IRICO

彩虹集團新能源股份有限公司
IRICO GROUP NEW ENERGY COMPANY LIMITED*

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

(Stock Code: 0438)

2019 ANNUAL RESULTS ANNOUNCEMENT

The board (the "**Board**") of directors (the "**Directors**") of IRICO Group New Energy Company Limited* (the "**Company**") hereby announces the audited consolidated results of the Company and its subsidiaries (collectively, the "**Group**") for the year ended 31 December 2019. The figures in respect of the Group's balance sheet, income statement and notes to the condensed consolidated financial statements for the year ended 31 December 2019 as set out in this announcement are consistent with the amounts set out in the audited consolidated financial statements of the Group for the same year.

During the reporting period, the Group realized operating revenue of RMB2,245 million (2018: RMB2,332 million) and net profits attributable to the owners of the parent of RMB93.14 million (2018: RMB81.30 million), representing a year-on-year increase of 14.57%.

In 2019, the Group accelerated the transformation and upgrading of its industries with technological innovation and strong talents, comprehensively promoted the production capacity of photovoltaic glass production lines, and continued the optimization of its geographical layout. At the same time, the Group took advantage of the opportunities of recovery of demand in the industry, adhered to the strategy of large customers, and therefore rapidly increased sales orders. The operating revenue generated from photovoltaic glass recorded significant increase of 53.93%, with remarkable enhancement of core competitiveness.

At the beginning of 2020, after the outbreak of the novel coronavirus pneumonia COVID-19, the Group quickly launched the "dual-line battle" of prevention and control in epidemic and production and operation in business. The photovoltaic glass, main business of the Group, maintained continuous production, showing a booming trend in production and sales. The momentum for the high-quality, high-efficiency and rapid development of the Group's business has been further stimulated. At the same time, in accordance with the planning, a new production capacity enhancement plan was launched this year to further consolidate the top three position in the world's photovoltaic glass production capacity. The Group assesses that COVID-19 will not have a significant impact on the Group, and its operating revenue is expected to grow significantly in the first quarter of 2020 as compared to the same period in last year.

BALANCE SHEET

As as 31st December 2019

Item	**Closing Balance**	Opening Balance
Current Assets:		
Cash at bank and on hand	**405,448,222.14**	260,546,684.16
△ Settlement reserve		
△ Placements with banks and other financial institutions		
☆ Held-for-trading financial assets	**2,863,047.11**	679,095.34
Derivative financial assets		
Bills receivable	**1,990,378.52**	56,270,058.70
Accounts receivable	**449,019,198.76**	666,021,403.75
☆ Receivables financing	**455,599,031.06**	283,052,731.03
Prepayments	**40,999,068.57**	63,045,789.85
△ Premiums receivable		
△ Reinsurance accounts receivable		
△ Reinsurance contract receivable		
Other receivables	**142,070,012.04**	249,397,827.25
△ Financial assets acquired for resale		
Inventory	**154,730,841.63**	166,308,583.08
☆ Contract assets		
Held-for-sale assets		
Non-current assets due within one year		
Other current assets	**78,529,164.23**	85,627,181.99
Total current assets	**1,731,248,964.06**	1,830,949,355.15

Item	Closing Balance	Opening Balance
Non-current Assets：		
△ Loans and advances to customers		
☆ Debt investment		
☆ Other debt investments		
Held-to-maturity investments		
Long-term accounts receivable		
Long-term equity investment	**194,360,686.48**	179,326,419.17
☆ Other investments in equity instruments	**251,344,922.06**	250,009,608.42
☆ Other non-current financial assets		
Investment properties		
Fixed assets	**1,622,125,907.01**	1,502,164,833.71
Construction in progress	**791,768,042.42**	772,497,652.24
Productive biological assets		
Oil and gas assets		
☆ Right-of-use assets	**14,883,147.32**	
Intangible assets	**242,468,802.24**	264,864,756.84
Development expenditures	**24,915,390.59**	
Goodwill	**36,553,211.37**	38,544,327.69
Long-term deferred expenses	**857,353.95**	19,689,300.10
Deferred tax assets	**1,568,220.47**	861,194.97
Other non-current assets		11,869,754.47
Total non-current assets	**3,180,845,683.91**	3,039,827,847.61
Total assets	**4,912,094,647.97**	4,870,777,202.76

Item	Closing Balance	Opening Balance
Current liabilities:		
Short-term borrowings	**584,392,230.44**	434,252,466.63
△ Borrowings from central bank		
△ Placements from banks and other financial institutions		
☆ Held-for-trading financial liabilities		
Derivative financial liabilities		
Bills payables	**652,957,552.71**	490,689,505.29
Accounts payables	**760,375,514.52**	889,384,282.44
Receipts in advance		
☆ Contract liabilities	**45,545,512.30**	50,535,500.53
△ Financial assets sold under repurchase agreements		
△ Deposit taking and interbank deposit		
△ Brokerage for trading securities		
△ Brokerage for underwriting securities		
Employee benefits payable	**16,983,477.31**	42,518,480.81
Taxes charge payable	**12,578,792.19**	22,195,570.97
Other payables	**1,574,136,220.28**	1,539,489,454.26
△ Handling fee and Commission Payable		
△ Reinsurance accounts payable		
Held-for-sale liabilities		
Non-current liabilities due within one year	**533,033,644.18**	497,519,566.90
Other current liabilities	**6,675,591.27**	
Total current liabilities	**4,186,678,535.20**	3,966,584,827.83

Item	Closing Balance	Opening Balance
Non-Current Liabilities:		
△ Insurance policy reserve		
Long-term borrowings	**132,321,800.00**	595,375,744.44
Bonds payable		
Including: Preference shares		
Perpetual bonds		
☆ Lease liabilities	**10,661,506.91**	
Long-term payables	**213,076,889.47**	7,000,000.00
Long-term employee benefits payable	**9,537,743.87**	10,856,171.40
Estimated liabilities		
Deferred income	**70,110,797.81**	76,512,512.01
Deferred tax liabilities	**636,361.01**	664,907.28
Other non-current liabilities		
Total non-current liabilities	**436,345,099.07**	690,409,335.13
Total Liabilities	**4,623,023,634.27**	4,656,994,162.96

Item	Closing Balance	Opening Balance
Owner's Equity (or Shareholder's equity):		
Share capital	**2,232,349,400.00**	2,232,349,400.00
Other equity instruments		
Including: Preference shares		
Perpetual bonds		
Capital reserve	**943,531,444.10**	943,531,444.10
Less: Treasury shares		
Other comprehensive income	**-231,481,998.58**	-233,080,783.78
Special reserve		
Surplus reserve	**22,477,267.06**	22,477,267.06
△ General risk reserve		
Undistributed Profit	**-2,778,892,693.43**	-2,872,034,688.32
Total equity attributable to the owner's of the Company (or shareholders)	**187,983,419.15**	93,242,639.06
Minority interest	**101,087,594.55**	120,540,400.74
Total equity attributable to the owners (or shareholders)	**289,071,013.70**	213,783,039.80
Total liabilities and equity attributable to the owners (or shareholders)	**4,912,094,647.97**	4,870,777,202.76

INCOME STATEMENT

Financial Statements Period: For the year 2019

Item		Current Period Amount	Previous Period Amount
I.	**Total Operating revenue**	**2,245,112,790.54**	2,331,919,056.79
	Including: Operating revenue	**2,245,112,790.54**	2,331,919,056.79
	△ Interest income		
	△ Premium earned		
	△ Revenue from handling charges and commission		
II.	**Total operating cost**	**2,333,693,048.17**	2,413,050,194.28
	Including: Operating costs	**1,966,446,728.69**	2,089,013,201.40
	△ Interest expenses		
	△ Handling charges and commission expenditures		
	△ Surrender value		
	△ Net payment of insurance claims		
	△ Net provision of insurance policy reserve		
	△ Premium bonus expenditures		
	△ Reinsurance expenses		
	Taxes and surcharges	**11,895,745.55**	9,908,805.07
	Selling expenses	**69,734,451.14**	62,350,299.28
	Administrative expenses	**128,478,554.44**	120,967,328.51
	Research and development expenses	**50,460,079.38**	43,681,819.82
	Finance costs	**106,677,488.97**	87,128,740.20
	Including: Interest expense	**109,203,148.48**	85,654,817.90
	Interest income	**10,864,454.05**	4,307,646.28

Item	Current Period Amount	Previous Period Amount
Add: Other income	**171,896,441.93**	44,164,887.91
Investment income (loss is represented by [-])	**2,763,876.38**	139,235,868.77
Including: Gains from investment in associates and joint ventures	**356,875.10**	-1,544,793.72
Income from derecognition of financial asset at the amortized cost		
△ Gains from foreign exchange (loss is represented by [-])		
☆ Gains from net exposure hedges (loss is represented by [-])		
Gains from changes in fair value (loss is represented by [-])	**-5,294.81**	-102,782.68
☆ Credit impairment losses (loss is represented by [-])	**-4,053,406.32**	-12,004,452.48
Impairment losses on assets(loss is represented by [-])	**-1,991,116.32**	-5,061,614.57
Gains from disposal of assets (loss is represented by [-])	**146,297.50**	55,533.98
III. Operating profit (loss is represented by [-])	**80,176,540.73**	85,156,303.44
Add: Non-operating income	**3,903,773.85**	2,230,423.35
Less: Non-operating expenses	**7,925,207.52**	428,952.38
IV. Total profit (total loss is represented by [-])	**76,155,107.06**	86,957,774.41
Less: Income tax expenses	**2,069,990.40**	171,493.96
V. Net profit (net loss is represented by [-])	**74,085,116.66**	86,786,280.45
(I) Classified by continuity of operations:	**74,085,116.66**	86,786,280.45
1. Net profit from continuing operations of the Company (net loss is represented by [-])	**74,085,116.66**	-56,415,763.13
2. Net profit from discontinued operations (net loss is represented by [-])		143,202,043.58
(II) Classified by ownership of equity:	**74,085,116.66**	86,786,280.45
1. Net profit attributable to the shareholders (net loss is represented by [-])	**93,141,994.89**	81,297,979.57
2. Minority interests (net loss is represented by [-])	**-19,056,878.23**	5,488,300.88

Item	**Current Period Amount**	Previous Period Amount
VI. Other comprehensive income, net of tax	**1,598,785.20**	-114,592,070.32
Other comprehensive income (net of tax) attributable to the owners of the Company	**1,598,785.20**	-114,592,070.32
(I) Other comprehensive income that cannot be reclassified to profit or loss	**1,335,313.64**	-114,432,872.86
1. Re-measurement of changes in defined benefit plan		
2. Other comprehensive income that cannot be reclassified to profit or loss under equity method		
☆ 3. Changes in fair value of other equity instrument investments	**1,335,313.64**	-114,432,872.86
☆ 4. Changes in fair value of enterprise's own credit risk		
(II) Other comprehensive income that will be reclassified to profit or loss	**263,471.56**	-159,197.46
1. Other comprehensive income that may be reclassified to profit or loss under equity method		
☆ 2. Changes in fair value of other debt investments		
☆ 3. Financial assets reclassified as other comprehensive income		
☆ 4. Provision for credit impairment of other debt investments		
5. Cash flows hedging reserve		
6. Exchange differences from translation of foreign currency financial statements	**263,471.56**	-159,197.46
7. Others		
Other comprehensive income (net of tax) attributable to minority shareholders		
VII. Total comprehensive income	**75,683,901.86**	-27,805,789.87
Total comprehensive income attributable to the owner of the Company	**94,740,780.09**	-33,294,090.75
Total comprehensive income attributable to minority shareholders	**-19,056,878.23**	5,488,300.88
VIII. Earnings per share:		
Basic earnings per share	**0.0417**	0.0364
Diluted earnings per share	**0.0417**	0.0364

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

As as 31st December 2019

I. GENERAL INFORMATION

IRICO Group New Energy Company Limited* (the "**Company**") was established in the People's Republic of China (the "**PRC**") on 10 September 2004 as a joint stock company with limited liability under the Company Law of the PRC. The Company was listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") on 20 December 2004. The addresses of its registered office and principal place of business are No. 1 Caihong Road, Xianyang, Shaanxi Province, the PRC.

