which intangible assets generate economic benefits, including the ability to prove that there is a market for the products produced by using the intangible assets or there is a market for the intangible assets themselves, and that the intangible assets will be used internally, can prove its usefulness;
- Have sufficient technical, financial and other resources support to complete the development of the intangible assets, and have the ability to use or sell the intangible assets;
- The expenditure attributable to the development stage of the intangible assets can be reliably measured.

20 Impairment of long-term assets

For long-term assets under the cost model such as long-term equity investments, fixed assets, construction in progress, intangible assets with limited useful lives, right-of-use assets, long-term deferred expenses etc., the Company shall perform impairment tests at the period end if there is clear indication of impairment. If the recoverable amounts of long-term assets are less than their carrying amounts, the carrying amounts of the assets shall be written down to their recoverable amounts. The write-downs are recognized as impairment losses and charged to current profit and loss. The recoverable amounts of long-term assets are the higher of their fair values less costs to sell and the present values of the future cash flows expected to be derived from the assets. The Company shall estimate its recoverable amount on an individual basis. Where it is difficult to do so, it shall determine the recoverable amount of the Group assets on the basis of the asset group to which the asset belongs. The term "group assets" refers to a minimum combination of assets by which the cash flows could be generated independently.

The goodwill and the intangible assets with uncertain service life shall be subject to an impairment test at least at the end of each year.

When the Company makes an impairment test of goodwill, it shall, as of the purchasing day, apportion the carrying value of the business reputation formed by merger of enterprises to the relevant asset groups by a reasonable method. Where it is difficult to do so, it shall be apportioned to the relevant combinations of asset groups.

When making an impairment test on the relevant asset groups or combination of asset groups containing business goodwill, if any evidence shows that the impairment of asset groups or combinations of asset groups is possible, the Company shall first make an impairment test on the asset groups or combinations of asset groups not containing business goodwill, calculate the recoverable amount, compare it with the relevant carrying value and recognize the corresponding impairment loss. Then the Company shall make an impairment test of the asset groups or combinations of asset groups containing business goodwill, and compare the carrying value of these asset groups or combinations of asset groups (including the carrying value of the business reputation apportioned thereto) with the recoverable amount. Where the recoverable amount of the relevant assets or combinations of the asset groups is lower than the carrying value thereof, it shall recognize the impairment loss of the business reputation.

Impairment losses on long-term assets shall not be reversed in subsequent accounting periods once recognized.

21 Long-term deferred expense

The long-term deferred expense refers to the expenses incurred but shall be borne by current and subsequent accounting period, which is more than one year. The long-term deferred expense shall be amortized over its beneficiary period evenly.

22 Employee benefits

(1) Accounting treatment for short-term employee benefits

The Company shall recognised, in the accounting period in which an employee provides service, actually occurred short-term employee benefits as a liability, with a corresponding charge to the profit or loss or cost of an asset for the current period.

Payments made by an enterprise of social security contributions for employees, payments of housing funds, and union running costs employee education costs provided in accordance with relevant requirements shall, in the accounting period in which employees provide services, be calculated according to prescribed bases and percentages in determining the amount of employee benefits.

The employee benefits which are non-monetary benefits shall be measured at fair value if it could be measured reliably.

(2) Accounting treatment of post-employment benefits

The Company adopt defined contribution plan for post-employment benefits. The Company shall recognize, in the accounting period in which an employee provides service, pension fund and unemployment fund for employees as a liability according to the local government regulations. The amount shall be calculated according to local prescribed bases and percentages in determining the amount of employee benefits, with a corresponding charge to the profit or loss or cost of an asset for the current period.

(3) Accounting treatment of termination benefits

The Company shall recognize an employee benefits liability for termination benefits, with a corresponding charge to the profit or loss for the current period, at the earlier of the following dates: when the Company cannot unilaterally withdraw the offer of termination benefits because of an employment termination plan or a curtailment proposal; or when the Company recognizes costs or expenses related to a restructuring that involves the payment of termination benefits.

23 Estimated liabilities

(1) Recognition criteria of estimated liabilities

The obligation pertinent to a Contingency (litigation, guarantees, loss contract , restructuring) shall be recognized as an estimated liability when the following conditions are satisfied simultaneously:

- That obligation is a current obligation of the enterprise;
- It is likely to cause any economic benefit to flow out of the enterprise as a result of performance of the obligation; and
- The amount of the obligation can be measured in a reliable way.

(2) Measurement of all kinds of estimated liabilities

The estimated liabilities shall be initially measured in accordance with the best estimate of the necessary expenses for the performance of the current obligation.

To determine the best estimate, an enterprise shall take into full consideration of the risks, uncertainty, time value of money, and other factors pertinent to the Contingencies. If the time value of money is of great significance, the best estimate shall be determined after discounting the relevant future outflow of cash.

The best estimate shall be conducted in accordance with the following situations, respectively:

If there is a continuous range for the necessary expenses and if all the outcomes within this range are equally likely to occur, the best estimate shall be determined in accordance with the average estimate within the range, that is, the average of the upper and lower limit.

If there is not a sequent range for the necessary expenses and if the outcomes within this range are not equally likely to occur, the best estimate shall be determined as follows:

If the Contingencies concern a single item, it shall be determined in the light of the most likely outcome.

If the Contingencies concern two or more items, the best estimate shall be calculated and determined in accordance with all possible outcomes and the relevant probabilities.

When all or some of the expenses necessary for the liquidation of an estimated debts of an enterprise is expected to be compensated by a third party, the compensation shall be separately recognized as an asset only when it is virtually certain that the reimbursement will be obtained. The amount recognized for the reimbursement shall not exceed the book value of the estimated debts.

The details are as follows :

(a) Onerous contract

An onerous contract is a contract in which the inevitable costs of performing contractual obligations exceed the expected economic benefits. If the contract to be executed becomes an onerous contract, and the obligations arising from the onerous contract meet the above-mentioned conditions for confirming the estimated liabilities, the portion of the contract losses expected to exceed the confirmed impairment losses (if any) of the underlying assets of the contract is recognized as estimated liabilities.

(b) Product quality guarantee

Product quality guarantee refers to a commitment to provide services to customers after selling products or providing services. During the agreed period, if the quality or other problems related to the product are in the normal range during the normal use of the product or service, the Company is responsible for replacing the product, repairing it free of charge or only receiving the cost price. If the conditions for the confirmation of the aforementioned estimated liabilities are met , they are recognized as estimated liabilities.

24 Share-based payment

The Company's share-based payment is a transaction that grants equity instruments or assumes liabilities determined on the basis of equity instruments in order to obtain services provided by employees or other parties. The Company's share-based payment is an equity-settled share-based payment.

(1) Accounting method of share-based payment

Equity-settled share-based payment in exchange for services provided by employees shall be measured at the fair value of the equity instruments granted to employees on the grant date. The fair value amount is calculated on the basis of the best estimate of the number of vesting equity instruments during the waiting period and included in the relevant cost according to the straight-line method when the service in the waiting period is completed or the specified performance conditions are met. Or expenses. When the right is exercised immediately after the grant, the relevant costs or expenses are included on the grant date, and the capital reserve is increased accordingly.

On each balance sheet date during the waiting period, the Company makes the best estimate of the number of vested equity instruments based on the latest obtained changes in the number of vested employees, whether the specified performance conditions are met, and other follow-up information, and revises the expected number of vested equity instruments. The impact of the above estimates is included in the relevant costs or expenses of the current period, and the capital reserve is adjusted accordingly. However, if the right can be exercised immediately after the grant, it shall be included in the relevant costs or expenses at the fair value on the grant date, and the capital reserve shall be increased accordingly.

For share-based payments that cannot be exercised, costs or expenses are not recognized, unless the exercise conditions are market conditions or non-exercising conditions. At this time, regardless of whether the market conditions or non-exercising conditions are met, as long as all of the exercise conditions are met Non-market conditions are deemed to be exercisable.

(2) Relevant accounting method for modification and termination of share-based payment plans

When the Company revises the share-based payment plan, if the revision increases the fair value of the equity instruments granted, the increase in the fair value of the equity instruments is correspondingly confirmed to obtain an increase in services. The increase in the fair value of equity instruments refers to the difference between the fair values of the equity instruments before and after the modification on the modification date. If the modification reduces the total fair value of the share-based payment or adopts other methods that are not conducive to the employees, the accounting treatment of the services obtained will continue to be treated as if the change has never occurred, unless the Group cancels part or all of the granted rights and interests tool.

During the waiting period, if the granted equity instruments are cancelled, the Company treats the cancellation of the granted equity instruments as an accelerated exercise, and the amount that should be confirmed during the remaining waiting period is immediately included in the current profit and loss, and the capital reserve is confirmed at the same time. If employees or other parties can choose to meet the non-exercising conditions but have not met within the waiting period, the Company will treat them as the cancellation of the granted equity instruments.

25 Revenue

(1) Accounting policies used in revenue recognition and measurement

The Company has fulfilled the performance obligations in the contract, that is, the revenue is recognized when the customer obtains control of the relevant goods or services . Obtaining control over related goods or services means being able to lead the use of the goods or services and obtain almost all of the economic benefits from it.

If the contract contains two or more performance obligations, the Company will allocate the transaction price to each individual performance obligation in accordance with the relative proportion of the stand-alone selling price of the goods or services promised by each individual performance obligation on the date of the contract. The Company measures revenue based on the transaction price allocated to each individual performance obligation.

The transaction price refers to the amount of consideration that the Company expects to be entitled to receive due to the transfer of goods or services to customers, excluding payments collected on behalf of third parties and payments expected to be returned to customers. The Company determines the transaction price in accordance with the terms of the contract and combined with its past customary practices. When determining the transaction price, it considers the impact of variable consideration, major financing components in the contract, non-cash consideration, consideration payable to customers and other factors. The Company determines trading price at the best estimate of the variable consideration according to the expected value or the most likely amount, and determines the amount that includes the variable consideration at an amount that does not exceed the amount that the accumulated recognized income is unlikely to be significantly reversed when the relevant uncertainty is eliminated. If there is a major financing component in the contract, the Company will adjust the transaction price according to the financing component in the contract; if the interval between the transfer of control and the payment by the customer is less than one year, the Company will not consider the financing component.

If one of the following conditions is met, it belongs to the performance obligation within a certain period of time, otherwise, it belongs to the performance obligation at a certain point in time:

- The customer obtains and consumes the economic benefits brought by the Company's performance at the same time as the Company's performance.
- Customers can control the products under construction in the Company's performance process.
- The goods produced by the Company during the performance of the contract have irreplaceable uses, and the Company has the right to collect payment for the cumulative performance part that has been completed so far during the entire contract period.

For performance obligations performed within a certain period of time, the Company recognizes revenue in accordance with the performance progress during that period, except where the performance progress cannot be reasonably determined. The Company considers the nature of the goods or services and adopts the output method or the input method to determine the progress of the contract. When the performance progress cannot be reasonably determined, and the cost incurred is expected to be compensated, the Company shall recognize the revenue according to the amount of the cost incurred until the performance progress can be reasonably determined.

For performance obligations performed at a certain point in time, the Company recognizes revenue at the point when the customer obtains control of the relevant goods or services. When judging whether the customer has obtained control of goods or services, the Company considers the following signs:

- The Company has the right to receive payment for the goods or services, that is, the customer has the current payment obligation for the goods or services
- The Company has transferred the legal ownership of the product to the customer, that is, the customer has the legal ownership of the product.
- The Company has transferred the product to the customer, that is, the customer has taken possession of the product.

- The Company has transferred the main risks and rewards of the ownership of the goods to the customers, that is, the customers have obtained the main risks and rewards of the ownership of the goods.
- The customer has accepted the goods or services, etc.
- Other signs that the customer has obtained control of the product.

(2) The specific accounting policies related to the main activities of obtaining income are described as follows:

(a) Photovoltaic power plant operation

The Company supplies electricity to the grid company, and the grid company recognizes revenue when it obtains control of the power.

(b) Sales of solar modules and relevant products

The Company's sales of solar module products will recognize revenue when the control is transferred to the customer in accordance with the contractual agreement.

(c) Sales of monocrystalline furnaces and other photovoltaic equipments

Revenue is recognized based on the above policy for the sale of goods, including PV modules. When the settlement period between the Group and the customer exceeds one year, the financing component in the contract is considered in determining the transaction price and the transaction price is adjusted accordingly.

(d) Service income

The service provided by the Company recognizes revenue during the period of service provision.

26 Contract cost

Contract costs are divided into contract performance costs and contract acquisition costs.

The cost incurred by the Company to perform the contract is recognized as an asset as the contract performance cost when the following conditions are met:

- This cost is directly related to a current or expected contract;
- This cost increases the Company's future resources for fulfilling contract performance obligations;
- The cost is expected to be recovered.

The incremental cost incurred by the Company in order to obtain the contract is expected to be recovered, and it shall be recognized as an asset as the cost of obtaining the contract.

Assets related to contract costs are amortized on the same basis as the revenue recognition of goods or services related to the asset; however, if the amortization period of contract acquisition costs does not exceed one year, the Company will recognize them in the current profits and losses when the cost incurred.

For assets related to contract costs, if the book value is higher than the difference between the following two items, the Company will make provision for impairment for the excess part and recognize it as an asset impairment loss:

- The remaining consideration expected to be obtained due to the transfer of goods or services related to the asset;
- Estimate the cost that will be incurred for the transfer of the related goods or services.

27 Government Subsidies

(1) Types

A government subsidy means the monetary or non-monetary assets obtained free of charge by the Company from the government. Government subsidies consist of the government subsidies pertinent to assets and government subsidies pertinent to income.

Government subsidies related to assets are government subsidies whose primary condition is that an entity qualifying for them should purchase, construct or otherwise acquire long-term assets. The government subsidies related to incomes refers to government subsidies other than those related to assets.

The standard of the Company recognizing the government subsidies related to assets is: an entity qualifying for them should purchase, construct or otherwise acquire long-term assets.

The standard of the Company recognizing the government subsidies related to income is: In addition to government subsidies related to assets, government subsidies that have been clearly targeted for subsidies.

(2) Recognition

Government subsidies related to assets shall be recognized by deducting the subsidies at the caring amount of the assets or recognized as deferred income. Subsidies that recognized as deferred income shall be recognized in profit or loss over the periods during the useful lives of the relevant assets.

The government subsidies related to incomes to compensate future expenses, shall be recognized as deferred income and transferred to current profit or loss. Government subsidies to compensate expenses or losses already incurred shall be recognized in current profit and loss.

(3) Accounting treatment

Government subsidies related to assets shall be recognized by deducting the subsidies at the caring amount of the assets or recognized as deferred income. Subsidies that recognized as deferred income shall be recognized in profit or loss on a systematic basis over the periods during the useful lives of the relevant assets (Subsidies related to daily activities should be recorded in Other Income. Subsidies that unrelated to daily activities should be recorded in Non-operating Income).

The government subsidies related to incomes to compensate future expenses, shall be recognized as deferred income and transferred to current profit or loss (Subsidies related to daily activities should be recorded in Other Income. Subsidies that unrelated to daily activities should be recorded in Non-operating Income) in the period during which the expenses compensation is recognized or deduct relevant cost or loss. Government subsidies to compensate expenses or losses already incurred shall be recognized in current profit and loss (Subsidies related to daily activities should be recorded in Other Income. Subsidies unrelated to daily activities should be recorded in Non-operating Income) or deduct relevant cost or loss.

The policy-related preferential loan interest discount obtained by the Company shall be divided into the following two situations and be accounted for separately:

- The finance allocates interest discount funds to the lending bank, and the lending bank provides loans to the Company at a preferential policy interest rate. The Company uses the actual loan amount received as the entry value of the loan, based on the loan principal and the policy preferential interest rate to calculate related borrowing costs.
- If the finance directly allocates the interest discount funds to the Company, the Company will offset the corresponding interest discount to reduce the relevant borrowing costs.

28 Deferred tax assets and deferred tax liabilities

An enterprise shall recognize the deferred income tax assets arising from a deductible temporary difference to the extent of the amount of the taxable income which it is most likely to obtain and which can be deducted from the deductible temporary difference. As for any deductible loss or tax deduction that can be carried forward to the next year, the corresponding deferred income tax assets shall be determined to the extent that the amount of future taxable income to be offset by the deductible loss or tax deduction to be likely obtained.

All taxable temporary differences shall be recognized as deferred tax liabilities with certain limited exceptions.

Deferred tax is not recognised for temporary differences arising from the initial recognition of assets or liabilities in a single transaction that is not a business combination, affects neither accounting profit nor taxable profit (or deductible loss) and does not give rise to equal taxable and deductible temporary differences. Deferred tax is also not recognised for taxable temporary differences arising from the initial recognition of goodwill.

Where there is a legal right to net settlement and there is an intention to net settlement or to acquire assets and pay off liabilities at the same time, current income tax assets and current income tax liabilities shall be presented as the net offset.

An entity shall offset deferred tax assets and deferred tax liabilities if, and only if: (a) the entity has a legally enforceable right to set off current tax assets against current tax liabilities; and (b) the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either: (i) the same taxable entity; or (ii) different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

29 Leases

(1) The Company as lessee

(a) Right-of-use assets

At commencement date, the Company recognizes the right-of-use assets for leases other than short-term leases and low value asset leases. The right-of-use assets are initially measured at cost. The cost includes:

- Initial measurement amount of lease liabilities;
- For the lease payment paid on or before the commencement date, if there is lease incentive, the relevant amount of lease incentive enjoyed shall be deducted;
- Initial direct costs incurred;
- The estimated costs incurred for dismantling and removing the underlying assets, restoring the site where the underlying assets are located or restoring the underlying assets to the state agreed in the lease terms, but it does not include costs incurred in producing inventory.

Depreciation method of right-of-use assets the Company adopts the straight-line method for depreciation. If it can be reasonably determined that the ownership of the underlying asset will be obtained at the expiration of the lease term, the Company shall accrue depreciation within the remaining useful life of the underlying asset; otherwise, the underlying asset shall be depreciated within the shorter of the lease term and the remaining useful life of the underlying asset.

For the principles which Company determines whether the right-of-use asset has been impaired, please refer to Note III 20 Impairment of long-term assets under “III .Significant accounting policies and accounting estimates”.

(b) Lease liabilities

At commencement date, the Company recognizes the present value of the unpaid lease payments as lease liabilities, except for short-term leases and low value asset leases. The lease liability is initially measured at the present value of outstanding lease payments. Lease payments include:

- Fixed payments (including in-substance fixed payments), if there is a lease incentive, deduct the relevant amount of the lease incentive;
- Variable lease payments that depend on an index or ratio;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option;
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

The Company uses the interest rate implicit in the lease as the discount rate, but if the interest rate implicit in the lease cannot be reasonably determined, the Company's incremental borrowing rate is used as the discount rate.

The Company calculates the interest expense of the lease liability in each period of the lease term according to the fixed periodic interest rate, and includes it into the current profit and loss or the cost of related assets. Variable lease payments that are not included in the measurement of lease liabilities are included in the current profit and loss or the cost of related assets when they are actually incurred.

After the commencement date of lease, the Company shall re-measure the lease liabilities and adjust the corresponding right-of-use assets under the following circumstances. If the book value of the right-of-use assets is reduced to zero and there is a further reduction in the measurement of the lease liability, the difference is included in the current profit and loss:

- When there is a change in the evaluation results of the purchase option, lease renewal option or termination option, or the actual exercise of the aforementioned options is inconsistent with the original evaluation result, the Company shall calculate the lease payment amount after the change and the revised discounted value. Remeasure the lease liability at the present value of the rate calculation;
- When the actual fixed payment changes, the estimated payable amount of the residual value guarantee changes, or the index or ratio used to determine the lease payment changes, the Company calculates the present value based on the changed lease payment and the original discount rate Remeasure the lease liability. However, where changes in lease payments result from changes in floating interest rates, a revised discount rate is used to calculate the present value.

(c) Short-term leases and low-value asset leases

The Company chooses not to recognize right-of-use assets and lease liabilities for short-term leases and low-value asset leases, and includes the relevant lease payments in the current profit and loss or related asset costs on a straight-line basis over each period of the lease term. Short-term leases refer to leases with a lease term of not more than 12 months and excluding purchase options on the commencement date of the lease term. A low-value asset lease refers to a lease with a lower value when a single leased asset is a brand-new asset. If the Company subleases or expects to sublease the leased assets, the original lease is not a low-value asset lease.

(d) Lease modification

A lessee shall account for a lease modification as a separate lease if both:

- The modification increases the scope of the lease by adding the right to use one or more underlying assets;
- The consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract

If the lease change is not accounted for as a separate lease, on the effective date of the lease change, the Company re-allocates the consideration of the contract after the change, re-determines the lease term, and calculates the current value based on the lease payment after the change and the revised discount rate. value to remeasure the lease liability.

If the lease change leads to the narrowing of the lease scope or the shortening of the lease term, the Company will reduce the book value of the right-of-use asset accordingly, and include the relevant gains or losses on partial or complete termination of the lease into the current profit and loss. If other lease changes result in re-measurement of lease liabilities, the Company adjusts the book value of the right-of-use asset accordingly.

(e) Sale and leaseback transactions

The Company apply the requirements for determining when a performance obligation is satisfied in Note III 25 Revenue under " III Significant accounting policies and accounting estimates" to determine whether the transfer of an asset is accounted for as a sale of that asset.

If the asset transfer in the sale and leaseback transaction is a sale, the Company, as the lessee, measures the right-of-use asset formed by the sale and leaseback according to the part of the original book value of the asset that is related to the right of use obtained by leaseback, and only transfers to the leased asset. If the asset transfer in the sale-and-leaseback transaction is not a sale, the Company, as the lessee, continues to recognize the transferred asset and recognizes a financial liability equal to the transfer income. For the accounting treatment of financial liabilities, please refer to Note III 10 Financial instruments under " III Significant accounting policies and accounting estimates".

(2) The Company as lessor

At commencement date, the Company classifies leases into finance leases and operating leases. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. Operating leases refer to leases other than finance leases.

(a) Accounting treatment of operating leases

Lease receipts from operating leases are recognized as rental income on a straight-line basis over each period of the lease term. The Company capitalizes the initial direct expenses incurred in relation to operating leases, and is amortized and included in the current profit and loss on the same basis as the rental income is recognized during the lease term. Variable lease payments not included in lease receipts are included in profit or loss for the period when they are actually incurred. If the operating lease is changed, the Company will account for it as a new lease from the effective date of the change, and the advance receipts or lease receivables related to the lease before the change are regarded as the receipts of the new lease.

(b) Accounting treatment of financial lease

At lease commencement date, the Company recognizes the finance lease receivables for the finance lease and derecognizes the finance lease assets. When the Company initially measures the finance lease receivables, the net investment in the lease is regarded as the entry value of the finance lease receivables. The net lease investment is the sum of the unguaranteed residual value and the present value of the lease receipts not yet received at the commencement date of the lease term, discounted at the interest rate implicit in the lease.

The Company calculates and recognizes the interest income in each period of the lease period according to the fixed periodic interest rate. For the derecognition and impairment of finance lease receivables, please refer to Note III 10 Financial instruments under “III Significant accounting policies and accounting estimates

Variable lease payments that are not included in the net lease investment measurement are included in the current profit and loss when they are actually incurred.

(c) Sale and leaseback transactions

If the asset transfer in the sale and leaseback transaction is a sale, the Company, as the lessor, accounts for the purchase of the asset according to the aforementioned accounting treatments relating to operating leases and financial lease; If the asset transfer in the sale-and-leaseback transaction is not a sale, the Company, as the lessor, does not recognize the transferred asset but recognizes a financial asset equal to the transfer income. For the accounting treatment of financial assets, please refer to Note III 10 Financial instruments under “ III Significant accounting policies and accounting estimates”.

30 Other significant accounting policies and accounting estimates

Segment report

The Company determines the operating segment based on the internal organizational structure, management requirements, and internal reporting system, and determines the reporting segment based on the operating segment and discloses segment information.

Operating segment refers to the component of the Company that meets the following conditions at the same time:

- (1) The component can generate income and expenses in daily activities;
- (2) The management of the Company can regularly evaluate the operating results of this component to determine the allocation of resources to it and evaluate its performance;
- (3) The Company can obtain relevant accounting information such as the financial status, operating results and cash flow of this component. If two or more operating segments have similar economic characteristics and meet certain conditions, they can be combined into one operating segment.

31 Description and reasons of changes in accounting policies

The Group has adopted “the accounting treatment of deferred tax related to assets and liabilities arising from a single transaction excluded from the scope of the initial recognition exemption” in CAS Bulletin No.16 (Caikuai [2022] No.31) (“CAS Bulletin No.16”) starting 1 January 2023.

According to the provisions, the Group does not apply the initial recognition exemption under *CAS 18 Income Taxes* to temporary differences arising from the initial recognition of assets or liabilities in a single transaction that is not a business combination, affects neither accounting profits nor taxable profit (or deductible losses) and gives rise to equal taxable and deductible temporary differences.

The Group has made retrospective adjustments in accordance with these provisions for single transactions occurring between 1 January 2022 and the date of initial implementation. For the taxable and deductible temporary differences arising from the recognition of lease liabilities and right-of-use assets on 1 January 2022 as a result of the relevant transactions to which the provisions apply, the Group has recognised the cumulative effect as an adjustment to the opening balance of retained earnings and other related financial statement items for the earliest period presented in the financial statements in accordance with the above provisions and the requirements of *CAS 18 Income Tax*.

(a) The effects on the financial statements

The effects on each of the line items in the consolidated balance sheet and company balance sheet as at 31 December 2023 are as follows:

	Increase in the amount of statement items after the adoption of the changed accounting policies	
	The Group	The Company
Assets:		
Deferred tax assets	1,601,515.73	-
Liabilities:		
Deferred tax liabilities	53,663.50	10,876.21

The effects on each of the line items in the consolidated income statement and company income statement for the year ended 31 December 2023 are as follows:

	(Decrease)/Increase in the amount of statement items after the adoption of the changed accounting policies	
	The Group	The Company
Less: Income tax expenses	(666,598.22)	10,876.21
Net profit for the year	666,598.22	(10,876.21)

(b) The effects on the comparative financial statements

The effects on each of the line items in the consolidated balance sheet as at 1 January 2023 are as follows:

	The Group		
	Before adjustment	Adjustment amount	After adjustment
Assets:			
Deferred tax assets	866,051,837.07	923,074.61	866,974,911.68
Liabilities:			
Deferred tax liabilities	410,589,595.05	41,820.60	410,631,415.65

The effects on each of the line items in the consolidated balance sheet for the year 2022 are as follows:

	The Group		
	Before adjustment	Before adjustment	After adjustment
Income tax expenses	777,556,748.42	(1,466,935.83)	776,089,812.59

IV. Taxation

1. Main types of taxes and corresponding tax rates

<i>Tax type</i>	<i>Tax basis</i>	<i>Tax rate</i>
Value-added tax (VAT)	According to tax laws, output VAT is calculated on product sales and taxable services revenue. VAT payable is determined by deducting input VAT from output VAT for the period	3% - 19%
City maintenance and construction tax	Based on VAT paid	5%, 7%
Corporate income tax	Based on taxable profits	15%、20%、25% etc.

The corporate income tax rate of the Company's domestic subsidiaries is the statutory rate of 25% (2022: 25%). The corporate income tax of its overseas subsidiaries should be recognized in accordance with the local income tax laws and regulations of its registration place, which are disclosed as follows:

<i>Name of taxpayer</i>	<i>Income tax rate</i>
JA Solar	15.00%
Hefei JA Solar Technology Co., Ltd.	15.00%
JA Solar (Xingtai) Co., Ltd.	15.00%
Jing Hai Yang Semiconductor Material (Donghai) Co., Ltd.	15.00%
JA Solar New Energy Yangzhou Co., Ltd.	15.00%
Shanghai JA Solar Technology Co., Ltd.	15.00%
JA Solar Technology Yangzhou Co., Ltd.	15.00%
Xingtai Jinglong PV Materials Co., Ltd.	15.00%
Yiwu JA Solar Technology Co., Ltd.	15.00%
Hebei Jingle Optoelectronic Technology Co., Ltd.	15.00%
Beijing Jinghong Energy Economization Technology Co., Ltd.	15.00%
Qujing Jinglong Electronic Materials Co., Ltd.	15.00%
Qujing JA Solar PV Technology Co., Ltd.	15.00%
Qujing JA Solar Technology Co., Ltd.	15.00%
Baotou JA Solar Technology Co., Ltd.	15.00%
Baotou Jingxu Carbon-carbon Technology Co., Ltd.	15.00%
Baotou JA Carbon Technology Co., Ltd.	15.00%
Inner Mongolia JA Solar PV Technology Co., Ltd.	15.00%
Baotou JA New Material Co., Ltd.	15.00%
JA Wisdom Energy Technology (Hainan) Co., Ltd.	15.00%
PV Power Station Project companies	3 - year exemption and 3 - year half payment or 20% or 15%
JA Solar Australia PTY Limited	30.00%
JA Solar GmbH	Federal tax rate 15.825%+ state tax
JA Solar International Limited	16.50%
JA Solar Investment (Hong Kong) Limited.	16.50%
JA Solar Hong Kong Limited	16.50%
JA Solar Smart Energy (Hong Kong) Limited	16.50%
JA Solar Energy Investment (Hong Kong) Co., Limited	16.50%
JA Solar Renewable Energy Limited	16.50%
JA Solar Malaysia Sdn. Bhd.	24.00%
JA Solar Korea Co., Ltd.	20.90%
JA Solar South Africa (PTY) Ltd.	27.00%
JA Solar Brasil Ltda	15.00%
JA Solar USA Inc.	Federal tax rate 21%+ state tax
JA Solar AZ, LLC.	Federal tax rate 21%+ state tax
JA Solar Japan Limited	30.62%
JA Solar VietNam Company Limited	20.00%
JA Solar PV VietNam Company Limited	20.00%
JA Solar NE VietNam Company Limited	20.00%

2 Tax preferential treatments

During the reporting period, the major preferential tax treatments entitled by the Group are as follows:

- (1) The subsidiary JA Solar Co., Ltd. (referred to as “JA Solar”) was re-certified by Hebei Provincial Department of Science and Technology, Hebei Provincial Department of Finance and Hubei Provincial Office of the State Administration of Taxation on 18 October 2022, and obtained a High-tech Enterprise Certificate (No.GR202213000628) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (2) The subsidiary Hefei JA Solar Technology Co., Ltd. (referred to as “Hefei JA Solar”) was re-certified by Anhui Provincial Department of Science and Technology, Anhui Provincial Department of Finance and Anhui Provincial Office of the State Administration of Taxation on 18 October 2022, and obtained a High-tech Enterprise Certificate (No.GR202234000794) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (3) The subsidiary JA Solar (Xingtai) Solar Co., Ltd. (referred to as “Xingtai Module”) was certified by Hebei Provincial Department of Science and Technology, Hebei Provincial Department of Finance and Hubei Provincial Office of the State Administration of Taxation on 6 November 2023, and obtained a High-tech Enterprise Certificate (No.GR202313001646) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (4) The subsidiary Jing Hai Yang Semiconductor Material (Donghai) Co., Ltd. (referred to as “Jing Hai Yang”) was certified by Jiangsu Provincial Department of Science and Technology, Jiangsu Provincial Department of Finance and Jiangsu Provincial Office of the State Administration of Taxation on 6 November 2023, and obtained a High-tech Enterprise Certificate (No.GR202332006222) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (5) The subsidiary JA Solar New Energy Yangzhou Co., Ltd. (referred to as “Yangzhou Module”) was re-certified by Jiangsu Provincial Department of Science and Technology, Jiangsu Provincial Department of Finance and Jiangsu Provincial Office of the State Administration of Taxation on 12 December 2022, and obtained a High-tech Enterprise Certificate (No.GR202232011093) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (6) The subsidiary Shanghai JA Solar Technology Co., Ltd. (referred to as “Fengxian Module”) was re-certified by Shanghai Municipal Department of Science and Technology, Shanghai Municipal Department of Finance and Shanghai Municipal Office of the State Administration of Taxation on 12 December 2023, and obtained a High-tech Enterprise Certificate (No.GR202331005925) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (7) The subsidiary JA Solar Technology Yangzhou Co., Ltd. (referred to as “Yangzhou Battery”) was re-certified by Jiangsu Provincial Department of Science and Technology, Jiangsu Provincial Department of Finance and Jiangsu Provincial Office of the State Administration of Taxation on 6 November 2023, and obtained a High-tech Enterprise Certificate (No.GR202332002014) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.

- (8) The subsidiary Xingtai Jinglong PV Materials Co., Ltd. (referred to as “Jinglong PV”) was certified by Hebei Provincial Department of Science and Technology, Hebei Provincial Department of Finance and Hebei Provincial Office of the State Administration of Taxation on 5 December 2023, and obtained a High-tech Enterprise Certificate (No.GR202313003014) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (9) The subsidiary Yiwu JA Solar Technology Co., Ltd. (referred to as “Yiwu JA”) was certified by Zhejiang Provincial Department of Science and Technology, Zhejiang Provincial Department of Finance and Zhejiang Provincial Office of the State Administration of Taxation on 16 December 2021 and obtained a High-tech Enterprise Certificate (No.GR202133000164) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (10) The subsidiary Hebei Jingle Optoelectronic Technology Co., Ltd.(referred to as “Jingle Optoelectronic”) was certified by Hebei Provincial Department of Science and Technology, Hebei Provincial Department of Finance and Hubei Provincial Office of the State Administration of Taxation on 3 November 2021 and obtained a High-tech Enterprise Certificate (No.GR202113004394) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (11) The subsidiary Beijing Jinghong Energy Economization Technology Co., Ltd. (referred to as “Jinghong Energy Economization”) was certified by Beijing Municipal Science and Technology Commission, Beijing Municipal Finance Bureau and Beijing Municipal Office of the State Administration of Taxation on 30 November 2023 and obtained a High-tech Enterprise Certificate (No.GR202311003991) with the validity period lasting for 3 years. A 15% corporate income tax rate is applicable to high-tech enterprises within the validity period.
- (12) The subsidiary Qujing Jinglong Electronic Materials Co., Ltd. (referred to as “Qujing Jinglong”): in accordance with *the “Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.
- (13) The subsidiary Qujing JA PV Technology Co., Ltd. (referred to as “Qujing JA”) : in accordance with *the “Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.

- (14) The subsidiary Qujing JA Solar Technology Co., Ltd. (referred to as “Qujing Technology”) : in accordance with the *“Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.
- (15) The subsidiary Baotou JA Solar Technology Co., Ltd. (referred to as “Baotou JA Solar”) : in accordance with the *“Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.
- (16) The subsidiary Baotou Jingxu Carbon-carbon Technology Co., Ltd. (referred to as “Baotou Jingxu”) : in accordance with the *“Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.
- (17) The subsidiary Baotou JA Carbon Technology Co., Ltd. (referred to as “JA Carbon”) : in accordance with the *“Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.
- (18) The subsidiary Inner Mongolia JA Solar PV Technology Co., Ltd. (referred to as “Inner Mongolia Module”) : in accordance with the *“Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.

- (19) The subsidiary Baotou JA New Material Co., Ltd. (referred to as “Baotou New Material”): in accordance with the *“Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development”* (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprises established in the western region whose principal businesses of the year are industry projects stipulated in the *Catalogue of Encouraged Industries in the Western Region*, and whose income from principal businesses constitutes 60% or more of their total income, CIT shall be levied at a reduced tax rate of 15%.
- (20) In accordance with *Notice on Preferential CIT Policies for the Hainan Free Trade Port* (Cai Shui [2020] No. 31), enterprises in encouraged industries registered in the Hainan Free Trade Port and engaging in substantive operations are entitled to corporate income tax at a reduced tax rate of 15%. Enterprises in encouraged industries are those mainly engaged in businesses stipulated in the List of *Encouraged Industries in the Hainan Free Trade Port*, and the income from their principal activities must account for at least 60% of their total income. JA Wisdom Energy Technology (Hainan) Co., Ltd. (“JA Hainan”) is entitled to the above mentioned preferential tax treatment from 1 January 2023 to 31 December 2024.
- (21) The Company’s PV Power Station Project companies are eligible for the preferential tax treatments as follows:
- (a) Eligible for the “3-year exemption and 3-year half payment” preferential treatment

According to the provisions of the Article 27 of Corporate Income Tax Law of the People’s Republic of China and the Article 87 of the Implementation Rules of Enterprise Income Tax Law of the People’s Republic of China, income derived by an enterprise investing and operating a key public infrastructure project supported by the State shall be exempted from Corporate Income Tax for the first year to the third year with effect from the tax year in which the first sum of production and business revenue is derived from the project and be subject to Corporate Income Tax at 50% reduction for the fourth year to the sixth year.

According to the *“Notice from the Ministry of Finance, the State Administration of Taxation, and the National Development and Reform Commission on the Promulgation of the Catalogue for Public Infrastructure Projects Eligible for a Favorable Corporate Income Tax”* (Cai Shui [2008] No. 116) and the *“Notice of Ministry of Finance and State Administration of Taxation on Issues relating to Implementation of Catalogue of Corporate Income Tax Preferential Incentives for Public Infrastructure Projects”* (Cai Shui [2008] 46), newly established solar power plant project is within the preferential catalogue. Some of the Group’s subsidiaries are photovoltaic power plants and meet the criteria, therefore fall in the scope of the above preferential tax treatments.