The Company and its subsidiaries (collectively referred to as the "**Group**") are engaged in solar photovoltaic business, new materials business and others.

IRICO Group Corporation Limited* (彩虹集團有限公司，"**IRICO Group**") is the Company's parent company and the ultimate holding company is China Electronics Corporation ("**CEC**").

The condensed consolidated financial statements are presented in Renminbi ("**RMB**"), the functional currency of the Company.

During the reporting period, subsidiaries included in the scope of consolidation are set out below:

No.	Names	Short name	Level
1	Shaanxi IRICO New Material Co., Ltd*	IRICO New Material	2
2	IRICO (Hefei) Photovoltaic Co., Ltd.*	Hefei Photovoltaic	2
3	IRICO Group Electronics (Hong Kong) Company Limited	IRICO (Hong Kong) Company	2
4	Xianyang IRICO Green Energy Co., Ltd.* (咸陽彩虹綠色能源有限公司)	IRICO Green Energy	2
5	IRICO Yan'an New Energy Co., Ltd.* (彩虹(延安)新能源有限公司)	Yan'an New Energy	2
6	Jiangsu IRICO Yongneng New Energy Company Limited*	IRICO Yongneng	2
7	Shaanxi IRICO Xinneng Glass Co., Ltd.* (陝西彩虹新能玻璃有限公司)	Shaanxi Xinneng	2

II. BASIS OF PREPARATION

(I) Basis of preparation

Based on going concern, the Company conducted recognition and measurement in accordance with the actual transactions and matters and in accordance with the Accounting Standards for Business Enterprises-Basic Standards and the specific accounting standards, Application Guidance for Accounting Standards for Business Enterprises, Interpretation of Accounting Standards for Business Enterprises and other relevant requirements (together referred to as the "**Accounting Standards for Business Enterprises**") promulgated by the Ministry of Finance of the PRC, and the disclosed rules of Preparation Convention of Information Disclosure by Companies Offering Securities to the Public No.15 — General Rules on Financial Reporting issued by the China Securities Regulatory Commission, on the basis of which financial statements was prepared.

(II) Going concern

During the period from January to December 2019, the Company recorded net profits attributable to the owners of the parent company of RMB93,142,000 and net cash flows from operating activities of RMB428,391,300. As at 31 December 2019, the Company had current liabilities of RMB4,186,678,500, current assets of RMB1,731,249,000, and net current liabilities of RMB2,455,429,600, which indicated that the Company would be under heavy debt repayment pressure in the short term and subject to liquidity risks. However, the Company will take the following measures to ensure the safety of its funds and improve its business results:

1. Along with the commencement of production of the Yan'an Photovoltaic Glass project adopting the global largest single-oxygen combustion furnace technology, the sales income and operating profit of the Company in the future will be significantly improved, and our cash flow will be greatly improved;

2. Benefiting from the rebound in demand from the industry, the Company will further expand the production capacity of the photovoltaic glass and new materials business. Currently, the sales orders are full and production and sales are booming, resulting that the business income of the Company is expected to increase significantly, and the operating results will also be improved significantly;

3. As the industry's leading photovoltaic glass manufacturer, the Company will continue to promote lean production management, and further reduce product costs through technological innovations, improving rate of qualified products, implementing centralized purchase of bulk materials, carrying out comprehensive benchmarking and other measures;

4. The Company will actively push forward its additional issuance of shares and has obtained approval from the SASAC and the CSRC. Upon completion of the additional issuance, the Company will speed up the construction of projects financed by the proceeds and put them into production, thus creating new profit growth points for the Company and alleviating the pressure of fund. Meanwhile, the Company's asset-liability ratio and finance costs will be significantly reduced.

In preparing the financial statements for the year, the Board had conducted a detailed and thorough review of the Company's going-concern ability with reference to the current operational and financial situation of the Company, put forward the improvement measures and obtained a financial support commitment letter from IRICO Group Corporation Limited* , the controlling shareholder of the Company. Based on the above, the management is of the view that the Company will be able to generate expected benefits from its production and operation and obtain sufficient funding required for ensuring its production and operating activities, repaying debts as they fall due and financing capital expenditures.

In view of the foregoing, the Board has no intention to wind up or close the Company and it is confident that the Company will not be forced to enter winding-up or dissolution proceedings in the next accounting period. Therefore, the Company believes that the financial statements for this year shall still be prepared on a going concern basis in respect of actual transactions and matters in accordance with the Accounting Standards for Business Enterprises and relevant requirements promulgated by the Ministry of Finance, and based on the accounting policies and estimates set out in Note III headed "Significant Accounting Policies and Accounting Estimates".

III. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

Specific accounting policies and accounting estimates pointed:

The following disclosures cover the specific accounting policies and accounting estimates formulated by the Company based on the characteristics of actual production and operation. Please refer to the notes "III. (XXVIII) Revenue".

(I) Statement on compliance with the Accounting Standards for Business Enterprises

The financial statements is in compliance with the requirements of the Accounting Standards for Business Enterprises issued by the Ministry of Finance, reflecting the Company's financial position as at 31 December 2019, and operating results, cash flows and other relevant information for the year 2019 on a true and complete basis.

(II) Accounting period

Accounting year is the calendar year from 1 January to 31 December.

(III) Operating cycle

The operating cycle of the Company is 12 months.

(IV) Functional currency

The functional currency of the Group is Renminbi (RMB).

(V) Accounting treatments for business combinations under common control and not under common control

Business combinations under common control: The assets and liabilities acquired by acquiree through business combination shall be measured at the carrying value of the assets, liabilities (including goodwill arising from the acquisition of the party being absorbed by the ultimate controller) of the acquiree in the consolidated financial statements of the ultimate controlling party at the date of combination. The difference between the carrying amount of the net assets obtained andthe carrying amount of the consideration paid for the combination (or total nominal value of the issued shares) is adjusted to capital premium in capital reserve. If the capital reserve is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings.

Business combinations not under common control: The assets paid and liabilities incurred or committed as a consideration of business combination by the acquirer are measured at fair value on the date of acquisition and the difference between the fair value and its carrying value shall be charged to current profit or loss. Where the cost of combination is higher than the fair value of the identifiable net assets acquired from the acquirer in business combination, such difference shall be recognized as goodwill; where the cost of combination is less than the fair value of the identifiable net assets acquired from the acquiree in business combination, such difference shall be charged to current profit or loss.

The direct relevant expenses incurred for the business combinations are recognised as the profit or loss in the period when the costs are incurred; the transaction costs for the equity securities or debt securities issued for business combination shall be recognised as the initial recognition amount of equity securities or debt securities.

(VI) Preparation method of consolidated financial statements

1. Scope of consolidation

The scope of consolidation of the consolidated financial statements of the Company is determined on the basis of control, and the scope of consolidation comprises the Company and all of its subsidiaries.

2. Consolidation Procedures

The Company prepares the consolidated financial statements based on its own financial statements and those of each subsidiary and other relevant information. When preparing the consolidated financial statements, the Company considers the entire enterprise group as a single accounting entity and presents the overall financial position, operating results and cash flows of the enterprise group according to the recognition, measurement and reporting requirements of relevant Accounting Standards for Business Enterprises based on the consistent accounting policies.

The accounting policies and accounting period adopted by all subsidiaries that fall within the scope of consolidation of the consolidated financial statements shall be consistent with those adopted by the Company. Any inconsistent accounting policies and accounting period adopted by a subsidiary will be subject to necessary adjustments to align with those of the Company when preparing the consolidated financial statements. In respect of the subsidiaries acquired through business combination not under common control, their financial statements are adjusted based on the fair value of identifiable net assets as at the date of purchase. In respect of the subsidiaries acquired through business combination under common control, their financial statements are adjusted based on the book values of the assets and liabilities (including goodwill arising from the acquisition of such subsidiaries by the ultimate controlling party) in the financial statements of the ultimate controlling party.

Owners' equity, net profit or loss of the current period and comprehensive income attributable to minority shareholders of the current period of subsidiaries are stated separately under owners' equity in the consolidated balance sheet, net profit in the consolidated income statement and total comprehensive income respectively. Loss of the current period assumed by minority shareholders of a subsidiary in excess of minority shareholders' share of owners' equity in that subsidiary at the beginning of the period is offset against minority interests.

(1) Addition of subsidiary or business

During the reporting period, if there is an addition of subsidiary or business due to business combination under common control, the amount at the beginning of the period in the consolidated balance sheet will be adjusted; the income, expenses and profit of the subsidiary or business combination from the beginning of the period to the end of the reporting period will be included in the consolidated income statement; the cash flows of the subsidiary or business combination from the beginning of the period to the end of the reporting period will be included in the consolidated statement of cash flows, and relevant items in the comparative statements will also be adjusted as if the reporting entity after combination had been existing since the control of the ultimate controlling party started.

Where control over the investee under common control is obtained due to reasons such as increase in investments, adjustment is made as if the parties involved in the combination had been existing in the current condition since the control of the ultimate controlling party started. For equity investment held before the control over the acquiree is obtained, profit or loss, other comprehensive income and other changes in net assets recognized from the later of the acquisition of the original equity interest and the date when the acquirer and the acquiree are placed under common control until the date of combination are offset against retained profit at the beginning of the period of the comparative financial statements or profit or loss of the period respectively.

During the reporting period, if there is an addition of subsidiary or business due to business combination not under common control, the amount at the beginning of the period in the consolidated balance sheet will not be adjusted; the income, expenses and profit of the subsidiary or business from the date of purchase to the end of the reporting period will be included in the consolidated income statement; the cash flows of the subsidiary or business from the date of purchase to the end of the reporting period will be included in the consolidated statement of cash flows.