- (b) Eligible for the preferential tax treatments of Catalogue of Encouraged Industries in the Western Region (15%):

In accordance with the “*Announcement of the Ministry of Finance, the State Administration of Taxation and the National Development and Reform Commission on Continuing the Income Tax Policy for Enterprises in the Great Western Development*” (No. 23 [2020]), from 1 January 2021 to 31 December 2030, the enterprise income tax on an enterprise in an encouraged industry established in western China shall still be paid at the reduced rate of 15%. Enterprises in encouraged industries referred to herein shall mean enterprises whose principal businesses are industry projects stipulated in the “*Catalogue of Encouraged Industries in the Western Region*”, and whose income from principal businesses constitutes 60% or more of their total income. The following enterprises are eligible for the above preferential policies: JA Solar PV Electric (Yanchi) Co., Ltd., Aiyouen Power Electric (Yinchuan) Co., Ltd.

- (c) Preferential tax treatments for small meagre-profit enterprises (20%):

In accordance with the *Notice of Ministry of Finance and State Taxation Administration on Implementing the Inclusive Tax Deduction and Exemption Policies for Small Meagre-profit Enterprises* (Caishui No.77 [2018]) and the *Notice of Ministry of Finance and State Taxation Administration on Implementing the Inclusive Tax Deduction and Exemption Policies for Small Meagre-profit Enterprises* (Caishui No.13 [2019]), for small meagre-profit enterprises, the applicable rate of corporate income tax is 20%. Some of the Group's subsidiaries are photovoltaic power plants and meet the criteria as small meagre-profit enterprises, therefore fall in the scope of the above preferential tax treatments.

- (22) Under Decree 218/2013/ND-CP of 26 December 2013, JA Solar VietNam Company Limited (“Vietnam JA Solar”), JA Solar PV VietNam Company Limited (“Vietnam JA PV”), JA Solar NE VietNam Company Limited (“Vietnam JA NE”), are entitled to a tax exemption for 2 years and a 50% reduction in corporate income tax for the 4 years that follows. Vietnam JA Solar, Vietnam JA PV and Vietnam JA NE have received preferential tax treatment certificates from the Vietnam Department of Trade and Industry, namely Certificate No.7224/GXN-BCT dated November 2021, Certificate No.431/GXN-BCT dated January 2023 and Certificate No. 7224/7GXN-BCT dated October 2023. These companies are entitled to a preferential tax rate of 10% for 15 years and a tax policy of "tax exemption for 4 years and a reduced tax rate of 50% for 9 years" after the application of the preferential tax rate.
- (23) In accordance with *Announcement on the Weighted VAT Deduction Policy for Advanced Manufacturing Enterprises* (Announcement No. 43 [2023] of the Ministry of Finance and the State Taxation Administration), with effect from 1 January 2023 to 31 December 2027, advanced manufacturing enterprises are allowed to deduct weighted 5% of the current deductible input tax amount from the VAT payable (hereinafter referred to as the "Weighted Deduction Policy"). Some of the Group's subsidiaries meet the criteria and fall in the scope of the Weighted Deduction Policy.

V. Notes to the consolidated financial statements

1 Cash at bank and on hand

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Cash on hand	-	38,680.00
Deposits with banks	6,763,088,775.67	6,120,437,904.90
Other monetary funds	9,225,344,774.40	6,063,162,734.63
Total	15,988,433,550.07	12,183,639,319.53
Including: Total overseas deposits	2,479,554,046.77	1,498,418,929.73

The balance of cash or other monetary funds that are restricted for being pledged as security or frozen is as follows:

<i>Item</i>	<i>2023</i>	<i>2022</i>
Deposits for bills	7,378,106,051.04	4,458,656,453.29
Deposits for letter of guarantee	1,648,619,731.90	1,083,536,118.21
Deposits for letter of credit	40,280,549.46	202,522,503.14
Time deposits or demand deposits for guarantee	150,913,171.16	307,619,800.80
Frozen bank deposits	-	609,428.48
Others	7,425,270.84	10,218,430.71
Total	9,225,344,774.40	6,063,162,734.63

2 Derivative financial assets

<i>Item</i>	<i>2023</i>	<i>2022</i>
Foreign currency derivatives	11,847,761.02	-

The Group hedges its exposure to the foreign exchange market by entering into forward foreign exchange contracts with banks. The Group does not apply hedge accounting, and these contracts are measured at fair value through profit or loss.

3 Bills receivable

(1) Classification of bills receivable

<i>Item</i>	2023	2022
Bank acceptance bills	158,375,167.52	56,563,331.86
Commercial acceptance bills	21,999,672.28	92,196,070.55
Sub-total	180,374,839.80	148,759,402.41
Less: Provision for bad and doubtful debts	219,996.72	-
Total	180,154,843.08	148,759,402.41

All of the above bills are due within one year.

(2) Outstanding endorsed or discounted bills that have not matured at the end of the year:

<i>Item</i>	<i>Amount derecognized at year end</i>	<i>Amount not derecognized at year end</i>
Bank acceptance bills	-	148,599,819.06
Commercial acceptance bills	-	6,483,457.88
Total	-	155,083,276.94

(3) Bills receivable by provisioning method

<i>Category</i>	2023					2022				
	<i>Book value</i>		<i>Provision for bad and doubtful debts</i>		<i>Carrying amount</i>	<i>Book value</i>		<i>Provision for bad and doubtful debts</i>		<i>Carrying amount</i>
	<i>Amount</i>	<i>Percentage (%)</i>	<i>Amount</i>	<i>Percentage (%)</i>		<i>Amount</i>	<i>Percentage (%)</i>	<i>Amount</i>	<i>Percentage (%)</i>	
Individual assessment	-	-	-	-	-	-	-	-	-	-
Collective assessment	180,374,839.80	100.00	219,996.72	0.12	180,154,843.08	148,759,402.41	100.00	-	-	148,759,402.41
- Bank acceptance bills	158,375,167.52	87.80	-	-	158,375,167.52	56,563,331.86	38.02	-	-	56,563,331.86
- Commercial acceptance bills	21,999,672.28	12.20	219,996.72	1.00	21,779,675.56	92,196,070.55	61.98	-	-	92,196,070.55
Total	180,374,839.80	100.00	219,996.72	0.12	180,154,843.08	148,759,402.41	100.00	-	-	148,759,402.41

(4) Movements of provisions for bad and doubtful debts

	2023	2022
Balance at the beginning of the year	-	-
Additions during the year	219,996.72	-
Balance at the end of the year	219,996.72	-

4 Accounts receivable

(1) Accounts receivable by customer type are as follows:

<i>Type</i>	<i>2023</i>	<i>2022</i>
Amounts due from related parties	75,070,090.31	77,112,971.88
Amounts due from third parties	9,437,561,810.63	8,558,203,396.32
Sub-total	9,512,631,900.94	8,635,316,368.20
Less: Provision for bad and doubtful debts	346,644,227.33	288,302,930.23
Total	9,165,987,673.61	8,347,013,437.97

(2) The ageing analysis of accounts receivable is as follows:

<i>Ageing</i>	<i>2023</i>	<i>2022</i>
Within 6 months (inclusive)	7,835,543,209.01	7,679,012,904.15
Over 6 months but within 1 year (inclusive)	692,599,666.15	282,618,576.12
Over 1 year but within 2 years (inclusive)	462,557,322.05	285,453,994.40
Over 2 years but within 3 years (inclusive)	185,989,733.72	134,286,417.01
Over 3 years but within 4 years (inclusive)	103,493,625.14	63,016,828.15
Over 4 years but within 5 years (inclusive)	54,199,556.64	43,167,351.87
Over 5 years	178,248,788.23	147,760,296.50
Sub-total	9,512,631,900.94	8,635,316,368.20
Less: Provision for bad and doubtful debts	346,644,227.33	288,302,930.23
Total	9,165,987,673.61	8,347,013,437.97

The ageing is counted starting from the date when accounts receivable are recognized.

(3) Accounts receivable by provisioning method

Category	2023					2022				
	Book value		Provision for bad and doubtful debts		Carrying value	Book value		Provision for bad and doubtful debts		Carrying value
	Amount	Percentage (%)	Amount	Percentage (%)		Amount	Percentage (%)	Amount	Percentage (%)	
Individual assessment	150,897,028.45	1.59	134,539,976.78	89.16	16,357,051.67	139,215,713.58	1.61	139,215,713.58	100.00	-
Collective assessment	9,361,734,872.49	98.41	212,104,250.55	2.27	9,149,630,621.94	8,496,100,654.62	98.39	149,087,216.65	1.75	8,347,013,437.97
- Accounts receivables due from external customers (except for power grid companies)	8,697,309,873.02	91.43	202,137,875.56	2.32	8,495,171,997.46	7,928,640,569.24	91.82	140,575,315.37	1.77	7,788,065,253.87
- Electricity fees due from Power Grid Companies	664,424,999.47	6.98	9,966,374.99	1.50	654,458,624.48	567,460,085.38	6.57	8,511,901.28	1.50	558,948,184.10
Total	9,512,631,900.94	100.00	346,644,227.33	3.64	9,165,987,673.61	8,635,316,368.20	100.00	288,302,930.23	3.34	8,347,013,437.97

(a) Rationale for individual assessment in 2023:

<i>Item</i>	<i>Book value</i>	<i>Provision for bad and doubtful debts</i>	<i>Percentage (%)</i>	<i>Rationale for provision</i>
Company 1	42,280,901.12	42,280,901.12	100.00%	Amount expected to be unrecoverable
Company 2	20,430,000.00	20,430,000.00	100.00%	Amount expected to be unrecoverable
Company 3	17,789,622.53	3,557,924.51	20.00%	Full amount expected to be unrecoverable
Company 4	16,275,837.53	16,275,837.53	100.00%	Amount expected to be unrecoverable
Company 5	13,599,402.50	13,599,402.50	100.00%	Amount expected to be unrecoverable
Company 6	11,472,198.40	11,472,198.40	100.00%	Amount expected to be unrecoverable
Company 7	11,434,086.91	11,434,086.91	100.00%	Amount expected to be unrecoverable
Company 8	6,124,160.00	6,124,160.00	100.00%	Amount expected to be unrecoverable
Other (individual amount less than RMB5 million)	11,490,819.46	9,365,465.81	81.50%	Full amount expected to be unrecoverable
Total	150,897,028.45	134,539,976.78		

(b) Criteria for collective assessment in 2023 and details:

Accounts receivables are classified into several portfolios based on their similar credit risk characteristics and the expected credit loss is calculated on a collective basis. The basis of determining the portfolios is as follows:

Portfolio 1: Accounts receivables due from external customers (except for power grid companies)

Portfolio 2: Electricity fees due from Power Grid Companies

(c) Assessment of ECLs on accounts receivable:

At all times the Group measures the impairment loss for accounts receivable at an amount equal to lifetime ECLs, and the ECLs are based on the number of ageing and the expected loss rate. According to the historical experience of the Group, the losses of different customer groups are as follows:

Portfolio 1: Accounts receivables due from external customers (except for power grid companies)

2023

	<i>Expected credit loss rate</i>	<i>Carrying amount at the end of the year</i>	<i>Impairment loss allowance at the end of the year</i>
Within 6 months (inclusive)	1%	7,685,312,060.69	76,853,120.61
Over 6 months but within 1 year (inclusive)	5%	577,178,139.19	28,858,906.96
Over 1 year but within 2 years (inclusive)	10%	297,676,522.94	29,767,652.29
Over 2 years but within 3 years (inclusive)	30%	74,772,922.30	22,431,876.69
Over 3 years but within 4 years (inclusive)	50%	36,287,817.78	18,143,908.89
Over 4 years but within 5 years (inclusive)	100%	1,812,735.60	1,812,735.60
Over 5 years	100%	24,269,674.52	24,269,674.52
Total		8,697,309,873.02	202,137,875.56

2022

	<i>Expected credit loss rate</i>	<i>Carrying amount at the end of the year</i>	<i>Impairment loss allowance at the end of the year</i>
Within 6 months (inclusive)	1%	7,518,045,690.47	75,180,456.91
Over 6 months but within 1 year (inclusive)	5%	184,124,307.51	9,206,215.38
Over 1 year but within 2 years (inclusive)	10%	146,452,233.65	14,645,223.37
Over 2 years but within 3 years (inclusive)	30%	53,670,704.73	16,101,211.42
Over 3 years but within 4 years (inclusive)	50%	1,810,849.18	905,424.59
Over 4 years but within 5 years (inclusive)	100%	11,405,916.98	11,405,916.98
Over 5 years	100%	13,130,866.72	13,130,866.72
Total		7,928,640,569.24	140,575,315.37

Portfolio 2: Electricity fees due from power grid companies

2023

<i>Item</i>	<i>Expected credit loss rate</i>	<i>Carrying amount at the end of the year</i>	<i>Impairment loss allowance at the end of the year</i>
Electricity fees due from Power Grid Companies	1.50%	664,424,999.47	9,966,374.99

2022

<i>Item</i>	<i>Expected credit loss rate</i>	<i>Carrying amount at the end of the year</i>	<i>Impairment loss allowance at the end of the year</i>
Electricity fees due from Power Grid Companies	1.50%	567,460,085.38	8,511,901.28

The expected credit losses is measured based on the actual credit loss experience in the past period and is adjusted for the differences among the economic conditions during the historical period, the current economic conditions and the anticipated economic conditions during the expected lifetime.

(4) Movements of provisions for bad and doubtful debts:

	<i>Note</i>	<i>2023</i>	<i>2022</i>
Balance at the beginning of the year		288,302,930.23	258,912,502.71
Additions during the year		66,706,966.56	39,041,006.13
Recoveries or reversals during the year	(a)	8,711,579.54	13,619,430.95
Written-off during the year	(b)	2,495,862.36	-
Others		2,841,772.44	3,968,852.34
Balance at the end of the year		346,644,227.33	288,302,930.23

(a) Significant recoveries or reversals during the year:

<i>Debtor</i>	<i>Amount of reversals or recoveries</i>	<i>Reason for reversals</i>	<i>Recovery manner</i>	<i>Basis for determining the original provision percentage and its reasonableness</i>
TIANWEI SOLUTION (BEIJING) CO., LTD	7,028,332.43	Actual recovery	Bank transfer	Considering all reasonable and relevant information for the debtor to recognize the expected credit loss
Total	7,028,332.43			

(b) Accounts receivable written off during the year

<i>Item</i>	<i>Written-off amount</i>
Accounts receivable written off	2,495,862.36

(5) Five largest accounts receivable and contract assets by debtor at the end of the year:

2023

<i>Debtor</i>	<i>Balance at the end of the year</i>		
	<i>Accounts receivable</i>	<i>Percentage of total accounts receivable and contract assets (%)</i>	<i>Provision for bad and doubtful debts</i>
The First	403,549,418.03	4.21	4,035,494.18
The Second	341,067,606.83	3.56	3,410,676.07
The Third	327,506,362.62	3.42	3,275,063.63
The Fourth	252,380,788.42	2.63	2,523,807.88
The Fifth	247,093,774.20	2.58	2,470,937.74
Total	1,571,597,950.10	16.40	15,715,979.50

2022

<i>Debtor</i>	<i>Balance at the end of the year</i>		
	<i>Accounts receivable</i>	<i>Percentage of total accounts receivable and contract assets (%)</i>	<i>Provision for bad and doubtful debts</i>
The First	340,088,133.76	3.90	3,400,881.35
The Second	323,212,158.91	3.70	3,232,121.59
The Third	191,568,291.06	2.20	1,915,682.91
The Fourth	180,881,954.49	2.07	1,808,819.54
The Fifth	161,301,016.75	1.85	1,613,010.17
Total	1,197,051,554.97	13.72	11,970,515.56

5 Receivables under financing

<i>Item</i>	<i>2023</i>	<i>2022</i>	<i>Accumulated impairment losses recognised in other comprehensive income</i>
Bills receivable	831,051,690.24	510,733,341.15	-
Accounts receivable	550,000.00	228,062,025.96	-
Total	831,601,690.24	738,795,367.11	-

(a) Receivables under financing that are pledged at the end of the year:

<i>Category</i>	<i>Pledged amount at the end of the year</i>
Bank acceptance bills	174,350,594.00
Commercial acceptance bills	-
Total	174,350,594.00

- (b) Receivables under financing that are endorsed or discounted but have not matured at the end of the year:

<i>Category</i>	<i>Amount at the end of the year of what has been derecognised</i>	<i>Amount at the end of the year of what has not been derecognised</i>
Bank acceptance bills	17,786,554,455.10	-
Commercial acceptance bills	246,543,923.68	-
Total	18,033,098,378.78	-

6 Prepayments

- (1) Prepayments by category:

<i>Item</i>	<i>2023</i>	<i>2022</i>
Material and service payment in advance	1,837,771,374.26	2,394,741,788.39
Others	152,139,599.00	156,361,282.00
Total	1,989,910,973.26	2,551,103,070.39

- (2) The ageing analysis of prepayments is as follows:

<i>Ageing</i>	<i>2023</i>		<i>2022</i>	
	<i>Amount</i>	<i>Percentage (%)</i>	<i>Amount</i>	<i>Percentage (%)</i>
Within 1 year (inclusive)	1,415,027,063.05	71.11	1,935,044,560.62	75.85
Over 1 year but within 2 years (inclusive)	359,477,369.70	18.07	614,059,967.06	24.07
Over 2 years but within 3 years (inclusive)	213,412,660.77	10.72	1,091,564.34	0.04
Over 3 years	1,993,879.74	0.10	906,978.37	0.04
Total	1,989,910,973.26	100.00	2,551,103,070.39	100.00

The ageing is counted starting from the date when prepayments are recognized.

Prepayments with ageing of over 1 year are mainly for long-term procurement of raw materials.

- (3) Five largest prepayments by debtor at the end of the year:

<i>Debtor</i>	<i>Balance at the end of the year</i>	<i>Percentage of total prepayments (%)</i>
The First	355,587,658.80	17.87
The Second	230,697,562.75	11.59
The Third	170,538,750.00	8.57
The Fourth	141,654,000.00	7.12
The Fifth	134,430,867.21	6.76
Total	1,032,908,838.76	51.91

7 Other receivables

<i>Item</i>	<i>Note</i>	<i>2023</i>	<i>2022</i>
Dividends receivable	(1)	3,042,037.80	2,000,000.00
Others	(2)	908,004,745.50	659,179,286.98
Total		911,046,783.30	661,179,286.98

(1) Dividends receivable

<i>Investee</i>	<i>2023</i>	<i>2022</i>
Datang Angli (Lingwu) New Energy Co., Ltd.	3,042,037.80	-
JA Solar PV Electric (Lincheng) Co., Ltd.	-	2,000,000.00
Total	3,042,037.80	2,000,000.00

(2) Others

(a) Analysis by customer type is as follow:

<i>Customer type</i>	<i>2023</i>	<i>2022</i>
Amounts due from related parties	13,000.00	13,000.00
Amounts due from third parties	953,051,865.87	680,221,540.13
Sub-total	953,064,865.87	680,234,540.13
Less: Provision for bad and doubtful debts	45,060,120.37	21,055,253.15
Total	908,004,745.50	659,179,286.98

(b) The ageing analysis is as follows:

<i>Ageing</i>	<i>2023</i>	<i>2022 (Restated)</i>
Within 1 year (inclusive)	565,601,500.51	232,333,537.36
Over 1 year but within 2 years (inclusive)	17,936,300.86	124,953,131.61
Over 2 years but within 3 years (inclusive)	74,529,177.54	164,379,430.23
Over 3 years but within 4 years (inclusive)	154,943,110.61	30,304,247.46
Over 4 years but within 5 years (inclusive)	30,158,625.26	109,300,252.55
Over 5 years	109,896,151.09	18,963,940.92
Sub-total	953,064,865.87	680,234,540.13
Less: Provision for bad and doubtful debts	45,060,120.37	21,055,253.15
Total	908,004,745.50	659,179,286.98

The ageing is counted starting from the date when other receivables are recognized.

(c) Others by provisioning method:

2023

Category	2023				Carrying amount
	Book value		Provision for bad and doubtful debts		
	Amount	Percentage (%)	Amount	Percentage (%)	
Individual assessment	41,193,035.80	4.32	37,201,149.92	90.31	3,991,885.88
Collective assessment	911,871,830.07	95.68	7,858,970.45	0.86	904,012,859.62
Total	953,064,865.87	100.00	45,060,120.37	4.73	908,004,745.50

2022

Category	2022				Carrying amount
	Book value		Provision for bad and doubtful debts		
	Amount	Percentage (%)	Amount	Percentage (%)	
Individual assessment	19,536,937.26	2.87	19,536,937.26	100.00	-
Collective assessment	660,697,602.87	97.13	1,518,315.89	0.23	659,179,286.98
Total	680,234,540.13	100.00	21,055,253.15	3.10	659,179,286.98

Basis for significant individual assessments in 2023:

Item	2022		2023			Basis for provision
	Book value	Provision for bad and doubtful debts	Book value	Provision for bad and doubtful debts	Percentage (%)	
Individual assessment	19,536,937.26	19,536,937.26	41,193,035.80	37,201,149.92	90.31%	Amount expected to be unrecoverable
Total	19,536,937.26	19,536,937.26	41,193,035.80	37,201,149.92		

(d) Movements of provisions for bad and doubtful debts

2023

Provision for bad and doubtful debts	Stage 1	Stage 2	Stage 3	Total
	12 - month ECL	Lifetime ECL - Not credit impaired	Lifetime ECL - Credit impaired	
Balance at 1 January 2023	1,143,219.52	-	19,912,033.63	21,055,253.15
Transfer to stage 3	(633,553.60)	-	633,553.60	-
Additions during the year	5,733,521.35	-	19,620,803.78	25,354,325.13
Written-off during the year	-	-	1,267,073.12	1,267,073.12
Translation differences arising from translation of foreign currency financial statements	-	-	(82,384.79)	(82,384.79)
Balance at the end of the year	6,243,187.27	-	38,816,933.10	45,060,120.37

2022

<i>Provision for bad and doubtful debts</i>	<i>Stage 1</i>	<i>Stage 2</i>	<i>Stage 3</i>	<i>Total</i>
	<i>12 - month ECL</i>	<i>Lifetime ECL - Not credit impaired</i>	<i>Lifetime ECL - Credit impaired</i>	
Balance at 1 January 2022	1,926,985.11	-	9,827,769.38	11,754,754.49
Transfer to stage 3	(44,100.99)	-	44,100.99	-
Additions during the year	1,114,629.43	-	10,544,835.67	11,659,465.10
Recoveries or reversals during the year	1,854,294.03	-	-	1,854,294.03
Written-off during the year	-	-	1,117,768.36	1,117,768.36
Translation differences arising from translation of foreign currency financial statements	-	-	613,095.95	613,095.95
Balance at the end of the year	1,143,219.52	-	19,912,033.63	21,055,253.15

(e) Provisions for bad and doubtful debts

<i>Category</i>	<i>Balance at the beginning of the year</i>	<i>Movements during the year</i>				<i>Balance at the end of the year</i>
		<i>Provision</i>	<i>Recoveries or reversals</i>	<i>Transfers or write-offs</i>	<i>Translation differences arising from translation of foreign currency financial statements</i>	
Provision for bad and doubtful debts	21,055,253.15	25,354,325.13	-	1,267,073.12	(82,384.79)	45,060,120.37
Total	21,055,253.15	25,354,325.13	-	1,267,073.12	(82,384.79)	45,060,120.37

(f) Others categorized by nature

<i>Nature of other receivables</i>	<i>2023</i>	<i>2022 (Restated)</i>
Amounts due from related parties	13,000.00	13,000.00
Deposits and warranties	778,478,246.68	558,906,861.77
Equity transfer receivable	127,489,000.00	46,939,000.00
Amounts due from other entities	22,355,533.25	26,294,966.79
Export rebates receivables	21,315,091.16	14,682,360.20
Subsidies receivable	3,413,994.78	3,266,062.09
Others	-	30,132,289.28
Total	953,064,865.87	680,234,540.13

(g) Five largest others by debtor at the end of the year

2023

<i>Debtor</i>	<i>Nature of the receivable</i>	<i>Balance at the end of the year</i>	<i>Ageing</i>	<i>Percentage of ending balance of others (%)</i>	<i>Ending balance of provision for bad and doubtful debts</i>
The First	Deposits	331,470,360.00	0 - 5 years and over five years	34.78	-
The Second	Deposits	306,216,341.55	0 - 2 years	32.13	-
The Third	Equity transfer receivable	98,400,000.00	Within 1 year	10.32	4,920,000.00
The Fourth	Equity transfer receivable	21,494,000.00	3 - 4 years	2.26	17,500,000.00
The Fifth	Deposits	11,830,706.00	0 - 2 years	1.24	-
Total		769,411,407.55		80.73	22,420,000.00

2022

<i>Debtor</i>	<i>Nature of the receivable</i>	<i>Balance at the end of the year</i>	<i>Ageing</i>	<i>Percentage of ending balance of others (%)</i>	<i>Ending balance of provision for bad and doubtful debts</i>
The First	Deposits	346,140,620.00	0 - 5 years and over five years	50.89	-
The Second	Deposits and equity transfer receivable	36,781,000.00	1 - 3 years	5.41	-
The Third	Deposits	34,606,160.32	Within 1 year	5.09	-
The Fourth	Deposits	30,117,096.39	Within 1 year	4.43	-
The Fifth	Equity transfer receivable	25,445,000.00	1 - 2 years	3.74	-
Total		473,089,876.71	-	69.56	-

8 Inventories

(1) Inventories by category:

<i>Item</i>	<i>2023</i>			<i>2022</i>		
	<i>Book value</i>	<i>Provision for impairment of inventories</i>	<i>Carrying amount</i>	<i>Book value</i>	<i>Provision for impairment of inventories</i>	<i>Carrying amount</i>
Raw materials	3,340,999,537.34	47,246,587.82	3,293,752,949.52	3,397,494,668.33	66,094,864.24	3,331,399,804.09
Materials in transit	481,573,852.98	-	481,573,852.98	427,623,292.15	-	427,623,292.15
Goods in transit	1,384,289,217.50	10,022,712.44	1,374,266,505.06	956,446,296.98	-	956,446,296.98
Material for consigned processing	3,628,781.21	-	3,628,781.21	12,492,071.10	-	12,492,071.10
Semi-finished goods	3,119,086,544.63	597,543,569.20	2,521,542,975.43	2,383,512,768.42	164,593,515.25	2,218,919,253.17
Finished goods	7,614,330,848.29	817,244,183.21	6,797,086,665.08	5,213,614,286.35	251,188,571.13	4,962,425,715.22
Total	15,943,908,781.95	1,472,057,052.67	14,471,851,729.28	12,391,183,383.33	481,876,950.62	11,909,306,432.71

(2) Provision for impairment of inventories

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Provision or reversals</i>	<i>Written-off</i>	<i>Translation differences arising from translation of foreign currency financial statements</i>	<i>Balance at the end of the year</i>
Raw materials	66,094,864.24	18,924,221.24	(37,778,923.65)	6,425.99	47,246,587.82
Goods in transit	-	9,970,922.80	-	51,789.64	10,022,712.44
Semi-finished goods	164,593,515.25	432,711,030.12	-	239,023.83	597,543,569.20
Finished goods	251,188,571.13	553,002,888.73	(713,346.91)	13,766,070.26	817,244,183.21
Total	481,876,950.62	1,014,609,062.89	(38,492,270.56)	14,063,309.72	1,472,057,052.67

(3) The basis for the determination of the net realisable value and the provision for impairment of inventories for the current period

<i>Items</i>	<i>Basis for the determination of the net realisable value</i>	<i>Basis for the determination of the provision for impairment of inventories</i>
Raw materials and semi-finished goods	The net realisable value shall be calculated by deducting the estimated cost of completion, estimated sale expense and relevant taxes from the estimated sale price of inventories.	The sale price of a product is expected to decrease and therefore the net realisable value of the related inventories is lower than the book value.
Finished goods and goods in transit	The net realisable value shall be calculated by deducting the estimated sale expense and relevant taxes from the estimated sale price of inventories.	The sale price of a product is expected to decrease and therefore the net realisable value of the related inventories is lower than the book value.

9 Contract assets

(1) Contract assets analyzed by nature as follows:

<i>Item</i>	<i>2023</i>			<i>2022</i>		
	<i>Book value</i>	<i>Provision for impairment</i>	<i>Carrying amount</i>	<i>Book value</i>	<i>Provision for impairment</i>	<i>Carrying amount</i>
Electricity fees due from Power Grid Companies	66,861,106.03	1,002,916.60	65,858,189.43	90,890,772.51	1,363,361.60	89,527,410.91

(2) Contract assets by provisioning method

<i>Type</i>	<i>2023</i>					<i>2022</i>				
	<i>Book value</i>		<i>Provision for impairment</i>		<i>Carrying amount</i>	<i>Book value</i>		<i>Provision for impairment</i>		<i>Carrying amount</i>
	<i>Amount</i>	<i>Percentage (%)</i>	<i>Amount</i>	<i>Percentage (%)</i>		<i>Amount</i>	<i>Percentage (%)</i>	<i>Amount</i>	<i>Percentage (%)</i>	
Collective assessment	66,861,106.03	100.00	1,002,916.60	1.50	65,858,189.43	90,890,772.51	100.00	1,363,361.60	1.50	89,527,410.91
Attributable to:										
- Electricity fees due from Power Grid Companies	66,861,106.03	100.00	1,002,916.60	1.50	65,858,189.43	90,890,772.51	100.00	1,363,361.60	1.50	89,527,410.91
Total	66,861,106.03	100.00	1,002,916.60	1.50	65,858,189.43	90,890,772.51	100.00	1,363,361.60	1.50	89,527,410.91

Collective assessment:

<i>Item</i>	<i>Balance at the end of the year</i>		
	<i>Contract assets</i>	<i>Provision for impairment</i>	<i>Percentage (%)</i>
Electricity fees due from Power Grid Companies	66,861,106.03	1,002,916.60	1.50

(3) Provision for impairment of contract assets:

2023

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reversals during the year</i>	<i>Transfers out or written-off during the year</i>	<i>Balance at the end of the year</i>
Electricity fees due from Power Grid Companies	1,363,361.60	175,705.36	536,150.36	-	1,002,916.60

2022

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reversals during the year</i>	<i>Transfers out or written-off during the year</i>	<i>Balance at the end of the year</i>
Electricity fees due from Power Grid Companies	1,057,359.82	306,001.78	-	-	1,363,361.60

10 Non-current assets due within one year

<i>Item</i>	<i>2023</i>	<i>2022</i>
Time deposits due within one year	2,498,637,840.30	268,477,657.97
Long-term receivables due within one year	169,902,425.13	-
Total	2,668,540,265.43	268,477,657.97

11 Other current assets

<i>Item</i>	<i>2023</i>	<i>2022</i>
Input VAT to be deducted/certified	2,481,748,420.90	1,105,249,908.66
Prepaid taxes	283,809,448.75	99,468,490.04
Prepaid expenses	30,802,023.74	37,837,898.09
Others	50,446,396.63	16,239,340.21
Total	2,846,806,290.02	1,258,795,637.00

12 Long-term receivables

Item	Note	2023			
		Book value	Provision for impairment	Carrying amount	Range of discount rate
Receivables from Energy Performance Contracting		12,792,474.02	639,623.70	12,152,850.32	4.57%
Including: Unearned finance income		3,029,068.24	-	3,029,068.24	
Installment sale		562,422,004.67	28,121,100.23	534,300,904.44	6.00%
Including: Unearned finance income		46,864,651.33	-	46,864,651.33	
Subtotal		575,214,478.69	28,760,723.93	546,453,754.76	
Less: Due within one year - Receivables from Energy Performance Contracting	V.10	1,088,948.40	54,447.42	1,034,500.98	4.57%
Less: Due within one year - Installment sale	V.10	177,755,709.63	8,887,785.48	168,867,924.15	6.00%
Total		396,369,820.66	19,818,491.03	376,551,329.63	

(1) By method of provisioning

Category	2023				
	Book value		Provision for bad and doubtful debts		Carrying amount
	Amount	Percentage (%)	Amount	Percentage (%)	
Individual assessment	384,666,295.04	97.05	19,233,314.75	5.00	365,432,980.29
Collective assessment	11,703,525.62	2.95	585,176.28	5.00	11,118,349.34
- Receivables from companies within the scope of consolidation	-	-	-	-	-
- Amounts due from other entities	11,703,525.62	2.95	585,176.28	5.00	11,118,349.34
Total	396,369,820.66	100.00	19,818,491.03	5.00	376,551,329.63

(2) Provisions for bad and doubtful debts

category	Balance at the beginning of the year	Movements during the year				Balance at the end of the year
		Provision	Recoveries or reversals	Transfers or write-offs	Other movements	
Receivables from companies within the scope of consolidation		585,176.28	-	-	-	585,176.28
Installment sale		19,233,314.75	-	-	-	19,233,314.75
total		19,818,491.03	-	-	-	19,818,491.03

13 Long-term equity investments

(1) Long-term equity investments by category:

Item	2023	2022
Investments in associates	899,155,598.20	773,754,028.19
Less: Provision for impairment	-	-
Total	899,155,598.20	773,754,028.19

(2) Movements of long-term equity investments during the year are as follows:

Investee	Balance at the beginning of the year	Movements during the year				Balance at the end of the year	Balance of provision for impairment at the end of the year
		Investment gains or losses recognized under equity method	Other equity movements	Declared distribution of cash profits	Translation differences arising from translation of foreign currency financial statements		
Associates							
Luoyang Jiwa Materials Technology Co., Ltd.	12,987,625.95	1,793,717.18	-	-	-	14,781,343.13	-
Yuhong JA New Energy Technology Co., Ltd.	5,187,921.28	4,872,689.63	-	222,251.47	-	9,838,359.44	-
Datang Angli (Lingwu) New Energy Co., Ltd.	43,647,362.14	(3,125,170.15)	5,517.55	3,042,037.80	-	37,485,671.74	-
JA Solar PV Electric (Lincheng) Co., Ltd.	54,256,108.90	9,117,488.39	415,098.57	-	-	63,788,695.86	-
Jingguan PV Electric (Yugan Xian) Co., Ltd. (Note 2)	-	-	-	-	-	-	-
Fukushima Nakamori Power Plant Contract Company (Note 1)	88,191,785.04	5,941,262.25	-	6,503,777.56	(3,683,507.97)	83,945,761.76	-
Suzhou JSolar Incorporated	41,484,649.66	9,601,990.70	6,114,757.81	-	-	57,201,398.17	-
Inner Mongolia Xinte Silicon Material Co., Ltd.	527,998,575.22	221,653,400.11	766,798.79	118,304,406.02	-	632,114,368.10	-
Total	773,754,028.19	249,855,378.11	7,302,172.72	128,072,472.85	(3,683,507.97)	899,155,598.20	-

Note 1: JA Solar Japan Limited (referred to as “JA Solar Japan”) adopted an investment method of “Contract company - anonymous portfolio”, which means that the Group does not have control of JA Solar Japan, but the Group has significant influence over it. Therefore, the equity investments in JA Solar Japan is accounted for using the equity method and was not incorporated into consolidated scope.

Note 2: In January 2019, Jingneng New Energy Development (Ningjin) Co., Ltd.(referred to as “Ningjin Jingneng”) made a capital contribution of RMB 9 million to establish the Jingguan PV Electric (Yugan Xian) Co., Ltd.(referred to as “Yugan Power Station”) and held 90% of its equity. Since the Group does not have control or common control over Yugan Power Station but has significant influence over it, the long-term equity investments in Yugan Power Station should be accounted for as associates based on equity method.