Where control over the investee not under common control is obtained due to reasons such as increase in investments, for the equity interest of the acquiree held before the date of purchase, the Company remeasures the equity interest at its fair value as at the date of purchase, and any difference between the fair value and its book value will be accounted for as investment gains of the period. Where equity interest of the acquiree held before the date of purchase is related to other comprehensive income under equity accounting and other changes in owners' equity other than net profit or loss, other comprehensive income and profit distribution, other comprehensive income and other changes in owners' equity related thereto are transferred to investment gains of the period to which the date of purchase belongs, except for other comprehensive income arising from the changes in net liabilities or net assets due to the re-measurement of defined beneficiary plans by the acquiree.

(2) Disposal of subsidiary or business

① General treatment for disposal

During the reporting period, for the disposal of a subsidiary or business, the income, expenses and profit of the subsidiary or business from the beginning of the period to the date of disposal are included in the consolidated income statement; the cash flows of the subsidiary or business from the beginning of the period to the date of disposal are included in the consolidated statement of cash flows.

When control over the investee is lost due to the disposal of part of the equity investment or other reasons, the Company re-measures the remaining equity investment at fair value as at the date on which control is lost. The difference between the sum of the consideration received from equity disposal and the fair value of the remaining equity interest and the sum of the net assets of the subsidiary proportionate to the original shareholding accumulated from the date of purchase or combination and goodwill is included in investment gains of the period during which the control is lost. Other comprehensive income related to the equity investment in the original subsidiary or other changes in owners' equity other than net profit or loss, other comprehensive income and profit distribution are transferred to investment gains of the period during which the control is lost, except for other comprehensive income arising from the changes in net liabilities or net assets due to the re-measurement of defined beneficiary plans by the investee.

Where loss of control is due to the decrease in the Company's shareholding as a result of the increase in capital contribution to the subsidiary by other investing parties, the accounting principle described above will be applied.

② Stepwise disposal of subsidiary

In respect of stepwise disposal of equity investment in a subsidiary through multiple transactions until control is lost, if the terms, conditions and economic effects of the transactions of equity investment in the subsidiary satisfy one or more of the following conditions, the transactions are normally accounted for as a package of transactions:

i. these transactions are entered into simultaneously or after considering the effects of each other;

ii. these transactions constitute a complete commercial result as a whole;

iii. one transaction is conditional upon at least one of the other transaction;

iv. one transaction is not economical on its own but is economical when considering together with other transactions.

Where the transactions of disposal of equity investment in a subsidiary until control is lost constitute a package of transactions, the Company accounts for the transactions as a transaction of disposal of a subsidiary resulting in the loss of control; however, the difference between the amount received each time for disposal before control is lost and the net assets of such subsidiary corresponding to the disposal of investment is recognized as other comprehensive income in the consolidated financial statements, and upon loss of control, is transferred to profit or loss of the period during which control is lost.

Where the transactions of disposal of equity investment in a subsidiary until control is lost do not constitute a package of transactions, before the loss of control, the transactions are accounted for using the policy related to partial disposal of equity investment in a subsidiary that does not involve loss of control; when control is lost, they are accounted for using the general method for disposal of subsidiaries.

(3) Purchase of minority interests in subsidiary

For the difference between the long-term equity investment newly acquired due to the purchase of minority interests by the Company and the share of net assets of the subsidiary calculated according to the new shareholding accumulated from the date of purchase (or date of combination), share premium of the capital reserve in the consolidated balance sheet will be adjusted; where share premium of the capital reserve is insufficient for the write-down, retained profit will be adjusted.

(4) Partial disposal of long-term equity investment in subsidiary without loss of control

For the difference between the consideration received from partial disposal of long-term equity investment in a subsidiary without loss of control and the net assets of the subsidiary corresponding to the long-term equity investment disposed accumulated from the date of purchase of date of combination, share premium of the capital reserve in the consolidated balance sheet will be adjusted; where share premium of the capital reserve is insufficient for the write-down, retained profit will be adjusted.

(VII) Classification of joint arrangements and accounting treatment

Joint arrangements can be classified into joint operations and joint ventures. When the Company is a party to a joint arrangement and has rights to the assets, and obligations for the liabilities, relating to such arrangement, the joint arrangement is classified as a joint operation.

The Company recognises the following items in relation to its share of benefits in joint operations and accounts for them according to relevant Accounting Standards for Business Enterprises:

(1) the assets held solely by the Company and those jointly held on a prorate basis;

(2) the liabilities assumed solely by the Company and those jointly assumed on a pro-rata basis;

(3) the income generated from the sale of the products of the joint operation attributable to the Company;

(4) the income generated by the joint operation from the sale of products on a pro-rata basis;

(5) the expenses incurred solely by the Company and those incurred by the joint operation on a pro-rata basis.

Please refer to Note "III. (XV) Long-term equity investments" for details on the Company's accounting policy on investment in joint ventures.

(VIII) Recognition standard for cash and cash equivalents

When preparing the statement of cash flows, the Company's cash on hand and deposits that can be used readily for payments are recognized as cash. Investments held by the Company that satisfy four conditions, namely short-term (mature within three months from the date of purchase), highly liquid, readily convertible to known amounts of cash and subject to an insignificant risk of changes in value, are recognized as cash equivalents.

(IX) Foreign currency transactions and translation of financial statements denominated in foreign currency

1. Foreign currency transactions

Foreign currency transactions shall be translated into RMB at the spot exchange rate on the day when the transactions occurred (or: They are translated into the amount of functional currency by applying the spot exchange rate at the dates of the transactions. Hint: If such method is adopted, then the method and direction shall be mentioned explicitly).

Balance sheet date foreign currency monetary items shall be translated using the spot exchange rate at the balance sheet date. The resulting exchange difference are recognised in profit or loss for the current period, except for those differences related to a specific-purpose borrowing denominated in foreign currency for acquisitions and construction of the qualified assets, which should be capitalised as cost of the borrowings.

2. ***Translation of financial statements denominated in foreign currency***

For the translation of financial statements of foreign operation denominated in foreign currency, the assets and liabilities in the balance sheets are translated at the spot exchange rates on the balance sheet date; except for "Retained earnings" items, all items under owner's equity are translated at the spot exchange rates when incurred. The income and expense items in the income statement are translated at the spot exchange rates on the transaction dates (or: using at spot rates with reasonable approximation of the exchange rates prevailing on the transaction dates. Important: if this method is used, the specific method and basis shall be clearly stated.)

On disposal of foreign operations, exchange differences in financial statements denominated in foreign currencies related to the foreign operation shall be transferred from owner's equity items to profit or loss to profit or loss from disposal for the current period.

(X) Financial Instruments

Financial instruments of the Company include financial assets, financial liabilities and equity instruments.

1. Classification of financial instruments

According to the business model of the Company for management of financial assets and the contractual cash flow characteristics of financial assets, financial assets are classified at the initial recognition as financial assets measured at amortized cost, or financial assets (debt instruments) measured at fair value through other comprehensive income, or other financial assets that are measured at fair value through current profit or loss.

If the objective of the business model is to collect contractual cash flows, and the cash flows are solely payment of the principal and the interest based on the outstanding principal amount, the financial assets are classified as financial assets measured at amortized cost; if the objective of the business model for managing such financial assets is both to collect contractual cash flows and to dispose of the financial assets, and the cash flows are solely payment of the principal and the interest based on the outstanding principal amount, the financial assets are classified as financial assets (debt instruments) measured at fair value through other comprehensive income, other financial assets are classified as financial assets measured at fair value through current profit or loss.

For an investment in equity instruments not held for trading purposes, the Company determines at the initial recognition whether it is designated as a financial asset (equity instruments) that is measured at fair value through other comprehensive income. At the initial recognition, financial assets can be designated as financial assets at fair value through current profit or loss to eliminate or significantly reduce an accounting mismatch.

Financial liabilities, at initial recognition, are classified into financial liabilities at fair value through current profit or loss and financial liabilities measured at amortized cost.

When meeting any of the following criteria, the Company may, at initial recognition, designate a financial liability as measured at fair value through current profit or loss:

(1) Such designation would eliminate or significantly reduce a measurement or recognition inconsistency.

(2) 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.

(3) The financial liabilities include embedded derivatives which can be split separately.

2. Recognition basis and measurement method of financial instruments

(1) Financial assets measured at amortized cost

Financial assets measured at amortized cost, including notes receivable and accounts receivable, other receivables, long-term receivables, and debt investments, are initially measured at fair value plus relevant transaction costs. Accounts receivable that do not contain significant financing components and accounts receivable that the Company has decided not to consider for a financing component of no more than one year are initially measured at the contractual transaction price.

Interest calculated under the effective interest method during the period of holding is included in current profit or loss.

When recovering or disposing, the difference between the price obtained and the book value of the financial asset is included in current profit or loss.

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

Financial assets (debt instruments) measured at fair value through other comprehensive income, including financing receivables and other debt investments, are initially measured at fair value plus relevant transaction costs. These financial assets are subsequently measured at fair value, with changes in fair value are included in other comprehensive income except for interest, impairment losses or gains and exchange gains or losses calculated using the effective interest method.

On derecognition, the accumulated gain or loss previously recognized in other comprehensive income is transferred out from other comprehensive income and recognized in current profit or loss.

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

Financial assets (equity instruments) measured by fair value through other comprehensive income, including other equity instruments, are initially measured at fair value plus relevant transaction costs, and subsequently measured at fair value through other comprehensive income. The dividends received are included in current profit or loss.

When derecognized, the accumulated gain or loss previously recognized in other comprehensive income is transferred from other comprehensive income to retained earnings.

(4) Financial assets at fair value through current profit or loss

Financial assets measured at fair value through current profit or loss, including held-for-trading financial assets, derivative financial assets and other non-current financial assets, are initially measured at fair value with relevant transaction costs included in current profit or loss, and subsequently measured at fair value through current profit or loss.

(5) Financial liabilities measured at fair value through current profit or loss

Financial liabilities measured at fair value through current profit or loss, including held-for-trading financial liabilities, derivative financial liabilities, etc., are initially measured at fair value with relevant transaction costs recognized in current profit or loss. Such financial liabilities are subsequently measured at fair value. Changes in fair value are recognized in current profit or loss.

On derecognition, the difference between the carrying amount and the consideration paid is recognized in current profit or loss.

(6) Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost, including short-term borrowings, bills payable, accounts payable, other payables, long-term borrowings, bonds payable and long-term payables, are initially measured at fair value plus relevant transaction costs.

Interest calculated under the effective interest method during the period of holding is included in current profit or loss.

On derecognition, the difference between the consideration paid and the carrying amount of the financial liability is recognized in current profit or loss.