14 Investments in other equity instruments

<i>Item</i>	<i>2023</i>	<i>2022</i>
Yonz Technology Co., Ltd.	55,861,000.00	27,500,800.00
Nordkette (SuZhou) Intelligent Equipment Co.,Ltd.	13,803,681.07	5,000,000.00
Duowei Union Group Co., Ltd.	30,000,000.00	-
Total	99,664,681.07	32,500,800.00

(1) Investments in other equity instruments:

<i>Items</i>	<i>Reason for being designated at fair value through other comprehensive income</i>	<i>Dividend income recognized for the year</i>	<i>Accumulated gains or losses recognized in other comprehensive income ("-" for losses)</i>	<i>Amount transferred from other comprehensive income to retained earnings</i>	<i>Reason for transferring from other comprehensive income to retained earnings</i>
Yonz Technology Co., Ltd.	With the intention of establishing or maintaining a long-term investment for strategic reasons	-	35,851,000.00	-	-
Nordkette (SuZhou) Intelligent Equipment Co.,Ltd.	With the intention of establishing or maintaining a long-term investment for strategic reasons	-	8,803,681.07	-	-
Duowei Union Group Co., Ltd.	With the intention of establishing or maintaining a long-term investment for strategic reasons	-	-	-	-

15 Fixed assets

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Fixed assets	36,859,908,408.98	21,445,276,087.21
Disposal of fixed assets	5,966,385.61	3,398,426.88
Total	36,865,874,794.59	21,448,674,514.09

(1) Details of fixed assets

	<i>Plant & buildings</i>	<i>Machinery & equipment</i>	<i>Transportation vehicles</i>	<i>Electronic and office equipments</i>	<i>Photovoltaic power station</i>	<i>Total</i>
Cost						
Balance at the beginning of the year (Restated)	7,529,419,932.69	16,672,012,701.79	70,660,294.54	302,544,685.71	4,304,833,953.92	28,879,471,568.65
Additions during the year						
- Purchases	7,181,302.42	89,305,632.98	9,312,658.98	89,604,456.69	-	195,404,051.07
- Transfers from construction in progress	6,366,554,220.61	10,756,412,808.09	7,255,147.10	35,308,495.41	4,641,013,626.73	21,806,544,297.94
- Transfers from right-of-use assets	-	-	-	-	182,017,806.07	182,017,806.07
Disposals or written-offs during the year	(164,624,174.99)	(2,247,978,932.34)	(9,258,793.79)	(41,098,255.44)	(27,118,385.92)	(2,490,078,542.48)
Change of consolidation scope	-	-	-	(87,619.46)	(1,605,195,901.28)	(1,605,283,520.74)
Translation differences arising from translation of foreign currency financial statements	14,488,749.09	29,877,217.47	24,055.73	96,184.75	(854,737.20)	43,631,469.84
Balance at the end of the year	13,753,020,029.82	25,299,629,427.99	77,993,362.56	386,367,947.66	7,494,696,362.32	47,011,707,130.35
Accumulated depreciation						
Balance at the beginning of the year (Restated)	1,429,323,537.31	4,366,201,294.98	34,778,162.25	179,568,808.83	459,394,391.76	6,469,266,195.13
Additions during the year						
- Charge for the year	443,669,038.03	2,501,751,996.78	11,740,450.54	60,757,312.28	317,660,324.77	3,335,579,122.40
Disposals or written-offs during the year	(69,674,404.60)	(1,180,032,154.21)	(7,462,102.75)	(35,884,758.41)	(20,204,359.20)	(1,313,257,779.17)
Change of consolidation scope	-	-	-	(33,795.49)	(54,304,841.97)	(54,338,637.46)
Translation differences arising from translation of foreign currency financial statements	1,249,609.87	5,805,039.51	10,801.35	18,917.72	(850,715.90)	6,233,652.55
Balance at the end of the year	1,804,567,780.61	5,693,726,177.06	39,067,311.39	204,426,484.93	701,694,799.46	8,443,482,553.45
Provision for impairment						
Balance at the beginning of the year (Restated)	2,428,313.22	868,901,379.75	183,008.91	1,138,851.81	92,277,732.62	964,929,286.31
Charge for the year	-	1,291,932,119.05	-	-	-	1,291,932,119.05
Disposals or written-offs during the year	(2,428,313.22)	(544,901,494.47)	(113,854.91)	(1,138,851.81)	-	(548,582,514.41)
Translation differences arising from translation of foreign currency financial statements	-	37,276.97	-	-	-	37,276.97
Balance at the end of the year	-	1,615,969,281.30	69,154.00	-	92,277,732.62	1,708,316,167.92
Carrying amounts						
At the end of the year	11,948,452,249.21	17,989,933,969.63	38,856,897.17	181,941,462.73	6,700,723,830.24	36,859,908,408.98
At the beginning of the year (Restated)	6,097,668,082.16	11,436,910,027.06	35,699,123.38	121,837,025.07	3,753,161,829.54	21,445,276,087.21

(2) Impairment loss on fixed assets

The Group perform impairment tests for PERC battery and module production lines which show clear indication of impairment, and the recoverable amounts of long-term assets are determined on their fair values less costs to sell.

<i>Item</i>	<i>Carrying amount</i>	<i>Recoverable amount</i>	<i>Impairment</i>	<i>Basis for the determination of the fair value and costs to sell</i>	<i>Key parameter and basis of determination</i>
Machinery & equipment	3,594,133,174.88	2,325,122,141.00	1,291,932,119.05	Fair value is based on the expected future use of the asset, taking into account recent market prices for similar assets and taking into account residue ratio of the asset as well as the cost of disposal of retired fixed assets. Costs to sell are related to the disposal of assets.	1) residue ratio is based on the expected future use of the asset and its physical condition, 2) the price of scrapped asset is determined based on the Company's historical disposal recovery value and the comparable market value, and 3) the costs to sell include the costs of disposal and related taxes, and direct costs that are necessary to prepare the asset for sale.

(3) Temporarily idle fixed assets

<i>Item</i>	<i>Cost</i>	<i>Accumulated depreciation</i>	<i>Provision for impairment</i>	<i>Carrying amount</i>
Plant & buildings	168,693,813.32	113,196,255.55	-	55,497,557.77
Machinery & equipment	616,351,005.21	345,340,745.37	248,953,700.06	22,056,559.78
Electronic and office equipments	1,014,388.81	1,014,388.81	-	-
Total	786,059,207.34	459,551,389.73	248,953,700.06	77,554,117.55

(4) Fixed assets leased out under operating leases

<i>Item</i>	<i>Plant & buildings</i>
<i>Cost</i>	
Balance at the beginning of the year	62,083,057.80
Additions during the year	23,084,337.23
Disposals or written-offs during the year	(13,509,150.84)
Balance at the end of the year	71,658,244.19
<i>Accumulated depreciation</i>	
Balance at the beginning of the year	41,906,063.25
Additions during the year	18,806,548.25
Disposals or written-offs during the year	(9,118,676.82)
Balance at the end of the year	51,593,934.68
<i>Carrying amounts</i>	
At the end of the year	20,064,309.51
At the beginning of the year	20,176,994.55

(5) Fixed assets pending certificates of ownership

<i>Item</i>	<i>Carrying amount</i>	<i>Reason why certificates of ownership are pending</i>
Plant & buildings	6,692,645,792.10	Self-built new buildings which certificates of ownership are being applied and the buildings constructed by the governments agency

(6) Disposal of fixed assets

<i>Item</i>	<i>2023</i>	<i>2022</i>
Disposal of fixed assets	5,966,385.61	3,398,426.88

16 Construction in progress

	<i>Note</i>	<i>2023</i>	<i>2022 (Restated)</i>
Construction in progress	(1)	9,740,436,205.07	2,655,480,839.82
Construction materials	(3)	-	310,520.34
Total		9,740,436,205.07	2,655,791,360.16

(1) Construction in progress

Project	2023			2022 (Restated)		
	Book value	Provision for impairment	Carrying amount	Book value	Provision for impairment	Carrying amount
Baotou JA Solar (3th) 20GW pulled crystal and slicing project	1,515,487,056.22	-	1,515,487,056.22	513,330,484.07	-	513,330,484.07
Shijiazhuang annual output of 10GW slicing and 10GW batteries project	1,459,815,513.28	-	1,459,815,513.28	-	-	-
Yangzhou annual output of 10GW solar batteries project	1,215,087,279.43	-	1,215,087,279.43	-	-	-
Qujing Technology 10GW high-efficiency batteries and 5GW high-efficiency modules project	1,208,542,355.14	-	1,208,542,355.14	2,923,180.14	-	2,923,180.14
Dongtai annual output of 10GW batteries and 10GW modules project	855,565,384.64	-	855,565,384.64	-	-	-
Photovoltaic power station	848,002,989.74	-	848,002,989.74	43,710,167.31	-	43,710,167.31
Annual output of 10GW high-efficiency batteries project	725,360,379.72	-	725,360,379.72	-	-	-
Yangzhou annual output of 2GW high-efficiency batteries project	280,723,609.76	-	280,723,609.76	-	-	-
Inner Mongolia annual output of 5GW modules project	266,024,527.70	-	266,024,527.70	-	-	-
High-efficiency solar cells R&D pilot project	168,821,040.36	-	168,821,040.36	62,951,218.47	-	62,951,218.47
New Energy Technology Institute project phase 1	115,248,128.17	-	115,248,128.17	7,438,460.46	-	7,438,460.46
JA Solar NE VietNam (2nd) silicon wafer upgrade project	114,005,891.82	-	114,005,891.82	60,628,921.87	-	60,628,921.87
Wuxi JA Waylion annual output of 500 monocrystalline furnaces and 100 tons of silver paste project	108,226,878.63	-	108,226,878.63	-	-	-
Ningjin 5GW slice and 6GW high-efficiency batteries project	77,857,619.24	-	77,857,619.24	1,190,000.00	-	1,190,000.00
Qujing JA Solar 20GW monocrystalline silicon rods and annual 20GW monocrystalline silicon rods and wafers project	75,085,275.40	-	75,085,275.40	191,220,340.56	-	191,220,340.56
Hefei 11GW high-power module expansion project	73,150,489.16	-	73,150,489.16	25,613,605.02	-	25,613,605.02
Installing equipment	57,301,658.09	-	57,301,658.09	61,954,042.68	-	61,954,042.68
Donghai 15GW velum project	31,081,185.72	-	31,081,185.72	-	-	-
Xingtai Module 5GW solar cells and modules project	20,337,627.51	-	20,337,627.51	109,157,000.70	-	109,157,000.70
Yangzhou Module annual 6GW high-performance solar modules project	14,893,990.30	-	14,893,990.30	32,077,861.45	-	32,077,861.45
Vietnam annual 3.5GW batteries project	14,547,680.37	-	14,547,680.37	80,595,014.58	-	80,595,014.58
Xingtai Module workshop renovation	13,550,354.39	-	13,550,354.39	-	-	-
Xuanhua County JA Solar 1GW solar module production project	62,748,077.44	53,211,178.39	9,536,899.05	62,565,206.33	53,211,178.39	9,354,027.94
Ningjin 1.3GW high-efficiency battery project	7,742,386.45	-	7,742,386.45	31,714,354.19	-	31,714,354.19
Kangbao module annual production of 1GW solar module project	39,011,575.72	32,439,027.07	6,572,548.65	38,973,101.36	32,439,027.07	6,534,074.29
Yiwu 5GW high-efficiency battery project	5,679,375.65	-	5,679,375.65	6,317,859.72	-	6,317,859.72
Vietnam JA Solar (1st) silicon wafer upgrade project	5,493,677.34	-	5,493,677.34	78,794,345.66	-	78,794,345.66
Yiwu Jingcheng 10GW modules and supporting project	4,269,276.73	-	4,269,276.73	72,932,287.73	-	72,932,287.73
Yiwu annual output of 5GW high-efficiency batteries and 10GW high-efficiency modules and supporting projects	1,295,575.24	-	1,295,575.24	43,295,686.94	-	43,295,686.94
Vietnam annual 3.5GW high-power module project	1,265,401.27	-	1,265,401.27	32,861,186.82	-	32,861,186.82
Chaoyang Xinghua photovoltaic power station project	-	-	-	17,634,483.88	-	17,634,483.88
Tuquan 200MW PV power storage and generation project	-	-	-	925,992,909.14	-	925,992,909.14
Other projects	460,946,286.60	21,082,136.70	439,864,149.90	258,341,462.90	21,082,136.70	237,259,326.20
Total	9,847,168,547.23	106,732,342.16	9,740,436,205.07	2,762,213,181.98	106,732,342.16	2,655,480,839.82

(2) Movements of major construction projects in progress during the year

Project	Budget (In RMB10,000)	Balance at the beginning of the year	Additions during the year	Transfers to fixed assets	Other decreases	Balance at the end of the year	Percentage of actual cost to budget (%)	Project progress (%)	Accumulated capitalised interest	Percentage of actual cost to budget (%)	Interest rate for capitalisation in 2023 (%)	Sources of funding
Baotou JA Solar (3th) 20GW pulled crystal and slicing project	440,660.62	513,330,484.07	2,099,104,908.91	1,096,948,336.76	-	1,515,487,056.22	73.06%	73.06%	-	-	-	Fund raising and self-financing
Shijiazhuang annual output of 10GW slicing and 10GW batteries project	363,708.97	-	3,471,889,257.26	2,012,073,743.98	-	1,459,815,513.28	95.46%	95.46%	-	-	-	Self-financing
Yangzhou annual output of 10GW solar batteries project	212,829.32	-	1,488,431,336.84	273,344,057.41	-	1,215,087,279.43	69.94%	69.94%	-	-	-	Self-financing
Qijing Technology 10GW high-efficiency batteries and 5GW high-efficiency modules project	400,315.12	2,923,180.14	3,325,172,963.72	2,119,553,788.72	-	1,208,542,355.14	83.14%	83.14%	-	-	-	Fund raising and self-financing
Dongtai annual output of 10GW batteries and 10GW modules project	496,571.91	-	4,643,784,245.77	3,788,218,861.13	-	855,565,384.64	93.52%	93.52%	-	-	-	Self-financing
Annual output of 10GW high-efficiency batteries project	204,476.46	-	1,749,063,473.63	1,023,703,093.91	-	725,360,379.72	85.54%	85.54%	-	-	-	Fund raising and self-financing
High-efficiency solar cells R&D pilot project	35,548.00	62,951,218.47	196,559,839.70	75,893,026.66	14,796,991.15	168,821,040.36	95.34%	95.34%	-	-	-	Fund raising and self-financing
Ningjin 5GW slice and 6GW high-efficiency batteries project	190,085.07	1,190,000.00	1,722,668,157.74	1,646,000,538.50	-	77,857,619.24	90.69%	90.69%	-	-	-	Self-financing
Qijing JA Solar 20GW monocrystalline silicon rods and annual 20GW monocrystalline silicon rods and wafers project	425,333.44	191,220,340.56	89,419,424.72	205,554,489.88	-	75,085,275.40	89.67%	89.67%	-	-	-	Fund raising and self-financing
Total		771,615,223.24	18,786,093,608.29	12,241,289,936.95	14,796,991.15	7,301,621,903.43	-	-	-	-	-	-

(3) Construction materials

Item	2023			2022		
	Book value	Provision for impairment	Carrying amount	Book value	Provision for impairment	Carrying amount
Construction materials	-	-	-	310,520.34	-	310,520.34

17 Right-of-use assets

(1) As a lessee

<i>Item</i>	<i>Plant & buildings</i>	<i>Land use rights</i>	<i>Machinery & equipment</i>	<i>Transportation vehicles</i>	<i>Electronic equipment and others</i>	<i>Photovoltaic power station</i>	<i>Total</i>
Cost							
Balance at the beginning of the year	759,421,705.35	471,793,229.66	-	40,303,634.54	136,406.68	399,763,511.24	1,671,418,487.47
Additions during the year	615,143,306.36	14,323,502.63	46,386,121.09	24,267,259.67	111,503.35	368,907.97	700,600,601.07
(1) Leases	611,943,424.06	11,822,808.27	46,093,696.20	24,253,754.03	44,557.36	368,907.97	694,527,147.89
(2) Others	3,199,882.30	2,500,694.36	292,424.89	13,505.64	66,945.99	-	6,073,453.18
Decreases during the year	(260,853,698.74)	(81,551,658.14)	(193,415.40)	(13,648,344.29)	(5,898.33)	(236,711,040.15)	(592,964,055.05)
(1) Transferred to fixed assets	-	-	-	-	-	(236,711,040.15)	(236,711,040.15)
(2) Disposals	(43,465,302.28)	(74,613,466.33)	-	(2,426,476.26)	-	-	(120,505,244.87)
(3) Expiration of lease	(213,978,466.41)	(5,381,630.86)	-	(11,220,966.19)	-	-	(230,581,063.46)
(4) Others	(3,409,930.05)	(1,556,560.95)	(193,415.40)	(901.84)	(5,898.33)	-	(5,166,706.57)
Balance at the end of the year	1,113,711,312.97	404,565,074.15	46,192,705.69	50,922,549.92	242,011.70	163,421,379.06	1,779,055,033.49
Accumulated depreciation							
Balance at the beginning of the year	228,105,996.03	24,193,032.80	-	19,952,203.36	71,724.39	67,555,336.87	339,878,293.45
Additions during the year	159,052,310.22	23,700,116.45	1,892,094.41	15,746,235.08	47,354.20	13,546,205.82	213,984,316.18
(1) Provision	158,712,348.53	23,700,116.45	1,892,094.41	15,694,304.26	47,354.20	13,546,205.82	213,592,423.67
(2) Others	339,961.69	-	-	51,930.82	-	-	391,892.51
Decreases during the year	(251,660,306.31)	(9,591,623.71)	-	(12,006,157.01)	(3,045.48)	(55,393,477.87)	(328,654,610.38)
(1) Transferred to fixed assets	-	-	-	-	-	(55,393,477.87)	(55,393,477.87)
(2) Disposals	(35,076,182.29)	(4,202,309.49)	-	(646,435.48)	-	-	(39,924,927.26)
(3) Expiration of lease	(213,978,466.41)	(5,381,630.86)	-	(11,220,966.19)	-	-	(230,581,063.46)
(4) Others	(2,605,657.61)	(7,683.36)	-	(138,755.34)	(3,045.48)	-	(2,755,141.79)
Balance at the end of the year	135,497,999.94	38,301,525.54	1,892,094.41	23,692,281.43	116,033.11	25,708,064.82	225,207,999.25
Provision for impairment							
Balance at the beginning of the year	4,561,837.20	-	-	-	-	-	4,561,837.20
Additions during the year	-	-	-	-	-	-	-
(1) Provision	-	-	-	-	-	-	-
Decreases during the year	(4,561,837.20)	-	-	-	-	-	(4,561,837.20)
(1) Disposals	(4,561,837.20)	-	-	-	-	-	(4,561,837.20)
Balance at the end of the year	-	-	-	-	-	-	-
Carrying amount							
At the end of the year	978,213,313.03	366,263,548.61	44,300,611.28	27,230,268.49	125,978.59	137,713,314.24	1,553,847,034.24
At the beginning of the year	526,753,872.12	447,600,196.86	-	20,351,431.18	64,682.29	332,208,174.37	1,326,978,356.82

For the Group's specific arrangements relating to leasing activities, refer to note V.66.

18 Intangible assets

(1) Intangible assets

<i>Item</i>	<i>Land use rights</i>	<i>Patent right</i>	<i>Know-how</i>	<i>Software</i>	<i>Ownership of land</i>	<i>Other intangible assets</i>	<i>Total</i>
Cost							
Balance at the beginning of the year (Restated)	1,467,851,621.46	7,660,254.96	12,792,901.16	123,728,673.86	956,891.14	22,120,650.10	1,635,110,992.68
Additions during the year							
- Purchases	794,869,973.32	106,415,833.32	-	66,442,354.57	-	341,704.63	968,069,865.84
- Translation differences arising from translation of foreign currency financial statements	2,378,254.80	-	-	77,253.53	-	(92,715.97)	2,362,792.36
Decreases during the year							
- Disposals	-	-	-	(99,056.60)	-	(99,056.61)	(198,113.21)
- Change of consolidation scope	(776,201.82)	-	-	-	-	-	(776,201.82)
Balance at the end of the year	2,264,323,647.76	114,076,088.28	12,792,901.16	190,149,225.36	956,891.14	22,270,582.15	2,604,569,335.85
Accumulated amortization							
Balance at the beginning of the year (Restated)	154,904,756.84	4,754,749.94	12,792,901.16	65,842,565.64	-	7,355,909.53	245,650,883.11
Additions during the year							
- Charge for the year	42,242,319.12	19,948,333.35	-	29,973,700.97	-	3,857,013.76	96,021,367.20
- Translation differences arising from translation of foreign currency financial statements	219,614.91	-	-	24,155.51	-	(33,916.87)	209,853.55
Decreases during the year							
- Disposals	-	-	-	(75,943.24)	-	-	(75,943.24)
- Change of consolidation scope	(20,698.72)	-	-	-	-	-	(20,698.72)
Balance at the end of the year	197,345,992.15	24,703,083.29	12,792,901.16	95,764,478.88	-	11,179,006.42	341,785,461.90
Carrying amounts							
At the end of the year	2,066,977,655.61	89,373,004.99	-	94,384,746.48	956,891.14	11,091,575.73	2,262,783,873.95
At the beginning of the year	1,312,946,864.62	2,905,505.02	-	57,886,108.22	956,891.14	14,764,740.57	1,389,460,109.57

The Group does not have any intangible asset arising from internal development.

(2) Land use rights pending certificates of ownership

<i>Project</i>	<i>Carrying amount</i>	<i>Reason why certificates of ownership are pending</i>
Land use rights	406,998,076.10	Mainly are the land use rights newly added in the current period and being purchased and delivered by the government

19 Long-term deferred expenses

<i>Item</i>	<i>Balance at the beginning of the year (Restated)</i>	<i>Additions during the year</i>	<i>Amortization for the year</i>	<i>Balance at the end of the year</i>
Installing expense	4,093,790.44	53,397.19	2,084,330.19	2,062,857.44
Reconstruction expense	183,929,584.04	36,711,929.07	111,844,676.00	108,796,837.11
Decoration expense	21,238,338.69	7,709,741.05	6,111,877.79	22,836,201.95
Graphite pieces, thermal field and other expense	167,329,362.91	369,151,436.21	246,740,719.87	289,740,079.25
Total	376,591,076.08	413,626,503.52	366,781,603.85	423,435,975.75

20 Deferred tax assets and deferred tax liabilities

(1) Deferred tax assets and deferred tax liabilities

Item	2023		2022 (Restated)	
	Temporary differences	Deferred tax	Temporary differences	Deferred tax
Deferred tax assets:				
Asset depreciation and amortization	616,722,651.27	94,454,204.39	338,441,617.56	50,766,242.63
Provision for impairment of assets	2,149,682,987.21	328,283,337.59	1,062,205,243.11	159,439,412.41
Provisions	1,215,086,352.32	187,317,043.48	843,525,760.57	126,528,864.08
Accrued expenses	20,856,044.35	3,128,406.65	54,291,572.43	8,143,735.86
Unrealized profits of intra-group transactions	3,825,527,352.33	512,591,208.00	2,928,730,389.11	470,759,959.02
Deferred income	458,514,947.44	68,956,734.17	395,065,585.32	60,319,666.87
Deductible tax losses	498,415,392.07	76,214,077.10	1,205,081,702.15	181,870,431.53
Lease liabilities	1,243,728,176.84	213,028,366.34	982,984,180.18	155,652,861.20
Share-based payment	8,971,787.66	1,822,795.46	364,003,590.13	59,963,805.42
Changes in fair value of derivative financial liabilities	-	-	36,411,244.43	5,461,686.66
Sub-total	10,037,505,691.49	1,485,796,173.18	8,210,740,884.99	1,278,906,665.68
Amount offset	3,460,182,599.23	553,014,372.51	2,687,373,630.32	411,931,754.00
Balance after offsetting	6,577,323,092.26	932,781,800.67	5,523,367,254.67	866,974,911.68
Deferred tax liabilities				
Capitalization of interest	78,043,862.92	11,918,451.00	99,560,017.73	15,174,063.48
Right-of-use assets	1,235,044,161.06	211,480,514.11	977,218,650.59	154,771,607.19
Asset depreciation and amortization	5,760,273,955.28	868,809,505.05	4,313,973,352.93	650,744,798.98
Changes in fair value of investments in other equity instruments	44,654,681.07	11,163,670.27	7,490,800.00	1,872,700.00
Changes in fair value of derivative financial assets	7,389,914.40	1,108,487.16	-	-
Convertible bonds	600,567,739.20	150,141,934.80	-	-
Installment sale	92,818,697.71	23,204,674.43	-	-
Sub-total	7,818,793,011.64	1,277,827,236.82	5,398,242,821.25	822,563,169.65
Amount offset	3,460,182,599.23	553,014,372.51	2,687,373,630.32	411,931,754.00
Balance after offsetting	4,358,610,412.41	724,812,864.31	2,710,869,190.93	410,631,415.65

(2) Details of unrecognized deferred tax assets

Item	2023	2022 (Restated)
Deductible temporary differences	2,685,533,684.78	3,995,681,810.24
Deductible tax losses	3,603,443,193.26	1,318,325,294.74
Total	6,288,976,878.04	5,314,007,104.98

(3) Expiration of deductible tax losses for unrecognized deferred tax assets

Year	2023	2022 (Restated)
2023	-	7,566,560.67
2024	34,227,497.33	253,156,155.66
2025	13,978,340.39	10,082,909.63
2026	29,176,196.80	29,874,858.72
2027	73,854,415.23	91,859,521.91
2028	998,734,927.00	-
Years afterwards	2,453,471,816.51	925,785,288.15
Total	3,603,443,193.26	1,318,325,294.74

21 Other non-current assets

Item	2023			2022		
	Book value	Provision for impairment	Carrying amount	Book value	Provision for impairment	Carrying amount
Prepayments for equity investments	165,000,000.00	-	165,000,000.00	165,000,000.00	-	165,000,000.00
Prepayments for long-term assets and raw materials	1,304,517,312.54	-	1,304,517,312.54	646,409,190.30	-	646,409,190.30
Input VAT to be deducted/certified	62,806,986.34	-	62,806,986.34	-	-	-
Pledge time deposits of more than 1 year	5,269,208,573.03	-	5,269,208,573.03	4,865,582,109.95	-	4,865,582,109.95
Less: Time deposits due within one year	2,498,637,840.30	-	2,498,637,840.30	268,477,657.97	-	268,477,657.97
Total	4,302,895,031.61	-	4,302,895,031.61	5,408,513,642.28	-	5,408,513,642.28

22 Assets with restrictive ownership titles or right-of-use

Item	2023				2022			
	Book value	Carrying amount	Restriction types	Reason for restriction	Book value	Carrying amount	Restriction types	Reason for restriction
Cash at bank and on hand	9,225,344,774.40	9,225,344,774.40	Pledge	Deposits, etc	6,063,162,734.63	6,063,162,734.63	Pledge	Deposits, etc
Fixed assets	5,373,103,863.73	4,254,272,062.52	Mortgage	Loan secured by mortgages, finance leases and government agency construction, etc	4,702,460,039.51	3,734,756,759.28	Mortgage	Loan secured by mortgages, finance leases and government agency construction, etc
Intangible assets	453,873,160.38	392,438,094.97	Mortgage	Loan secured by mortgages and government agency construction, etc	397,613,403.05	333,554,927.60	Mortgage	Loan secured by mortgages and government agency construction, etc
Bills receivable	155,083,276.94	155,018,442.36	Pledge	Outstanding endorsed or discounted bills that have not matured at the end of the year	91,248,544.62	91,248,544.62	Pledge	Outstanding endorsed or discounted bills that have not matured at the end of the year
Accounts receivable	406,188,266.96	400,095,442.96	Pledge	Loan secured by pledges and finance leases	459,772,534.13	452,875,946.12	Pledge	Loan secured by pledges and finance leases
Receivables under financing	174,350,594.00	174,350,594.00	Pledge	Bills pledge	-	-	-	-
Non-current assets due within one year	2,498,637,840.30	2,498,637,840.30	Pledge	Deposits, etc	268,477,657.97	268,477,657.97	Pledge	Deposits, etc
Other non-current assets	2,770,570,732.73	2,770,570,732.73	Pledge	Deposits, etc	4,597,104,451.98	4,597,104,451.98	Pledge	Deposits, etc
total	21,057,152,509.44	19,870,727,984.24			16,579,839,365.89	15,541,181,022.20		

23 Short-term loans

(1) Short-term loans by category:

<i>Category</i>	2023	2022
Credit loans	706,735,733.19	-
Guaranteed loans	260,827,484.01	602,297,060.70
Pledged loans	6,483,457.88	1,137,939,376.85
Guarantees and mortgages	-	38,270,682.77
Guaranteed and pledged loans	4,544,400.00	4,069,945.00
Guaranteed, mortgaged and pledged loans	-	4,565,000.00
Total	978,591,075.08	1,787,142,065.32

Guaranteed loans are obtained by the Company and the Group's subsidiaries as guarantees for their subsidiaries.

24 Derivative financial liabilities

<i>Item</i>	2023	2022
Foreign currency derivatives	-	113,064,066.74

25 Bills payable

<i>Item</i>	2023	2022
Bank acceptance bills	18,480,904,576.50	13,418,146,649.03
Commercial acceptance bills	128,392,037.35	-
Total	18,609,296,613.85	13,418,146,649.03

There is no due but unpaid bill payable at the end of the year. The bills above are all due within one year.

26 Accounts payable

<i>Item</i>	2023	2022 (Restated)
Payable for materials and service fees	8,816,378,706.33	5,155,050,686.52

27 Contract liabilities

<i>Item</i>	2023	2022
Advances for goods	4,872,292,085.69	5,388,228,068.95

28 Employee benefits payable

(1) Employee benefits payable

<i>Items</i>		<i>Balance at the beginning of the year (Restated)</i>	<i>Accrued during the year</i>	<i>Decreased during the year</i>	<i>Balance at the end of the year</i>
Short-term employee benefits	(2)	804,743,478.30	5,457,167,118.18	5,197,763,595.68	1,064,147,000.80
Post-employment benefits - defined contribution plans	(3)	7,602,948.06	371,147,729.42	367,425,492.45	11,325,185.03
Termination benefits		3,657,113.42	4,029,524.53	7,401,945.42	284,692.53
Total		816,003,539.78	5,832,344,372.13	5,572,591,033.55	1,075,756,878.36

(2) Short-term employee benefits

<i>Items</i>		<i>Balance at the beginning of the year (Restated)</i>	<i>Accrued during the year</i>	<i>Decreased during the year</i>	<i>Balance at the end of the year</i>
Salaries, bonuses, allowances and subsidies		716,748,029.95	4,834,388,871.85	4,523,726,978.56	1,027,409,923.24
Staff welfare		56,284,197.34	196,478,879.17	247,775,861.40	4,987,215.11
Social insurance					
- Medical insurance		5,786,505.61	187,653,582.79	187,707,863.72	5,732,224.68
- Work-related injury insurance		143,735.25	11,811,929.81	11,751,544.35	204,120.71
- Maternity insurance		8,924.82	9,714,481.21	9,669,544.10	53,861.93
Housing fund		5,421,525.11	165,458,412.55	162,746,833.75	8,133,103.91
Labour union fee, staff and workers' education fee		20,350,560.22	51,660,960.80	54,384,969.80	17,626,551.22
Total		804,743,478.30	5,457,167,118.18	5,197,763,595.68	1,064,147,000.80

(3) Post-employment benefits - defined contribution plans

<i>Item</i>		<i>Balance at the beginning of the year</i>	<i>Accrued during the year</i>	<i>Decreased during the year</i>	<i>Balance at the end of the year</i>
Basic pension insurance		7,294,294.20	358,307,226.20	354,730,582.71	10,870,937.69
Unemployment insurance		308,653.86	12,840,503.22	12,694,909.74	454,247.34
Total		7,602,948.06	371,147,729.42	367,425,492.45	11,325,185.03

29 Taxes payable

<i>Item</i>	2023	2022 (Restated)
Corporate income tax	231,234,915.34	305,156,253.20
Value-added tax (VAT)	159,901,779.55	68,058,637.75
Stamp duty	35,611,976.45	37,241,414.45
Individual income tax	22,327,570.80	19,699,732.09
Property tax	18,897,603.63	5,410,147.32
Land use tax	10,145,004.02	2,334,168.16
Urban maintenance and construction tax	5,405,270.64	3,319,668.81
Education surcharges	4,009,137.16	2,537,355.90
River management fees	1,502,546.47	1,459,626.33
Consumption tax	1,122,080.53	1,654,400.54
Others	1,082,022.59	98,161.72
Total	491,239,907.18	446,969,566.27

30 Other payables

	<i>Note</i>	2023	2022 (Restated)
Dividends payable	(1)	252,599,002.24	15,490,934.75
Others	(2)	14,117,124,052.24	5,643,758,787.26
Total		14,369,723,054.48	5,659,249,722.01

(1) Dividends payable

<i>Item</i>	2023	2022
KEI CHEONG(HK) Co., Ltd.	89,261,071.50	15,147,553.25
China Orient Asset Management Co., Ltd.	121,666,399.00	-
ABC Financial Asset Investment Co., Ltd.	30,416,599.75	-
Hong Kong Jinhua Semiconductor Materials Corporation	11,254,931.99	343,381.50
Total	252,599,002.24	15,490,934.75

(2) Others

Details of others by nature are as follows:

<i>Items</i>	2023	2022 (Restated)
Equipment and construction fee	11,650,444,216.92	3,851,675,178.24
Freight, customs declaration service fees	1,776,829,893.14	1,204,556,027.26
Amounts due to other entities	40,007,182.45	123,428,658.06
Deposits, security deposit	513,682,964.24	304,786,138.70
Repurchase obligation of restricted shares	136,159,795.49	154,494,371.80
Others	-	4,818,413.20
Total	14,117,124,052.24	5,643,758,787.26

31 Non-current liabilities due within one year

Non-current liabilities due within one year by category are as follows:

<i>Item</i>	2023	2022
Long-term loans due within one year	228,796,034.14	480,815,951.32
Debentures payable due within one year	8,150,197.69	-
Long-term payables due within one year	364,871,521.03	469,000,450.08
Lease liabilities due within one year	222,489,413.91	304,171,449.74
Other long-term liabilities due within one year (Notes)	-	651,054,794.56
Total	824,307,166.77	1,905,042,645.70

Note 1: Yangzhou Battery signed a construction assignment agreement with Yangzhou Lingang Construction and Development Co., Ltd. in October 2017. According to the agreement, as the consignee of “JA No.11 High-efficiency Battery Workshop and Auxiliary Building Project”, Yangzhou Lingang construction and development Co., Ltd. should assist the management committee in fund raising, payment and supervision, and assist in construction site management. Five years after the first payment of Yangzhou Lingang Construction and Development Co., Ltd., and Yangzhou Battery shall have a bullet repay without interest. As of 31 December 2023, “JA No.11 High-efficiency Battery Workshop and Auxiliary Building Project” has been completed. Yangzhou Lingang Construction and Development Co., Ltd. has raised a total of RMB150,000,000.00 for the project, which was settled by Yangzhou Battery in April 2023.

Note 2: On 29 June 2021, ICBC Financial Asset Investment Co., Ltd. signed a capital increase agreement with Hefei JA Solar Technology Co., Ltd. ICBC Financial Asset Investment Co., Ltd. increased the capital of Hefei JA Solar by RMB1,000,000,000.00. After the capital increase, the registered capital of Hefei JA Solar is changed from RMB1.822 billion to RMB2.167 billion. The equity proportion of ICBC Financial Asset Investment Co., Ltd. is 15.93%, and the investment income of ICBC Financial Asset Investment Co., Ltd. is limited to the dividend target agreed herein (the expected annual return rate is 7%). Equity withdrawal: Upon mutual agreement, JA Solar Technology Co., Ltd. can acquire Hefei JA Solar's equity held by ICBC Financial Asset Investment Co., Ltd. through a private placement, and ICBC Financial Asset Investment Co., Ltd. will withdraw its equity through the secondary market in the future. ICBC Financial Asset Investment Co., Ltd. will increase its stake after implement exit in transfer way which involving the rights and obligations of the Company and the actual controller, to this agreement and ICBC Financial Asset Investment Co., Ltd., JA Solar Co., Ltd., Jin Baofang, Jin Junmiao and JA Solar Technology Yangzhou Co., Ltd. shall be signed by the Shareholders' Agreement shall prevail. On 18 February 2022, the Group paid ICBC Financial Asset Investment Co., Ltd. RMB500,000,000.00 to repurchase 7.97% equities of Hefei JA Solar it held. After the repurchase, ICBC Financial Asset Investment Co., Ltd. held 7.97% equities. On 30 June 2023, the Group paid ICBC Financial Asset Investment Co., Ltd. RMB500,000,000.00 to repurchase 7.97% equities of Hefei JA Solar it held. After that, ICBC Financial Asset Investment Co., Ltd. will no longer hold the equity interest in Hefei JA Solar.

32 Other current liabilities

<i>Item</i>	2023	2022
Pending output VAT	228,496,447.73	365,369,574.18

33 Long-term loans

<i>Item</i>	<i>Note</i>	2023	2022
Credit loans		50,000,000.00	-
Guaranteed loans		543,352,351.74	627,854,370.82
Guarantees and mortgages		-	243,985,740.14
Guaranteed and pledged loans		1,069,255,555.11	936,917,430.43
Guaranteed, mortgaged and pledged loans		43,040,000.00	448,646,056.17
Less: Long-term loans due within one year	V.31	228,796,034.14	480,815,951.32
Including: Guaranteed loans due within one year		191,624,178.73	299,697,035.14
Guarantees and mortgages due within one year		-	32,216,882.81
Guaranteed and pledged loans due within one year		37,171,855.41	44,471,589.00
Guaranteed, mortgaged and pledged loans due within one year		-	104,430,444.37
Total		1,476,851,872.71	1,776,587,646.24

Guaranteed loans are obtained by the Company and the Group's subsidiaries as guarantees for their subsidiaries.