3. *Recognition basis and measurement method for financial asset transfers*

When transferring a financial asset, if substantially all the risks and rewards of ownership of the financial asset are transferred to the transferee, the Company shall derecognize such asset; if the Company retains substantially all risks and rewards of ownership of the financial asset, the Company shall continue to recognize such asset.

When judging whether the transfer of a financial asset meets the above criteria for derecognition, the substance-over-form principle shall be applied. The Company differentiates the transfer of a financial asset as full transfer or partial transfer. If the full transfer of a financial asset meets the criteria for derecognition, then the difference between the following two included in current profit or loss:

(1) the book value of the financial asset transferred;

(2) the sum of the consideration received from the transfer and the total amount of the fair value changes that is directly charged or credited to owners' equity (if the asset transferred is a financial asset (debt instruments) at fair value through other comprehensive income).

When the partial transfer of a financial asset meets the criteria for derecognition, the entire book value of the financial asset transferred shall be allocated between the part derecognized and the part to be recognized based on their respective fair value, with the difference between the following two included in current profit or loss:

(1) The book value of the part that is derecognized;

(2) The sum of the consideration attributable to the part derecognized and the total amount of the fair value changes that is directly charged or credited to owners' equity and attributable to the part derecognized (if the asset transferred is a financial asset (debt instruments) at fair value through other comprehensive income).

If the transfer of a financial asset does not meet the criteria for derecognition, the financial asset shall continue to be recognized and the consideration received is recognized as a financial liability.

4. Conditions for derecognition of financial liabilities

If all or part of the current obligations of a financial liability have been discharged, the financial liability or part of it will be derecognized; if the Company signs an agreement with the creditor to replace the existing financial liability with new financial liability of substantially different contractual terms, the existing financial liability shall be derecognized while the new financial liability shall be recognized.

If substantial changes are made to the contractual terms (in whole or in part) of the existing financial liability, the existing financial liability (or part of it) shall be derecognized, and the financial liability after the modification of terms shall be recognized as a new financial liability.

When a financial liability is derecognized in whole or in part, the difference between the book value of the financial liability derecognized and the consideration paid (including the non-cash assets transferred out or the new financial liability assumed) shall be included in current profit or loss.

If the Company repurchases part of a financial liability, the book value of the entire financial liability is allocated between the part that continues to be recognized and the part that is derecognized on the repurchase date based on their respective relative fair value. The difference between the book value assigned to the part derecognized and the consideration paid (including the non-cash assets transferred out or the new financial liability assumed) shall be included in current profit or loss.

5. Determination of fair value of financial assets and financial liabilities

As for financial instruments with an active market, their fair values are determined by quoted prices in the active market. As for financial instruments without an active market, their fair values are determined by using valuation techniques. At the time of valuation, the Company adopts valuation techniques that are applicable in the current circumstances and sufficiently supported by available data and other information, and selects inputs that are consistent with the characteristics of the assets or liabilities considered by the market participants in the transactions of the relevant assets or liabilities, and prioritizes the use of relevant observable inputs. Unobservable inputs are used only if the relevant observable inputs are unavailable or not reasonably available.

6. Test and accounting methods for impairment of financial assets

The Company takes into account all reasonable and reliable information, including forward-looking information, and estimates financial assets measured at amortized cost by way of single or combination, or the expected credit losses of financial assets (debt instruments) measured at fair value through other comprehensive income. The measurement of the expected credit losses depends on whether its credit risk has increased significantly since the initial recognition of the financial assets.

If the credit risk of a financial instrument has increased significantly since the initial recognition, the Company measures the loss provisions according to the lifetime expected credit loss of the financial instrument; if the credit risk on a financial instrument has not increased significantly since the initial recognition, the Company measures the loss provisions at an amount equal to 12-month expected credit losses of the financial instrument. The resulting increase in or reversal of loss provision shall be included in current profit or loss as impairment losses or gains.

Usually, if it is overdue for more than 30 days, the Company will consider that the credit risk of the financial instrument has increased significantly, unless there is conclusive evidence to prove that the credit risk on a financial instrument has not increased significantly since initial recognition.

For a financial instrument with lower credit risk on the balance sheet date, the Company assumes that its credit risk on a financial instrument has not increased significantly since the initial recognition.

If there is objective evidence that a financial asset has been credit impaired, the Company shall make individual provision for the impairment of the financial asset.

For trade receivables whether contain significant financing components or otherwise, the Company always measures the loss provision at the lifetime expected credit loss.

For lease receivables and long-term receivables formed by the Company through the sale of goods or the provision of labor services, the Company chooses to always measures the loss provisions at the lifetime expected credit loss.

(XI) IMPAIRMENT OF RECEIVABLES

Accounts receivable of the Company comprise accounts receivable, bills receivable, receivables financing, contract assets, other receivables and long-term receivables. If there is objective evidence that they have been impaired at balance sheet date, impairment loss shall be recognized base on the differences between the carrying amount and the present value of estimated future cash flows.

1. Accounts receivable and bills receivable

For accounts receivable and bills receivable, whether it contains significant financing components, the company always measures its loss provisions in accordance with the amount of expected credit losses for the entire life period, and the increase or reversal of the loss provision resulting therefrom is included in the current profit and loss as an impairment loss or gain.

(1) Accounts receivable that are individual determination and subject to provision for bad debt

The impairment test is conducted separately. If there is objective evidence that it has been impaired, provision for bad debts will be made based on the difference between the present value of future cash flows and its book value, which shall be included in the current profit or loss.

(2) Accounts receivable for which provision for bad debts by portfolio

For the trade receivables and bill receivables without objective evidence of impairment or the expected credit loss cannot be estimated for an individual provision at a reasonable cost, the Company grouped trade receivables and bill receivables in accordance with credit risk characteristics and calculated the expected credit loss based on portfolio. The reason of choosing the portfolio are as follows:

The reason of choosing the portfolio

The portfolio of bills	The portfolio is in the credit risk characteristic of the credit degree of acceptance bank or acceptor
The portfolio of aging	The portfolio is in the credit risk characteristic of the aging of accounts receivable
The portfolio of related parties	The portfolio is in the credit risk characteristics of the trading relationship of accounts receivable
The portfolio of deposit, guarantees and reserves	The portfolio is in the credit risk characteristic of the nature of accounts receivable

The method of accruing bad debt provision on portfolio

The portfolio of bills	The credit risk characteristic is in the credit degree of acceptance bank or acceptor
The portfolio of aging	Accruing bad debt provision based on aging analysis method
The portfolio of related parties	Other method
The portfolio of deposit, guarantees and reserves	Other method

The Company combines the receivables with similar credit risk characteristics and the Company estimates the proportion of accruing bad debt provision by aging portfolio based on all reasonable and evidenced information, including forward-looking information:

Aging	Provision ratios for accounts receivable *(%)*
0–6 months	0
7–12 months	1
1–2 years	30
2–3 years	50
over 3 years	100

In the portfolio, other methods are used to accrual provision for bad debts:

When there is objective evidence that the Company will not be able to recover all the amount in accordance with the original terms of the receivables, the impairment test is carried out separately and the provision for bad debts is made based on the difference between the present value of its future cash flow and its book value.

2. Receivables financing

If the bills receivable and accounts receivable meet the following conditions: 1) contractual cash flows is for the payment of interest based on the principal and the principal outstanding; 2) the objective of the Company's business model for managing the bills receivable and accounts receivable is both to collect contractual cash flows and to dispose the bills receivable and accounts receivable;

The Group classifies it as financial assets at fair value through other comprehensive income. It was presented as a receivables financing on the statement. For the relevant specific accounting treatment, please see the note "III. (X) Financial instruments";

When it is unable to assess the information of the expected credit loss at a reasonable cost in accordance with an individual item, the Company shall divide the bill receivables and account receivables into certain combination based on the credit risk characteristic and estimate the expected credit loss on the basis of the combination. If any objective evidence indicates that a bill receivable and an account receivable has been credit impaired, the Company shall make individual provision for bad debts and recognize the expected credit losses for the bills receivable and accounts receivable. For the bills receivable and accounts receivable divided into portfolios, it is treated in accordance with the measurement method of impairment loss of the aforementioned accounts receivable.

3. Other receivables

For the measurement of impairment loss of other receivables, it is treated in accordance with the measurement method of impairment loss of the aforementioned accounts receivable.

4. Others

For other receivables such as bills receivable, prepayments, interests receivable, long-term receivables and etc., the provision for bad debts is made based on the difference between the present value of future cash flows and its book value.

(XII) Inventories

1. Classification

Inventories are classified into raw materials, work in progress, revolving materials, low-value consumables, packaging materials, goods in stock (finished goods), and goods in transit.

2. Measurement for inventories delivered

Upon delivery, inventories are measured with the weighted average method.

3. Basis for the determination of net realisable value of different type of inventories

Net realizable value of held-for-sale commodity stocks, such as finished goods, goods-in-stock, and held-for-sale raw materials, during the normal course of production and operation, shall be determined by their estimated selling prices less related selling costs and taxes; the net realizable value of inventory materials, which need to be processed, during the normal course of production and operation, shall be determined by the amount after deducting the estimated cost of completion, estimated selling costs and relevant taxes from the estimated selling price of finished goods; the net realizable value of inventories held for execution of sales contracts or labor contracts shall be calculated on the ground of the contracted price. If an enterprise holds more inventories than the quantity stipulated in the sales contract, the net realizable value of the excess part shall be calculated on the ground of general selling price.

Provision for decline in value of inventories is made on an item-by item basis at the end of the period. For large quantity and low value items of inventories, provision for decline in value of inventories may be made based on categories of inventories; for items of inventories relating to a product line that is produced and marketed in the same geographical area and with the same or similar end uses or purposes, which cannot be practicable evaluated separately from other items in that product line, provision for decline in value of inventories may be determined on an aggregate basis.

Unless there is evidence clearly shows that abnormality in market price exists as of the balance sheet date, the net realizable value of inventories is determined based on the market price as of the balance sheet date.

The net realizable value of inventories at the end of current period is determined based on the market price of the balance sheet date.

4. Inventory system

The perpetual inventory system is adopted.

5. Amortisation of low-value consumables and packaging materials

(1) Low-value consumables are mortised using the immediate write-off method.

(2) Packaging materials are mortised using the immediate write-off method.

(XIII) Contract assets

1. Recognition and standard of contract assets

The Company presents contract assets or contract liabilities in the balance sheet based on the relationship between performance obligations and customer payments. The consideration that the Company has the right (and this right depends on factors other than passage of time) to receive for goods transferred to customers is listed as a contract assets; the obligation of the Company to transfer goods or provide services to customers for which the consideration is received or receivable is presented as contract liabilities. Contract assets and contract liabilities under the same contract shall be shown on a net basis.

2. Method of determination of expected credit loss of contract assets and accounting treatment methods

For the method of determination of expected credit loss of contract assets and accounting treatment methods, please refer to the accounting treatment of accounts receivable in relation to Note "III. (X) 6. Testing of Impairment of Financial Assets and Accounting Treatment Methods".