34 Debentures payable

(1) Debentures payable

Item	2023	2022
Convertible bonds	8,359,739,960.81	-

(2) Details of debentures payable

Debenture	Face value	Issuance date	Maturity period	Issuance amount	Balance at the beginning of the year	Issuance during the year	Interest at face value	Amortisation of discounts or premium	Repayment during the year	Balance at the end of the year	Default (Y/N)
JA Convertible Bonds	100.00	18 July 2023	Six years	8,960,307,700.00	-	8,237,817,094.54	8,150,197.69	130,073,063.96	8,150,197.69	8,359,739,960.81	N

(3) Description of Conditions for conversion and timing of convertible bonds

In accordance with the resolutions of the 36th Meeting of the 5th Board of Directors of JA Solar Technology held on 25 August 2022 and the 24th Meeting of the 5th Supervisory Committee held on the same date, and the resolution of its 1st Extraordinary General Meeting of Shareholders of 2022 held on 13 September 2022, as well as the resolution of the 28th Meeting of the Listing Committee of Shenzhen Stock Exchange held on 27 April 2023, plus the *Approval of the Registration of the Issuance of Convertible Bonds to Public by JA Solar Technology Co., Ltd.* By the CSRC (Zheng Jian Xu Ke No.1164 [2023]), JA Solar Technology Co., Ltd. has publicly issued RMB8.96 billion convertible bonds. Fund raised amounted to RMB8.93 billion after costs of issuance (RMB26.46 million). The convertible bonds have been listed and traded on the Shenzhen Stock Exchange since 4 August 2023, with the abbreviation of "JA Convertible Bonds" and the bond code of "127089".

According to the *Prospectus of JA Solar Technology Co., Ltd. on Issuance of Convertible Bonds to the Public*, the initial conversion price of the convertible bonds is RMB38.78 per share. The coupon rate of the convertible bonds is 0.20% for the first year, 0.40% for the second year, 0.60% for the third year, 1.50% for the fourth year, 1.80% for the fifth year and 2.00% for the sixth year.

The issuance ended on 24 July 2023. The conversion period starts from 24 January 2024 (the first trading day six months after 24 July 2023) to 17 July 2029 (the maturity date of the convertible bond).

In 2023, the Company recognised other equity instruments of RMB515,408,280.06 relating to the issuance of convertible bonds.

35 Lease liabilities

Item	Note	2023	2022
Long-term lease liabilities		1,375,781,457.39	1,031,646,335.92
Less: Lease liabilities due within one year	V.31	222,489,413.91	304,171,449.74
Total		1,153,292,043.48	727,474,886.18

See Note V 66 for specific arrangements regarding the Group's leases.

36 Long-term payables

<i>Item</i>	<i>Note</i>	2023	2022
Long-term payables		4,359,874,503.93	2,612,101,405.39
Less: Long-term payables due within one year	V.31	364,871,521.03	469,000,450.08
Total		3,995,002,982.90	2,143,100,955.31

37 Provisions

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reductions during the year</i>	<i>Translation differences arising from translation of foreign currency financial statements</i>	<i>Balance at the end of the year</i>	<i>Reasons for the provision</i>
Warranties for product quality	1,139,398,304.79	390,873,089.52	13,983,449.67	2,685,747.06	1,518,973,691.70	
Outstanding litigation	90,739,769.78	-	95,184,259.21	4,444,489.43	-	Note
Total	1,230,138,074.57	390,873,089.52	109,167,708.88	7,130,236.49	1,518,973,691.70	

Note: As at 31 December 2023, the Group has no provisions arising from outstanding litigation. JA Solar GmbH was in dispute with its customer over a module supply contract signed between the two parties on 26 October 2020. The customer has applied to International Chamber of Commerce (hereinafter referred to as "ICC") for arbitration. The Company received a notice of acceptance from ICC on 10 January 2022 and as of reporting date, JA Solar GmbH has won the arbitration. JA Solar International Limited was in dispute with its customer over a module supply contract signed between the two parties on 17 September 2021. The customer has applied to Singapore International Arbitration Centre (hereinafter referred to as "SIAC") for arbitration. The Company received a notice of acceptance from SIAC on 1 July 2022 and as of 31 December 2023, the case has settled.

38 Deferred income

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reductions during the year</i>	<i>Balance at the end of the year</i>
Government grant	611,231,908.32	768,880,895.00	479,206,198.83	900,906,604.49
Unrealized profit from long-term investment under equity method	104,857,809.09	939,410.62	-	105,797,219.71
Total	716,089,717.41	769,820,305.62	479,206,198.83	1,006,703,824.20

39 Other non-current liabilities

<i>Item</i>	<i>2023</i>	<i>2022</i>
Other non-current liabilities	83,875,914.00	183,875,914.00

Note 1: Yangzhou Battery signed a repurchase agreement for project construction with Yangzhou Lingang Construction and Development Co., Ltd. in March 2020. According to the agreement, Yangzhou Lingang Construction and Development Co., Ltd. is responsible for “JA Solar (Yangzhou) Solar Technology Co., Ltd. annual 4GW High-performance solar photovoltaic module project” agency construction fund raising and use supervision, and timely payment of agency construction funds according to the contract and the actual progress of the project, the total amount of project funds raised is not more than RMB250 million. The use period of Yangzhou Battery’s commissioned construction funds for the project is 5 years. It will be calculated in batches from the date when the funds arrive in the jointly managed account of both parties. After each commissioned construction fund expires, it will be paid in one lump sum without any interest. Yangzhou Lingang construction and development Co., Ltd. has raised funds of RMB183,875,914.00 for the project. As of 31 December 2023, Yangzhou Battery has repayed RMB100 million.

40 Share capital

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Changes during the year: Increase / (Decrease)</i>					<i>Balance at the end of the year</i>
		<i>Issuance of new shares</i>	<i>Bonus shares</i>	<i>Transfer from reserves</i>	<i>Others</i>	<i>Sub-total</i>	
Total shares	2,356,345,036.00	17,215,966.00	-	942,715,373.00	(16,542.00)	959,914,797.00	3,316,259,833.00

- As at 31 December 2023, the number of stock options exercised under the first grant and the reserved grant of the 2020 Stock Option and Restricted Stock Incentive Plan and the 2022 Stock Option Incentive Plan of the Company was 13,815,966.00, and the share capital has accordingly increased by RMB13,815,966.00. As at 31 December 2023, under the Restricted Stock Incentive Plan issued to the employees of the Group, 3,400,000.00 shares have been subscribed and the share capital has accordingly increased by RMB3,400,000.00;
- The 2022 Proposal on the Distribution of Profit and Conversion of Capital Reserve into Share Capital (“Proposal 2022”) was approved in the 4h Meeting of the 6th Board of Directors of the Company held on 22 March 2023. In accordance with Proposal 2022, based on the total share capital as at the date of share registration at the time of implementation of the distribution plan, RMB2.4 (before tax) of cash dividend for every 10 shares will be distributed to all shareholders; 4 shares for every 10 shares will be transferred to all shareholders by transferring the share premium in the capital reserve with no bonus shares, and the remaining undistributed profits will be carried forward for distribution in subsequent years. The Proposal 2022 was approved by the 2022 Annual General Meeting of Shareholders held on 13 April 2023. After the implementation of the equity distribution plan, the share capital was increased by RMB942,715,373.00;

3. Pursuant to the *Proposal on the Repurchase and Cancellation of Certain Restricted Shares that Have Been Granted But Not Released* approved by the 4th Meeting of the 6th Board of Directors and the the 6th Supervisory Committee held on 22 March 2023, the *Announcement of Resolutions of the 2022 General Meeting of Shareholders* approved by the 2022 General Meeting of Shareholders held on 13 April 2023, as well as the *Proposal on the Adjustment of the Number and Price of Interests Related to the 2020 Stock Option and Restricted Stock Incentive Plan* approved by the 5th Meeting of the 6th Board of Directors and the 5th Meeting of the 6th Supervisory Committee held on 26 April 2023, the Company completed the corresponding restricted share cancellation plan on 12 June 2023 by repurchasing 3,920.00 restricted shares that have not been released from resigning employees at a price of RMB3.76 per share, and the share capital decreased by RMB3,920.00;
4. Pursuant to the *Proposal on the Repurchase and Cancellation of Certain Restricted Shares that Have Been Granted But Not Released* approved by the 11th Meeting of the 6th Board of Directors and the 9th meeting of the 6th Supervisory Committee held on 30 August 2023, and the *Announcement of Resolutions of the 3rd Extraordinary General Meeting of Shareholders of 2023* approved by the 2023 Extraordinary General Meeting of Shareholders held on 18 September 2023, the Company completed the corresponding restricted share cancellation plan on 22 December 2023 by repurchasing 12,622.00 restricted shares that have not been released from resigning employees at a price of RMB3.76 per share, and the share capital decreased by RMB12,622.00.

41 Other equity instruments

- (1) Financial instruments (including preference shares and perpetual bonds) that remain outstanding at the end of the year are set out as follows:

Outstanding financial instruments	Issuance date	Accounting classification	Dividend or interest rate	Issuance price	Quantity	Amount	Maturity date or renewal status	Conditions for conversion	Conversion status
JA Convertible Bonds	18 July 2023	Other equity instruments	0.20%-2.00%	100.00	89,603,077.00	515,408,280.06	17 July 2029	The conversion period starts from 24 January 2024 (the first trading day six months after 24 July 2023)	Conversion not started

- (2) Movement of the financial instruments (including preference shares and perpetual bonds) that remain outstanding at the end of the year:

Outstanding financial instruments	At the beginning of the year		Additions during the year		Reductions during the year		At the end of the year	
	Quantity	Carrying value	Quantity	Carrying value	Quantity	Carrying value	Quantity	Carrying value
JA Convertible Bonds	-	-	89,603,077.00	515,408,280.06	-	-	89,603,077.00	515,408,280.06

42 Capital reserve

<i>Item</i>	<i>Balance at the beginning of the year (Restated)</i>	<i>Additions during the year</i>	<i>Reductions during the year</i>	<i>Balance at the end of the year</i>
Share premium	13,695,660,891.90	631,861,872.81	1,033,862,190.34	13,293,660,574.37
Other capital reserves	303,627,620.36	270,380,734.51	117,050,776.86	456,957,578.01
Total	13,999,288,512.26	902,242,607.32	1,150,912,967.20	13,750,618,152.38

As of 31 December 2023, the reason for changes in the Group's capital reserves are as follows:

1. Since the exercise conditions of the 2020 Stock Options and Restricted Share Incentive Plan are met, the number of the exercised stock options during the year was 13,815,966.00 shares as of 31 December 2023, resulting an increase of RMB121,138,786.40 in the share premium under the capital reserve.
2. The Company issued an equity incentive plan to motivate employees of the Company and its subsidiaries to settle with its own equity instruments, resulting an increase of RMB263,078,561.80 in the other capital reserves under the capital reserve.
3. Due to the resignation of the incentive objects, the Company has repurchased and cancelled 16,542.00 restricted shares granted but not released, resulting a decrease of RMB45,655.92 in the share premium under the capital reserve.
4. As of 31 December 2023, since the exercise and release conditions of the Company's 2020 Stock Options and Restricted Shares Incentive Plan are met in 2022, the other capital reserves under the capital reserve has been decreased by RMB117,050,776.86 and the other share premium under the capital reserve has been increased by RMB117,050,776.86.
5. In February 2023, the Company's subsidiary Shijiazhuang JA Solar Technology Co., Ltd. merged with Shijiazhuang JA PV Technology Co., Ltd. (a company under common control) for a consideration of RMB56 million, resulting in an decrease of RMB56 million in the share premium under the capital reserve.
6. On 13 April 2023, the Company conversed capital reserve into share capital, resulting a decrease of RMB942,715,373.00 in the share premium under the capital reserve.
7. In June 2023, the subsidiary of the Group, Yiwu JA Solar Technology Co., Ltd., introduced non-controlling shareholders, resulting in an increase of RMB341,828,500.26 in the share premium under the capital reserve.
8. The Company issued the Restricted Share Incentive Plan to motivate employees of the Company and 3,400,000.00 shares were purchased, resulting an increase of RMB 45,900,000.00 in the share premium under the capital reserve as of 31 December 2023.
9. In October 2023, the Company acquired non-controlling interests in JA Solar Technology Yangzhou Co., Ltd. (a subsidiary), resulting in a decrease of RMB35,059,717.40 in the share premium under the capital reserve.

10. In November 2023, the Company acquired non-controlling interests in Xingtai Jinglong PV Materials Co., Ltd. (a subsidiary), resulting in an increase of RMB5,943,809.29 in the share premium under the capital reserve.
11. In October 2023, the Company adopted a share repurchase plan. As of 31 December 2023, the Company repurchased 12,483,600.00 shares of the Company in accordance with the above plan, and the related cost amounted to RMB41,444.02, resulting in a decrease of RMB41,444.02 in the share premium under the capital reserve.
12. Due to other equity changes of associates, the other capital reserves under the capital reserve has been increased by RMB1,187,414.90.
13. The Company's equity interest in Suzhou JSolar Incorporated was subject to a passive dilution due to the financing activities of the associate, resulting in an increase in capital reserve - other capital surplus by RMB6,114,757.81.

43 Treasury shares

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reductions during the year</i>	<i>Balance at the end of the year</i>
Treasury shares	154,494,371.80	309,228,728.62	67,634,576.31	396,088,524.11

44 Other comprehensive income

Item	Balance at the beginning of the year attributable to shareholders of the Company	Movements during the year					Balance at the end of the year attributable to shareholders of the Company
		Before-tax amount	Less: Previously recognized amount transferred to profit or loss	Less: Income tax expenses	Net-of-tax amount attributable to shareholders of the Company	Net-of-tax amount attributable to non-controlling interests	
Item that will not be reclassified to profit or loss	5,618,100.00	37,163,881.07	-	9,290,970.27	27,872,910.80	-	33,491,010.80
- Changes in fair value of investments in other equity instruments	5,618,100.00	37,163,881.07	-	9,290,970.27	27,872,910.80	-	33,491,010.80
Item that may be reclassified to profit or loss	(19,008,468.67)	33,961,286.93	-	-	33,961,286.93	-	14,952,818.26
- Translation differences arising from translation of foreign currency financial statements	(19,008,468.67)	33,961,286.93	-	-	33,961,286.93	-	14,952,818.26
Total other comprehensive income	(13,390,368.67)	71,125,168.00	-	9,290,970.27	61,834,197.73	-	48,443,829.06

45 Specific reserve

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reductions during the year</i>	<i>Balance at the end of the year</i>
Safety fund	19,144,079.90	12,469,623.46	5,678,020.98	25,935,682.38

46 Surplus reserve

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Reductions during the year</i>	<i>Balance at the end of the year</i>
Statutory surplus reserve	531,983,909.75	251,500,356.12	-	783,484,265.87

47 Retained earnings

<i>Item</i>	<i>Note</i>	<i>2023</i>	<i>2022 (Restated)</i>
Retained earnings at the beginning of the year		10,815,830,846.99	5,581,219,747.20
Add: Business combination under common control		(20,883,103.49)	(20,342,020.39)
Changes in accounting policies		881,254.01	(585,681.82)
Add: Net profits for the year attributable to shareholders of the Company		7,039,490,537.23	5,533,792,625.25
Less: Appropriation for statutory surplus reserve		251,500,356.12	46,688,504.33
Dividends to ordinary shares	(1)	565,629,224.16	251,567,168.40
Others	(2)	(53,931,871.27)	-
Retained earnings at the end of the year		17,072,121,825.73	10,795,828,997.51

(1) Dividends in respect of ordinary shares declared during the year

Pursuant to the shareholders' approval at the shareholders' general meeting on 13 April 2023, a cash dividend of RMB2.4 per share (2022: RMB1.5 per share), totalling RMB565,629,224.16 (2022: RMB251,567,168.40), was declared and paid to the Company's ordinary shareholders on 25 April 2023.

(2) In 2023, the Group's subsidiary, Solar Silicon Valley Electronic Science and Technology Co., Ltd. reverted the non-payable welfare fund of RMB53,931,871.27 accrued in previous years.

48 Operating income and operating costs

(1) Operating income and operating costs

Item	2023		2022	
	Income	Cost	Income	Cost
Principal activities	80,747,270,951.15	66,509,517,967.97	72,343,858,918.47	62,025,003,520.37
Other operating activities	808,906,285.83	263,557,591.70	645,541,656.71	179,701,212.09
Total	81,556,177,236.98	66,773,075,559.67	72,989,400,575.18	62,204,704,732.46

(2) Disaggregation of income and cost from contracts with customers

Type of contract	2023		2022	
	Income	Cost	Income	Cost
By type of products				
Solar module	78,174,617,903.22	63,885,045,710.26	70,344,583,284.97	60,277,554,933.83
Operation of photovoltaic power station	843,274,457.51	481,624,584.51	423,039,306.76	199,330,285.56
Others	2,538,284,876.25	2,406,405,264.90	2,221,777,983.45	1,727,819,513.07
Total	81,556,177,236.98	66,773,075,559.67	72,989,400,575.18	62,204,704,732.46
By geographical regions				
Mainland	37,128,416,721.90	32,460,466,110.37	29,172,365,952.89	24,510,197,884.22
Europe	17,619,601,271.02	15,124,106,633.72	22,909,868,158.71	19,867,621,885.40
Asia and Oceania	11,142,627,268.22	8,791,550,994.05	9,529,350,477.05	8,352,754,323.03
America	13,571,634,350.71	8,609,719,184.86	9,943,697,219.05	8,272,284,551.39
Africa and others	2,093,897,625.13	1,787,232,636.67	1,434,118,767.48	1,201,846,088.42
Total	81,556,177,236.98	66,773,075,559.67	72,989,400,575.18	62,204,704,732.46

49 Taxes and surcharges

Item	2023	2022
Stamp duty	130,031,410.97	107,136,185.47
City maintenance and construction tax	101,217,305.48	44,854,202.14
Education and local education surcharges	80,761,979.88	34,793,589.87
Property tax	53,820,023.55	26,989,999.31
Land use tax	34,876,948.51	15,982,351.14
River management fees	14,350,447.99	11,266,096.11
Others	6,568,753.91	1,426,861.38
Total	421,626,870.29	242,449,285.42

50 Selling and distribution expenses

<i>Item</i>	2023	2022
Salaries and benefits	438,061,901.51	264,900,747.95
Warranties for product quality	390,873,089.52	351,722,916.42
Commission for agent	47,783,142.71	30,266,729.23
Service fee	54,638,306.90	87,354,499.22
Storage and rental charge	180,201,906.44	162,137,156.19
Sample expenses	58,748,646.37	41,601,742.51
Promotion and exhibition fees	53,778,096.85	32,848,217.28
Expenses for advisory, auditing and evaluating	11,446,832.26	10,189,015.97
Bidding expenses	49,032,712.86	20,679,797.48
Travel expenses	41,368,278.75	12,779,922.14
Customs clearance expenses	750,320.93	4,959,459.81
Others	53,372,050.44	30,567,942.81
Total	1,380,055,285.54	1,050,008,147.01

51 General and administrative expenses

<i>Item</i>	2023	2022 (Restated)
Salaries and benefits	1,294,727,383.96	883,803,023.60
Depreciation and amortization	185,345,343.28	190,353,234.50
Expenses for advisory, auditing and evaluating	96,743,257.53	45,692,041.43
Rental charge	25,897,726.49	40,106,304.94
Administrative expense	78,352,590.34	51,245,817.36
Property management fee	50,507,097.91	39,915,636.92
Travelling expenses	37,159,389.00	25,671,492.57
Pre-operating expenses	141,047,599.04	76,562,906.45
Entertainment expenses	16,458,254.93	17,357,521.37
Share-based payment	306,762,489.43	232,545,033.24
Others	112,293,263.00	104,651,475.49
Total	2,345,294,394.91	1,707,904,487.87

52 Research and development expenses

<i>Item</i>	2023	2022
Material expenses	560,820,993.93	521,370,985.66
Salaries and benefits	332,035,406.26	261,558,773.10
Fuel expenses	130,805,057.41	113,609,335.47
Others	118,417,984.26	110,192,023.98
Total	1,142,079,441.86	1,006,731,118.21

53 Financial expenses

<i>Item</i>	2023	2022
Interest expenses from loans and payables	442,265,199.29	405,178,836.68
Interest expenses from lease liabilities	66,568,480.62	88,817,112.23
Less: Borrowing costs capitalised	2,549,244.74	52,588,358.87
Interest income from deposits and receivables	(364,837,863.67)	(354,629,082.95)
Net foreign exchange gains	(585,237,913.56)	(716,240,973.71)
Other financial expenses	83,920,969.31	100,090,260.37
Total	(359,870,372.75)	(529,372,206.25)

In the year 2023, the interest rate per annum, at which the borrowing costs were capitalised by the Group, was 3.75% - 4.15% (2022: 3.48% - 5.67%).

54 Other income

<i>Item</i>	2023	2022
Government grants	724,034,368.08	339,786,161.13
Additional deduction of input VAT	3,476,473.45	102,719.72
Refund of handling fee for individual income tax	5,860,426.67	3,197,358.78
Total	733,371,268.20	343,086,239.63

55 Investment income

Investment income by item

<i>Item</i>	2023	2022
Income from long-term equity investments accounted for using equity method	277,063,417.49	186,717,689.89
Investment income from disposal of long-term equity investments (Note)	203,384,130.79	17,327,398.34
Investment (losses) / income from disposal of derivative financial instruments	(550,954,146.01)	113,178,881.69
Total	(70,506,597.73)	317,223,969.92

Note: Refer to Note VII.2

56 Gains from changes in fair value

<i>Item</i>	2023	2022
Gains / (losses) on fair value changes of derivative financial instruments proceeds	125,640,705.84	(198,899,064.91)

57 Credit losses

<i>Item</i>	2023	2022
Losses of bad and doubtful debts on bills receivable	(219,996.72)	-
Losses of bad and doubtful debts on accounts receivable	(57,995,387.02)	(25,421,575.18)
Losses of bad and doubtful debts on other receivables	(25,354,325.13)	(9,805,171.07)
Losses of bad and doubtful debts on long-term receivables	(28,760,723.93)	-
Total	(112,330,432.80)	(35,226,746.25)

58 Impairment losses

<i>Item</i>	2023	2022
Inventories	(1,014,609,062.89)	(261,409,211.86)
Contract assets	360,445.00	(306,001.78)
Fixed assets	(1,291,932,119.05)	(842,562,373.23)
Right-of-use assets	-	(4,421,276.56)
Intangible assets	-	(130,081.05)
Total	(2,306,180,736.94)	(1,108,828,944.48)

59 Gains from asset disposals

<i>Item</i>	2023	2022
Losses from disposal of fixed assets	(110,683,232.83)	(161,178,181.77)
Losses from disposal of long-term deferred expenses	-	(1,777,777.80)
Gains from disposal of right-of-use assets	985,946.27	5,433,552.61
Total	(109,697,286.56)	(157,522,406.96)

60 Non-operating income and non-operating expenses

(1) Non-operating income by item is as follows:

<i>Item</i>	2023	2022 (Restated)	<i>Amount recognized in extraordinary gain and loss in 2023</i>
Gains from damage or scrapping of non-current assets	2,967,661.14	17,482,304.10	2,967,661.14
Insurance claim	3,087,162.50	5,881,180.62	3,087,162.50
Written-off on payables	2,985,501.11	3,639,659.66	2,985,501.11
Income from default fine and penalties	8,265,241.90	19,479,771.61	8,265,241.90
Others	3,318,588.38	3,442,862.60	3,318,588.38
Total	20,624,155.03	49,925,778.59	20,624,155.03

(2) Non-operating expenses

<i>Item</i>	2023	2022	<i>Amount recognized in extraordinary gain and loss in 2023</i>
Losses on damage or scrapping of fixed assets	106,753,912.71	34,861,377.11	106,753,912.71
Donations provided	35,408,894.39	24,673,750.00	35,408,894.39
Expenses for contract settlement fees, fines and late payment penalty	2,640,325.42	44,256,876.61	2,640,325.42
Outstanding litigation	(57,447,283.15)	40,356,456.00	(57,447,283.15)
Others	4,662,434.22	56,038,465.50	4,662,434.22
Total	92,018,283.59	200,186,925.22	92,018,283.59

61 Income tax expenses

<i>Item</i>	<i>Note</i>	2023	2022 (Restated)
Current tax expense for the year based on tax law and regulations		849,577,280.03	714,767,444.23
Changes in deferred tax assets/liabilities	(1)	882,015.15	61,322,368.36
Total		850,459,295.18	776,089,812.59

(1) The analysis of changes in deferred tax assets/liabilities is set out below:

<i>Item</i>	2023	2022 (Restated)
Origination and reversal of temporary differences	882,015.15	61,322,368.36

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

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Profit before taxation	8,042,818,848.91	6,316,546,910.78
Expected income tax expense at tax rate of 25%	2,010,704,712.23	1,579,136,727.70
Effect of different tax rates applied by subsidiaries	(1,745,013,904.56)	(896,179,681.49)
Adjustments to income tax of previous years	(5,210,135.02)	6,430,389.69
Effect of non-taxable income	(63,418,570.05)	(46,679,422.47)
Effect of non-deductible costs, expense and losses	51,169,794.54	18,553,250.70
Effect of using the deductible losses for which no deferred tax asset was recognized in previous periods	(49,602,676.62)	(90,103,939.32)
Effect of deductible temporary differences or deductible losses for which no deferred tax asset was recognized at the end of this year	797,438,542.59	362,606,666.46
Others	(145,608,467.93)	(157,674,178.68)
Income tax expenses	850,459,295.18	776,089,812.59

62 Basic earnings per share and diluted earnings per share

(1) Basic earnings per share

Basic earnings per share is calculated as dividing consolidated net profit attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding:

	<i>2023</i>	<i>2022 (Restated)</i>
Consolidated net profit attributable to ordinary shareholders of the Company	7,039,490,537.23	5,533,792,625.25
Less: Net profits distributed to the shareholders of restricted shares during the period	2,363,286.24	832,353.90
Weighted average number of ordinary shares outstanding	3,295,316,958.40	3,227,048,327.33
Basic earnings per share (RMB/share)	2.14	1.71

Weighted average number of ordinary shares is calculated as follows:

	Note	2023	2022 (Restated)
Issued ordinary shares at the beginning of the year		3,285,097,214.00	3,120,980,139.76
Effect of non-directional issuance of new shares		-	97,193,295.36
Effect of repurchase of equity interest	V.42	(1,040,300.00)	-
Effect of the release of restricted shares	V.42	4,665,298.17	3,468,850.46
Effect of share options exercised	V.42	6,594,746.23	5,406,041.75
Weighted average number of ordinary shares at the end of the year		3,295,316,958.40	3,227,048,327.33

The Company has issued the *Implementation Report on the 2022 Annual Equity Distribution* in April 2023, and increased 4 shares for every 10 shares to all shareholders by transferring the share premium in the capital reserve. The calculation of the weighted average number of ordinary shares has considered the effect of transferring capital reserves into shares.

(2) Diluted earnings per share

Diluted earnings per share is calculated as dividing consolidated net profit attributable to ordinary shareholders of the Company (diluted) by the weighted average number of ordinary shares outstanding (diluted):

	Note	2023	2022 (Restated)
Consolidated net profit attributable to ordinary shareholders of the Company (diluted)	(a)	7,137,045,335.19	5,533,792,625.25
Weighted average number of ordinary shares outstanding (diluted)	(b)	3,406,373,769.25	3,254,952,713.45
Diluted earnings per share (RMB/share)		2.10	1.70

(a) Consolidated net profit attributable to ordinary shareholders of the Company (diluted) is calculated as follows:

	2023	2022 (Restated)
Consolidated net profit attributable to ordinary shareholders of the Company	7,039,490,537.23	5,533,792,625.25
Diluted adjustments:		
After-tax effect of effective interest on the liability component of convertible bonds	97,554,797.96	-
Consolidated net profit attributable to ordinary shareholders of the Company (diluted)	7,137,045,335.19	5,533,792,625.25

- (b) Weighted average number of the Company's ordinary shares (diluted) is calculated as follows:

	<i>Note</i>	2023	2022 (<i>Restated</i>)
Weighted average number of ordinary shares at the end of the year		3,295,316,958.40	3,227,048,327.33
Diluted adjustments:			
Effect of convertible bonds		96,372,264.89	-
Effect of granting restricted shares		186,983.63	8,931,418.78
Effect of share options		14,497,562.33	18,972,967.34
Weighted average number of ordinary shares (diluted) at the end of the year		3,406,373,769.25	3,254,952,713.45

63 Cash flow statement

- (1) Proceeds from other operating activities:

<i>Item</i>	2023	2022 (<i>Restated</i>)
Deposits	5,888,178,587.56	4,646,803,373.18
Government grant	1,087,057,686.64	484,678,170.48
Interest income	168,584,938.67	230,479,113.39
Capital flows and others	542,921,972.60	373,727,337.43
Total	7,686,743,185.47	5,735,687,994.48

- (2) Payments for other operating activities:

<i>Item</i>	2023	2022 (<i>Restated</i>)
Deposits	5,806,147,592.59	4,740,949,283.38
Cash paid expenses and others	1,419,051,212.99	1,264,556,229.14
Service charges	59,778,306.30	37,843,074.58
Non-operating expenses	57,481,565.22	47,664,418.54
Total	7,342,458,677.10	6,091,013,005.64

(3) Proceeds from other investing activities:

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Proceeds from asset placement for restructuring and listing	-	372,000,000.00
Recovery of forward foreign exchange contracts, foreign currency option income and others	125,569,344.43	163,548,580.32
Recover the amounts due from disposed subsidiaries	336,255,681.49	-
Recovery of time deposits and interest	-	4,545,000.00
Total	461,825,025.92	540,093,580.32

(4) Payments for other investing activities:

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Payment for forward foreign exchange contracts, foreign currency option loss and others	672,534,465.27	65,146,302.03
Payment for deposits	158,818,599.05	-
Total	831,353,064.32	65,146,302.03

(5) Proceeds from other financing activities:

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Recovery of financing deposits and pledged time deposits	-	256,628,831.93
Payment for financing lease	-	11,994,880.80
Borrowing funds	-	90,000,000.00
Total	-	358,623,712.73

(6) Payments for other financing activities:

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Lease and installment purchase of assets	1,004,809,027.24	2,010,984,144.39
Business combination under common control	56,000,000.00	-
Repayment of the principal and interest of the borrowing funds	807,000,000.00	1,075,656,792.73
Financing deposits and pledged time deposits	-	1,038,425,031.29
Purchase of non-controlling interests	218,450,000.00	-
Repurchase of equity interest	259,928,728.62	-
Other expenses relating to financing	15,624,158.01	66,270,116.79
Total	2,361,811,913.87	4,191,336,085.20

(7) Changes in liabilities relating to financing activities:

	Balance at the beginning of the year	Additions during the year		Decreases during the year		Balance at the end of the year
		Change in cash	Change in non cash	Change in cash	Change in non cash	
Dividends payable	15,490,934.75	-	951,483,007.40	714,374,939.91	-	252,599,002.24
Short-term and long-term loans (including loans due within one year)	4,044,545,662.88	6,514,967,134.26	-	7,607,397,165.95	267,876,649.26	2,684,238,981.93
Lease liabilities (including lease liabilities due within one year)	1,031,646,335.92	-	765,288,978.59	421,153,857.12	-	1,375,781,457.39
Long-term payables (including long-term payables due within one year)	2,612,101,405.39	-	2,331,428,268.66	583,655,170.12	-	4,359,874,503.93
Debentures payable (including debentures payable due within one year)	-	8,237,817,094.54	130,073,063.96	-	-	8,367,890,158.50
Other non-current liabilities (including other non-current liabilities due within one year)	834,930,708.56	-	-	750,000,000.00	1,054,794.56	83,875,914.00
Other payables	57,000,000.00	-	-	57,000,000.00	-	-
total	8,595,715,047.50	14,752,784,228.80	4,178,273,318.61	10,133,581,133.10	268,931,443.82	17,124,260,017.99

64 Supplementary information on cash flow statement

(1) Supplement to cash flow statement

a. Reconciliation of net profit to cash flows from operating activities:

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Net profit	7,192,359,553.73	5,540,457,098.19
Add: Credit losses	112,330,432.80	35,226,746.25
Impairment losses	2,306,180,736.94	1,108,828,944.48
Depreciation of fixed assets	3,335,579,122.40	2,227,986,502.76
Depreciation of right-of-use assets	213,592,423.67	267,373,293.12
Amortization of intangible assets	96,021,367.20	52,434,063.24
Amortization of long-term deferred expenses	366,781,603.85	511,482,598.31
Losses from disposal of fixed assets, intangible assets, and other long-term assets	109,697,286.56	157,522,406.96
Losses from scrapping of fixed assets	103,786,251.57	17,379,073.01
(Gains)/ Losses from changes in fair value	(125,640,705.84)	198,899,064.91
Net financial (income)/expenses	(82,953,378.39)	(224,952,593.13)
Investment income/(loss)	70,506,597.73	(317,223,969.92)
Depreciation of deferred income	(97,593,097.61)	(72,177,758.28)
(Increase)/ Decrease in deferred tax assets	(123,385,811.88)	95,390,264.33
Increase/(Decrease) in deferred tax liabilities	124,267,827.03	(1,404,123.33)
Increase in inventories	(3,552,725,398.62)	(4,276,304,992.62)
Share-based payment	306,762,489.43	232,545,033.24
Provision of safety fund	12,469,623.46	7,800,187.05
Utilization of safety fund	(5,678,020.98)	(3,357,392.60)
Increase in operating receivables	(5,042,117,656.50)	(5,723,352,110.04)
Increase in operating payables	7,093,904,139.20	8,347,724,939.19
Net cash inflows from operating activities	12,414,145,385.75	8,182,277,275.12

b. Change in cash and cash equivalents:

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Cash at the end of the year	6,763,088,775.67	6,120,476,584.90
Less: Cash at the beginning of the year	6,120,476,584.90	6,531,701,654.96
Net increase/(decrease) in cash and cash equivalents	642,612,190.77	(411,225,070.06)

(2) Information on disposals of subsidiaries during the year:

	<i>2023</i>	<i>2022</i>
Cash or cash equivalents received during the year for disposing subsidiaries during the year	257,875,200.00	-
Including: Kunshan Jinghai Energy Technology Co., Ltd.	476,000.00	-
Xinsheng PV Electric (Tuquan) Co., Ltd.	195,000,000.00	-
Inner Mongolia YiAo PV Technology Co., Ltd.	16,603,200.00	-
Inner Mongolia ChengAo PV Technology Co., Ltd.	21,249,700.00	-
Inner Mongolia Huijia PV Technology Co., Ltd.	24,546,300.00	-
Less: Cash and cash equivalents held by the Company at the date when control is lost	25,187,094.26	-
Including: Kunshan Jinghai Energy Technology Co., Ltd.	179,419.00	-
Xinsheng PV Electric (Tuquan) Co., Ltd.	1,901,822.00	-
Inner Mongolia YiAo PV Technology Co., Ltd.	9,142,649.56	-
Inner Mongolia ChengAo PV Technology Co., Ltd.	7,115,160.13	-
Inner Mongolia Huijia PV Technology Co., Ltd.	6,848,043.57	-
Add: Cash or cash equivalents received during the period for disposing subsidiaries in previous years	23,850,000.00	128,082,398.34
Including: Jiuzhou Fangyuan New Energy (Xinjiang) Co., Ltd.	-	100,452,784.29
Hai Tian Da PV Electric (Beitun) Co., Ltd.	-	13,907,700.00
Hai Tian Da PV Electric (Hoboksar) Co., Ltd.	23,850,000.00	13,721,914.05
Net cash received from disposal of subsidiaries	256,538,105.74	128,082,398.34

(3) Details of cash and cash equivalents

<i>Item</i>	<i>2023</i>	<i>2022 (Restated)</i>
Cash	6,763,088,775.67	6,120,476,584.90
Including: Cash on hand	-	38,680.00
Bank deposits available on demand	6,763,088,775.67	6,120,437,904.90
Closing balance of cash and cash equivalents	6,763,088,775.67	6,120,476,584.90

65 Foreign-currency monetary items

(1) Foreign-currency monetary items

<i>Item</i>	<i>Balance at foreign currency at the end of the year</i>	<i>Exchange rate</i>	<i>Balance at RMB equivalent at the end of the year</i>
Cash at bank and on hand			
Including: AUD	16,184,799.32	4.8484	78,470,381.02
BRL	2,870,734.94	1.4596	4,190,124.72
EUR	23,344,459.80	7.8592	183,468,778.44
HKD	4,930,134.28	0.9062	4,467,786.29
JPY	793,466,920.69	0.0502	39,842,354.49
KRW	7,401,317,081.03	0.0055	40,810,862.38
MYR	45,154.53	1.5415	69,607.74
TRY	89,411,920.26	0.2405	21,504,371.53
USD	408,181,587.14	7.0827	2,891,027,727.22
VND	99,660,033,310.58	0.0003	29,200,389.76
ZAR	343,773.31	0.3819	131,296.31
GBP	0.19	9.0411	1.70
AED	505.00	1.9326	975.94
Accounts receivable			
Including: AUD	25,108,091.60	4.8484	121,734,071.31
EUR	176,640,804.34	7.8592	1,388,255,409.44
JPY	1,521,549,281.26	0.0502	76,401,554.06
KRW	16,342,772,555.31	0.0055	90,114,047.87
USD	649,998,749.76	7.0827	4,603,746,144.90
VND	4,681,478,327.65	0.0003	1,371,673.15

<i>Item</i>	<i>Balance at foreign currency at the end of the year</i>	<i>Exchange rate</i>	<i>Balance at RMB equivalent at the end of the year</i>
Other receivables			
Including: AED	1,000.00	1.9326	1,932.55
AUD	9,600.00	4.8484	46,544.64
BRL	40,600.00	1.4596	59,259.76
EUR	2,296,123.53	7.8592	18,045,694.05
GBP	17,655.66	9.0411	159,626.63
JPY	24,611,469.94	0.0502	1,235,815.74
KRW	74,730,000.00	0.0055	412,061.22
MYR	2,854,364.97	1.5415	4,400,132.05
USD	92,129,104.83	7.0827	652,522,810.79
VND	7,457,596,518.77	0.0003	2,185,075.78
Short-term loans			
Including: EUR	1,800,582.75	7.8592	14,151,139.95
Accounts payable			
Including: BRL	155,462.52	1.4596	226,913.09
EUR	2,356,668.40	7.8592	18,521,528.25
JPY	239,383.82	0.0502	12,020.18
USD	76,566,780.61	7.0827	542,299,537.00
VND	80,827,196,757.68	0.0003	23,682,368.65
Other payables			
Including: AED	68,985.00	1.9326	133,317.24
AUD	842,435.11	4.8484	4,084,462.40
BRL	95,099.41	1.4596	138,807.10
EUR	6,686,211.00	7.8592	52,548,269.52
JPY	62,625,154.04	0.0502	3,144,596.86
KRW	1,077,581,131.66	0.0055	5,941,782.36
MYR	181,519.27	1.5415	279,820.12
TRY	167,876.30	0.2405	40,375.76
USD	153,987,232.21	7.0827	1,090,645,369.57
VND	415,510,167,576.79	0.0003	121,744,479.10
ZAR	8,731,877.22	0.3819	3,334,939.67
GBP	16,570.00	9.0411	149,811.03
Long-term loans (including loans due within one year)			
Including: JPY	600,000,000.00	0.0502	30,127,800.00
VND	19,274,370,989.76	0.0003	5,647,390.70

(2) Details of foreign operations

<i>Name of the Subsidiary</i>	<i>Native name</i>	<i>Principal place of business</i>	<i>Functional currency</i>	<i>Reasons for functional currency</i>
JA Solar USA Inc.	JA Solar USA Inc.	U.S.A.	USD	Settlement currency for operating activities
JA Solar Hong Kong Limited	JA Solar Hong Kong Limited	Hong Kong	USD	Settlement currency for operating activities
JA Solar GmbH	JA Solar GmbH	Germany	EUR	Settlement currency for operating activities
JA Solar Japan Limited	JA ソーラー・ジャパン株式会社 (JA Solar Japan Limited)	Japan	JPY	Settlement currency for operating activities
JA Solar Investment (Hong Kong) Limited.	JA Solar Investment (Hong Kong) Limited	Hong Kong	USD	Settlement currency for operating activities
JA Solar Australia PTY Limited	JA Solar Australia PTY Limited	Australia	AUD	Settlement currency for operating activities
JA Solar South Africa (PTY) Ltd.	JA Solar South Africa (PTY) Ltd.	South Africa	ZAR	Settlement currency for operating activities
JA Solar Malaysia Sdn. Bhd.	JA Solar Malaysia Sdn. Bhd.	Malaysia	MYR	Settlement currency for operating activities
Ecoplexus Shiojiri Project LLC	エコプレクス塩尻プロジェクト合同会社 (Ecoplexus Shiojiri Project Limited Liability Company)	Japan	JPY	Settlement currency for operating activities
JA Solar Brasil Ltda	JA Solar Brasil Ltda	Brazil	BRL	Settlement currency for operating activities
JA Solar Korea Co., Ltd.	제이에이솔라코리아주식회사 (JA Solar Korea Co., Ltd.)	Korea	KRW	Settlement currency for operating activities
JA Solar International Limited	JA Solar International Limited	Hong Kong	USD	Settlement currency for operating activities
JA Solar Viet Nam Company Limited	JA Solar VietNam Company Limited	Vietnam	USD	Settlement currency for operating activities
JA Solar Enerji Yatirim Ticaret Limited Sirketi	JA Solar Enerji Yatirim Ticaret Limited Sirketi	Turkey	TRY	Settlement currency for operating activities
Fukushimanakamori Real Estate LLC	福島中森土地合同会社 (Fukushimanakamori Real Estate LLC)	Japan	JPY	Settlement currency for operating activities
JA Solar Japan Asset Management LLC	JA ソーラー・ジャパン・アセットマネジメント合同会社 (JA Solar Japan Asset Management LLC)	Japan	JPY	Settlement currency for operating activities
JA Solar Mexico Energy	JA Solar Mexico Energy	Mexico	MXN	Settlement currency for operating activities
JA Solar Trading Limited	JA Solar Trading Limited	Hong Kong	USD	Settlement currency for operating activities
JA Solar Middle East DMCC	JA Solar Middle East DMCC	Dubai	AED	Settlement currency for operating activities
JA Solar PV VietNam Company Limited	JA Solar PV VietNam Company Limited	Vietnam	USD	Settlement currency for operating activities
JA Solar NE VietNam Company Limited	JA Solar NE VietNam Company Limited	Vietnam	USD	Settlement currency for operating activities
JA Solar Smart Energy (Hong Kong) Limited	JA Solar Smart Energy (Hong Kong) Limited	Hong Kong	USD	Settlement currency for operating activities
JA Solar Energy Investment (Hong Kong) Co., Ltd.	JA Solar Energy Investment (Hong Kong) Co., Limited	Hong Kong	USD	Settlement currency for operating activities

66 Leases

(1) As a lessee

<i>Item</i>	<i>2023</i>	<i>2022</i>
Short-term lease expenses for which the practical expedient has been applied	61,476,672.79	30,026,287.53
Expenses relating to leases of low-value assets for which the practical expedient has been applied, excluding short-term leases of low-value assets	40,631,888.26	850,239.36
Total cash outflow for leases	525,622,493.45	621,786,382.24

(2) As a lessor

Operating lease

<i>Item</i>	<i>2023</i>	<i>2022</i>
Lease income	10,320,544.16	6,626,312.19
Including: Income relating to variable lease payments not included in lease receipts	-	-

The undiscounted lease receipts to be received after the balance sheet date are as follows:

<i>Item</i>	<i>2023</i>	<i>2022</i>
Within 1 year (inclusive)	7,232,129.45	5,061,194.00
Over 1 year but within 2 years (inclusive)	5,068,959.06	3,712,569.05
Over 2 years but within 3 years (inclusive)	3,229,026.32	1,806,767.96
Over 3 years but within 4 years (inclusive)	2,181,953.82	518,218.18
Over 4 years but within 5 years (inclusive)	544,609.25	17,000.00
Over 5 years	-	238,000.00
Total	18,256,677.90	11,353,749.19

VI. Research and development expenses

Presentation by nature

<i>Item</i>	2023	2022
Material expenses	560,820,993.93	521,370,985.66
Salaries and benefits	332,035,406.26	261,558,773.10
Fuel expenses	130,805,057.41	113,609,335.47
Others	118,417,984.26	110,192,023.98
Total	1,142,079,441.86	1,006,731,118.21
Including: research and development expenditures that are expensed	1,142,079,441.86	1,006,731,118.21

VII. Change of consolidation scope

1 Business combinations involving entities under common control

(1) Business combinations involving entities under common control during the year

Name of acquiree	Proportion of equity interests acquired in business combination	Basis for business combination under common control	Combination date	Basis for determination of acquisition date	From the beginning of the period to the combination date			2022	
					Income	Net losses	Net cash outflow	Income	Net losses
Shijiazhuang JA PV Technology Co., Ltd. (formerly known as Shijiazhuang Jinglong Electronic Materials Co., Ltd.)	100%	It's under the control of Jin Baofang both before and after the business combination, and the control was and is not temporary	February 2023	Obtained control	-	(64,717.16)	(98,569.26)	-	(541,083.10)

Shijiazhuang JA PV Technology Co., Ltd. (formerly known as Shijiazhuang Jinglong Electronic Materials Co., Ltd.) was established in Shijiazhuang, Hunan on 26 October 2007. The Company is principally engaged in the provision of technical services, technology development, technology consulting, technology exchange, technology transfer and technology promotion; production of photovoltaic equipment and components; sales of photovoltaic equipment and components; production of batteries; sales of batteries; research and development of special electronic materials; production of special electronic materials; sales of mechanical and electrical equipment; sales of special electronic equipment; technical services for solar power generation; sales of mechanical parts and components; machining of mechanical parts and components; import and export of goods; Sales of special electronic materials; Sales of mechanical and electrical equipment; Sales of special electronic equipment; Technical services for solar power generation; Sales of mechanical parts and components; Machining of mechanical parts and components; Import and export of goods; Import and export of technology; Leasing of land use rights; Leasing of housing; Leasing of mechanical equipment.

(2) Acquisition cost

<i>Acquisition cost</i>	<i>Shijiazhuang JA PV Technology Co., Ltd.</i>
Cash	56,000,000.00

(3) The carrying amounts of assets and liabilities of the acquiree at the combination date

	Shijiazhuang JA PV Technology Co., Ltd.	
	Combination Date	December 31, 2022
Assets		
Cash at bank and on hand	144,748.44	243,317.70
Other Receivables	714,188.00	714,188.00
Inventories	-	-
Fixed assets	18,829.48	19,158.90
Construction in progress	51,417,535.88	51,338,863.83
Intangible assets	33,592,965.83	33,671,637.88
Long-term deferred expenses	300,000.00	300,000.00
Liabilities		
Accounts payable	129,450.50	129,450.50
Employee benefits payable	4,774.00	8,956.00
Taxes payable	3.78	3.30
Other payables	57,001,860.00	57,031,860.00
Net assets	29,052,179.35	29,116,896.51
Less: Non-controlling interests	-	-
Net assets acquired	29,052,179.35	29,116,896.51

2 Disposal of subsidiaries

Disposal of investments in subsidiaries through a single transaction resulting in loss of control

<i>Entity name</i>	<i>Consideration on the date of losing control</i>	<i>Shareholding being disposed on the date of losing control (%)</i>	<i>Disposal method on the date of losing control</i>	<i>Date of losing control</i>	<i>Basis for determining date of losing control</i>	<i>Difference between consideration received and the related share of net assets in consolidated financial statements</i>
Kunshan Jinghai Energy Technology Co., Ltd.	476,000.00	100.00	Transfer	May 6 2023	Equity transfer completed	298,282.05
Xinsheng PV Electric (Tuquan) Co., Ltd.	325,000,000.00	100.00	Transfer	November 30 2023	Equity transfer completed	34,434,623.35
Inner Mongolia YiAo PV Technology Co., Ltd.	18,603,200.00	100.00	Transfer	December 26 2023	Equity transfer completed	69,311,292.02
Inner Mongolia ChengAo PV Technology Co., Ltd.	23,249,700.00	100.00	Transfer	December 26 2023	Equity transfer completed	69,025,566.52
Inner Mongolia Huijia PV Technology Co., Ltd.	26,546,300.00	100.00	Transfer	December 26 2023	Equity transfer completed	30,314,364.85

3 Other reasons for change of consolidation scope

In January 2023, the Group newly established Shijiazhuang JA Solar Technology Co., Ltd., Inner Mongolia JA Solar PV Technology Co., Ltd., Anhui Chengjia New Energy Technology Co., Ltd., Guangdong Xingjia New Energy Technology Co., Ltd., Langfang Fujing New Energy Technology Co., Ltd., Xingtai Jingyi Energy Technology Co., Ltd., Gaotai Jingguan New Energy Development Co., Ltd., Shanghai Jingzhahui New Energy Co., Ltd. and cancelled Hainan Changjiang Jingyao New Energy Co., Ltd.;

In February 2023, the Group newly established Weinan Aofeng Solar New Energy Technology Co., Ltd., Linzhou Mengxing New Energy Technology Co., Ltd., Rongcheng Hejing New Energy Technology Co., Ltd., Dongtai Jingdong New Energy Technology Co., Ltd. and cancelled Jingguan New Energy Development (Ningjin) Co., Ltd., Inner Mongolia Chengjia PV Technology Co., Ltd., Inner Mongolia Chengxing PV Technology Co., Ltd., Inner Mongolia PuAo PV Technology Co., Ltd., Inner Mongolia FuAo PV Technology Co., Ltd., Inner Mongolia Lixing PV Technology Co., Ltd., Inner Mongolia Pujing PV Technology Co., Ltd., Inner Mongolia Anxing PV Technology Co., Ltd., Inner Mongolia Hejing PV Technology Co., Ltd., Inner Mongolia Fuijing PV Technology Co., Ltd., Inner Mongolia Mengjing PV Technology Co., Ltd., Inner Mongolia MengAo PV Technology Co., Ltd., Inner Mongolia Mengxing PV Technology Co., Ltd.;

In March 2023, the Group newly established Wuxi JA Waylion New Energy Technology Co., Ltd., Zhengyang Anxing New Energy Technology Co., Ltd., Meizhou Fuaao New Energy Technology Co., Ltd., Dongtai Jingzhahui New Energy Co., Ltd., JA Solar Renewable Energy Limited and cancelled Jingsheng PV Electric (Huhhot) Co., Ltd., Gaotai Jingsheng New Energy Electric Power Co., Ltd., Gaotai Jingguan New Energy Co., Ltd.;

In April 2023, the Group newly established Dongtai JA Distributed Energy Co., Ltd., JA Solar Investment (Inner Mongolia) Co., Ltd., Ordos JA Solar Technology Co., Ltd., Shanghai JA Waylion New Energy Technology Co., Ltd., Hengyang Shuojing New Energy Technology Co., Ltd., Tangshan Youjing New Energy Technology Co., Ltd., Donghai Jinghang New Energy Technology Co., Ltd., Zhengzhou Jingkun New Energy Technology Co., Ltd., Nanning Jingcheng New Energy Technology Co., Ltd., LuAn HuiAo New Energy Technology Co., Ltd., Suqian Xujing New Energy Technology Co., Ltd., TaiAn Aosheng New Energy Technology Co., Ltd., Bozhou Yijing New Energy Technology Co., Ltd., Putian Aoshuo New Energy Technology Co., Ltd., Yangzhou Crystal Storage New Energy Co., Ltd., Jingzhou Jingyao New Energy Technology Co., Ltd. and cancelled Jingneng New Energy (Baotou) Co., Ltd.;

In May 2023, the Group newly established Yiyang Jingnuo New Energy Co., Ltd., Tianjin DingAo New Energy Technology Co., Ltd., Chongqing Hongjing PV Technology Co., Ltd., Beihai Jinghai New Energy Technology Co., Ltd., Ordos Jingyang New Energy Co., Ltd. and cancelled Dalian Jingsheng New Energy Co., Ltd.;

In June 2023, the Group newly established Jiangsu JA International Investment Co., Ltd. , Chengdu Jingxin Mingneng PV Technology Co., Ltd. , Suzhou Jinghui New Energy Technology Co.,Ltd. , Dongfang Shuojing New Energy Technology Co.,Ltd. , Jingxingbao(Guangxi) New Energy Technology Co.,Ltd. , Suzhou Yuanao PV Technology Co.,Ltd. , Jingxing Shuke(Beijing) Energy Co., Ltd. , Jinping Jingjian(Shantou) Technology Co., Ltd. , Shanghai Jinglianghui New Energy Co., Ltd. , Donghai Jinglu New Energy Co., Ltd. , Baotou Jingyun New Energy Co., Ltd. , Chongqing Jingyonghai New Energy Technology Co., Ltd.;

In July 2023, the Group newly established Yichun Jingming New Energy Co.,Ltd. , Maanshan Aoxiong New Energy Technology Co.,Ltd. , Anhui Aokang New Energy Technology Co.,Ltd. , Datong Jingxing New Energy Co.,Ltd. , Zhumadian Xingao New Energy Technology Co.,Ltd. , Xunxian Lijing New Energy Technology Co.,Ltd. , Wenxian Fuaao New Energy Co.,Ltd. , Pingdingshan Jingming New Energy Technology Co.,Ltd. , Taikang Jingsheng New Energy Co.,Ltd. , Suixian Jingfeng New Energy Technology Co.,Ltd. , Shenqiu Aofeng New Energy Technology Co.,Ltd. , Dongtai JA New Energy Technology Co., Ltd. , Xinxiang Jingshun New Energy Co., Ltd. , Xuzhou Aozhi New Energy Technology Co.,Ltd. , Xiangcheng Jingsheng New Energy Technology Co.,Ltd. , Sihong Huayi New Energy Co., Ltd. and cancelled JA Solar PV Electric (Anyang) Co., Ltd. , Anyang Jingguan Technology Co., Ltd. and purchased Jinzhou Ruineng New Energy Technology Co., Ltd. , Zhumadian Fengda New Energy Co., Ltd. at cash consideration of RMB1;

In August 2023, the Group newly established Changde Jingde New Energy Technology Co.,Ltd. , Shaoyang Jingju New Energy Technology Co.,Ltd. , Shaoyang Jingshao New Energy Technology Co.,Ltd. , Shanxi Jingyu New Energy Technology Co.,Ltd. , Chenzhou Yongjing New Energy Technology Co.,Ltd. , Guangxi Jingyang New Energy Technology Co.,Ltd. , Anhui Aosbang New Energy Technology Co.,Ltd. , Anhui Aosheng New Energy Technology Co.,Ltd. , Xuchang Jinghao New Energy Technology Co.,Ltd. , Xinyang Aoxing New Energy Technology Co.,Ltd. , Fuyang Jingfeng Energy Technology Co.,Ltd. , Zhoukou Jinghui New Energy Technology Co.,Ltd. , Wushe Ruijing New Energy Technology Co.,Ltd. , Baotou JA New Material Co., Ltd. , Suzhou Jinghong New Energy Technology Co.,Ltd. , Hubei Aoyu New Energy Co.,Ltd. , Boao Energy (Jiangsu) Co., Ltd. , Heze Aosheng New Energy Technology Co.,Ltd.;

In September 2023, the Group newly established Guangxi Jingrui New Energy Technology Co.,Ltd. , Zhengzhou Qianao New Energy Technology Co.,Ltd. , Qujing Jinghao New Energy Co.,Ltd. , Haerbin Jingguan New Energy Technology Co., Ltd. , Xiangxi Jinghong New Energy Technology Co.,Ltd. , Chizhou Jingxing Energy Technology Co.,Ltd. , Huainan Jinghong New Energy Technology Co.,Ltd. , Xinyang Aoan New Energy Technology Co.,Ltd. , Xinyang Jingan New Energy Technology Co.,Ltd. , Anhui Aoteng New Energy Technology Co.,Ltd. , Nanyang Jingling New Energy Technology Co., Ltd. , Hefei Jingyue New Energy Technology Co.,Ltd. , Huangshan Jingbao New Energy Technology Co.,Ltd. , Anhui Aoqing New Energy Technology Co.,Ltd. , Guangxi Jingyu New Energy Technology Co.,Ltd. , Anhui Chenao New Energy Technology Co.,Ltd. , Fuyang Haotai New Energy Technology Co.,Ltd. , Hefei Jingwanjia New Energy Co.,Ltd. , Fengqiu Lichuang New Energy Technology Co.,Ltd. , Yuanyang Mingchang New Energy Technology Co.,Ltd. , Yanjin Yunche New Energy Technology Co.,Ltd. , Hubei Chujing New Energy Co.,Ltd. , Yicheng Jingyu New Energy Co.,Ltd. , Hubei Jinran New Energy Co.,Ltd. , Zhangjiakou Jingxing New Energy Technology Co.,Ltd. , Suiping Siao New Energy Co., Ltd. , Qinzhou Jingyang New Energy Technology Co., Ltd. , Guangdong Jinghuo New Energy Technology Co.,Ltd. , Jiujiang Jingming New Energy Co.,Ltd. and cancelled Jingjie PV Electric (Taizhou) Co., Ltd.;

In October 2023, the Group newly established Shijiazhuang JA Electronic Technology Co., Ltd. , JA SOLAR DMCC , Haerbin Aohai New Energy Co., Ltd. , Jinzhou Jingshun New Energy Co., Ltd. , Shenyang Jingshun New Energy Co., Ltd. , Suzhou Yaoka New Energy Technology Co., Ltd. , Wuhan Aohai New Energy Co., Ltd. , Hube Chuangguang New Energy Technology Co.,Ltd. , Hubei Aofan New Energy Technology Co.,Ltd. , Dongguan Jingshun New Energy Technology Co.,Ltd. , Heyuan Jinghuo New Energy Technology Co.,Ltd. , Hubei Aoyu New Energy Technology Co.,Ltd. , Mingguang Aosheng New Energy Technology Co.,Ltd. , Yangquan Aoya New Energy Technology Co.,Ltd. , Yuzhou Longao New Energy Co.,Ltd. , Quanzhou Jinxin New Energy Technology Co.,Ltd. , Beijing Jingchuang New Energy Co., Ltd. , Tianchang Jingyong New Energy Technology Co.,Ltd. , Zhejiang Suao New Energy Technology Co.,Ltd. , Qingxu Aojie New Energy Technology Co.,Ltd. , Yangxin Yuzhiyuan New Energy Co.,Ltd. , Luotian Jingxing New Energy Co.,Ltd. , Chuzhou Aofeng New Energy Technology Co.,Ltd. , Qujing Jingfeng New Energy Co.,Ltd. , Xinyi JA PV Technology Co., Ltd. , Shenze Jingsheng New Energy Technology Co., Ltd. , Jingzhou Jingsheng New Energy Technology Co., Ltd. , Xinbaerhu Jingyao New EnergyCo., Ltd. , Yiyang Jingzhen New Energy Co.,Ltd. , Hubei Aobo New Energy Co.,Ltd. , Hubei Jingxu New Energy Co.,Ltd. and purchased Ezhou Kasilaite New Energy Co., Ltd. at cash consideration of RMB1;

In November 2023, the Group newly established Zhangzhou Aolong New Energy Technology Co.,Ltd. , Erdos Jingfei PV Co., Ltd. , Puyang Jingzhong New Energy Co., Ltd. , Anhui Jingran New Energy Technology Co.,Ltd. , Zhengzhou Aohai New Energy Co., Ltd. , Anhui Jingteng New Energy Technology Co.,Ltd. , Hubei Yichang New Energy Co.,Ltd. , Hubei Aohong New Energy Co.,Ltd. , Gongan Jingle New Energy Co.,Ltd. , Daye Jingyu New Energy Technology Co.,Ltd. , Hubei Jingxing New Energy Co.,Ltd. , Shiyan Aoshun New Energy Technology Co.,Ltd. , Shiyan Baojing New Energy Technology Co.,Ltd. , Shiyan Aosheng New Energy Technology Co.,Ltd. , Anhui Aoning New Energy Technology Co.,Ltd. , Hubei Jingyang New Energy Co.,Ltd. , Hubei Jingfeng New Energy Technology Co.,Ltd. , Fuzhou Jingding New Energy Technology Co.,Ltd. , JA Energy Storage Technology(Shanghai) Co., Ltd. , Honghe Jingfeng New Energy Co.,Ltd. , Anlu Aoliang New Energy Co.,Ltd. , Zaoyang Jingying New Energy Development Co.,Ltd. , Yunnan Fengjing New Energy Technology Co.,Ltd. , Yunnan Fengjia New Energy Technology Co.,Ltd. , Kunming Jingsheng New Energy Co.,Ltd. , Guangxi Jingan New Energy Technology Co.,Ltd. , Yangchun Xingjia New Energy Technology Co.,Ltd. and cancelled Gaotai Jingguan New Energy Development Co., Ltd. , Aksai Kazak Autonomous County Jingxin New Energy Co., Ltd. , Chengdu Jingxin Yucheng PV Technology Co., Ltd. and Xingtai Jinglong New Energy Co., Ltd. , Xingtai Jinglong Electronic Materials Co., Ltd.were merged by absorption by JA Solar (Xingtai) Co., Ltd. and have completed the deregistration procedures on November and purchased Qingdao Jingshun New Energy Co., Ltd. , Linyi Aoshun New Energy Co., Ltd. at cash consideration of RMB1;

In December 2023, the Group newly established Henan Yaojing New Energy Co.,Ltd. , Luyi Aofeng PV Technology Co., Ltd. , Qujing Jingsheng New Energy Co.,Ltd. , Xingtang Jingsheng New Energy Technology Co., Ltd. , Shanxi Anjing New Energy Technology Co.,Ltd. , Hubei Jinghao New Energy Co.,Ltd. , Yuncheng Anjing New Energy Technology Co.,Ltd. , Meishan Aoshun New Energy Co., Ltd. , Shanghai Jiahe Energy Co.,Ltd. , Shijiazhuang Jingming PV Technology Co., Ltd. , Hubei Jingmian New Energy Co.,Ltd. , Ningde Jinghui New Energy Technology Co.,Ltd. , Qujing Fengjing New Energy Co.,Ltd. , Shanghai Xingzheng Energy Co.,Ltd. , Shanghai Xingyao New Energy Co.,Ltd. , Gejiu Jingsheng New Energy Co.,Ltd. , Yichang Jingyan New Energy Co.,Ltd. , Puer Jingfeng New Energy Co.,Ltd. , Hubei Aowei New Energy Co.,Ltd. , Yuanshi Jingsheng Energy Co., Ltd. , Guangxi Jingzuo New Energy Technology Co.,Ltd. , Jieyang Ruijing New Energy Co.,Ltd. , Binzhou Jingyan New Energy Co.,Ltd. , Zhanjiang Yuanjia New Energy Co.,Ltd. , Hubei Weifeng New Energy Co.,Ltd. , Shanxi Yuanao New Energy Technology Co.,Ltd. , Anhui Yeteng New Energy Technology Co.,Ltd. , Shanghai Xingfeng New Energy Co.,Ltd. , Shanghai Xingjing Energy Co.,Ltd. , Shayang Jingaoda New Energy Technology Co.,Ltd. , Shanghai Mingjia Energy Co.,Ltd. , Shanghai Jiaming Energy Co.,Ltd. , Shanghai Xinjia Energy Co.,Ltd. , JA SOLAR SA (PTY) LTD. , Jingzhou Jingrui New Energy Co., Ltd. and cancelled Dali JA Solar PV Technology Co., Ltd. , Youyu Jingsheng PV Electric Co., Ltd.

VIII. Interests in other entities

1 Interests in subsidiaries

(1) Composition of the Group

Name of the Subsidiary	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
JA Solar	Hebei Province	Hebei Province	Production base	RMB21,271,975,746.37	100.00	-	Reverse acquisition
Ningjin Jingxing Electronic Material Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB323,090,000.00	-	70.00	Purchase
Qujing Jinglong Electronic Materials Co., Ltd.	Yunnan Province	Yunnan Province	Production base	RMB520,000,000.00	-	100.00	Purchase
Hebei Jinglong Sun Equipment Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB248,100,000.00	-	100.00	Purchase
Beijing Jinghong Energy Economization Technology Co., Ltd.	Beijing	Beijing	Energy economizing company	RMB100,000,000.00	-	100.00	Purchase
Hebei Jingle Optoelectronic Technology Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB30,000,000.00	-	80.00	Purchase
Xingtai Jinglong PV Materials Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB25,710,000.00	-	100.00	Purchase
JA Solar Hong Kong Limited	Hong Kong	Hong Kong	Investment company	HKD10,000.00	-	100.00	Purchase
JA Solar Mexico Energy	Mexico	Mexico	Trading company	MXN50,000.00	-	100.00	Set up
JA Solar USA Inc.	USA	USA	Trading company	USD50,000.00	-	100.00	Purchase
JA Solar International Limited	Hong Kong	Hong Kong	Investment company	HKD100,000.00	-	100.00	Set up
JA Solar Investment (Hong Kong) Limited.	Hong Kong	Hong Kong	Investment company	USD100,000.00	-	100.00	Purchase
JA Solar Korea Co., Ltd.	South Korea	South Korea	Trading company	KRW100,000,000.00	-	100.00	Set up
JA Solar Australia PTY Limited	Australia	Australia	Trading company	AUD1,000.00	-	100.00	Set up
JA Solar Brasil Ltda	Brazil	Brazil	Trading company	BRL10,000.00	-	100.00	Set up
JA Solar GmbH	Germany	Germany	Trading company	EUR25,000.00	-	100.00	Purchase
JA Solar South Africa (PTY) Ltd.	South Africa	South Africa	Trading company	ZAR100.00	-	100.00	Purchase
JA Solar Japan Limited	Japan	Japan	Trading company	JPY99,990,000.00	-	100.00	Purchase
JA Solar Malaysia Sdn. Bhd.	Malaysia	Malaysia	Production base	MYR2,500,000.00	-	100.00	Set up
JA Solar VietNam Company Limited	Vietnam	Vietnam	Production base	USD90,000,000.00	-	100.00	Set up
JA Solar PV Electric (Hefei) Co., Ltd.	Anhui Province	Anhui Province	Distributed project companies	RMB18,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Datong) Co., Ltd.	Shanxi Province	Shanxi Province	Centralized project companies	RMB100,000,000.00	-	100.00	Purchase
Jingsheng Agricultural Technology (Renxian) Co., Ltd.	Hebei Province	Hebei Province	Agriculture	RMB10,000,000.00	-	100.00	Purchase
JA Solar Enerji Yatirim Ticaret Limited Sirketi	Turkey	Turkey	Trading company	TL10,000.00	-	100.00	Set up
Jiuzhou Fangyuan New Energy (Yichang) Co., Ltd.	Hubei Province	Hubei Province	Investment company	RMB120,000,000.00	-	100.00	Purchase
Jingkong PV Electric (Foshan) Co., Ltd.	Guangdong Province	Guangdong Province	Distributed project companies	RMB10,000,000.00	-	100.00	Set up
JA Solar (Chaoyang) Electric Co., Ltd.	Liaoning province	Liaoning province	Centralized project companies	RMB120,000,000.00	-	100.00	Set up
JA Solar PV Electric (Yangzhou) Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project companies	RMB10,000,000.00	-	100.00	Set up
JA Solar PV Electric (Xingtai) Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB10,000,000.00	-	100.00	Set up
Jingneng Solar PV Electric (Daqing) Co., Ltd.	Heilongjiang Province	Heilongjiang Province	Centralized project companies	RMB120,000,000.00	-	100.00	Set up
JA Solar Japan Asset Management LLC	Japan	Japan	Asset management	JPY100,000.00	-	100.00	Set up
Fukushimanakamori Real Estate LLC	Japan	Japan	Land lease	JPY100,000.00	-	100.00	Set up
JA Solar Investment China Co., Ltd.	Shanghai	Shanghai	Investment company	RMB7,721,974,500.00	-	100.00	Purchase
JA Solar Technology Yangzhou Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB2,831,859,675.00	-	71.16	Purchase
Hefei JA Solar Technology Co., Ltd.	Anhui Province	Anhui Province	Production base	RMB2,167,340,000.00	-	78.54	Purchase
Shanghai JA Solar Technology Co., Ltd.	Shanghai	Shanghai	Production base	RMB821,450,520.00	-	85.29	Purchase
Shanghai JA Solar PV Technology Co., Ltd.	Shanghai	Shanghai	Trading company	RMB251,424,000.00	-	100.00	Purchase