(XIV) Assets classified as held-for-sale

The Company recognises non-current assets or disposal groups which meet the following conditions as assets held for sale:

(1) The assets or disposal groups must be available for sale immediately under the current conditions according to the usual terms of the sale of such assets or disposal groups in similar transactions;

(2) The assets are highly likely to be sold, namely, the Company has been offered a resolution with one disposition of the assets and obtained a firm purchase commitment and the disposition will be completed within 1 year. If regulation needs to be approved by the relevant authorities or supervision department of the Company, such approval has been obtained.

(XV) Long-term equity investments

1. Joint control or significant influence criterion

Joint control is the contractually agreed sharing of control of an arrangement, and exists only when decisions about the relevant activities of the arrangement require the unanimous consent of the parties sharing control. If the Company together with the other joint venture parties can jointly control over the investee and are entitled to the right of the net assets of the investee, the investee is joint venture of the Company.

Significant influence refers to the power to participate in making decisions on the financial and operating policies of an enterprise, but not the power to control, or jointly control, the formulation of such policies with other parties. Where the Company can exercise significant influence over an investee, the investee is an associate of the Company.

2. Determination of initial investment cost

(1) Long-term equity investments acquired through business combination

For business combinations involving entities under common control: where the Company pays cash, transfers non-cash assets, bear debts or issue equity securities as consideration of combinations, the initial investment cost of long-term equity investments are its share of the book value of the shareholders' equity of the acquiree in the financial statements of the ultimate controlling party on the date of combinations. In connection with imposing control over the investee under joint control as a result of additional investment and other reasons, on the combination date, the initial investment cost of long-term equity investments shall be determined based on share of the carrying amount of the net assets of the combined party in the consolidated financial statement of the ultimate controlling party after the combination. The difference between initial investment cost of long-term equity investment on the date of combination and the sum of the carrying value of long-term equity investment before combination and the carrying value of newly paid consideration for additional shares acquired on the date of combination is to adjust share premium. If the balance of share premium is insufficient, any excess is adjusted to retained earnings.

Business combinations involving entities not under common control: the cost of the combination determined on the date of acquisition shall be taken as the initial investment cost of the long-term equity investment. In connection with imposing control over the investee not under joint control as a result of additional investment and other reasons, the initial investment cost when changing to the cost method shall be the sum of the carrying value of the equity investment originally held and the newly increased investment cost.

(2) *Long-term equity investments acquired by other means*

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

The initial investment cost of a long-term equity investment obtained by the Company by means of issuance of equity securities shall be the fair value of the equity securities issued.

If the non-monetary assets transaction is commercial in nature and the fair value of the assets received or surrendered can be reliably measured, the initial investment cost of a long-term equity investment acquired through the non-monetary assets transaction, shall be determined on the basis of the fair value of the assets surrendered and the related tax payable, unless there is concrete evidence that the fair value of the assets received is more reliable; For non-monetary assets transaction which does not meet the above conditions, the initial investment cost of a long-term equity investment received shall be the book value of the assets surrendered and the relevant taxes payable.

For the long-term equity investment acquired by the Company through debt restructurings, its book value is determined based on the fair value of the creditor's rights waived and the taxes that can be directly attributable to the asset and other costs, and the balance between the fair value and book value of the creditor's rights waived is included in current profit or loss.

3. Subsequent measurement and recognition of profit or loss

(1) Long-term equity investment accounted for by cost method

Long-term equity investments in subsidiaries are accounted for using cost method. Except for the actual consideration paid for the acquisition of investment or the declared but not yet distributed cash dividends or profits which are included in the consideration, investment gains is recognized as the Company' share of the cash dividends or profits declared by the investee.

(2) Long-term equity investment accounted for by equity method

Long-term equity investments in associates and jointly controlled entities are accounted for using equity method. Where the initial investment cost of a long-term equity investment exceeds the Company's share of the fair value of the investee's identifiable net assets at the acquisition date, no adjustment shall be made to the initial investment cost; where the initial investment cost is less than the Company's share of the fair value of the investee's identifiable net assets at the acquisition date, the difference shall be charged to current profit or loss.

The Company recognizes the investment income and other comprehensive income according to its shares of net profit or loss and other comprehensive income realized by the investee respectively, and simultaneously makes adjustment to the carrying value of long-term equity investments. The carrying value of long-term equity investment shall be reduced by attributable share of the profit or cash dividends for distribution declared by the investee. In relation to other changes of owner's equity except for net profits and losses, other comprehensive income and profit distribution of the investee, the carrying value of long-term equity investment shall be adjusted and included in owner's equity.

The Company's share of net profit or loss of an investee is determined based on the fair value of identifiable assets of the investee at the time when the investment is obtained, and according to the accounting policies and accounting period of the Company, recognition shall be made to the net profit of the investee after the adjustment. During the period of holding investments, if the investee prepares its consolidated financial statements, the accounting shall be based on the amounts attributable to the investee in the net profit, other comprehensive income and other changes of the owner's equity in the consolidated financial statements.

The unrealized profit or loss resulting from transactions between the Company and its associates or joint venture shall be eliminated in, based on which investment income or loss shall be recognized. Any losses resulting from transactions, which are attributable to impairment of assets, shall be fully recognized. For asset injection or disposal between the Company and any of its associates or joint ventures, if the asset constitutes a business, such transaction shall be dealt with in accordance with relevant accounting treatment disclosed in Note III. (V) "Accounting method for business combination involving enterprises under common control and not under common control" and Note III. (VI) "Preparation of consolidated financial statements".

In recognition of its share of losses of an investee, the Company deal with it in the following order: Firstly, the Company will write off the carrying value of long-term equity investment. Secondly, in the event the aforesaid carrying value is insufficient for write off, it shall continue to recognize investment loss and write off carrying value of long-term receivables to the extent of the carrying amount of the long-term equity which substantively constitutes the net investment in the investee. Finally, after the above treatment, for the additional obligations which shall be still assumed by the Company according to investment contract or agreement, the estimated liabilities shall be recognized based on the obligations which are expected to assume and included in the investment loss for the current period.

When the investee realizes net profit or net increase in other comprehensive income in the following period, the Company shall carry out accounting treatment in the reverse order of the previous confirmation or registration of the investment net loss, i.e. write down the net unconfirmed investment loss, restore other long-term rights and interests and restore the book value of long-term equity investment in sequence, and review the book value of the estimated liabilities and make adjustments according to the best estimation after review.

(3) Disposal of long-term equity investments

When long-term equity investments are disposed of, the difference between the carrying amount and the actual proceeds received should be charged to current profit or loss.

For the long-term equity investment under the equity method, when disposing of such investment, part of amounts that shall be originally included in other comprehensive income shall be accounted for in proportion by using the same basis as the investee used for direct disposal of relevant assets or liabilities. The owner's equity which is recognized due to other changes of owner's equity except for net profits and losses, other comprehensive income and profit distributions shall be transferred in proportion into current profit or loss, excluding the other comprehensive income derived from changes of net liabilities or net assets due to re-measurement on defined benefit plan by the investee.

When the Group loses the control or material influence over the investee due to partially disposal of equity investment and other reasons, the remaining equity interest shall be accounted for in accordance with the standards on recognition and measurement of financial instruments, and the difference between the fair value and the carrying value at the date of losing control or material influence shall be included in current profit or loss. For other comprehensive income recognized in the original equity investment due to the equity method is adopted, it shall be treated using the same accounting basis as the investee used for direct disposal of relevant assets or liabilities when ceasing to use the equity method. All owner's equity which is recognized due to changes of owner's equity other than net profits and losses, other comprehensive income and profit distributions shall be transferred into the current profit or loss when ceasing to use the equity method.

When the Group loses the control over the investee due to partially disposal of equity investment, decline in shares of the Company resulting from the increased investment on the subsidiaries and other reasons, the remaining equity interest after disposal shall be accounted for under equity method in preparation of separate financial statements provided that joint control or material influence over the investee can be imposed and shall be adjusted as if such remaining equity interest had been accounted for under the equity method since being obtained. Where the remaining equity interest after disposal cannot exercise joint control or exert material influence over the investee, it shall be accounted for according to relevant provisions of the standards on recognition and measurement of financial instruments, and the difference between fair value and the carrying value on the date of losing control shall be included in current profit or loss.

The disposed equity interest was acquired in a business combination as resulted from making additional investment, the remaining equity interest after disposal will be accounted for using cost method or equity method when preparing the separate financial statements. Other comprehensive income and other owners' equity which are recognized because the equity investment held on the acquisition date is accounted for using equity method shall be transferred on pro rata basis. For the remaining equity interest after disposal accounted for using the recognition and measurement standards of financial instruments, other comprehensive income and other owners' equity shall be fully carried forward.

4. *The recognition criteria and methods of provision for impairment of long-term equity investments*

The Company assesses whether an indication of impairment exists in the long-term equity investments at the end of each reporting period.

If an indication of impairment exists in the long-term equity investments, for example, when the carrying value of long-term equity investments is greater than the share of the carrying value of the owner's equity of the investee, etc., the Company shall conduct an impairment test on the long-term equity investments and estimate the recoverable amount.

Where the recoverable amount of the asset is lower than the difference with the carrying amount of long-term equity investments, the provision for impairment shall be made, the provision for impairment cannot be reversed in subsequent accounting periods once recognized.

(XVI) Investment property

Investment property is held to earn rentals or for capital appreciation or both which include leased land use rights; land use rights held for sale after appreciation; leased buildings (including buildings after self-completion of construction or development for the purpose of leasing and buildings that is being constructed or developed for the purpose of leasing in future).

The Company's existing investment property is measured at cost. Investment property measured at cost – buildings held for leasing shall adopt the same depreciation policy for fixed assets of the company, land use rights held for leasing shall adopt the same amortization policy for the intangible assets.

(XVII) Fixed assets

1. Conditions for recognition of fixed assets

Fixed assets are tangible assets that are held for use in production or supply of goods or services, for rental to others, or for administrative purposes, and have a useful life of more than one accounting year. Fixed asset is recognised when it meets the following conditions:

(1) it is probable that the economic benefits associated with the fixed asset will flow to the enterprise;

(2) its cost can be reliably measured.

2. Methods for depreciation

Fixed assets of the Company are depreciated by categories using the straight-line method, and the annual depreciation rates are determined by categories based upon their estimated useful lives and their estimated residual values. Where different components of a fixed asset have different useful lives or generate economic benefits for the enterprise in different ways, different depreciation rates or depreciation methods shall apply, and each component is depreciated separately.