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Jingneng PV Electric (Zhengding) Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB10,000,000.00	-	100.00	Set up
Jingneng New Energy Development (Ningjin) Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB50,000,000.00	-	100.00	Set up
Jingneng New Energy Development (Lincheng) Co., Ltd.	Hebei Province	Hebei Province	Centralized project companies	RMB200,000,000.00	-	100.00	Set up
Jingneng New Energy Development (Renxian) Co., Ltd.	Hebei Province	Hebei Province	Centralized project companies	RMB120,000,000.00	-	100.00	Purchase
Jingneng New Energy Development (Kangbao) Co., Ltd.	Hebei Province	Hebei Province	Centralized project companies	RMB30,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Wulanchabu) Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Centralized project companies	RMB70,000,000.00	-	100.00	Purchase
JA New Energy Development (Hebei) Co., Ltd.	Hebei Province	Hebei Province	Others	RMB50,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Yanchi) Co., Ltd.	Ningxia Hui Autonomous Region	Ningxia Hui Autonomous Region	Centralized project companies	RMB180,000,000.00	-	100.00	Purchase
Aiyouen Power Electric (Yinchuan) Co., Ltd.	Ningxia Hui Autonomous Region	Ningxia Hui Autonomous Region	Centralized project companies	RMB100,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Baotou) Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Centralized project companies	RMB100,000,000.00	-	100.00	Purchase
Shanghai Jinglong Solar Technology Co., Ltd.	Shanghai	Shanghai	Others	RMB180,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Linzhou) Co., Ltd.	Henan Province	Henan Province	Centralized project companies	RMB110,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Laiwu) Co., Ltd.	Shandong Province	Shandong Province	Centralized project companies	RMB60,000,000.00	-	100.00	Purchase
JA Solar (Zhangjiakou) Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB130,000,000.00	-	100.00	Set up
JA Solar (Kangbao) Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB100,000,000.00	-	100.00	Set up
JA Solar (Xingtai) Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB1,236,007,700.00	-	100.00	Purchase
Baotou JA Solar Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production base	RMB780,000,000.00	-	78.54	Purchase
Solar Silicon Valley Electronic Science and Technology Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB351,407,014.19	-	100.00	Purchase
Donghai JA Solar Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Trading company	RMB250,000,000.00	-	100.00	Set up
Jiangsu JA Convention Centre Co., Ltd.	Jiangsu Province	Jiangsu Province	Service company	RMB10,000,000.00	-	100.00	Purchase
Jing Hai Yang Semiconductor Material (Donghai) Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB714,482,900.00	-	100.00	Set up
Beijing JA Solar PV Technology Co., Ltd.	Beijing	Beijing	Trading and investment company	RMB500,000,000.00	-	100.00	Purchase
JA PV Technology Co., Ltd.	Shanghai	Shanghai	Trading company	RMB61,107,000.00	-	100.00	Purchase
JA Solar PV Electric (Shexian) Co., Ltd.	Hebei Province	Hebei Province	Centralized project companies	RMB110,000,000.00	-	100.00	Purchase
JA Solar PV Electric (Shanghai) Co., Ltd.	Shanghai	Shanghai	Distributed project companies	RMB2,000,000.00	-	100.00	Purchase
Qingdao Hai Neng Zhi Guang PV Technology Co., Ltd.	Shandong Province	Shandong Province	Distributed project companies	RMB3,000,000.00	-	100.00	Purchase
Qingdao Qing Heng Han New Energy Technology Co., Ltd.	Shandong Province	Shandong Province	Distributed project companies	RMB10,000,000.00	-	100.00	Purchase
Xusheng New Enegy Electric (Kazuo) Co., Ltd.	Liaoning province	Liaoning province	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Xinghua PV Electric (Chaoyang) Co., Ltd.	Liaoning province	Liaoning province	Centralized project companies	RMB380,000,000.00	-	100.00	Set up
Dongsheng PV Electric (Chaoyang) Co., Ltd.	Liaoning province	Liaoning province	Centralized project companies	RMB10,000,000.00	-	100.00	Set up
Yangzhou JA Solar PV Engineering Co., Ltd.	Jiangsu Province	Jiangsu Province	Engineering company	RMB68,270,000.00	-	100.00	Purchase
Longsheng PV Electric (Chaoyang) Co., Ltd.	Liaoning province	Liaoning province	Centralized project companies	RMB390,000,000.00	-	100.00	Set up
JA Solar New Energy Yangzhou Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB1,900,000,000.00	-	100.00	Set up
Qingdao Shun Yao Yang PV Technology Co., Ltd.	Shandong Province	Shandong Province	Distributed project companies	RMB1,000,000.00	-	100.00	Purchase
Ecoplexus Shiojiri Project LLC	Japan	Japan	Centralized project companies	JPY200,000.00	-	100.00	Purchase
Changde Dingcheng Xingyang PV Electric Technology Co., Ltd.	Hunan Province	Hunan Province	Centralized project companies	RMB70,000,000.00	-	100.00	Set up
Jingsheng PV Electric (Daqing) Co., Ltd.	Heilongjiang Province	Heilongjiang Province	Centralized project companies	RMB200,000,000.00	-	100.00	Set up
Yiwu JA Solar Technology Co., Ltd.	Zhejiang Province	Zhejiang Province	Production base	RMB4,116,518,557.00	-	90.12	Set up
Jingyuan PV Electric (Yiwu) Co., Ltd.	Zhejiang Province	Zhejiang Province	Distributed project companies	RMB40,000,000.00	-	100.00	Set up
JA SOLAR MIDDLE EAST DMCC	United Arab Emirates	United Arab Emirates	Trading company	AED50,000.00	-	100.00	Set up
JA Solar Trading Limited	Hong Kong	Hong Kong	Trading company	HKD100,000.00	-	100.00	Set up
JA Wisdom Energy Technology (Hainan) Co., Ltd.	Hainan Province	Hainan Province	Investment company	RMB300,000,000.00	-	100.00	Set up
Baotou Jingxu Carbon-carbon Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production base	RMB30,000,000.00	-	80.00	Set up
Qujing JA PV Technology Co., Ltd.	Yunnan Province	Yunnan Province	Production base	RMB1,300,000,000.00	-	100.00	Set up
JA Solar PV Vietnam Company Limited	Vietnam	Vietnam	Production base	USD60,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Beijing JA Energy Technology Co., Ltd.	Beijing	Beijing	Trading company	RMB300,000,000.00	-	100.00	Set up
Dongtai JA Solar PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Trading company	USD80,000,000.00	-	100.00	Set up
Changde Jingsheng PV Technology Co., Ltd.	Hunan Province	Hunan Province	Trading company	RMB28,100,000.00	-	100.00	Set up
JA Solar (Wuxi) PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB388,878,000.00	-	100.00	Set up
JA Solar (Gaoyou) PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB200,000,000.00	-	100.00	Set up
JA Solar Smart Energy (Hong Kong) Limited	Hong Kong	Hong Kong	Investment company	USD100,000.00	-	100.00	Set up
JA Solar PV Electric (Qujing) Co., Ltd.	Yunnan Province	Yunnan Province	Distributed project companies	RMB60,000,000.00	-	100.00	Set up
Tuquan Xinhua New Energy Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Trading company	RMB1,000,000.00	-	100.00	Set up
Zhuhai Hengqin JA New Energy Investment Co., Ltd.	Guangdong Province	Guangdong Province	Investment company	RMB1,000,000.00	-	100.00	Set up
Zhuhai Hengqin JA Trading Co., Ltd.	Guangdong Province	Guangdong Province	Trading company	RMB1,000,000.00	-	100.00	Set up
Zhuhai Hengqin JA Information Consulting Service Co., Ltd.	Guangdong Province	Guangdong Province	Consulting company	RMB1,000,000.00	-	100.00	Set up
Yiwu Jingcheng Photovoltaic Materials Co., Ltd.	Zhejiang Province	Zhejiang Province	Production base	RMB160,000,000.00	-	100.00	Set up
Hebei JA Education Technology Co., Ltd.	Hebei Province	Hebei Province	Education company	RMB500,000,000.00	100.00	-	Set up
Jingxin PV Electric (Wuqiang) Co., Ltd.	Hebei Province	Hebei Province	Residential project companies	RMB1,000,000.00	-	100.00	Set up
Hefei Jingjiu PV Technology Co., Ltd.	Anhui Province	Anhui Province	Production base	RMB56,000,000.00	-	100.00	Set up
Baotou JA Carbon Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production base	RMB9,000,000.00	-	100.00	Set up
Changde Xiangchu Technology Co., Ltd.	Hunan Province	Hunan Province	Energy storage project companies	RMB24,000,000.00	-	100.00	Set up
Hebei Ruineng Electricity Sales Co., Ltd.	Hebei Province	Hebei Province	Electricity sales intermediary service companies	RMB50,000,000.00	-	100.00	Purchase
Jingneng PV Electric (Longyao) Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB5,000,000.00	-	100.00	Set up
Linyi Xingjing PV Technology Co., Ltd.	Shandong Province	Shandong Province	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Inner Mongolia Chengjing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB69,000,000.00	-	100.00	Set up
Inner Mongolia Li'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB106,000,000.00	-	100.00	Set up
Inner Mongolia Hui'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB109,000,000.00	-	100.00	Set up
Inner Mongolia An'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Rui'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia You'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB56,000,000.00	-	100.00	Set up
Inner Mongolia Ruijia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB86,000,000.00	-	100.00	Set up
Inner Mongolia He'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB160,000,000.00	-	100.00	Set up
JA Wisdom Distributed Energy Technology (Hainan) Co., Ltd.	Hainan Province	Hainan Province	Investment company	RMB2,917,560,000.00	-	100.00	Set up
JA New Energy Power Investment (Hainan) Co., Ltd.	Hainan Province	Hainan Province	Investment company	RMB1,000,000,000.00	-	100.00	Set up
Shanghai Jiejing Jicheng Chemical Technology Co., Ltd.	Shanghai	Shanghai	Engineering company	RMB35,000,000.00	-	70.00	Set up
Changde Jingyang Technology Co., Ltd.	Hunan Province	Hunan Province	Centralized project companies	RMB3,000,000.00	-	100.00	Set up
Suiyang Jingneng Energy Technology Co., Ltd.	Guizhou Province	Guizhou Province	Centralized project companies	RMB40,000,000.00	-	100.00	Set up
Jiuquan Jingyang New Energy Co., Ltd.	Gansu Province	Gansu Province	Energy storage project companies	RMB5,000,000.00	-	100.00	Set up
Suiyang Jingyang Energy Technology Co., Ltd.	Guizhou Province	Guizhou Province	Centralized project companies	RMB40,000,000.00	-	100.00	Set up
JA Solar NE VietNam Company Limited	Vietnam	Vietnam	Production base	USD30,000,000.00	-	100.00	Set up
Inner Mongolia Anjing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Huijing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB35,000,000.00	-	100.00	Set up
Inner Mongolia Huixing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB42,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Inner Mongolia Yijia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Jingneng New Energy (Dalian) Co., Ltd.	Liaoning province	Liaoning province	Centralized project companies	RMB3,000,000.00	-	100.00	Set up
Qujing JA Solar Technology Co., Ltd.	Yunnan Province	Yunnan Province	Production base	RMB3,334,484,600.00	-	100.00	Set up
Zhengxiang Baiqi Xingsheng PV Electric Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Centralized project companies	RMB3,000,000.00	-	100.00	Set up
Zhejiang JA New Materials Technology Co., Ltd.	Zhejiang Province	Zhejiang Province	Production base	RMB30,000,000.00	-	75.00	Set up
JA Yuhong New Energy Power Development Co., Ltd.	Tianjin	Tianjin	Distributed project companies	RMB100,000,000.00	-	65.00	Set up
Beijing JA Haibo Energy Storage Technology Co., Ltd.	Beijing	Beijing	Energy storage project companies	RMB100,000,000.00	-	50.50	Set up
Hainan Honghui New Energy Technology Co., Ltd.	Hainan Province	Hainan Province	JA Yuhong Project companies	RMB5,000,000.00	-	100.00	Set up
Yiwu Jingda New Energy Co., Ltd.	Zhejiang Province	Zhejiang Province	Solution project companies	RMB8,000,000.00	-	100.00	Set up
Tangxian Jingxing New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Mengjia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB51,000,000.00	-	100.00	Set up
Inner Mongolia Pujia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Fengjia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB88,000,000.00	-	100.00	Set up
Inner Mongolia Fujia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB127,000,000.00	-	100.00	Set up
Inner Mongolia Fengxing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB35,000,000.00	-	100.00	Set up
Inner Mongolia Fengjing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Lijia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Hejia PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Inner Mongolia Feng'ao PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Yanhe Jingneng Energy Technology Co., Ltd.	Guizhou Province	Guizhou Province	Centralized project companies	RMB2,000,000.00	-	100.00	Set up
Yanhe Jingyang Energy Technology Co., Ltd.	Guizhou Province	Guizhou Province	Centralized project companies	RMB1,000,000.00	-	100.00	Set up
Nanchang Hongjie New Energy Development Co., Ltd.	Jiangxi Province	Jiangxi Province	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
JA Solar Energy Investment (Hong Kong) Co., Ltd.	Hong Kong	Hong Kong	Investment company	USD100,000.00	-	100.00	Set up
JA (Donghai) New Materials Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB65,000,000.00	-	100.00	Set up
Xinrong PV Electric (Tuquan) Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Centralized project companies	RMB1,000,000.00	-	100.00	Set up
Lanping JA PV Technology Co., Ltd.	Yunnan Province	Yunnan Province	Trading company	RMB1,000,000.00	-	100.00	Set up
Zhangjiagang Hongneng PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Xuzhou Hongjing PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project companies	RMB12,600,000.00	-	100.00	Set up
Qidong Hongguang PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project companies	RMB23,430,000.00	-	100.00	Set up
Daqing Jingyang Wind Power Co., Ltd.	Heilongjiang Province	Heilongjiang Province	Centralized project companies	RMB3,000,000.00	-	100.00	Set up
Liaocheng Aozhi PV Technology Co., Ltd.	Shandong Province	Shandong Province	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Ningjin Ning'ao New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB50,000,000.00	-	100.00	Set up
Qionghai Jinneng New Energy Development Co., Ltd. (Hainan)	Hainan Province	Hainan Province	Centralized project companies	RMB3,000,000.00	-	100.00	Set up
Inner Mongolia Ruijing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB33,000,000.00	-	100.00	Set up
Inner Mongolia Yijing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Inner Mongolia Youjing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB63,000,000.00	-	100.00	Set up
Hainan Fengjing New Energy Technology Co., Ltd.	Hainan Province	Hainan Province	Distributed project companies	RMB20,000,000.00	-	100.00	Set up
JA Solar Technology Chaoyang Co., Ltd.	Liaoning province	Liaoning province	Production base	RMB100,000,000.00	-	100.00	Set up
Tianjin Lijing New Energy Technology Co., Ltd.	Tianjin	Tianjin	Distributed project companies	RMB20,000,000.00	-	100.00	Set up
Mengcheng Mengjing New Energy Technology Co., Ltd.	Anhui Province	Anhui Province	Distributed project companies	RMB20,000,000.00	-	100.00	Set up
Ningjin Jingteng PV Electric Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB28,780,000.00	-	100.00	Set up
Changzhi Anjing New Energy Technology Co., Ltd.	Shanxi Province	Shanxi Province	Distributed project companies	RMB20,000,000.00	-	100.00	Set up
Wuxi Jinghao New Materials Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB10,000,000.00	-	51.00	Set up
Inner Mongolia Lijing PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Residential project companies	RMB20,000,000.00	-	100.00	Set up
Qujing Development Zone Jiantou Green Energy Technology Co., Ltd.	Yunnan Province	Yunnan Province	Distributed project companies	RMB5,000,000.00	-	51.00	Set up
Taiyuan Honghui PV Technology Co., Ltd.	Shanxi Province	Shanxi Province	Distributed project companies	RMB5,840,000.00	-	100.00	Set up
Tangshan Honggao New Energy Development Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Baoding Honghui New Energy Development Co., Ltd.	Hebei Province	Hebei Province	Distributed project companies	RMB10,000,000.00	-	100.00	Set up
Ja Solar Ireland Limited	Ireland	Ireland	Trading company	-	-	100.00	Set up
Lushan Honghui New Energy Development Co., Ltd.	Jiangxi Province	Jiangxi Province	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Tianjin Jingtong PV Electric Co., Ltd.	Tianjin	Tianjin	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Dongtai JA Solar Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB1,500,000,000.00	-	100.00	Set up
Shijiazhuang Chengjing New Energy Technology Co., Ltd. (Formerly known as "Zanhuang Ruijing New Energy Technology Co., Ltd.")	Hebei Province	Hebei Province	Distributed project companies	RMB20,000,000.00	-	100.00	Set up
Jinzhou Ruijing New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Residential project companies	RMB30,000,000.00	-	100.00	Set up
Beijing Jingtong PV Technology Co., Ltd.	Beijing	Beijing	Distributed project companies	RMB1,000,000.00	-	100.00	Set up
Shijiazhuang JA Solar Technology Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB1,000,000,000.00	-	100.00	Set up
Inner Mongolia JA Solar PV Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production base	RMB200,000,000.00	-	78.54	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Anhui Chengjia New Energy Technology Co., Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Guangdong Xingjia New Energy Technology Co., Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Langfang Fujing New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Xingtai Jingyi Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Integrated energy project company	RMB10,000,000.00	-	100.00	Set up
Shanghai Jingzhui New Energy Co., Ltd.	Shanghai	Shanghai	Distributed project company	RMB20,000,000.00	-	100.00	Set up
Linzhou Mengxing New Energy Technology Co., Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Rongcheng Hejing New Energy Technology Co., Ltd.	Shandong Province	Shandong Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Wuxi JA Waylon New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	USD50,000,000.00	-	100.00	Set up
Zhengyang Anxing New Energy Technology Co., Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Meizhou Fuaon New Energy Technology Co., Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Dongtai Jingzhui New Energy Co., Ltd.	Jiangsu Province	Jiangsu Province	Integrated energy project company	RMB1,000,000.00	-	100.00	Set up
Dongtai JA Distributed Energy Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed platform company of industry and commerce	RMB1,000,000,000.00	-	100.00	Set up
JA Solar Investment (Inner Mongolia) Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Investing platform company	RMB1,000,000,000.00	-	100.00	Set up
Ordos JA Solar Technology Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production base	RMB1,000,000,000.00	-	100.00	Set up
Shanghai JA Waylon New Energy Technology Co., Ltd.	Shanghai	Shanghai	Production base	RMB50,000,000.00	-	100.00	Set up
Hengyang Shuojing New Energy Technology Co., Ltd.	Hunan Province	Hunan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Tangshan Youjing New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Donghai Jinghang New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Zhengzhou Jingkun New Energy Technology Co., Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Nanning Jingcheng New Energy Technology Co., Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB20,000,000.00	-	100.00	Set up
LuAn HuiAo New Energy Technology Co., Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Suqian Xujing New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
TaiAn Aosheng New Energy Technology Co., Ltd.	Shandong Province	Shandong Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Bozhou Yijing New Energy Technology Co., Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Putian Aoshuo New Energy Technology Co., Ltd.	Fujian Province	Fujian Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Jingzhou Jingyao New Energy Technology Co., Ltd.	Hubei Province	Hubei Province	Distributed project company	RMB1,000,000.00	-	80.00	Set up
Yiyang Jingnuo New Energy Co., Ltd.	Hunan Province	Hunan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Tianjin DingAo New Energy Technology Co., Ltd.	Tianjin	Tianjin	Residential project company	RMB20,000,000.00	-	100.00	Set up
Chongqing Hongjing PV Technology Co., Ltd.	Chongqing	Chongqing	Distributed project company	RMB14,000,000.00	-	100.00	Set up
Beihai Jinghai New Energy Technology Co., Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Ordos Jingyang New Energy Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Centralized project company	RMB1,000,000.00	-	100.00	Set up
Jiangsu JA International Investment Co., Ltd.	Jiangsu Province	Jiangsu Province	Investment company	RMB550,000,000.00	-	100.00	Set up
Chengdu Jingxin Mingneng PV Technology Co., Ltd.	Sichuan Province	Sichuan Province	Research and development company	RMB100,000,000.00	-	65.00	Set up
Suzhou Jinghui New Energy Technology Co., Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Dongfang Shuojing New Energy Technology Co., Ltd.	Hainan Province	Hainan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Jingxingbao(Guangxi) New Energy Technology Co., Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB20,000,000.00	-	100.00	Set up
Suzhou Yuanao PV Technology Co., Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Jingxing Shuke(Beijing) Energy Co., Ltd.	Beijing	Beijing	Integrated energy project company	RMB10,550,000.00	-	100.00	Set up
Jinping Jingjian(Shantou) Technology Co., Ltd.	Guangdong Province	Guangdong Province	Centralized project company	RMB10,000,000.00	-	100.00	Set up
Shanghai Jinglianghui New Energy Co., Ltd.	Shanghai	Shanghai	Integrated energy project company	RMB5,000,000.00	-	100.00	Set up
Donghai Jinglu New Energy Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project company	RMB20,000,000.00	-	100.00	Set up
Dongtai Jingdong New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Centralized project company	RMB300,000,000.00	-	66.67	Set up
Yangzhou Crystal Storage New Energy Co., Ltd.	Jiangsu Province	Jiangsu Province	Energy storage project company	RMB1,000,000.00	-	100.00	Set up
JA Solar Renewable Energy Limited	Hong Kong	Hong Kong	Investment company	HKD100,000	-	100.00	Set up
JA Solar Industrial Corp.	USA	USA	Investment company	-	-	100.00	Set up
JA Solar AZ, LLC.	USA	USA	Production base	-	-	100.00	Set up
Chongqing Jingyonghai New Energy Technology Co., Ltd.	Chongqing	Chongqing	Distributed project company	RMB1,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Shanghai Xingyao New Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Geju Jingsheng New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yichang Jingyan New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Puer Jingfeng New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Aowei New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yuanshi Jingsheng Energy Co., Ltd.	Hebei Province	Hebei Province	Centralized project company	RMB2,000,000.00	-	70.00	Set up
Guangxi Jingzuo New Energy Technology Co.,Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB3,000,000.00	-	100.00	Set up
Jieyang Ruijing New Energy Co.,Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Binzhou Jingyan New Energy Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Zhanjiang Yuanjia New Energy Co.,Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Weifeng New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Shanxi Yuanao New Energy Technology Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Anhui Yeteng New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Shanghai Xingfeng New Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shanghai Xingjing Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shayang Jinggaoda New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Shanghai Mingjia Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shanghai Jiaming Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shanghai Xinjia Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Hefei Jingyue New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shanxi Jingyang Risheng New Energy Technology Co., Ltd. (Formerly known as "Weinan Aofeng Solar New Energy Technology Co., Ltd.")	Shanxi Province	Shanxi Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Huangshan Jingbao New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Xinxiang Jingshun New Energy Co., Ltd.	Henan Province	Henan Province	Distributed project company	RMB20,000,000.00	-	100.00	Set up
Anhui Aoqing New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Hubei Chuanguang New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Zhangzhou Aolong New Energy Technology Co.,Ltd.	Fujian Province	Fujian Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Erdos Jingfei PV Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Investment company	USD2,000,000.00	-	100.00	Set up
Guangxi Jingyu New Energy Technology Co.,Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Aofan New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Xuzhou Aozhi New Energy Technology Co.,Ltd.	Jiangsu Province	Jiangsu Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Anhui Chenao New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Dongguan Jingshun New Energy Technology Co.,Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Heyuan Jinghuo New Energy Technology Co.,Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Aoyu New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Mingguang Aosheng New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Yangquan Aoya New Energy Technology Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yuzhou Longao New Energy Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Fuyang Haotai New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Hefei Jingwanjia New Energy Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Fengqiu Lichuang New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Puyang Jingzhong New Energy Co., Ltd.	Henan Province	Henan Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Quanzhou Jinxin New Energy Technology Co.,Ltd.	Fujian Province	Fujian Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Anhui Jingran New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Beijing Jingchuang New Energy Co., Ltd.	Beijing	Beijing	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Zhengzhou Aohai New Energy Co., Ltd.	Henan Province	Henan Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Tianchang Jingyong New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Suzhou Jinghong New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Zhejiang Suao New Energy Technology Co.,Ltd.	Zhejiang Province	Zhejiang Province	Residential project company	RMB10,000,000.00	-	100.00	Set up
Yuanyang Mingchang New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Yanjin Yunche New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Hubei Aoyu New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Anhui Jingteng New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Henan Yaojing New Energy Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Qingxu Aojie New Energy Technology Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yangxin Yuzhiyuan New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Luotian Jingxing New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Chuzhou Aofeng New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Chujing New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yicheng Jingyu New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Hubei Yichang New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Aoyu New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Jinran New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Xiangcheng Jingsheng New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Gongan Jingle New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
JA SOLAR SA (PTY) LTD	South Africa	South Africa	Trading company	ZAR1,000,000.00	-	100.00	Set up
JA SOLAR DMCC	Dubai	Dubai	Trading company	AED50,000.00	-	100.00	Set up
Jingzhou Jingrui New Energy Technology Co., Ltd.	Hubei Province	Hubei Province	Distributed project company	RMB10,000,000.00	-	100.00	Set up
Baotou Jingyun New Energy Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Distributed project company	RMB50,000,000.00	-	100.00	Set up
Shijiazhuang JA PV Technology Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB200,000,000.00	-	100.00	Business combination under common control
Yichun Jingming New Energy Co.,Ltd.	Jiangxi Province	Jiangxi Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Maanshan Aoxiong New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Jinzhou Ruineng New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Distributed project company	RMB20,000,000.00	-	100.00	Purchase
Anhui Aokang New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Datong Jingxing New Energy Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Zhumadian Xingao New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Xunxian Lijing New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Changde Jingde New Energy Technology Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shaoyang Jingju New Energy Technology Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shaoyang Jingshao New Energy Technology Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shanxi Jingyu New Energy Technology Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Chenzhou Yongjing New Energy Technology Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Guangxi Jingyang New Energy Technology Co.,Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB20,000,000.00	-	100.00	Set up
Zhumadian Fengda New Energy Co., Ltd.	Henan Province	Henan Province	Distributed project company	RMB2,200,000.00	-	100.00	Purchase
Anhui Aosbang New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Anhui Aosheng New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Wenxian Fuao New Energy Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Pingdingshan Jingming New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Guangxi Jingrui New Energy Technology Co.,Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB10,000,000.00	-	100.00	Set up
Xuchang Jinghao New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Xinyang Aoxing New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Fuyang Jingfeng Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Talkang Jingsheng New Energy Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Suixian Jingfeng New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shenqiu Aofeng New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Zhengzhou Qianao New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Qijing Jinghao New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Haerbin Jingguan New Energy Technology Co., Ltd.	Heilongjiang Province	Heilongjiang Province	Centralized project company	RMB3,000,000.00	-	100.00	Set up
Xiangxi Jinghong New Energy Technology Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Chizhou Jingxing Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Huainan Jinghong New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Zhoukou Jinghui New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Wushe Ruijing New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Xinyang Acan New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Xinyang Jingan New Energy Technology Co.,Ltd.	Henan Province	Henan Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Anhui Aoteng New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Shijiazhuang JA Electronic Technology Co., Ltd.	Hebei Province	Hebei Province	Production base	RMB150,000,000.00	-	100.00	Set up
Dongtai JA New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Production base	RMB500,000,000.00	-	100.00	Set up
Baotou JA New Material Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production base	RMB30,000,000.00	-	78.54	Set up
Nanyang Jingling New Energy Technology Co., Ltd.	Henan Province	Henan Province	Distributed project company	RMB30,000,000.00	-	100.00	Set up
Haerbin Aohai New Energy Co., Ltd.	Heilongjiang Province	Heilongjiang Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Jinzhou Jingshun New Energy Co., Ltd.	Liaoning province	Liaoning province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Shenyang Jingshun New Energy Co., Ltd.	Liaoning province	Liaoning province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Ezhou Kasilaita New Energy Co., Ltd.	Hubei Province	Hubei Province	Distributed project company	RMB17,600,000.00	-	100.00	Purchase
Suzhou Yaoka New Energy Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project company	RMB7,000,000.00	-	100.00	Set up
Wuhan Aohai New Energy Co., Ltd.	Hubei Province	Hubei Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Sihong Huayi New Energy Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Boao Energy (Jiangsu) Co., Ltd.	Jiangsu Province	Jiangsu Province	Distributed project company	RMB10,000,000.00	-	80.00	Set up
Heze Aosheng New Energy Technology Co.,Ltd.	Shandong Province	Shandong Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Zhangjiakou Jingxing New Energy Technology Co.,Ltd.	Hebei Province	Hebei Province	Residential project company	RMB20,000,000.00	-	100.00	Set up
Suiping Siao New Energy Co., Ltd.	Henan Province	Henan Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Qinzhou Jinyang New Energy Technology Co., Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Guangdong Jinghuo New Energy Technology Co.,Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Jiujiang Jingming New Energy Co.,Ltd.	Jiangxi Province	Jiangxi Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Qijing Jingfeng New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Xinyi JA PV Technology Co., Ltd.	Jiangsu Province	Jiangsu Province	Trading company	RMB10,000,000.00	-	100.00	Set up
Shenze Jingsheng New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Centralized project company	RMB3,000,000.00	-	100.00	Set up
Jingzhou Jingsheng New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Centralized project company	RMB2,000,000.00	-	100.00	Set up
Xinbaerhu Jinyao New Energy Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Centralized project company	RMB1,000,000.00	-	100.00	Set up
Yiyang Jingzhen New Energy Co.,Ltd.	Hunan Province	Hunan Province	Residential project company	RMB10,000,000.00	-	100.00	Set up
Hubei Aobo New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up

Name of the subsidiaries (continued)	Principal place of business	Registration place	Business nature	Registered capital	Shareholding percentage (%)		Acquisition method
					Direct	Indirect	
Hubei Jingxu New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Daye Jingyu New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Jingxing New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Shiyan Aoshun New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Shiyan Baojing New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Shiyan Aosheng New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Anhui Aoning New Energy Technology Co.,Ltd.	Anhui Province	Anhui Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Hubei Jingyang New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Jingfeng New Energy Technology Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Fuzhou Jingding New Energy Technology Co.,Ltd.	Fujian Province	Fujian Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
JA Energy Storage Technology(Shanghai) Co., Ltd.	Shanghai	Shanghai	Energy storage project company	RMB20,000,000.00	-	100.00	Set up
Honghe Jingfeng New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Anlu Aoliang New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Zaoyang Jingying New Energy Development Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yunnan Fengjing New Energy Technology Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yunnan Fengjia New Energy Technology Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Kunming Jingsheng New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Guangxi Jingan New Energy Technology Co.,Ltd.	Guangxi Zhuang Autonomous Region	Guangxi Zhuang Autonomous Region	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yangchun Xingjia New Energy Technology Co., Ltd.	Guangdong Province	Guangdong Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Luyi Aofeng PV Technology Co., Ltd.	Henan Province	Henan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Qijing Jingsheng New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Xingtang Jingsheng New Energy Technology Co., Ltd.	Hebei Province	Hebei Province	Centralized project company	RMB3,000,000.00	-	100.00	Set up
Shanxi Anjing New Energy Technology Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Hubei Jinghao New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Yuncheng Anjing New Energy Technology Co.,Ltd.	Shanxi Province	Shanxi Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Meishan Aoshun New Energy Co., Ltd.	Sichuan Province	Sichuan Province	Distributed project company	RMB1,000,000.00	-	100.00	Set up
Shanghai Jiahe Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up
Shijiazhuang Jingming PV Technology Co., Ltd.	Hebei Province	Hebei Province	Distributed project company	RMB5,000,000.00	-	100.00	Set up
Hubei Jingmian New Energy Co.,Ltd.	Hubei Province	Hubei Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Ningde Jinghui New Energy Technology Co.,Ltd.	Fujian Province	Fujian Province	Residential project company	RMB5,000,000.00	-	100.00	Set up
Qijing Fengjing New Energy Co.,Ltd.	Yunnan Province	Yunnan Province	Residential project company	RMB3,000,000.00	-	100.00	Set up
Shanghai Xingzheng Energy Co.,Ltd.	Shanghai	Shanghai	Residential project company	RMB20,000,000.00	-	100.00	Set up

(2) Material non-wholly owned subsidiaries

<i>Name of the Subsidiary</i>	<i>Proportion of ownership interest held by non-controlling interests</i>	<i>Profit or loss allocated to non-controlling interests during the year</i>	<i>Dividend declared to non-controlling shareholders during the year</i>	<i>Balance of non-controlling interests at the end of the year</i>
Yiwu JA Solar Technology Co., Ltd.	9.88%	(9,292,486.46)	-	648,879,012.58

Note: Refer to Note VIII.2(1)

(3) Key financial information about material non-wholly owned subsidiaries

<i>Name of the Subsidiary</i>	<i>2023</i>					
	<i>Current assets</i>	<i>Non-current assets</i>	<i>Total assets</i>	<i>Current liabilities</i>	<i>Non-current liabilities</i>	<i>Total liabilities</i>
Yiwu JA Solar Technology Co., Ltd.	8,795,018,216.11	3,648,608,095.41	12,443,626,311.52	5,499,186,619.68	475,990,837.07	5,975,177,456.75

<i>Name of the Subsidiary</i>	<i>2022</i>					
	<i>Current assets</i>	<i>Non-current assets</i>	<i>Total assets</i>	<i>Current liabilities</i>	<i>Non-current liabilities</i>	<i>Total liabilities</i>
Yiwu JA Solar Technology Co., Ltd. (Restated)	9,515,903,742.57	4,059,789,311.86	13,575,693,054.43	8,254,659,070.36	609,616,206.39	8,864,275,276.75

<i>Name of the Subsidiary</i>	<i>2023</i>				<i>2022 (Restated)</i>			
	<i>Operating income</i>	<i>Net profit for the year</i>	<i>Total comprehensive income for the year</i>	<i>Cash flows from operating activities</i>	<i>Operating income</i>	<i>Net profit for the year</i>	<i>Total comprehensive income for the year</i>	<i>Cash flows from operating activities</i>
Yiwu JA Solar Technology Co., Ltd.	21,154,819,542.78	751,402,046.83	751,402,046.83	(692,274,491.39)	24,380,321,632.80	985,253,239.81	985,253,239.81	1,417,730,517.59

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

(1) Changes in the Group's interests in subsidiaries:

In June 2023, a subsidiary of the Group, Yiwu JA Solar Technology Co., Ltd. (hereinafter referred to as "Yiwu Base"), accepted an investment of RMB1 billion from ICBC Financial Asset Investment Co., Ltd. (hereinafter referred to as "ICBC Investment") to optimise its capital structure and reduce its asset-liability ratio, thereby promoting its healthy development of its business and enhancing its overall competitiveness. The funds will mainly be used to repay the debts to financial institutions and for the production and operation. After the capital injection from ICBC Investment, the Group holds 90.12% equity in Yiwu Base, and ICBC Investment holds 9.88%. Therefore Yiwu Base is still within the consolidation scope of the Group.

In October 2023, Sino-German Manufacturing (Anhui) Investment Fund (L.P.) transferred 2.31% equity in Yangzhou Battery to JA Solar, for a consideration of RMB218,450,000.00. After the transfer, the Group holds 71.16% equity in Yangzhou Battery, China Orient Asset Management Co., Ltd. holds 23.07%, ABC Financial Asset Investment co., Ltd. holds 5.77%. Yangzhou Battery is still within the consolidation scope of the Group.

In November 2023, JA Solar acquired all the shares of Xingtai Jinglong PV Materials Co., Ltd. held by Shanghai HIUV New Materials Co., Ltd. (a non-controlling shareholder) with a consideration of RMB10,552,334.60. After the acquisition, the Group holds 100% equity in Xingtai Jinglong PV Materials Co., Ltd.

(2) Impact from transactions with non-controlling interests and equity attributable to the shareholders of the Company:

	Yiwu JA Solar Technology Co., Ltd.	JA Solar Technology Yangzhou Co., Ltd.	Xingtai Jinglong PV Materials Co., Ltd.
Acquisition cost - Cash	1,000,000,000.00	218,450,000.00	10,552,334.60
Less: share of net assets in subsidiaries based on the shares disposed	658,171,499.74	183,390,282.60	16,496,143.18
Difference	341,828,500.26	35,059,717.40	(5,943,808.58)
Including: Adjustment on capital reserve	341,828,500.26	35,059,717.40	(5,943,808.58)

3 Interests in joint ventures or associates

Item	31 December 2023	31 December 2022
Associates		
- Material associates	632,114,368.10	527,998,575.22
- Immaterial associates	267,041,230.10	245,755,452.97
Sub-total	899,155,598.20	773,754,028.19
Less: Provision for impairment	-	-
Total	899,155,598.20	773,754,028.19

(1) Material associates

Name of associate	Principal place of business	Registered place	Nature of business	Shareholding percentage (%)		Accounting treatment of investments in associates	Registered capital
				Direct	Indirect		
Inner Mongolia Xinte Silicon Material Co., Ltd.	Inner Mongolia Autonomous Region	Inner Mongolia Autonomous Region	Production	9.00	-	Equity method	RMB3,500,000,000.00

(2) Key financial information of material associates:

Item	2023	2022
	Inner Mongolia Xinte Silicon Material Co., Ltd.	Inner Mongolia Xinte Silicon Material Co., Ltd.
Current assets	5,227,754,291.29	3,659,131,121.24
Non-current assets	8,578,206,719.71	8,699,660,948.05
Total assets	13,805,961,011.00	12,358,792,069.29
Current liabilities	3,836,028,252.54	3,260,072,925.25
Non-current liabilities	2,946,439,779.65	3,208,845,565.63
Total liabilities	6,782,468,032.19	6,468,918,490.88
Non-controlling interests	-	-
Equity attributable to shareholders of the Company	7,023,492,978.81	5,889,873,578.41
Group's share of net assets	632,114,368.10	530,088,622.06
Adjustments	-	-
- Goodwill	-	-
- Unrealized profits of intra-group transactions	-	-
- Others	-	-
Carrying amount of equity investments in associates	632,114,368.10	527,998,575.22
Fair value of equity investments in associates which have quoted market prices	-	-
Operating income	9,078,630,667.85	5,035,245,094.00
Net profit for the year	2,462,815,556.75	2,364,113,038.35
Net profit from discontinued operations	-	-
Other comprehensive income for the year	-	-
Total comprehensive income for the year	2,462,815,556.75	2,364,113,038.35
Dividends received from associates during the year	118,304,406.02	-

(3) Summarized financial information of immaterial associates:

	2023	2022
Associates: :		
Aggregate carrying amount of investments	267,041,230.10	245,755,452.97
Aggregate amount of share of		
- Net profit	28,201,978.01	27,387,853.85
- Other comprehensive income	6,535,373.91	-
- Total comprehensive income	34,737,351.92	27,387,853.85

(4) Excess loss from associates

Name of enterprise	Accumulated unrecognized loss in prior periods	Unrecognized loss at the end of the year	Accumulated unrecognized loss at the end of the year
Jingguan PV Electric (Yugan Xian) Co., Ltd.	(60,320,780.55)	(30,114,495.47)	(90,435,276.02)

The net loss of Jingguan PV Electric (Yugan Xian) Co., Ltd. for the year 2023 is RMB33,460,550.52, and has recognized an accumulated unrecovered loss of RMB110,483,640.02. In the year 2020, the Group recognized the investment loss of RMB9,000,000.00 according to the 90% shareholding ratio, and the remaining RMB7,333,775.87 of excess losses were recorded off the books for future reference. In 2021, the Group recognized the investment loss of RMB17,291,195.61 according to the 90% shareholding ratio. In the year 2022, the Group recognized the investment loss of RMB35,695,809.07 according to the 90% shareholding ratio and the accumulated RMB60,320,780.55 of excess losses were recorded off the books for future reference. In the year 2023, the Group recognized the investment loss of RMB30,114,495.47 according to the 90% shareholding ratio and the accumulated RMB90,435,276.02 of excess losses were recorded off the books for future reference.

IX. Government grants

1 Details of government grants

2023

Item	Amount	Presentation item	Amount recognized in profit or loss for the current period
Industrial development support funds	438,157,882.60	Other income	438,157,882.60
Fixed assets subsidy and infrastructure support funds	74,283,138.12	Other income	74,283,138.12
Research and development subsidy	48,327,944.00	Other income	48,327,944.00
Special funds	39,693,989.85	Other income	39,693,989.85
Electricity subsidy	24,487,907.95	Other income	24,487,907.95
Tax rebate support funds	19,144,087.31	Other income	19,144,087.31
Housing support funds	17,178,300.00	Other income	17,178,300.00
Project grants	24,150,474.22	Other income	24,150,474.22
Foreign trade subsidy	10,699,998.84	Other income	10,699,998.84
Job stabilization subsidy	8,551,670.00	Other income	8,551,670.00
Technical transformation subsidy funds	6,703,411.13	Other income	6,703,411.13
Land support funds	1,318,074.00	Other income	1,318,074.00
Loan discount subsidy	19,894,040.02	Financial expenses	19,894,040.02
Others (individual amount less than 1 million)	11,337,490.06	Other income	11,337,490.06

2022

<i>Item</i>	<i>Amount</i>	<i>Presentation item</i>	<i>Amount recognized in profit or loss for the current period</i>
Industrial development support funds	75,754,120.60	Other income	75,754,120.60
Fixed assets subsidy and infrastructure support funds	43,792,048.20	Other income	43,792,048.20
Research and development subsidy	8,600,000.00	Other income	8,600,000.00
Special funds	25,377,959.12	Other income	25,377,959.12
Electricity subsidy	82,610,000.00	Other income	82,610,000.00
Tax rebate support funds	10,002,349.75	Other income	10,002,349.75
Project grants	31,559,069.61	Other income	31,559,069.61
Foreign trade subsidy	5,807,857.00	Other income	5,807,857.00
Job stabilization subsidy	12,282,609.45	Other income	12,282,609.45
Technical transformation subsidy funds	14,539,917.70	Other income	14,539,917.70
Loan discount subsidy	43,640,300.00	Financial expenses	43,640,300.00
Others (individual amount less than 1 million)	29,460,229.70	Other income	29,460,229.70

2 Liabilities relating to government grants

<i>Item</i>	<i>Balance at the beginning of the year</i>	<i>Additions during the year</i>	<i>Amounts recognised in non-operating income during the year</i>	<i>Amounts recognised in other income during the year</i>	<i>Other changes during the year</i>	<i>Balance at the end of the year</i>	<i>Related to assets/income</i>
Deferred income	611,231,908.32	431,810,895.00	-	96,836,967.90	(49,613,101.22)	896,592,734.20	related to assets
Deferred income	-	337,070,000.00	-	332,756,129.71	-	4,313,870.29	related to income

X. Risk related to financial instruments

The Group has exposure to the following main risks from its use of financial instruments in the normal course of the Group's operations:

- Credit risk
- Liquidity risk
- Interest rate risk
- Foreign currency risk
- Other price risks

The following mainly presents information about the Group's exposure to each of the above risks and their sources, their changes during the year, and the Group's objectives, policies and processes for measuring and managing risks, and their changes during the year.

The Group aims to seek appropriate balance between the risks and benefits from its use of financial instruments and to mitigate the adverse effects that the risks of financial instruments have on the Group's financial performance. Based on such objectives, the Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities.

1 Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Group is mainly exposed to credit risk arising from customers' failure to discharge an obligation in sales on credit. The Group mainly faces customer credit risks caused by sales on account. Prior to the conclusion of the new contract, the Group will evaluate the credit risk of the new customer including the external credit rating and bank credential letter under some circumstances (if it is available). The Group sets a credit limit for each customer. The limit is the maximum amount unnecessary for additional approval.