The depreciation methods, useful life of depreciation, residual value rate and annual depreciation rate of each category of fixed assets are as follows:

Category	Depreciation methods	Useful life	Residual value rate	Annual depreciation rate
		(Years)	*(%)*	*(%)*
Plant and buildings	Straight-line method	10-30	3	3.23-9.70
Machinery and equipment	Straight-line method	18	3	5.40
Electronic equipment	Straight-line method	15	3	6.50
Office equipment	Straight-line method	5	3	19.40
Transportation tools	Straight-line method	5	3	19.40
Specialized glass equipment	Straight-line method	6	3	16.20

3. *Recognition and measurement of fixed assets under finance lease (Accounting policies applicable before 1 January 2019)*

Where any one of the following conditions is provided in the lease agreement between the Company and the lessor, assets under finance lease will be recognized:

(1) upon the expiry of lease, the ownership of the leased asset will be transferred to the Company;

(2) the Company has the option to purchase the leased asset at a price that is expected to be far less than the fair value of the leased asset at the exercise of the option;

(3) the lease term accounts for the majority of the useful life of the leased asset;

(4) the present value of the minimum lease payment at the inception of the lease is substantially the same as the fair value of the leased asset.

At the commencement of the lease term, the Company will use the lower of the fair value of the leased assets and the present value of the minimum lease payments as the book value of the leased assets, and the minimum lease payments as the book value of the long-term payables. The difference between the book value of the leased assets and the long-term payables is recorded as the unrecognized financing fee.

(XVIII) Construction in progress

The total value of the construction in progress before the construction of the asset is ready for its use, as the recorded value of the fixed assets. If the construction in progress of fixed assets constructed are ready for their intended use but the final account of completed project has not been issued, it should be transferred to fixed assets at an estimated cost according to the construction budget, construction price or actual cost, and depreciation should be provided according to deprecation policy for fixed assets from the date when the assets are ready for their intended use. When the final account of completed project is issued, the estimated cost will be adjusted according to the actual cost, while the original depreciation charge will not be adjusted.

(XIX) Borrowing costs

1. Criteria for recognition of capitalised borrowing costs

Borrowing costs refer to borrowing interest, amortization of discounts or premiums, ancillary costs and exchange differences arising from foreign currency borrowings, etc.

The Company's borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized into the cost of relevant assets. Other borrowing costs are recognized as expenses in profit or loss in the period in which they are incurred.

Qualifying assets include fixed assets, investment property and inventories that necessarily take a substantial period of time for acquisition, construction or production to get ready for their intended use or sale.

Capitalisation of borrowing costs begins when the following three conditions are fully satisfied:

(1) expenditures for the assets (including cash paid, non-currency assets transferred or interest-bearing liabilities assumed for the acquisition, construction or production of qualifying assets) have been incurred;

(2) borrowing costs have been incurred;

(3) acquisition, construction or production that are necessary to enable the asset get ready for their intended use or sale have commenced.

2. Capitalisation period of borrowing costs

The capitalisation period shall refer to the period between the commencement and the cessation of capitalisation of borrowing costs, excluding the period in which capitalisation of borrowing costs is temporarily suspended.

Capitalisation of borrowing costs shall cease when the qualifying asset under acquisition, construction or production gets ready for intended use or sale.

If part of the project of acquisition, construction or production of qualifying assets has been completed respectively and can be put into use individually, capitalisation of borrowing costs of that part should cease.

If different parts of the asset acquired, constructed or produced are completed separately, but such asset will not be ready for the intended use or sale until all parts have been completed, the capitalisation of borrowing costs should cease upon the completion of all parts of the said asset.

3. Suspension of capitalisation period

Capitalisation of borrowing costs shall be suspended during periods in which the acquisition, construction or production of a qualifying asset is interrupted abnormally, and the interruption is for a continuous period of more than 3 months; if the interruption is a necessary step for making the qualifying asset under acquisition, construction or production ready for the intended use or sale, the capitalisation of the borrowing costs shall continue. The borrowing costs incurred during such period of interruption shall be recognized in current profit or loss. When the acquisition, construction or production of the asset resumes, the capitalisation of borrowing costs continues.

4. Calculation of capitalisation amount of borrowing costs

As to specific borrowings for the acquisition, construction or production of qualifying assets, borrowing costs from the specific borrowings actually incurred in the current period minus the interest income earned on the unused borrowing loans as a deposit in the bank or the investment income earned from temporary investment will be used to determine the amount of borrowing costs for capitalisation.

As to general borrowings for the acquisition, construction or production of qualifying assets, the to-be-capitalized amount of interests on the general borrowing shall be calculated and determined by multiplying the weighted average asset disbursement of the part of the accumulative asset disbursements minus the specific borrowings and the capitalisation rate of the said general borrowings. The capitalisation rate shall be calculated and determined according to the weighted average interest rate of general borrowings.

(XX) Intangible assets

1. *Measurement of intangible assets*

(1) *Intangible assets are initially measured at cost upon acquisition by the Company;*

The costs of an externally purchased intangible asset include the purchase price, relevant tax expenses, and other expenditures directly attributable to bringing the asset ready for its intended use. If the payment for an intangible asset is delayed beyond the normal credit conditions and it is of financing nature in effect, the cost of the intangible asset shall be ascertained based on the present value of the purchase price.

The amount of intangible assets acquired from debt restructuring should be recorded at the fair value of the creditor' rights waived thereunder and other costs including the taxes directly attributable to bringing the asset ready for its intended use, and the difference between the fair value and the carrying amount of creditor' right waived thereunder should be included in current profit or loss.

If the non-monetary assets transaction is commercial in nature, and the fair value of the assets received or surrendered can be reliably measured, it is measured on the basis of fair value. If the fair value of the assets received or surrendered can be reliably measured, for the intangible asset received, the fair value of the assets surrendered and the relevant taxes and fees payable shall be taken as the initial investment cost of the intangible asset received, unless there is concrete evidence that the fair value of the assets received is more reliable. If the non-monetary assets transaction does not have commercial substance, or the fair value of the assets received or surrendered cannot be reliably measured, for the intangible asset received, the book value of the assets surrendered and the relevant taxes and fees payable shall be taken as the initial investment cost of the intangible asset received.

(2) Subsequent measurement

The Company shall analyse and judge the useful life of intangible assets upon acquisition.

As for intangible assets with a finite useful life, they are amortized using the straight-line method over the term in which economic benefits are brought to the firm; if the term in which economic benefits are brought to the firm by an intangible asset cannot be estimated, the intangible asset shall be taken as an intangible asset with indefinite useful life, and shall not be amortized.

2. Estimate of useful life for the intangible assets with finite useful life

Items	**Estimated useful lives**	**Amortization method**
Land use rights	16.75–50	straight-line method
Trademark use rights	10	straight-line method
Computer software	5–10	straight-line method
Patent	10	straight-line method
Software copyrights	10	straight-line method
Non-patent technology	5	straight-line method

The useful life and amortization method of intangible assets with finite useful life are reviewed at the end of each period.

After review, the useful life and amortization method of intangible assets at the end of this period remain the same as the previous period.

3. Basis for determining intangible assets with indefinite useful life and procedure for reviewing its useful life

The useful life of intangible assets with indefinite useful life is reviewed at the end of each period.

4. Specific criteria for the division of research phase and development phase

The expenses for internal research and development projects of the Company are divided into expenses in the research phase and expenses in the development phase.

Research phase: a phase in which innovative and scheduled investigations and research activities are conducted to obtain and understand new scientific or technological knowledge.

Development phase: a phase in which the research outcomes or other knowledge are applied for a plan or a design prior to the commercial production or use in order to produce new or substantially improved materials, devices, products, etc.

5. Specific conditions for capitalisation of expenditure incurred in development phase

Expenditure incurred in the development phase are recognized as intangible assets if the following conditions are fulfilled:

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

(2) the intention to complete the intangible asset for use or for sale;

(3) the ways in which the intangible asset generate economic benefits, including there is evidence that the products produced using the intangible asset has a market or the intangible asset itself has a market, or if the intangible asset is for internal use, there is evidence that proves its usefulness;

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

(5) the expenditures attributable to the development phase of the intangible asset could be reliably measured.

Expenditure in the development phase, if it does not meet the conditions listed above, is charged to profit or loss when incurred. Development expenditure previously included in profit or loss will not be recognized as assets in subsequent periods. The capitalized expenditures for the development phase are presented as development expenditures on the balance sheet, and are converted to intangible assets from the date when the project reaches its intended use.

When the recoverable amount of development expenditure is lower than its carrying amount, the carrying amount will be reduced to the recoverable amount.

(XXI) Impairment of long-term assets

Long-term assets such as long-term equity investments, fixed assets, construction in progress, right-to-use assets, use of intangible assets with a finite useful life are tested for impairment if there is any indication that such assets may be impaired at the balance sheet date. If the result of the impairment test indicates that the recoverable amount of the asset is less than its carrying amount, a provision for impairment and an impairment loss are recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset. Provision for asset impairment is determined and recognized on the individual asset basis. If it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of a group of assets to which the asset belongs is determined. A group of assets is the smallest group of assets that is able to generate independent cash inflows.

Goodwill, intangible assets with indefinite useful lives and intangible assets that are not yet ready for use are tested for impairment at least at the end of each year.

When the Company performs impairment test on goodwill, the Company shall, as of the purchase day, allocate on a reasonable basis the carrying value of the goodwill formed by merger of enterprises to the relevant asset groups, or if there is a difficulty in allocation, to allocate it to the set of asset groups. When the Company allocates the carrying value of goodwill, the allocation shall be made based on the relative benefits gained from the synergy of business combination by relevant asset group or set of asset groups, based on which impairment tests for goodwill shall be carried out.

For the purpose of impairment test on the relevant asset groups or the set of asset groups containing goodwill, if any evidence shows that the impairment of asset groups or set of asset groups related to goodwill is possible, an impairment test will be made firstly on the asset groups or set of asset groups not containing goodwill, thus calculating the recoverable amount and comparing it with the relevant carrying value so as to recognize the corresponding impairment loss. Then the Company will make an impairment test on the asset groups or set of asset groups containing goodwill, and compare the carrying value of the asset groups or set of asset groups (including the carrying value of the goodwill allocated thereto) with the recoverable amount. Where the recoverable amount of the relevant asset groups or set of the asset groups is lower than the carrying value thereof, it shall recognize the impairment loss of the goodwill. Once the above asset impairment loss is recognized, it will not be reversed in subsequent accounting periods.

(XXII) Long-term deferred expenses

Long-term prepaid expenses are expenses which have occurred but will benefit over 1 year and shall be amortized over the current period and subsequent periods.

The long-term deferred expenses of the Company are measured at actual cost and amortized equally over the expected benefit periods. For long-term deferred expenses that will not benefit the future accounting periods, their amortized value shall be included in current profit or loss upon determination.

(XXIII) Contract liabilities

The Company has presented contract assets or contract liabilities in the balance sheet based on the connection between the fulfilment of performance obligations and payment of the customers. A contract liability represents the obligation to transfer goods or services to a customer for which the Company has received a consideration or an amount of consideration that is due from the customer. A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

(XXIV) Employee benefits

1. *Accounting treatment methods of Short-term benefits*

In the accounting period in which employees provide service for the Company, short-term benefits actually incurred are recognized as liabilities and charged to current profit or loss or cost of relevant assets.

With regard to medical insurance, work-related injury insurance, maternity insurance and other social insurance and housing provident funds contributed and labour union expenses and employee education expenses paid as required by regulations, the Company should calculate and recognize the corresponding employee benefits payables according to the appropriation basis and proportion as stipulated by relevant requirements in the accounting period in which employees provide service.

Non-currency employee welfare expenses, if can be reliably measured, are measured at fair value.

2. *Accounting treatment methods of Post-employment benefits*

(1) *Defined contribution scheme*

The Company will pay basic pension insurance and unemployment insurance for the staff in accordance with the relevant provisions of the local government. During the accounting period when the staff provides service, the Company will calculate the amount payable in accordance with the local stipulated basis and proportions which will be recognized as liabilities, and the liabilities would be charged into current profit or loss or costs of relevant assets.

(2) *Defined benefit scheme*

In respect of the defined benefit scheme, the Company shall attribute the welfare obligations under the defined benefit scheme in accordance with the estimated accrued benefit method to the service period of relevant employee, and record the obligation in profit loss for the current period or costs of related assets.

The deficit or surplus generated from the present value of obligations of the defined benefit scheme minus the fair value of the assets of defined benefit scheme is recognized as net liabilities or net assets of a defined benefit scheme. When the defined benefit scheme has surplus, the Company will measure the net assets of the defined benefit scheme at the lower of the surplus of defined benefit scheme and the upper limit of the assets.

All defined benefit plans obligations, including the expected duty of payment within 12 months after the end of annual reporting period during which the staff provided service, are discounted based on the market yield of government bonds matching the term and currency of defined benefit plan obligations or corporate bonds of high quality in the active market on the balance sheet date.

The service cost incurred by the defined benefit scheme and the net interest of the net liabilities and net assets of the defined benefit scheme would be charged to current profit or loss or relevant costs of assets. The changes arising from the remeasurement of the net liabilities or net assets of the defined benefit scheme would be included in other comprehensive income and are not reversed to profit or loss in a subsequent accounting period; when the previously defined benefits plan is terminated, such amount previously included in other comprehensive income shall be transferred to undistributed profit.

When the defined benefit scheme is settled, the gain or loss is recognized based on the difference between the present value of obligations under the defined benefit scheme and the settlement price at the balance sheet date.

3. Accounting treatment of Termination benefits

The Company recognizes employee benefits liabilities arising from termination benefits and recorded in current profit or loss when it cannot unilaterally withdraw the offer of termination benefits resulting from the employment termination plan or the proposed layoff, or when it recognizes costs or expenses for restructuring involving the payment of termination benefits (whichever is earlier).

(XXV) Estimated liabilities

When the Company is involved in litigation, debt guarantees, loss contracts, and restructuring matters, if such matters are likely to require future delivery of assets or provision of labor services, and the amount can be reliably measured, it is recognized as an estimated liability.

1. Recognition criteria of estimated liabilities

The Company shall recognize it as the estimated liability, when all of the following conditions are satisfied:

(1) such obligation is the present obligation of the Company;

(2) the performance of such obligation is likely to lead to an outflow of economic benefits of the Company;

(3) the amount of such obligation can be reliably measured.

2. Measurement methods for various estimated liabilities

The estimated liabilities of the Company are initially measured at the best estimate of expenditure required for the performance of relevant present obligations.

The Company shall take into consideration the risks, uncertainties, time value of money and other factors relating to the contingencies in determining the best estimate. If the time value of money is significant, the best estimates shall be determined after discount of relevant future cash outflows.

The best estimates are handled as follows:

If there is a successive range (or interval) of the required expenditure, and the likelihood of occurrence of various results within the range is the same, the best estimate is determined by the intermediate value, i.e. the average of the upper and lower limits of the range.

If there is not a successive range (or interval) of required expenditure, or although there is a successive range (or interval), the likelihood of occurrence of various results within the range is not the same, and where the contingency is related to individual item, the best estimate should be determined as the most likely amount; where the contingency is related to a number of items, the best estimate should be calculated and determined according to the various possible results and the relevant probabilities.

When all or part of the expenditures necessary for the settlement of an estimated liability of the Company is expected to be compensated by a third party, the compensation should be separately recognized as an asset only when it is virtually certain that the compensation will be received. The amount recognized for the compensation should not exceed the carrying amount of estimated liabilities.

(XXVI) Share-based payments

The Company's share-based payment represents transactions in which the Company receives services from employee by granting equity instruments or incurring liabilities that are based on the price of the equity instruments to the employee or other suppliers. The Company's share-based payments included equity-settled share-based payments and cash-settled share-based payments.

1 Equity-settled share-based payment and equity instrument

As to an equity-settled share-based payment in return for services of employees, calculation will be based on the fair value of the equity instrument granted to the employees. If the Company make the share-based payment by restricted shares, employees will subscribe the share but those shares shall not be listed on the market or transferred before it fulfill the unlocking condition and unlocked. If the unlocking conditions stipulated in the equity incentive scheme cannot be fulfilled eventually, the Company will repurchase those shares based on the predetermined price. Upon obtaining the payment for subscribing restricted shares made by the employees, the Company will recognized the share capital and capital reserve (share capital premium) according to the payment it received, while fully recognize a liability for its repurchasing obligation as well as its treasury shares. On each balance sheet date within the vesting period, the Company will make the best estimation of the number of vested equity instruments based on the subsequent information such as the updated changes in the number of executives and the achievement of performance standard. Based on the above results, the services received in the current period will be included in the relevant cost or expense based on the fair value on the date of grant, and the capital reserve will be increased accordingly. The recognized cost or expense and owners' interest will not be adjusted after the vesting date. However, equity instruments vested immediately after the date of grant will be included in the relevant cost or expense based on its fair value on the date of grant, and the capital reserve will be increased accordingly.

For the share-based payments that are not vested eventually, no cost or expense will be recognized, except the vesting condition is market condition or non-exercisable condition. Under such circumstances, no matter whether the market condition or non-exercisable condition can be fulfilled, the share-based payment will be deemed as vested as long as all the non-market conditions in the vesting condition are fulfilled.

If the terms of the equity-settled share-based payment are amended, the Company shall recognize the services received at least based on the situation before the amendment was made. In addition, any amendment resulting in the increase of the fair value of the equity instrument granted or changes that are beneficial to the staff on the amendment date, will be recognized as an increase in the service received.

If the equity-settled share-based payment is cancelled, it will be accounted for as accelerated exercise on the cancellation date and the unrecognized amount will be recognized immediately. Employees and other parties are able to satisfy the non-vesting conditions. If the conditions are not fulfilled during the vesting period, the equity settled share-based payment will be deemed as cancelled. However, if new equity instruments are vested and they are verified at the vesting date of new equity instrument as alternatives vested to cancelled equity instruments, the treatment on the new equity instrument is in conformity with the modified treatment on disposal of equity instrument with the same terms and conditions.

2 Cash-settled share-based payments and equity instrument

A cash-settled share-based payment shall be measured in accordance with the fair value of liability calculated and confirmed based on the shares or other equity instruments undertaken by the Group. It is initially measured at fair value on the date of grant, taking account into the terms and conditions of the equity instrument granted, for details, please refer to "XXVI. Share-based payments" of this notes. If the right may be exercised immediately after the grant, the fair value of the liability undertaken by the enterprise shall, on the date of the grant, be included in the relevant costs or expenses, and the liabilities shall be increased accordingly. If the right may not be exercised until the vesting period comes to an end or until the specified performance conditions are met, within the vesting period, the services obtained in the current period shall, based on the best estimate of the information about the exercisable right, be included in the relevant costs or expenses and the corresponding liabilities at the fair value of the liability undertaken by the enterprise. For each of the balance sheet date and settlement date before the settlement of the relevant liabilities, fair value of the liabilities will be remeasured and the changes will be included in the profit or loss for the current period.

(XXVII) Other financial instruments such as preferred shares and perpetual bonds

The Company's preferred shares and perpetual bonds are, on initial recognition, classified into financial assets, financial liabilities or equity instruments on the basis of contractual terms for issuance and the economic substance reflected by such terms instead of only on the basis of the legal form.

For financial instruments such as perpetual bonds/preference shares issued by the Company, which meet one of the following conditions, such financial instrument as a whole or a component thereof is classified as a financial liability on initial recognition:

(1) there are contractual obligations performed by the delivery of cash or other financial assets that the Company cannot unconditionally avoid;

(2) there are contractual obligations that include the delivery of a variable number of own equity instruments for settlement;

(3) there are derivatives that are settled with their own equity (such as conversion rights), and the derivatives are not settled with a fixed amount of their own equity instruments for a fixed amount of cash or other financial assets for settlement;

(4) there are contractual clauses that indirectly form contractual obligations;

(5) when the issuer liquidates, the perpetual bonds are in the same liquidate order as the ordinary bonds and other debts issued by the issuer.

For financial instruments such as perpetual bonds/preference shares that do not meet any of the above conditions, such financial instrument as a whole or a component thereof is classified as an equity instrument on initial recognition.

(XXVIII) Revenue

1. Accounting policies adopted for revenue recognition and measurement

The Company recognizes revenue when the performance obligation in a contract is fulfilled, namely when the customer acquires control over the relevant goods. If a contract contains two or more performance obligations, at the commencement of the contract, the Company allocates the transaction price into each individual performance obligation according to the relative proportion of each individual selling price of goods committed by individual performance obligation, and recognizes the revenue according to the transaction price allocated to each individual performance obligation.

The transaction price is the amount of consideration that the Company expects to be entitled to receive as a result of the transfer of goods to the customers. When determining the transaction price, if there is a variable consideration, the Company shall determine the best estimate of the variable consideration according to its expected value or the amount most likely to be incurred and the transaction price included by the Company does not exceed the amount of revenue accumulatively recognized when the relevant uncertainties are eliminated and where it is highly unlikely that a major reversal on such revenue will occur. Where there are significant financing elements in the contract, the Company will adjust the transaction price according to the financing elements in the contract; where the interval between the transfer of control right and the payment of the price by the customer dose not exceed one year, the financing elements in the contract will not be considered by the Company.

When one of the following conditions is satisfied, the Company is considered to have fulfilled an obligation within a certain period of time. Otherwise, the Company is considered to have fulfilled an obligation at a certain point in time:

(1) At the same time when the Company fulfills the obligation, the customer immediately obtains and consumes the economic benefits brought about by the Company's performance.

(2) The customers can control the goods under construction in the course of the Company's performance.

(3) Goods produced in the course of the Company's performance are irreplaceable. In addition, during the entire contract period, the Company has the right to collect the payments for the cumulatively completed parts of performance.