The Group quarterly monitors the existing customer credit rating and monthly reviews aging analysis of accounts receivable to ensure that the Group's overall credit risk is within the controllable range. When monitoring the credit risk of the customer, the Group will divide the customer into groups by their credit characteristics. Customers rated as "high risk" level will be placed in a restricted customer list. The Group may sell goods to such customers on credit in future periods in case of additional approval, otherwise the Group must require advance payments of the corresponding amount.

The maximum exposure to credit risk is represented by the carrying amount of each financial asset, including derivative financial instruments, in the balance sheet. The Group does not provide any other guarantees which would expose the Group to credit risk.

2 Liquidity risk

Liquidity risk is the risk that an enterprise will encounter difficulty in meeting obligations that are settled by delivering cash or another financial asset. The Group's policy is to maintain sufficient cash to meet maturing obligations. Liquidity risk is centralized controlled by the Company's finance department. The finance department monitors cash balances, readily realizable marketable securities, and rolling forecasts of cash flows over the next 12 months to ensure that the Company has sufficient funds to repay debts under all reasonable forecasts.

The following tables set out the remaining contractual maturities at the balance sheet date of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the balance sheet date) and the earliest date the Group can be required to pay:

Item	2023 Contractual undiscounted cash flow					Carrying amount at balance sheet date
	Within 1 year or demand (inclusive)	More than 1 year but less than 2 years (inclusive)	More than 2 years but less than 5 years (inclusive)	More than 5 years	Total	
Short-term loans	1,062,995,428.03	-	-	-	1,062,995,428.03	978,591,075.08
Bills payable	18,609,296,613.85	-	-	-	18,609,296,613.85	18,609,296,613.85
Accounts payable	8,816,378,706.33	-	-	-	8,816,378,706.33	8,816,378,706.33
Other payables	14,369,723,054.48	-	-	-	14,369,723,054.48	14,369,723,054.48
Long-term loans (including the portion due within one year)	262,010,256.25	212,244,481.30	675,916,499.35	881,823,654.80	2,031,994,891.70	1,705,647,906.85
Lease liabilities (including the portion due within one year)	292,704,714.13	471,747,100.32	337,370,153.33	761,182,360.86	1,863,004,328.64	1,375,781,457.39
Long-term payables (including the portion due within one year)	417,614,564.83	215,104,698.02	1,620,646,959.18	3,357,887,011.74	5,611,253,233.77	4,359,874,503.93
Other non-current liabilities (including the portion due within one year)	-	27,235,914.00	56,640,000.00	-	83,875,914.00	83,875,914.00
Total	43,830,723,337.90	926,332,193.64	2,690,573,611.86	5,000,893,027.40	52,448,522,170.80	50,299,169,231.91

Item	2022 Contractual undiscounted cash flow (Restated)					Carrying amount at balance sheet date
	Within 1 year or demand (inclusive)	More than 1 year but less than 2 years (inclusive)	More than 2 years but less than 5 years (inclusive)	More than 5 years	Total	
Short-term loans	1,801,452,489.98	-	-	-	1,801,452,489.98	1,787,142,065.32
Derivative financial liabilities	113,064,066.74	-	-	-	113,064,066.74	113,064,066.74
Bills payable	13,418,146,649.03	-	-	-	13,418,146,649.03	13,418,146,649.03
Accounts payable	5,155,050,686.52	-	-	-	5,155,050,686.52	5,155,050,686.52
Other payables	5,659,249,722.01	-	-	-	5,659,249,722.01	5,659,249,722.01
Long-term loans (including the portion due within one year)	495,211,612.80	451,113,052.53	688,150,142.28	1,102,807,776.80	2,737,282,584.41	2,257,403,597.56
Lease liabilities (including the portion due within one year)	414,293,324.48	146,587,193.14	275,824,273.25	685,783,146.22	1,522,487,937.09	1,031,646,335.92
Long-term payables (including the portion due within one year)	687,621,409.56	476,889,914.50	220,616,898.16	1,937,346,028.21	3,322,474,250.43	2,612,101,405.39
Other non-current liabilities (including the portion due within one year)	651,163,858.67	-	183,875,914.00	-	835,039,772.67	835,039,772.67
Total	28,395,253,819.79	1,074,590,160.17	1,368,467,227.69	3,725,936,951.23	34,564,248,158.88	32,868,844,301.16

3 Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to currency risk is primarily arising from variable-rate bank balances and variable-rate borrowings. The Group has not yet formulated a policy to manage its interest rate risk, but the management will closely monitor interest rate risk and use interest rate swaps when necessary to achieve the expected interest rate structure. Although this measure cannot completely prevent the Company from paying the risk that the interest rate paid exceeds the current market interest rate, nor can it completely eliminate the cash flow risk associated with fluctuations in interest income and expenditure, the management believes that this measure achieves a reasonable balance between these risks.

(1) As at 31 December, the Group held the following interest-bearing financial instruments:

Fixed rate financial instruments :

Item	2023		2022	
	Effective interest rate	Amounts	Effective interest rate	Amounts
Financial assets				
Non-current assets due within one year	2.70%-3.99%	2,498,637,840.30	2.50% - 3.60%	268,477,657.97
Long-term receivables(including the portion due within one year)	4.57%-6.00%	546,453,754.76	-	-
Other non-current assets	2.65%-3.55%	2,770,570,732.73	2.70% - 3.99%	4,597,104,451.98
Financial liabilities				
Short-term loans	0-3.89%	536,006,444.00	0 - 5.22%	1,787,142,065.32
Long-term loans(including the portion due within one year)	1.00%-2.95%	70,163,855.56	0 - 5.39%	1,911,326,647.83
Lease liabilities(including the portion due within one year)	3.56%-6.70%	1,375,781,457.39	4.20% - 6.70%	1,031,646,335.92
Long-term payables(including the portion due within one year)	1.52%-4.65%	4,359,874,503.93	1.52% - 4.65%	2,612,101,405.39
Debentures payable(including the portion due within one year)	0.20%-2.00%	8,367,890,158.50	-	-
Total		(8,894,054,091.59)		(2,476,634,344.51)

Variable rate financial instruments:

Item	2023		2022 (Restated)	
	Effective interest rate	Amounts	Effective interest rate	Amounts
Financial assets				
Cash at bank and on hand	0-7.50%	15,988,433,550.07	0 - 5.10%	12,183,639,319.53
Financial liabilities				
Short-term loans	LPR-0.25%	105,938,435.17	-	-
Short-term loans	LPR-0.43%	2,001,650.00	-	-
Short-term loans	LPR-0.45%	80,095,206.26	-	-
Short-term loans	LPR-0.55%	112,098,527.86	-	-
Short-term loans	PBOC benchmark lending rate+10%	1,544,400.00	-	-
Short-term loans	LPR-0.20%	140,906,411.79	-	-
Long-term loans(including the portion due within one year)	LPR	10,009,777.78	3M LIBOR + 2.75%	346,076,949.73
Long-term loans(including the portion due within one year)	LPR-0.43%	298,255,627.78	-	-
Long-term loans(including the portion due within one year)	LPR-0.45%	901,617,423.41	-	-
Long-term loans(including the portion due within one year)	LPR-0.95%	99,596,026.70	-	-
Long-term loans(including the portion due within one year)	PBOC benchmark lending rate+10%	167,638,131.70	-	-
Long-term loans(including the portion due within one year)	LPR-1.40%	50,000,000.00	-	-
Long-term loans(including the portion due within one year)	LPR+5.00%	43,040,000.00	-	-
Long-term loans(including the portion due within one year)	LPR-0.20%	59,679,673.22	-	-
Long-term loans(including the portion due within one year)	6MLIBOR+4%	5,647,390.70	-	-
Total		13,910,364,867.70		11,837,562,369.80

(2) Sensitivity analysis

As at 31 December 2023, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would increase/decrease the Group's equity by RMB123,802,247.33 (2022: RMB104,170,548.86 (Restated)), and net profit by RMB123,802,247.33 (2022: RMB104,170,548.86 (Restated)).

4 Foreign currency risk

In respect of cash at bank and on hand, accounts receivable and payable, short-term loans denominated in foreign currencies other than the functional currency, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

(1) As at 31 December, the Group's exposure to currency risk arising from recognized assets or liabilities denominated in foreign currencies is presented in the following tables. For presentation purposes, the amounts of the exposure are shown in Renminbi, translated using the spot rate at the balance sheet date. Differences resulting from the translation of the financial statements denominated in foreign currency are excluded.

Item	2023		2022	
	Balance in foreign currency	Balance in RMB equivalent	Balance in foreign currency	Balance in RMB equivalent
Cash at bank and on hand				
- USD	408,181,587.14	2,891,027,727.22	234,696,374.78	1,634,566,371.82
- EUR	23,344,459.80	183,468,778.44	42,955,059.40	318,851,110.45
- Other foreign currencies		218,688,151.88		176,902,883.95
Derivative financial assets				
- USD	589,264.13	4,173,581.05	-	-
Accounts receivable				
- USD	649,998,749.76	4,603,746,144.90	436,629,119.77	3,040,947,167.56
- EUR	176,640,804.34	1,388,255,409.44	445,921,450.76	3,310,030,336.87
- Other foreign currencies		289,621,346.39		171,344,870.96
Other receivables				
- USD	92,129,104.83	652,522,810.79	62,047,650.95	432,137,070.03
- EUR	2,296,123.53	18,045,694.05	1,272,961.15	9,449,063.35
- Other foreign currencies		8,500,448.37		19,982,509.53
Short-term loans				
- EUR	1,800,582.75	14,151,139.95	40,238,634.63	298,687,361.03
Derivative financial liabilities				
- USD	-	-	9,130,633.92	63,591,213.00
Accounts payable				
- USD	76,566,780.61	542,299,537.00	98,151,169.05	683,583,631.98
- EUR	2,356,668.40	18,521,528.25	7,655,261.50	56,824,240.61
- Other foreign currencies		23,921,301.92		26,693,581.29
Other payables				
- USD	153,987,232.21	1,090,645,369.57	120,921,748.67	842,171,610.77
- EUR	6,686,211.00	52,548,269.52	8,822,182.58	65,486,179.05
- Other foreign currencies		138,992,391.64		82,588,919.99
Long-term loans (including the portion due within one year)				
- USD	-	-	48,759,270.04	339,588,812.09
- Other foreign currencies		35,775,190.70		39,211,573.46
Gross balance sheet exposure				
- USD	920,344,693.04	6,518,525,357.39	456,410,323.83	3,178,715,341.57
- EUR	191,437,925.52	1,504,548,944.21	433,433,392.60	3,217,332,729.98
- Other foreign currencies		318,121,062.38		219,736,189.70

- (2) The following are the exchange rates for Renminbi against foreign currencies applied by the Group:

	Average rate		Balance sheet date mid-spot rate	
	2023	2022	2023	2022
USD	7.0467	6.7261	7.0827	6.9646
EUR	7.6425	7.0721	7.8592	7.4229

- (3) Sensitivity analysis

Assuming all other risk variables remained constant, a 5% strengthening of the Renminbi against other foreign currencies at 31 December would have decreased / increased the shareholders' equity and net profit by the amount shown below, whose effect is in Renminbi and translated using the spot rate at the year-end date:

	Shareholders' equity	Net profit
As at 31 December 2023		
Increase by 5%	(372,959,265.23)	(372,959,265.23)
Decrease by 5%	372,959,265.23	372,959,265.23
As at 31 December 2022		
Increase by 5%	(290,146,415.34)	(290,146,415.34)
Decrease by 5%	290,146,415.34	290,146,415.34

A 5% weakening of the Renminbi against other foreign currencies at 31 December would have had the equal but opposite effect to the amounts shown above, on the basis that all other variables remained constant.

5 Other price risks

Other price risk refers to the risk that the fair value or future cash flow of financial instruments will fluctuate due to changes in market prices other than exchange rate risk and interest rate risk. The Group did not hold equity investments in other listed companies in the year 2023.

XI. Fair value disclosure

The following table presents the fair value information and the fair value hierarchy, at the end of the current reporting period, of the Group's assets and liabilities which are measured at fair value at each balance sheet date on a recurring or non-recurring basis. The level in which fair value measurement is categorized is determined by the level of the fair value hierarchy of the lowest level input that is significant to the entire fair value measurement. The levels are defined as follows:

Level 1 inputs: unadjusted quoted prices in active markets that are observable at the measurement date for identical assets or liabilities;

Level 2 inputs: inputs other than Level 1 inputs that are either directly or indirectly observable for underlying assets or liabilities;

Level 3 inputs: inputs that are unobservable for underlying assets or liabilities.

1 Fair value of assets and liabilities measured at fair value at the end of the year

Item	Note	31 December 2023			Total
		Level 1 Fair value measurement	Level 2 Fair value measurement	Level 3 Fair value measurement	
Recurring fair value measurements					
Receivables under financing	V.5	-	-	831,601,690.24	831,601,690.24
Investments in other equity instruments	V.14	-	-	99,664,681.07	99,664,681.07
Derivative financial assets	V.2	-	11,847,761.02	-	11,847,761.02
Total assets measured at fair value on a recurring basis		-	11,847,761.02	931,266,371.31	943,114,132.33

Item	Note	31 December 2022			Total
		Level 1 Fair value measurement	Level 2 Fair value measurement	Level 3 Fair value measurement	
Recurring fair value measurements					
Receivables under financing	V.5	-	-	738,795,367.11	738,795,367.11
Investments in other equity instruments	V.14	-	-	32,500,800.00	32,500,800.00
Total assets measured at fair value on a recurring basis		-	-	771,296,167.11	771,296,167.11
Derivative financial liabilities	V.24	-	113,064,066.74	-	113,064,066.74
Total liabilities measured at fair value on a recurring basis		-	113,064,066.74	-	113,064,066.74

2 Valuation techniques used and the qualitative and quantitative information of key parameters for recurring and non-recurring fair value measurements categorized within Level 2

The Company uses the input value verified by the market as the basis for determining the fair value of the second-level financial assets.

3 Valuation techniques used and the qualitative and quantitative information of key parameters for recurring and non-recurring fair value measurements categorized within Level 3

The Company uses the unobservable input value as the basis for determining the fair value of the third-level financial assets.

The Company's receivables under financing for items measured at fair value in Level 3 is bank acceptance bills. These bills will mature in a relatively short period of time, and there is no significant difference between their carrying amount and fair value. The fair value is based on the carrying value of the bank acceptance bills.

The Company's investments in other equity instruments measured at fair value in Level 3 are the equity interests in Yonz Technology Co., Ltd., Nordkette (SuZhou) Intelligent Equipment Co.,Ltd. and Duowei Union Group Co., Ltd. The fair value of investments in other equity instruments is based on the fair value of the initial investment consideration in the investee and adjustments to the cost of investment from the investee's operations.

XII. Related parties and related party transactions

1 Information about the parent of the Company

<i>Company name</i>	<i>Registered place</i>	<i>Business nature</i>	<i>Registered capital (RMB'0000)</i>	<i>Shareholding percentage (%)</i>	<i>Percentage of voting rights (%)</i>
Dongtai Jingtaifu Technology Co., Ltd.	Dongtai, Jiangsu	Investment	3,000.00	47.35	47.35

The parent company of the Company is Dongtai Jingtaifu Technology Co., Ltd., and the ultimate controller of the Company is Jin Baofang.

2 Information about the subsidiaries of the Company

For information about the subsidiaries of the Group, refer to Note VIII. Interests in other entities.

3 Information about joint ventures and associates of the Company

For information about the joint ventures and associates of the Group, refer to Note VIII. Interests in other entities. Joint ventures and associates that have related party transactions with the Group during this year or the previous year are as follows:

<i>Name of entity</i>	<i>Relationship with the Company</i>
JA Solar PV Electric (Lincheng) Co., Ltd.	Associates of the Group
Fukushima Nakamori Power Plant Contract Company	Associates of the Group
Jingguan PV Electric (Yugan Xian) Co., Ltd.	Associates of the Group
Suzhou JSolar Incorporated	Associates of the Group
Inner Mongolia Xinte Silicon Material Co., Ltd.	Associates of the Company
Yuhong JA New Energy Technology Co., Ltd.	Associates of the Group
Datang Angli (Lingwu) New Energy Co., Ltd.	Associates of the Group

4 Information on other related parties

<i>Name of other related parties</i>	<i>Related party relationship</i>
Jinglong Industrial Group Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Anhui) Property Co., Ltd.	Company controlled by the same ultimate controller
Ningjin County Jinglong Hotel Co., Ltd.	Company controlled by the same ultimate controller
Yiwu Hongyang Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Hefei Dinghong Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Yangzhou Hongkang Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Xingtai Jingning Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Jinglong Catering Co., Ltd.	Company controlled by the same ultimate controller
Jinglong Property Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Hebei) Property Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Jiangsu) Property Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Zhejiang) Property Co., Ltd.	Company controlled by the same ultimate controller
Yunnan Jinglong Property Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Lianyungang) Property Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Inner Mongolia) Property Co., Ltd.	Company controlled by the same ultimate controller
Sanhe Lewanjia Trading Co., Ltd.	Company controlled by the same ultimate controller
Ningjin Jinglong Small Loan Co., Ltd.	Company controlled by the same ultimate controller
Sunshine Silicon Peak Electronic Technology Co., Ltd.	Company controlled by the same ultimate controller
JASO HOLDINGS LIMITED	Company controlled by the same ultimate controller

<i>Name of other related parties (continued)</i>	<i>Related party relationship</i>
Hebei Jinglong Logistics Co., Ltd.	Company controlled by the same ultimate controller
Qujing Dinghong Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Sanhe Huadian Yili Technology And Trade Co., Ltd.	Company controlled by the same ultimate controller
Jinglong Technology Holdings Limited	Company controlled by the same ultimate controller
Ningjin County Xinghe Real Estate Development Co., Ltd.	Company controlled by the same ultimate controller
Yiwu Jinghong Supermarket Co., Ltd.	Company controlled by the same ultimate controller
Baotou Hongyang Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Ningjin County Jingdian Jingwei Pastry Co., Ltd.	Company controlled by the same ultimate controller
Ningjin County Chengzhi Trading Co., Ltd.	Company controlled by the same ultimate controller
Sanhe Jingning Catering Co., Ltd.	Company controlled by the same ultimate controller
Ningjin County Dinggao Trading Co., Ltd.	Company controlled by the same ultimate controller
Hebei Jinglong Human Resource Service Co., Ltd.	Company controlled by the same ultimate controller
Hebei Jinglong Hotel Co., Ltd.	Company controlled by the same ultimate controller
Tianjin Jinfeng Logistics Co., Ltd.	Company controlled by the same ultimate controller
Yangzhou Jinglefu Supermarket Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Xingtai) Property Co., Ltd. (Formerly known as "Jinglong Property (Xingtai) Co., Ltd.")	Company controlled by the same ultimate controller
Hebei Jingning Elderly Care Service Co., Ltd.	Company controlled by the same ultimate controller
Xingtai Hongfan Trading Co., Ltd.	Company controlled by the same ultimate controller
Bank of Xingtai Co., Ltd.	Company invested by the ultimate controller
Xinte Energy Co., Ltd.	Company invested by the ultimate controller
Xinjiang Xinte Crystalline Silicon High-tech Co., Ltd.	Company invested by the ultimate controller

<i>Name of other related parties (continued)</i>	<i>Related party relationship</i>
Ningjin County Heilonggang Construction and Installation Co., Ltd.	Company under the significant influence of close relatives of executives
Yuhong JA New Energy Technology (Tianjin) Co., Ltd.	Subsidiary of associates
Baotou Jinglong Hotel Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Shijiazhuang) Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Yangzhou Jinglong Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Lianyungang Jingkanghong Catering Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Qijing) Catering Co., Ltd.	Company controlled by the same ultimate controller
Jinglong (Dongtai) Catering Management Co., Ltd.	Company controlled by the same ultimate controller
Baotou Jinghong Trading Co., Ltd.	Company controlled by the same ultimate controller
Yancheng Jiwa New Material Technology Co., Ltd.	Subsidiary of associates
Xinte Silicon-based New Material Co., Ltd.	Company invested by the ultimate controller
Jinglong (Dongtai) Property Co., Ltd.	Company controlled by the same ultimate controller
Ningjin County Jingyuan New Energy Investment Co., Ltd.	Company controlled by the same ultimate controller
Donghai County Longhai Real Estate Co., Ltd.	Company controlled by the same ultimate controller
Beijing Sunshine Jinglong Technology and Trade Co., Ltd.	Company controlled by the same ultimate controller

5 Transactions with related parties

(1) Purchase of goods/receiving of services (excluding remuneration of key management personnel)

<i>Name of related party</i>	<i>Nature of transaction</i>	2023	2022
Bank of Xingtai Co., Ltd.	Interest and handling fees	1,625,358.78	9,228,606.96
Qijing Dinghong Catering Management Co., Ltd.	Procurement of services	15,802,827.00	13,253,101.00
Sanhe Lewanjia Trading Co., Ltd.	Procurement of services	-	272,210.03
Ningjin County Heilonggang Construction and Installation Co., Ltd.	Procurement of services	299,026.61	1,645,929.03
Hebei Jinglong Logistics Co., Ltd.	Procurement of services	149,087,669.47	92,089,495.50
Jinglong Industrial Group Co., Ltd.	Procurement of services	227,690.15	63,736.28
Sanhe Jingning Catering Co., Ltd.	Procurement of services	76,625.00	1,692,627.37
Yiwu Hongyang Catering Management Co., Ltd.	Procurement of services	27,066,722.25	26,479,814.19
Baotou Hongyang Catering Management Co., Ltd.	Procurement of services	9,545,937.00	4,235,148.95
Hefei Dinghong Catering Management Co., Ltd.	Procurement of services	20,284,857.00	11,775,588.00
Tianjin Jinfeng Logistics Co., Ltd.	Procurement of services	90,206,008.53	54,364,370.33
Yangzhou Hongkang Catering Management Co., Ltd.	Procurement of services	19,660,582.58	21,518,896.78
Jinglong (Anhui) Property Co., Ltd.	Procurement of services	7,895.43	30,723.37
Jinglong Catering Co., Ltd.	Procurement of services	17,451,911.67	10,538,525.00
Hebei Jinglong Human Resource Service Co., Ltd.	Procurement of services	408,098.26	205,883.65
Hebei Jinglong Hotel Co., Ltd.	Procurement of services	1,328,892.27	949,832.58
Xingtai Jingning Catering Management Co., Ltd.	Procurement of services	16,423,184.86	8,909,610.15
Ningjin County Jinglong Hotel Co., Ltd.	Procurement of services	52,503.96	409,747.08
Yuhong JA New Energy Technology (Tianjin) Co., Ltd.	Procurement of services	51,440,459.56	-
Jinglong Property Co., Ltd.	Procurement of services	12,182.55	-
Baotou Jinglong Hotel Co., Ltd.	Procurement of services	70,379.61	-
Jinglong (Shijiazhuang) Catering Management Co., Ltd.	Procurement of services	3,628,664.20	-
Yangzhou Jinglong Catering Management Co., Ltd.	Procurement of services	3,247,451.17	-
Lianyungang Jingkanhong Catering Co., Ltd.	Procurement of services	635,621.87	-
Jinglong (Qijing) Catering Co., Ltd.	Procurement of services	4,175,593.35	-
Jinglong (Dongtai) Catering Management Co., Ltd.	Procurement of services	6,444,271.48	-
Xinte Energy Co., Ltd.	Procurement of materials	654,958,937.96	1,688,811,858.44
Inner Mongolia Xinte Silicon Material Co., Ltd.	Procurement of materials	3,696,235,710.83	1,022,527,433.56
Xinjiang Xinte Crystalline Silicon High-tech Co., Ltd.	Procurement of materials	1,231,017,345.93	2,099,610,168.22

<i>Name of related party (continued)</i>	<i>Nature of transaction</i>	2023	2022
Yancheng Jiwa New Material Technology Co., Ltd.	Procurement of materials	4,531,407.30	-
Xinte Silicon-based New Material Co., Ltd.	Procurement of materials	197,028,318.60	-
Sanhe Huadian Yili Technology And Trade Co., Ltd.	Rental and property management fees	-	1,079,194.34
Jinglong (Xingtai) Property Co., Ltd.	Rental and property management fees	3,389,434.00	1,363,449.79
Jinglong Technology Holdings Limited	Rental and property management fees	2,170,098.12	2,455,592.93
Jinglong (Jiangsu) Property Co., Ltd.	Rental and property management fees	9,185,369.76	6,862,753.00
Jinglong (Hebei) Property Co., Ltd.	Rental and property management fees	1,535,173.63	4,578,204.11
Jinglong (Zhejiang) Property Co., Ltd.	Rental and property management fees	7,812,073.23	7,043,740.40
Jinglong (Inner Mongolia) Property Co., Ltd.	Rental and property management fees	3,345,542.14	1,534,512.94
Jinglong (Lianyungang) Property Co., Ltd.	Rental and property management fees	2,073,834.88	1,831,157.24
Yunnan Jinglong Property Co., Ltd.	Rental and property management fees	7,174,992.07	2,556,722.48
Jinglong Property Co., Ltd.	Rental and property management fees	2,966,436.27	5,553,714.22
Jinglong (Anhui) Property Co., Ltd.	Rental and property management fees	2,799,730.90	2,487,146.44
Jinglong (Dongtai) Property Co., Ltd.	Rental and property management fees	3,925,247.87	-
Ningjin County Jingdian Jingwei Pastry Co., Ltd.	Procurement of goods	153,984.70	174,417.00
Ningjin County Jinglong Hotel Co., Ltd.	Procurement of goods	442,859.00	899,353.00
Hebei Jinglong Hotel Co., Ltd.	Procurement of goods	2,571,452.69	543,177.00
Xingtai Hongfan Trading Co., Ltd.	Procurement of goods	734.00	3,665.50
Yangzhou Jinglefu Supermarket Co., Ltd.	Procurement of goods	162,782.89	60,310.60
Ningjin County Chengzhi Trading Co., Ltd.	Procurement of goods	14,842.00	36,747.00
Ningjin County Dinggao Trading Co., Ltd.	Procurement of goods	2,730,041.71	947,410.00
Yiwu Jinghong Supermarket Co., Ltd.	Procurement of goods	465,798.80	82,805.59
Jinglong Catering Co., Ltd.	Procurement of goods	36,600.00	-
Jinglong Property Co., Ltd.	Procurement of goods	35,761.60	-
Yiwu Hongyang Catering Management Co., Ltd.	Procurement of goods	5,349.50	-
Baotou Jinghong Trading Co., Ltd.	Procurement of goods	21,374.24	-
Jinglong (Qujing) Catering Co., Ltd.	Procurement of goods	11,040.00	-
Qujing Dinghong Catering Management Co., Ltd.	Procurement of goods	410,450.00	-
Xingtai Jingning Catering Management Co., Ltd.	Procurement of goods	1,909.44	-
Total		6,276,425,048.67	5,108,707,380.05

(2) Sale of goods/rendering of services

<i>Name of related party</i>	<i>Nature of transaction</i>	2023	2022
Bank of Xingtai Co., Ltd.	Interest income	1,504,393.04	1,898,535.03
Jingguan PV Electric (Yugan Xian) Co., Ltd.	Sale of goods	1,374,848.68	(5,436,645.00)
Sanhe Lewanjia Trading Co., Ltd.	Sale of goods	6,293.85	20,341.79
Ningjin Jinglong Small Loan Co., Ltd.	Sale of goods	-	176.99
Yuhong JA New Energy Technology Co., Ltd.	Sale of goods	516,515,263.28	222,647,416.95
JA Solar PV Electric (Lincheng) Co., Ltd.	Sale of goods	-	581,365.49
Xinte Energy Co., Ltd.	Sale of goods	54,557.52	17,208.70
Hebei Jinglong Logistics Co., Ltd.	Sale of goods	344,992.49	10,006.20
Jinglong Industrial Group Co., Ltd.	Sale of goods	135,163.05	3,982.31
Jinglong Property Co., Ltd.	Sale of goods	1,017.69	3,379.11
Inner Mongolia Xinte Silicon Material Co., Ltd.	Sale of goods	-	35,935.81
Xingtai Jingning Catering Management Co., Ltd.	Sale of goods	-	663.71
Ningjin County Dinggao Trading Co., Ltd.	Sale of goods	-	442.48
Ningjin County Jinglong Hotel Co., Ltd.	Sale of goods	-	1,969.02
Hebei Jinglong Hotel Co., Ltd.	Sale of goods	4,619.46	-
Jinglong (Anhui) Property Co., Ltd.	Rendering of services	484,475.11	290,222.64
Fukushima Nakamori Power Plant Contract Company	Rendering of services	602,689.52	613,594.16
Yiwu Hongyang Catering Management Co., Ltd.	Rendering of services	159,077.82	295,734.43
Jinglong (Hebei) Property Co., Ltd.	Rendering of services	59,687.78	346,636.99
Baotou Jinglong Hotel Co., Ltd.	Rendering of services	780,483.80	-
Heifei Dinghong Catering Management Co., Ltd.	Rendering of services	93,577.98	-
Jinglong (Inner Mongolia) Property Co., Ltd.	Rendering of services	236,240.90	-
Jinglong (Dongtai) Catering Management Co., Ltd.	Rendering of services	60,311.06	-
Total		522,417,693.03	221,330,966.81

(3) Leases

As the lessee:

Name of lessor	Type of assets leased	Short-term rental expense and low-value lease expense, to which the practical expedient is applied		Rental paid		Interest expenses incurred on lease liabilities		Increased right-of-use assets	
		2023	2022	2023	2022	2023	2022	2023	2022
Jinglong Technology Holdings Limited	Plant and buildings, transportation vehicles	435,495.51	381,365.82	19,103,709.40	18,378,454.00	382,221.49	1,080,688.53	-	3,808,227.01
Jinglong Industrial Group Co., Ltd.	Land use rights, buildings, equipment, machinery equipment	1,683,225.16	5,421,484.72	52,764,777.48	53,674,713.07	1,683,144.95	3,776,243.64	21,310,761.96	(45,906,371.01)
Sanhe Huadian Yili Technology And Trade Co., Ltd.	Plant and buildings	3,725,037.48	-	3,847,384.17	13,218,821.04	294,752.80	888,538.62	-	(2,620,919.31)
Sunshine Silicon Peak Electronic Technology Co., Ltd.	Machinery and equipment	4,800,000.00	-	5,961,809.23	32,800,000.00	169,656.94	1,979,361.53	-	(9,766,777.58)
Hebei Jinglong Logistics Co., Ltd.	Transportation vehicles	1,561,254.12	31,380.00	1,999,952.34	267,075.09	13,598.55	8,443.70	354,446.79	(513,518.91)
Total		12,205,012.27	5,834,230.54	83,677,632.62	118,339,063.20	2,543,374.73	7,733,276.02	21,665,208.75	(54,999,359.80)

(4) Guarantees with related parties

(a) The Group does not act as a guarantor for the year.

(b) The Group as the guarantee holder

<i>Name of guarantor</i>	<i>Amount of guarantee</i>	<i>Inception date of guarantee</i>	<i>Maturity date of guarantee</i>	<i>Guarantee expired (Y/N)</i>
Sanhe Huadian Yili Technology And Trade Co., Ltd.	210,000,000.00	01/04/2022	15/03/2023	N

(5) Funding from related parties

<i>Name of related party</i>	<i>Amount of funding</i>	<i>Inception date</i>	<i>Maturity date</i>
Funds received			
Sunshine Silicon Peak Electronic Technology Co., Ltd.	33,000,000.00	08/11/2022	06/04/2023
Donghai County Longhai Real Estate Co., Ltd.	2,000,000.00	21/09/2022	06/04/2023
Donghai County Longhai Real Estate Co., Ltd.	15,000,000.00	05/05/2022	06/04/2023
Donghai County Longhai Real Estate Co., Ltd.	7,000,000.00	09/03/2022	07/04/2023
Total	57,000,000.00		

(6) Fund usage fees and guarantee fee paid to the related parties

<i>Name of related party</i>	<i>Nature of transaction</i>	<i>Current period</i>	<i>Prior period</i>
JASO HOLDINGS LIMITED	Guarantee fee	10,293,764.83	12,238,027.37
Sanhe Huadian Yili Technology And Trade Co., Ltd.	Guarantee fee	2,100,000.00	3,975,000.00
Dongtai Jingtaifu Technology Co., Ltd.	Guarantee fee	1,716,657.53	1,749,945.21
Jinglong Technology Holdings Limited	Guarantee fee	420,273.97	3,985,616.44
Jinglong Industrial Group Co., Ltd.	Guarantee fee	-	6,429,166.67
Total		14,530,696.33	28,377,755.69

(7) Transfer of assets and debt restructuring between related parties

<i>Name of related party</i>	<i>Nature of transaction</i>	<i>2023</i>	<i>2022</i>
Ningjin County Jingyuan New Energy Investment Co., Ltd.	Acquire 100% equities of Shijiazhuang JA PV Technology Co., Ltd. (formerly known as Shijiazhuang Jinglong Electronic Materials Co., Ltd.)	56,000,000.00	-
Jinglong Industrial Group Co., Ltd.	Disposal of equipment	90,086.44	32,446.56
Jinglong Property Co., Ltd.	Disposal of equipment	789.31	-
Hebei Jingning Elderly Care Service Co., Ltd.	Disposal of equipment	-	40,480.00
Hebei Jinglong Hotel Co., Ltd.	Disposal of equipment	-	10,000.00
Ningjin County Xinghe Real Estate Development Co., Ltd.	Disposal of equipment	176.99	-
Sanhe Huadian Yili Technology And Trade Co., Ltd.	Disposal of equipment	6,686.22	-
Jinglong Industrial Group Co., Ltd.	Procurement of equipment	26,548.67	-
Yuhong JA New Energy Technology Co., Ltd.	Procurement of equipment	-	186,902.65
Suzhou JSolar Incorporated	Procurement of equipment	-	37,207,998.25

(8) Remuneration of key management personnel

<i>Item</i>	<i>2023</i>	<i>2022</i>
Remuneration of key management personnel	56,560,196.57	34,823,846.59
Share-based payments for key management personnel	28,423,921.66	29,190,803.77

6 Receivables from and payables to related parties

(1) Receivables from related parties

Item	Related party	2023		2022	
		Book value	Provision for bad and doubtful debts	Book value	Provision for bad and doubtful debts
Cash at bank and on hand	Bank of Xingtai Co., Ltd.	76,358,206.21	-	270,585,091.48	-
Accounts receivable	Jingguan PV Electric (Yugan Xian) Co., Ltd.	66,006,736.00	23,606,556.80	76,006,736.11	12,176,527.86
	Jinglong Industrial Group Co., Ltd.	2,970.00	29.70	26,664.61	266.65
	Yuhong JA New Energy Technology Co., Ltd.	7,873,424.10	82,635.74	1,015,860.93	10,158.61
	Jinglong Property Co., Ltd.	-	-	600.00	6.00
	Ningjin County Jinglong Hotel Co., Ltd.	-	-	1,050.00	10.50
	Xingtai Jingning Catering Management Co., Ltd.	-	-	750.00	7.50
	Yiwu Hongyang Catering Management Co., Ltd.	-	-	61,310.23	613.10
	Jinglong (Anhui) Property Co., Ltd.	77,224.42	772.24	-	-
	Baotou Jinglong Hotel Co., Ltd.	852,192.83	8,521.93	-	-
	Jinglong (Inner Mongolia) Property Co., Ltd.	257,542.96	2,575.43	-	-
Prepayments	Xinjiang Xinte Crystalline Silicon High-tech Co., Ltd.	42,535,200.00	-	-	-
	Xinte Energy Co., Ltd.	112,836,000.00	-	183,720,000.00	-
	Inner Mongolia Xinte Silicon Material Co., Ltd.	74,180,337.19	-	-	-
	Jinglong Technology Holdings Limited	198,476.19	-	186,479.26	-
	Ningjin County Dinggao Trading Co., Ltd.	-	-	105,560.00	-
	Ningjin County Jinglong Hotel Co., Ltd.	-	-	49,388.78	-
	Xinte Silicon-based New Material Co., Ltd.	820,800.00	-	-	-
Other receivables	Jinglong Technology Holdings Limited	13,000.00	-	13,000.00	-
Dividends receivable	JA Solar PV Electric (Lincheng) Co., Ltd.	-	-	2,000,000.00	-
	Datang Angli (Lingwu) New Energy Co., Ltd.	3,042,037.80	-	-	-
Other non-current assets	Xinte Energy Co., Ltd.	83,920,000.00	-	-	-

(2) Payables to related parties

Item	Related party	2023	2022 (Restated)	
Accounts payable	Tianjin Jinfeng Logistics Co., Ltd.	10,181,172.00	10,923,214.46	
	Ningjin County Heilonggang Construction and Installation Co., Ltd.	205,678.28	208,749.73	
	Jinglong Catering Co., Ltd.	233,744.00	-	
	Hebei Jinglong Hotel Co., Ltd.	33,200.00	-	
	Hebei Jinglong Logistics Co., Ltd.	6,993,211.82	6,749,316.50	
	Suzhou JSolar Incorporated	16,876,905.85	16,876,905.82	
	Xingtai Jingning Catering Management Co., Ltd.	-	2,088,042.00	
	Jinglong Industrial Group Co., Ltd.	-	2,349.40	
	Ningjin County Jinglong Hotel Co., Ltd.	-	20,244.00	
	Yancheng Jiwa New Material Technology Co., Ltd.	475,805.30	-	
	Jinglong (Zhejiang) Property Co., Ltd.	31,273.50	-	
	Yiwu Hongyang Catering Management Co., Ltd.	97,994.00	-	
	Yiwu Jinghong Supermarket Co., Ltd.	3,690.00	-	
	Jinglong (Qijing) Catering Co., Ltd.	1,215,564.00	-	
	Jinglong (Hebei) Property Co., Ltd.	64,800.00	-	
	Other payables	JASO HOLDINGS LIMITED	-	1,812,821.88
		Yiwu Jinghong Supermarket Co., Ltd.	676.35	35,169.85
		Yiwu Hongyang Catering Management Co., Ltd.	1,742,734.12	1,669,024.60
		Baotou Hongyang Catering Management Co., Ltd.	3,764,007.00	437,391.00
		Hefei Dinghong Catering Management Co., Ltd.	2,384,538.00	-
Tianjin Jinfeng Logistics Co., Ltd.		12,406,314.92	5,305,412.12	
Ningjin County Heilonggang Construction and Installation Co., Ltd.		342,041.39	341,494.99	
Jinglong (Lianyungang) Property Co., Ltd.		367,415.54	520,950.00	
Ningjin County Dinggao Trading Co., Ltd.		177,080.00	-	
Jinglong Industrial Group Co., Ltd.		4,458,530.01	132,403.42	
Jinglong Catering Co., Ltd.		1,286,890.00	1,705,497.00	
Hebei Jinglong Human Resource Service Co., Ltd.		93,185.02	22,361.99	
Hebei Jinglong Hotel Co., Ltd.		85,566.00	3,929.00	
Hebei Jinglong Logistics Co., Ltd.		65,117,623.42	23,101,629.91	
Fukushima Nakamori Power Plant Contract Company		324,375.98	343,931.64	
Jinglong (Anhui) Property Co., Ltd.		631,750.34	6,132.08	
Ningjin County Jinglong Hotel Co., Ltd.		-	112,948.00	
Xingtai Jingning Catering Management Co., Ltd.		1,369,334.00	378,357.00	
Jinglong Property Co., Ltd.		134,288.35	12,490.57	
Sanhe Jingning Catering Co., Ltd.		-	93,377.03	
Sanhe Lewanjia Trading Co., Ltd.		-	68,864.97	
Sunshine Silicon Peak Electronic Technology Co., Ltd.		-	33,940,604.15	
Donghai County Longhai Real Estate Co., Ltd.		-	24,000,000.00	
Lianyungang Jingkanghong Catering Co., Ltd.		213,248.32	-	
Jinglong (Inner Mongolia) Property Co., Ltd.		1,127,509.43	-	
Baotou jinghong Trading Co., Ltd.		3,600.00	-	
Yangzhou Jinglong Catering Management Co., Ltd.		879,154.25	-	
Jinglong (Zhejiang) Property Co., Ltd.		714,306.84	-	
Jinglong (Shijiazhuang) Catering Management Co., Ltd.		1,491,960.00	-	
Jinglong (Hebei) Property Co., Ltd.		117,794.00	-	
Yuhong JA New Energy Technology (Tianjin) Co., Ltd.		3,412,890.86	-	
Suzhou JSolar Incorporated		800,000.00	-	
Contract liabilities		Hebei Jinglong Logistics Co., Ltd.	-	66,376.64
	Fukushima Nakamori Power Plant Contract Company	361,872.55	-	
Lease liabilities	Jinglong Industrial Group Co., Ltd.	13,219,821.92	8,981,737.23	
	Jinglong Technology Holdings Limited	-	23,879.71	
	Hebei Jinglong Logistics Co., Ltd.	175,348.26	-	
Non-current liabilities due within one year	Jinglong Industrial Group Co., Ltd.	14,619,026.62	45,782,725.49	
	Jinglong Technology Holdings Limited	-	17,851,631.30	
	Hebei Jinglong Logistics Co., Ltd.	150,497.04	17,931.60	

7 Commitments of the related parties

<i>Item</i>	<i>Related party</i>	2023	2022
Procurement of goods	Xinte Energy Co., Ltd.		
Procurement of goods	Inner Mongolia Xinte Silicon Material Co., Ltd.	Note 1	Note 1
Procurement of goods	Xinjiang Xinte Crystalline Silicon High-tech Co., Ltd.		
Procurement of goods	Xinte Silicon-based New Material Co., Ltd.		
Procurement of goods	Yancheng Jiwa New Material Technology Co., Ltd.	6,120,000.00	-
Receipt of service	Hebei Jinglong Human Resource Service Co., Ltd.	130,000.00	312,245.16
Receipt of service	Jinglong (Anhui) Property Co., Ltd.	2,592,400.56	2,129,298.75
Receipt of service	Jinglong (Hebei) Property Co., Ltd.	908,364.00	-
Receipt of service	Jinglong (Jiangsu) Property Co., Ltd.	4,970,805.60	529,200.00
Receipt of service	Jinglong (Lianyungang) Property Co., Ltd.	2,160,493.24	2,113,800.00
Receipt of service	Jinglong (Inner Mongolia) Property Co., Ltd.	5,747,333.33	1,355,760.72
Receipt of service	Jinglong (Zhejiang) Property Co., Ltd.	7,500,000.00	9,009,059.54
Receipt of service	Jinglong Technology Holdings Limited	2,300,304.00	2,300,304.01
Receipt of service	Jinglong (Xingtai) Property Co., Ltd.	5,125,500.00	2,059,200.00
Receipt of service	Jinglong Property Co., Ltd.	1,630,800.00	4,161,422.92
Receipt of service	Yuhong JA New Energy Technology (Tianjin) Co., Ltd.	609,612.07	176,135.40
Receipt of service	Yunnan Jinglong Property Co., Ltd.	7,024,271.12	9,415,132.07
Receipt of service	Ningjin County Heilonggang Construction and Installation Co., Ltd.	-	108,231.00
Rendering of services	Fukushima Nakamori Power Plant Contract Company	298,572.57	310,685.20
Lease out	Baotou Jinglong Hotel Co., Ltd.	323,547.00	-
Lease out	Fukushima Nakamori Power Plant Contract Company	232,091.01	266,460.23
Lease out	Jinglong (Inner Mongolia) Property Co., Ltd.	107,848.83	
Lease out	Jinglong (Anhui) Property Co., Ltd.	-	334,951.20
Rent in	Beijing Sunshine Jinglong Technology and Trade Co., Ltd.	156,000.00	-
Rent in	Jinglong Technology Holdings Limited	60,000.00	156,000.00
Rent in	Jinglong Industrial Group Co., Ltd.	1,226,473.66	1,370,409.72
Rent in	Hebei Jinglong Logistics Co., Ltd.	-	94,000.00

Note 1: In 2020, Donghai JA Solar, subsidiary of the Group, signed a “Strategic Cooperation Sale and Purchase Agreement” with Xinte Energy Co., Ltd. (hereinafter referred to as “Xinte Energy”). Donghai JA Solar and other companies under its group companies planned to pay Xinte Energy and its subordinate companies during the period from October 2020 to December 2025 to purchase 97,200 tons of primary polysilicon, and the unit price of the product is determined by monthly negotiation, subject to the signed current contract execution confirmation. In 2021, both parties signed a “Strategic Cooperation Sale and Purchase Agreement” to reach strategic cooperation. Donghai JA Solar and other companies under its group planned to purchase 181,000 tons of primary polysilicon from Xinte Energy and its subsidiaries from April 2022 to December 2026. The unit price of the product is determined by monthly negotiation and confirmed by the execution of the signed current contract. As of 31 December 2023, a total of 183,700 (2022: 240,500) tons of primary polysilicon is to be purchased.

XIII. Share-based payments

1 Information about share-based payments

Total amount of equity instruments granted during the year	82,240,200.00
Total amount of equity instruments exercised during the year	23,373,220.00
Total amount of equity instruments forfeited during the year	727,571.00
Range of exercise prices and remaining contractual life of stock options outstanding at the end of the year	RMB7.89, 832,941.00 shares with a remaining maturity of 0 month; RMB17.66, 436,408.00 shares with a remaining maturity of 0 month; RMB30.21, 5,470,876.00 shares with a remaining maturity of 0 month, 6,138,367.00 shares with a remaining maturity of 7 months, and 8,184,490.00 shares with a remaining maturity of 19 months; RMB21.75, 23,652,060.00 shares with a remaining maturity of 11 months, 23,652,060.00 shares with a remaining maturity of 23 months and 31,536,080.00 shares with a remaining maturity of 35 months.
Range of exercise prices and remaining contractual life of other equity instruments outstanding at the end of the year	RMB20.06, 1,805,160 shares with a remaining maturity of 7 months, 2,406,889 shares with a remaining maturity of 19 months; RMB14.5, 1,020,000 shares with a remaining maturity of 10 months, 1,020,000 shares with a remaining maturity of 22 months, and 1,360,000 shares with a remaining maturity of 34 months.

Expenses recognized during the year arising from share-based payments are as follows:

Item	2023	2022
Equity-settled share-based payments	306,762,489.43	232,545,033.22

2 Equity-settled share-based payments

On 26 April 2023, the *Proposal to Adjust the Number and Price of Interests Related to the 2022 Stock Option and Restricted Stock Incentive Plan* was approved at the 5th Meeting of the 6th Board of Directors and the 5th Meeting of the 6th Supervisory Board of the Company. The Board of Directors has agreed to adjust the number and exercise price of the stock options and the number and repurchase price of the restricted shares due to the profit distribution by the Company in 2022. Following the adjustment, the number of unvested share options granted under the Company's 2022 Incentive Plan has been adjusted to 20,731,300.00 shares and the number of unvested restricted shares has been adjusted to 6,017,200.00 shares.

On 30 August 2023, the 11th Meeting of the 6th Board of Directors approved the *2023 Stock Option and Restricted Stock Incentive Plan (Draft) and its Summary*, the *Proposal on the Management Measures for the Implementation and Evaluation of the 2023 Stock Option and Restricted Stock Incentive Plan of the Company*, and the *Proposal to Request the General Meeting to Authorise the Board of Directors to Handle Matters Relating to the Equity Incentive*. On 18 September 2023, the 3rd Extraordinary General Meeting of Shareholders of 2023 approved the above three proposals. On 18 September 2023, the 13th Meeting of the 6th of the Board of Directors and the 10th Meeting of the 6th of the Supervisory Board approved the *Proposal for Adjustment of Matters Related to the 2023 Stock Option and Restricted Stock Incentive Plan*, and the *Proposal for Granting Stock Options and Restricted Stock to Incentive Recipients*. In accordance to the aforementioned resolutions, the Company has implemented the *2023 Stock Option and Restricted Stock Incentive Plan* ("Incentive Plan 2023") effective 18 September 2023, and 3,400,000.00 restricted shares and 78,840,200.00 options were granted.

(1) Method for determining the fair value of equity instruments at the grant date

Fair value of share options and model inputs are as follows:

Item	2023	2022
Method for determining the fair value of equity instruments at the grant date	Calculated and confirmed according to the Black-Scholes model	Calculated and confirmed according to the Black-Scholes model
Method for determining the best estimate of the number of exercisable equity instruments	Management's best estimate	Management's best estimate
Reasons for material differences between estimates for the current period and previous period	None	None
The cumulative amount of equity-settled share-based payments included in the capital reserves	611,232,852.25	304,470,362.82
The total amount of expenses recognized for the year arising from equity-settled share-based payments	306,762,489.43	232,545,033.22

(2) Basis of determining the number of equity instruments expected to vest

At each balance sheet date during the vesting period, the best estimation is made according to the latest information, such as the number of employees who are granted options, and the number of equity instruments expected to vest is revised accordingly. On the vesting date, the estimated number is equal to the number of equity instruments that are ultimately vested.

XIV. Capital management

The Group's primary objectives when managing capital are to safeguard its ability to continue as a going concern, so that it can continue to provide returns for shareholders, by pricing products and services commensurately with the level of risk and by securing access to finance at a reasonable cost.

The Group defines "capital" as including all components of shareholders' equity. The balances of related party transactions are not regarded by the Group as capital.

The Group's capital structure is regularly reviewed and managed to achieve an optimal structure and return for shareholders. Factors for the Group's consideration include: its future funding requirements, capital efficiency, actual and expected profitability, expected cash flows, and expected capital expenditure. Adjustments are made to the capital structure in light of changes in economic conditions affecting the Group.

The Group's capital structure is monitored on the basis of an adjusted net debt-to-capital ratio.

XV. Significant commitments

1 Capital commitments

<i>Item</i>	<i>2023</i>	<i>2022</i>
Signed assets procurement and assets construction contracts which are being executed, and the one signed or approved but not yet executed.	8,002,287,297.17	4,385,980,935.62

2 Significant procurement commitments

For the year ended 31 December 2023, the Group did not have new significant procurement contract. As of 31 December 2023, the undergoing significant procurement contracts are as follows:

In October 2016, the Group and Hemlock have entered into a settlement agreement and a new supply agreement. According to the new agreement, the Group shall purchase solar grade polycrystalline silicon products from Hemlock on a quarterly basis until 31 October 2026. In September 2020, Hemlock signed a supplementary agreement with the Group to postpone the execution of the contract to 30 September 2027.

In September 2020, Donghai JA Solar Technology Co., Ltd. (hereinafter referred to as "Donghai JA Solar"), a subsidiary of the Group, signed a "Strategic Cooperation Sale and Purchase Agreement with Xinte Energy Co., Ltd. (hereinafter referred to as "Xinte Energy"). Donghai JA Solar and other companies under its group companies planned to pay Xinte Energy and its subordinate companies during the period from October 2020 to December 2025 to purchase 97,200 tons of primary polysilicon. The unit price of the product is determined by monthly negotiation and confirmed by the execution of the signed current contract. In April 2021, Donghai JA Solar, subsidiary of the Group, signed a "Strategic Cooperation Sale and Purchase Agreement" with Xinte Energy. Donghai JA Solar and other companies under its group planned to purchase 181,000 tons of primary polysilicon from Xinte Energy and its subsidiaries from April 2022 to December 2026. The unit price of the product is determined by monthly negotiation and confirmed by the execution of the signed current contract.

In December 2020, the Group's subsidiary Donghai JA Solar Technology Co., Ltd. (hereinafter referred to as "Donghai JA Solar") and Xinjiang Daquan Energy Co., Ltd. (hereinafter referred to as "Xinjiang Daquan") signed the "Polysilicon Procurement Cooperation" on 23 December 2020. Donghai JA Solar intended to purchase solar-grade polysilicon special-grade no-clean monocrystalline materials from Xinjiang Daquan from January 2021 to December 2023, and the total purchase is expected to be 32,400 to 43,200 tons. The actual purchase price adopts monthly bargaining method, and the specific quantity and price are subject to the purchase order / contract reached each month. In May 2021, the Group's subsidiary Donghai JA Solar and Xinjiang Daquan signed the "Polysilicon Procurement Cooperation" on 12 May 2021. Donghai JA Solar intended to purchase solar-grade polysilicon special-grade no-clean monocrystalline materials from Xinjiang Daquan from 1 July 2021 to 31 December 2025, and the total purchase is expected to be 78,200 tons. The actual purchase price adopts monthly bargaining method, and the specific quantity and price are subject to the purchase order / contract reached each month.

The Company and Flat Glass Group Co., Ltd. (hereinafter referred to as "Flat") signed the "Strategic Cooperation Agreement" on photovoltaic glass procurement on 30 July 2021. The Agreement stipulated that the Company and the holding company designated by the Company are expected to purchase approximately 230 million square meters of photovoltaic rolled glass for modules from Flat and its designated wholly-owned holding company from 1 August 2021 to 31 July 2024, and the specific order price will be determined through negotiation on a monthly basis.

The Group's subsidiary Donghai JA Solar and Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. (hereinafter referred to as "Jiangsu Zhongneng") signed the "Polysilicon Procurement Framework Cooperation" on 27 May 2021. Donghai JA Solar intended to purchase granular silicon from Jiangsu Zhongneng from 1 July 2021 to 30 June 2026, and the total purchase is expected to be 145,800 tons. The actual purchase price adopts monthly bargaining method, and the specific quantity and price are subject to the purchase "The Contract Confirmation form" reached each month.

The Group's subsidiary Donghai JA Solar and Asia Silicon Supply (Qinghai) Co., Ltd. (hereinafter referred to as "Asia Silicon") signed the "Polysilicon Purchase and Sale Long Order Contract" on 24 August 2020. Donghai JA Solar intended to purchase polysilicon from Asia Silicon from September 2020 to August 2023, and the total purchase is expected to be 19,800 tons. In consideration of the Company's future business plan, the Company fully guaranteed the supply of raw materials, and on the basis of the above procurement contract, the Company and Asia Silicon signed the "Supplementary Agreement for Polysilicon Purchase and Sales Long Order Contract" on 20 April 2021, to increase the purchase quantity of polysilicon material and extend the supply period. According to the signed "Polysilicon Purchase and Sales Long Order Contract" and supplementary agreement, Donghai JA Solar intended to purchase polysilicon materials from Asia Silicon from September 2020 to August 2025, and the total purchase is expected to be 75,000 tons. The actual purchase price adopts monthly bargaining method, and the specific quantity and price are subject to the purchase order / contract reached each month.

XVI. Subsequent events

1 Material non-adjusting post balance sheet date events

On 14 March 2024, the 1st Extraordinary General Meeting of 2024 of the Company approved the Resolution on the Termination of the 2022 Stock Option and Restricted Stock Incentive Plan and the Cancellation of Stock Options and the Repurchase and Cancellation of Restricted Stocks, and the Proposal for Termination of the 2023 Incentive Plan and Cancellation of Stock Options and Repurchase and Cancellation of Restricted Shares. The 2022 and 2023 Incentive Plans shall be terminated, and all stock options granted but not yet exercised under the two incentive plans shall be cancelled, all restricted stock granted but not yet vested under the two incentive plans shall be repurchased and cancelled.

2 Profit appropriations after the balance sheet date

The Board of Director proposed on 29 April 2024, the appropriation of a cash dividend of RMB5.63 (including tax) for every 10 shares to the Company's ordinary shareholders, totalling RMB1,851,923,026.48. The proposal is subject to approval by the shareholders' general meeting.

XVII. Other significant items

1 Segment reporting

(1) Determination basis and accounting policies of reporting segments

According to the Group's internal organizational structure, management requirements and internal reporting system, two reporting segments have been established, namely, manufacturing segment and power station segment. Each reporting segment of the Group provides different products or services, or operates in different region. As each segment requires different technologies or market strategies, the Group's management separately operates business activities of each reporting segment and regularly evaluates the business results of these reporting segments to decide on allocation of resources to them and evaluate their performance.

The transfer price between segments is determined on the basis of the actual transaction price, and the expenses indirectly attributable to each segment are allocated among the segments according to the proportion of revenue. Assets are allocated based on the operations of the segments and the location of the assets. Segment liabilities include the liabilities attributable to the segment arising from the segment's operating activities. If expenses related to liabilities shared by more than one operating segment are allocate to these operating segments, the shared liability is also allocated to those operating segments.

(2) Financial information about reportable segments

<i>Item</i>	<i>Manufacturing segment</i>	<i>Power station segment</i>	<i>Elimination among segments</i>	<i>Total</i>
Total assets	104,065,139,383.50	12,282,901,029.21	(9,758,574,339.19)	106,589,466,073.52
Total liabilities	66,781,491,477.76	5,623,482,819.92	(3,819,639,208.10)	68,585,335,089.58
Total owners' equity	37,283,647,905.74	6,659,418,209.29	(5,938,935,131.09)	38,004,130,983.94
Operating income	83,112,397,015.53	1,032,114,657.74	(2,588,334,436.29)	81,556,177,236.98
Operating costs	68,512,730,780.01	610,678,268.58	(2,350,333,488.92)	66,773,075,559.67
Net profit	7,341,950,378.14	24,484,652.03	(174,075,476.44)	7,192,359,553.73

XVIII. Notes to the Company's financial statements

1 Accounts receivable

(1) Accounts receivable by customer type are as follows:

<i>Type</i>	<i>2023</i>	<i>2022</i>
Amounts due from subsidiaries and related parties	218,611,637.40	1,237,056,842.64
Amounts due from third parties	491,295,574.26	86,022,547.22
Sub-total	709,907,211.66	1,323,079,389.86
Less: Provision for bad and doubtful debts	15,681,489.49	1,225,867.02
Total	694,225,722.17	1,321,853,522.84

(2) The ageing analysis of accounts receivable is as follows:

<i>Ageing</i>	<i>2023</i>	<i>2022</i>
Within 6 months (inclusive)	286,362,313.96	1,149,633,096.68
Over 6 months but within 1 year (inclusive)	208,599,987.82	173,446,293.18
Over 1 year but within 2 years (inclusive)	214,944,909.88	-
Sub-total	709,907,211.66	1,323,079,389.86
Less: Provision for bad and doubtful debts	15,681,489.49	1,225,867.02
Total	694,225,722.17	1,321,853,522.84

The ageing is counted starting from the date when accounts receivable are recognized.

(3) Accounts receivable by provisioning method

Category	2023					2022				
	Book value		Provision for bad and doubtful debts		Carrying amount	Book value		Provision for bad and doubtful debts		Carrying amount
	Amount	Percentage (%)	Amount	Percentage (%)		Amount	Percentage (%)	Amount	Percentage (%)	
Individual assessment	-	-	-	-	-	-	-	-	-	-
Collective assessment	709,907,211.66	100.00	15,681,489.49	2.21	694,225,722.17	1,323,079,389.86	100.00	1,225,867.02	0.09	1,321,853,522.84
Attributable to:										
- Accounts receivables due from external customers (except for power grid companies)	491,393,111.71	69.22	15,681,489.49	3.19	475,711,622.22	87,038,408.15	6.58	1,225,867.02	1.41	85,812,541.13
- Amounts due from companies within the scope of consolidation	218,514,099.95	30.78	-	-	218,514,099.95	1,236,040,981.71	93.42	-	-	1,236,040,981.71
Total	709,907,211.66	100.00	15,681,489.49	2.21	694,225,722.17	1,323,079,389.86	100.00	1,225,867.02	0.09	1,321,853,522.84

(a) Criteria for collective assessment in 2023 and details:

Accounts receivables are classified into several portfolios based on their similar credit risk characteristics and their expected credit loss are determined on a collectively basis. The basis of determining the portfolios is as follows:

Portfolio 1: Accounts receivables from external customers (except for power grid companies)

Portfolio 3: Amounts due from companies within the scope of consolidation

(b) Assessment of ECLs on accounts receivable:

At all times the Company measures the impairment loss for accounts receivable at an amount equal to lifetime ECLs, and the ECLs are based on the number of ageing and the expected loss rate. According to the historical experience of the Group, the losses of different customer groups are as follows:

Portfolio 1: Accounts receivables due from external customers (except for power grid companies)

2023

	<i>Expected credit loss rate</i>	<i>Carrying amount at the end of the year</i>	<i>Impairment loss at the end of the year</i>
Within 6 months (inclusive)	1%	255,864,692.06	2,558,646.92
Over 6 months but within 1 year (inclusive)	5%	208,599,987.82	10,429,999.39
Over 1 year but within 2 years (inclusive)	10%	26,928,431.83	2,692,843.18
Total		491,393,111.71	15,681,489.49

2022

	<i>Expected credit loss rate</i>	<i>Carrying amount at the end of the year</i>	<i>Impairment loss at the end of the year</i>
Within 6 months (inclusive)	1%	78,151,334.72	781,513.35
Over 6 months but within 1 years (inclusive)	5%	8,887,073.43	444,353.67
Total		87,038,408.15	1,225,867.02

(4) Movements of provisions for bad and doubtful debts

	2023	2022
Balance at the beginning of the year	1,225,867.02	660,981.41
Additions during the year	14,455,622.47	564,885.61
Balance at the end of the year	15,681,489.49	1,225,867.02

(5) Five largest accounts receivable and contract assets by debtor at the end of the year
2023

<i>Debtor</i>	<i>Balance at the end of the year</i>		
	<i>Accounts receivable</i>	<i>Percentage in the total balance of accounts receivable (%)</i>	<i>Provision for bad and doubtful debts</i>
The First	188,016,478.05	26.49	-
The Second	95,967,673.76	13.52	4,133,228.35
The Third	49,423,007.16	6.96	1,778,693.81
The Fourth	45,672,398.13	6.43	1,978,853.01
The Fifth	45,325,328.61	6.38	1,640,742.68
Total	424,404,885.71	59.78	9,531,517.85

2022

<i>Debtor</i>	<i>Balance at the end of the year</i>		
	<i>Accounts receivable</i>	<i>Percentage in the total balance of accounts receivable (%)</i>	<i>Provision for bad and doubtful debts</i>
The First	792,061,761.96	59.87	-
The Second	443,979,219.75	33.56	-
The Third	15,725,317.72	1.19	157,253.18
The Fourth	13,394,159.99	1.01	133,941.60
The Fifth	11,286,190.39	0.85	112,861.90
Total	1,276,446,649.81	96.48	404,056.68

2 Other receivables

<i>Item</i>	<i>Note</i>	<i>2023</i>	<i>2022</i>
Dividends receivable	(1)	2,200,000,000.00	100,000,000.00
Others	(2)	2,925,453,888.79	429,294,532.86
Total		5,125,453,888.79	529,294,532.86

(1) Dividends receivable

Dividends receivable by category:

<i>Investee</i>	<i>2023</i>	<i>2022</i>
JA Solar	2,200,000,000.00	100,000,000.00

(2) Others

(a) Others by customer type:

<i>Customer type</i>	2023	2022
Amounts due from related parties	2,900,391,000.24	411,247,021.08
Amounts due from third parties	25,062,888.55	18,047,511.78
Sub-total	2,925,453,888.79	429,294,532.86
Less: Provision for bad and doubtful debts	-	-
Total	2,925,453,888.79	429,294,532.86

(b) The ageing analysis is as follows:

<i>Ageing</i>	2023	2022
Within 1 year (inclusive)	2,912,396,867.71	429,294,532.86
Over 1 year but within 2 years (inclusive)	13,057,021.08	-
Sub-total	2,925,453,888.79	429,294,532.86
Less: Provision for bad and doubtful debts	-	-
Total	2,925,453,888.79	429,294,532.86

The ageing is counted starting from the date when other receivables are recognized.

(c) Others categorized by nature

<i>Nature of other receivables</i>	2023	2022
Amounts due to/from subsidiaries	2,900,391,000.24	411,247,021.08
Deposits	24,752,500.00	11,625,000.00
Others	310,388.55	6,422,511.78
Total	2,925,453,888.79	429,294,532.86

(d) Five largest others by debtor at the end of the year

2023

<i>Debtor</i>	<i>Nature of the receivable</i>	<i>Balance at the end of the year</i>	<i>Ageing</i>	<i>Percentage of ending balance of others (%)</i>	<i>Ending balance of provision for bad and doubtful debts</i>
The First	Amounts due to/from subsidiaries	1,963,902,507.26	Within 1 year (inclusive)	67.13	-
The Second	Amounts due to/from subsidiaries	903,469,788.06	Within 1 year (inclusive)	30.88	-
The Third	Amounts due to/from subsidiaries	11,360,661.29	Over 1 year but within 2 years (inclusive)	0.39	-
The Fourth	Deposits	6,200,000.00	Within 1 year (inclusive)	0.21	-
The Fifth	Amounts due to/from subsidiaries	4,999,268.97	Within 1 year (inclusive)	0.17	-
Total		2,889,932,225.58		98.78	-

2022

<i>Debtor</i>	<i>Nature of the receivable</i>	<i>Balance at the end of the year</i>	<i>Ageing</i>	<i>Percentage of ending balance of others (%)</i>	<i>Ending balance of provision for bad and doubtful debts</i>
The First	Amounts due to/from subsidiaries	411,247,021.08	Within 1 year (inclusive)	95.80	-
The Second	Others	6,422,511.78	Within 1 year (inclusive)	1.50	-
The Third	Deposits	3,200,000.00	Within 1 year (inclusive)	0.75	-
The Fourth	Deposits	2,400,000.00	Within 1 year (inclusive)	0.56	-
The Fifth	Deposits	800,000.00	Within 1 year (inclusive)	0.19	-
Total	-	424,069,532.86	-	98.80	-

3 Long-term equity investments

(1) Long-term equity investments by category:

Item	2023			2022		
	Book value	Provision for impairment	Carrying amount	Book value	Provision for impairment	Carrying amount
Investments in subsidiaries	27,141,241,312.84	-	27,141,241,312.84	17,511,557,800.57	-	17,511,557,800.57
Investments in associates	632,114,368.10	-	632,114,368.10	527,998,575.22	-	527,998,575.22
Total	27,773,355,680.94	-	27,773,355,680.94	18,039,556,375.79	-	18,039,556,375.79

(2) Investments in subsidiaries:

Investee	Balance at the beginning of the year	Increase during the year	Decrease during the year	Balance at the end of the year	Impairment at the end of the year
Hebei JA Education Technology Co., Ltd.	160,000,000.00	295,000,000.00	-	455,000,000.00	-
JA Solar	17,048,857,383.40	9,036,168,662.97	-	26,085,026,046.37	-
Long-term equity investment recognized arising from equity-settled share-based payments	302,700,417.17	298,514,849.30	-	601,215,266.47	-
Total	17,511,557,800.57	9,629,683,512.27	-	27,141,241,312.84	-

For information about the subsidiaries of the Company, refer to Note VIII.

(3) Investments in associates

Name of investee	Balance at the beginning of the year	Increase/decrease in the current year			Balance at the end of the year	Impairment at the end of the year
		Investment Gains or losses under equity method	Other changes in equity	Declared distribution of cash dividends or profits		
Associates						
Inner Mongolia Xinte Silicon Material Co., Ltd.	527,998,575.22	221,653,400.11	766,798.79	118,304,406.02	632,114,368.10	-

4 Operating income and operating costs

(1) Operating income and operating costs

<i>Item</i>	2023		2022	
	<i>Income</i>	<i>Cost</i>	<i>Income</i>	<i>Cost</i>
Principal activities	10,888,372,803.67	10,650,056,290.77	15,245,486,324.74	15,063,465,180.70
Other operating activities	58,928,082.24	-	12,308,781.81	-
Total	10,947,300,885.91	10,650,056,290.77	15,257,795,106.55	15,063,465,180.70

(2) Disaggregation of revenue from contracts with customers

<i>Item</i>	2023	2022
Solar module	10,888,372,803.67	11,641,126,370.04
Others	58,928,082.24	3,616,668,736.51
Total	10,947,300,885.91	15,257,795,106.55

5 Investment income

<i>Item</i>	2023	2022
Income from long-term equity investments accounted for using cost method	2,200,000,000.00	100,000,000.00
Income from long-term equity investments accounted for using equity method	221,653,400.11	212,668,889.08
Total	2,421,653,400.11	312,668,889.08

XIX. Extraordinary gains and losses in 2023

<i>Item</i>	<i>Amount</i>	<i>Note</i>
Disposal of non-current assets	(213,483,538.13)	Mainly are the assets disposals through technological transformation
Government grants recognized through profit or loss (excluding those having close relationships with the Group's operation and enjoyed in fixed amount or quantity according to uniform national standard)	627,197,400.18	Mainly are the government grants received during the period
Profit or loss of subsidiaries generated before the acquisition date of a business combination involving entities under common control	(64,717.16)	
Changes in fair value of financial assets and liabilities held for trading and derivative financial assets and liabilities, and disposal of financial assets and liabilities held for trading, derivative financial assets and liabilities and other debt investments, other than those held for effective hedging related to normal operations	(425,313,440.17)	Mainly are losses arising from forward sale and purchase of foreign exchange
Reversal of provision for bad and doubtful debts of receivables and contract assets assessed on an individual basis	8,711,579.54	
Other items that qualify as extraordinary gain and loss	2,063,434.84	
Other non-operating income and expenses besides items above	32,392,123.01	
Sub-total	31,502,842.11	
Tax effect	(114,397,509.29)	
Effect on non-controlling interests after taxation	(18,113,902.67)	
Total	(101,008,569.85)	

In accordance with *Interpretive Pronouncement on the Preparation of Information Disclosures of Companies Issuing Public Shares No.1 – Extraordinary Gains and Losses (Revised in 2023)*, an amount of RMB75,375,117.06 in the items presented by the Group as extraordinary gains and losses in 2022 should be redefined as ordinary gains and losses, and a decrease of RMB58,698,427.68 in the Group's total extraordinary gains and losses in 2022 after deducting the effects on tax and non-controlling interests.

XX. Return on net assets and earnings per share

In accordance with “Regulation on the Preparation of Information Disclosures by Companies Issuing Securities No.9 – Calculation and Disclosure of the Return on Net Assets and Earnings Per Share” (2010 revised) issued by the CSRC and relevant accounting standards, the Group’s return on net assets and earnings per share are calculated as follows:

<i>Profit for the reporting period</i>	<i>Weighted average return on net assets (%)</i>	<i>Basic earnings per share</i>	<i>Diluted earnings per share</i>
Net profit attributable to the Company’s ordinary equity shareholders	22.52%	2.14	2.10
Net profit excluding extraordinary gain and loss attributable to the Company’s ordinary equity shareholders	22.84%	2.17	2.12

1 Calculation of earnings per share

(1) Basic earnings per share

For calculation of the basic earnings per share, refer to Note V.62.

(2) Basic earnings per share excluding extraordinary gain and loss

Basic earnings per share excluding extraordinary gain and loss is calculated as dividing consolidated net profit excluding extraordinary gain and loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding:

	2023	2022 (Restated)
Consolidated net profit attributable to ordinary shareholders of the Company	7,039,490,537.23	5,533,792,625.25
Less: Extraordinary gains and losses attributable to ordinary shareholders of the Company	(101,008,569.85)	(24,625,874.33)
Net profit distributed to the shareholders of restricted shares for the period	2,363,286.24	832,353.90
Consolidated net profit (excluding extraordinary gain and loss and net profits distributed to the shareholders of restricted shares for the period) attributable to the Company’s ordinary equity shareholders	7,138,135,820.84	5,557,586,145.68
Weighted average number of ordinary shares outstanding	3,295,316,958.40	3,227,048,327.33
Basic earnings per share excluding extraordinary gain and loss (RMB/share)	2.17	1.72

(3) Diluted earnings per share

For calculation of the diluted earnings per share, refer to Note V.62.

(4) Diluted earnings per share excluding extraordinary gain and loss

Diluted earnings per share excluding extraordinary gain and loss is calculated as dividing consolidated net profit excluding extraordinary gain and loss attributable to ordinary shareholders of the Company (diluted) by the weighted average number of ordinary shares outstanding (diluted):

	2023	2022 (Restated)
Consolidated net profit attributable to ordinary shareholders of the Company (diluted)	7,137,045,335.19	5,533,792,625.25
Less: Extraordinary gains and losses attributable to ordinary shareholders of the Company	(101,008,569.85)	(24,625,874.33)
Consolidated net profit excluding extraordinary gain and loss attributable to the Company's ordinary equity shareholders (diluted)	7,238,053,905.04	5,558,418,499.58
Weighted average number of ordinary shares outstanding (diluted)	3,406,373,769.25	3,254,952,713.45
Diluted earnings per share excluding extraordinary gain and loss (RMB/share)	2.12	1.71

2 Calculation of weighted average return on net assets

(1) Weighted average return on net assets

Weighted average return on net assets is calculated as dividing consolidated net profit attributable to ordinary shareholders of the Company by the weighted average amount of consolidated net assets:

	2023	2022 (Restated)
Consolidated net profit attributable to ordinary shareholders of the Company	7,039,490,537.23	5,533,792,625.25
Weighted average amount of consolidated net assets	31,265,657,778.87	22,899,996,673.00
Weighted average return on net assets	22.52%	24.17%

Calculation of weighted average amount of consolidated net assets is as follows:

	2023	2022 (Restated)
Consolidated net assets at the beginning of the year	27,534,705,796.26	16,523,919,103.27
Effect of consolidated net profit attributable to ordinary shareholders of the Company	3,519,745,268.62	2,766,896,312.63
Effect of net assets attributable to ordinary shareholders of the Company increased by issuance of new shares or debt-to-equity swaps during the reporting period	-	3,311,611,788.13
Effect of net assets attributable to ordinary shareholders of the Company decreased by redemption or cash dividends during the reporting period	(397,171,270.64)	(125,483,668.41)
Effect of changes of net assets arising from other transactions or events	608,377,984.63	423,053,137.38
Weighted average amount of consolidated net assets	31,265,657,778.87	22,899,996,673.00

(2) Weighted average return on net assets excluding extraordinary gain and loss

Weighted average return on net assets excluding extraordinary gain and loss is calculated as dividing consolidated net profit excluding extraordinary gain and loss attributable to ordinary shareholders of the Company by the weighted average amount of consolidated net assets:

	2023	2022 (Restated)
Consolidated net profit excluding extraordinary gain and loss attributable to the Company's ordinary equity shareholders	7,140,499,107.08	5,558,418,499.58
Weighted average amount of consolidated net assets	31,263,236,763.93	22,870,609,234.93
Weighted average return on net assets excluding extraordinary gain and loss	22.84%	24.30%