For obligations fulfilled within a certain period of time, the Company recognizes income in accordance with the fulfillment progress of the performance obligations. Otherwise, the Company recognizes revenue at the point of time when the customer acquires control over the relevant goods.

(XXIX) Contract costs

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

The costs incurred by the Company for the performance of the contract are recognized as an asset as contract performance costs when the following conditions are met:

1. This cost is directly related to a current or expected contract.

2. This cost increases the resources of the Company to fulfill its performance obligations in the future.

3. The cost is expected to be recovered.

If the incremental cost incurred by the Company in obtaining the contract can be expected to be recovered, the contract acquisition cost shall be recognized as an asset.

Assets related to the cost of the contract are amortized on the same basis as the revenue recognition of the goods or services related to the asset; however, if the amortization period of the contract acquisition cost is less than one year, the Company will include it into the current profit or loss when is incurs.

For assets related to contract costs whose carrying amount is higher than the difference between the following two items, the Company will make provision for impairment for the excess and recognize it as asset impairment loss:

1. The remaining consideration expected to be obtained by the transfer of goods or services related to the asset;

2. The cost expected to be incurred for the transfer of the relevant goods or services.

If the impairment provision of the above-mentioned asset is subsequently reversed, the book value of the reversed asset shall not exceed the book value of the asset on the date of the reverse assuming no provision for impairment is made.

(XXX) Government grants

1. Types of government grants

Government grants are monetary assets or non-monetary assets obtained by the Company from the government for free, and are divided into government grants related to assets and government grants related to income.

Government grants related to assets are those obtained by the Company for the purposes of acquisition, construction or other project that forms a long-term asset. Government grants related to income refer to the government grants other than those related to assets.

2. Timing for recognition

Government grants related to revenue is recognised when the grant is received;

3. Measurement and derecognition of government grants

The government grants of the Company are recognized when the conditions attached to the government grants are met and the government grants are received.

As for monetary assets, government grants are measured based on the received or receivable amounts. As for non-monetary assets, government grants are measured based on their fair value; if the fair value cannot be estimated reliably, they will be measured based on nominal amount.

Asset-related government grants shall be used to offset the carrying amount of relevant asset or recognized as deferred income. The amount recognized as deferred income shall be recorded in current profit or loss by installments in a reasonable and systematic way over the useful life of the relevant assets (the government grants related to the Company's daily activities shall be included in other income; and the government grants unrelated to the Company's daily activities shall be included in non-operating income). For relevant assets that are sold, transferred, discarded or damaged before the end of their useful lives, the relevant unallocated deferred incomes are transferred into the profit or loss of the current period when the assets are disposed of.

Government grants related to income that are used to compensate relevant costs or losses of the enterprise in subsequent periods are recognized as deferred income and recorded in current profit or loss when such costs and losses are recognized (government grants related to the Company's daily activities shall be included in other income; government grants unrelated to the Company's daily activities shall be included in non-operating income) or offset relevant costs or losses; and the grants used to compensate relevant costs or losses that have incurred by the enterprise are recorded directly in current profit or loss (government grants related to the Company's daily activities shall be included in other income; government grants unrelated to the Company's daily activities shall be included in non-operating income) or offset relevant costs or losses.

A government grant measured at a nominal amount is recognised immediately in profit or loss for the period.

The interest subsidies for policy-related preferential loans obtained by the Company are divided into two types and subject to accounting treatment separately:

(1) Where the interest subsidies are appropriated from the fiscal funds to the lending bank and then the bank provides loans to Company at a policy-based preferential interest rate, the Company will recognize the amount of borrowings received as the initial value and calculate the borrowing costs according to the principal amount and the policy-based preferential interest rate.

(2) Where the interest subsidies are paid directly to the Company, the Company will use such interest subsidies to offset the corresponding borrowing costs.

4. Accounting treatment of return of government grants

If the government grants that the Company has confirmed need to be returned, accounting treatment will be carried out in the current period according to different circumstances:

(1) Where it has been offset against the carrying value of the relevant asset on initial recognition, the carrying value of the asset is adjusted;

(2) If there is relevant deferred income, the book value of the related deferred income will be offset, and the excess will be included in current profit or loss;

(3) In other circumstances, the returned grant will be directly included in current profit or loss.

(XXXI) Deferred income tax assets and deferred income tax liabilities

Deferred income tax assets are recognized to the extent that it is probable that future taxable profits will be available against which deductible temporary differences can be utilized. For deductible losses and tax credits that can be reversed in the future period, deferred tax assets shall be recognized to the extent that it is probable that taxable profit will be available in the future to offset the deductible losses and tax credits.

Save for exceptions, deferred income tax liabilities shall be recognized for the taxable temporary difference.

The exceptions for not recognition of deferred income tax assets and liabilities include: the initial recognition of the goodwill; other transactions or matters other than business combinations in which neither profit nor taxable income (or deductible loss) will be affected when transactions occur.

When the Group has a legally enforceable right to set-off and intends either to settle on a net basis or to acquire the income tax asset and settle the income tax liability simultaneously, current income tax assets and current income tax liabilities shall be presented as the net amount after offsetting.

When the Group has the legal right to set off current income tax assets and current income tax liabilities on a net basis, such deferred income tax assets and deferred income tax liabilities are related to income tax to be paid by the same entity liable to pay tax to the same tax authority, or related to different entities liable to pay tax but the relevant entities intend to settle on a net basis or to acquire the income tax assets and settle the income tax liabilities simultaneously in the future period in which significant deferred income tax assets and liabilities would be reversed, deferred income tax assets and liabilities of the Company shall be presented as the net amount after offsetting.

(XXXII) Lease

The applicable accounting policies commencing from 1 January 2019.

A lease is a contract that conveys the right to use an asset for a period of time in exchange for consideration. At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of one or more identified asset(s) for a period of time in exchange for consideration.

For a contract that contains multiple separate lease, the lessee and lessor separates and accounts for each lease component as a lease separately. For a contract that contains lease and non-lease components, the lessee and lessor separates the lease and non-lease components.

1. The Company as a lessee

(1) Right-of-use assets

At the commencement date of lease term, the Company recognizes right-of-use assets for leases (excluding short-term leases and leases of low-value assets). Right-of-use assets are measured initially at cost. Such cost comprises:

- the amount of the initial measurement of lease liability;

- lease payments made at or before the inception of the lease less any lease incentives already received (if there is a lease incentive);

- initial direct costs incurred by the Company;

The Company uses straight-line method to accrue depreciation for the right-of-use assets. If there is reasonable certainty that the Company will obtain the ownership of a leased asset at the end of the lease term, the Company depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset.; if there is no reasonable certainty that the Company will obtain ownership of a leased asset at the end of the lease term, the Company depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

(2) Lease liabilities

At the commencement date of lease term, the Company recognizes lease liabilities for leases (excluding short-term leases and leases of low-value assets). Lease liabilities are initially measured based on the present value of outstanding lease payment. Lease payment include:

- fixed payments (including in-substance fixed payments), less any lease incentives (if there is a lease incentive);

- variable lease payment that are based on an index or a rate;

- amounts expected to be payable under the guaranteed residual value provided by the Company;

- the exercise price of a purchase option if the Company is reasonably certain to exercise that option;

- payments of penalties for terminating the lease option, if the lease term reflects that the Company will exercise that option.

The Company adopts the interest rate implicit in the lease as the discount rate. If that rate cannot be determined reasonably, the Company's incremental borrowing rate is used.

The Company shall calculate the interest expenses of lease liabilities over the lease term at the fixed periodic interest rate, and include it into profit or loss in the period or cost of relevant assets.

Variable lease payments not included in the measurement of lease liabilities are charged to profit or loss in the period or cost of relevant assets in which they actually arise.

After the commencement date of lease term, if the following circumstances occur, the Company remeasures the lease liability based on the present value of the lease payments after the change:

- changes in the amount expected to be payable under the guaranteed residual value;

- changes in the index or rate arising from the confirmation of lease payments;

- changes in the reassessment of the Company in relation to the purchase, extension or termination option or the actual exercise condition of extension or termination option disaccords with the original assessment.

When remeasuring the lease liability, the Company shall make a corresponding adjustment any to the carrying amount of the right-of-use asset, or the remaining amount is recorded in profit or loss in the period if the carrying amount of the right-of-use asset has been adjusted downward to zero but the lease liabilities shall still be adjusted downward.

(3) Short-term leases and leases of low-value assets

The right-of-use asset and lease liability are not recognized by the Company for short-term leases and leases of low-value assets, and the relevant lease payments are included in profit or loss in the period or costs of relevant assets in each period of the lease term on a straight-line basis. Short-term leases are defined as leases with a lease term of not more than 12 months from the commencement date and excluding a purchase option. Leases of low-value assets are defined as leases with underlying low value when new. Where the Company subleases or expects to sublease a leased asset, the original lease shall not belong to a lease of low-value asset.

(4) Lease change

The Company will account for the lease change as a separate lease if the lease changes and meets the following conditions:

1) the lease change expands the scope of lease by increasing the rights to use one or more leased assets;

2) the increased consideration and the individual price of the expanded part of the lease are equivalent to the amount adjusted for the contract.

If the lease change is not accounted for as a separate lease,, the Company shall re-allocate the consideration of a changed contract, re-determine the lease term, and remeasure the lease liabilities by the present value calculated from the changed lease payments and revised discount rate on the effective date of the lease change.

2. The Company as a lessor

At the commencement date of lease term, the Company classifies leases as financing leases and operating leases. A financing lease is a lease that transfers substantially all the risks and rewards incidental to ownership of a leased asset, irrespective of whether the ownership of the asset is eventually transferred. An operating lease is a lease other than a finance lease. As a sub-leasing lessor, the Company classifies the sub-leases based on the right-of-use assets of the original leases.

(1) Accounting treatment of operating leases

The lease payments derived from operating leases are recognised as rental income on a straight-line basis over the respective lease terms. Initial direct costs relating to operating leases to be incurred by the Company shall be capitalized and then included in the current income by stages at the same base as the recognition of rental income over the lease term. The variable lease payments not included in the measurement of lease payments shall be recognised in profit or loss in the period in which they are occurred.

(2) Accounting treatment of financing leases

At the commencement date of lease term, the Company recognizes financing lease receivable and derecognizes the underlying assets. The Company initially measures financing lease receivable in the amount of net investment in the lease. Net investment in the lease is the sum of present value of unguaranteed residual value and the lease payments receivable at the commencement date of lease term, discounted at the interest rate implicit in the lease.

The Company calculates and recognizes interest income in each period during the lease term, based on a constant periodic interest rate. The derecognition and impairment losses of financing lease receivable are accounted for in accordance with the Note "III. (X) Financial instruments".

Variable lease payments not included in the measurement of the net investment in the lease are included in profit or loss in the period in which they are occurred.

3. *After-sale and leaseback transactions*

The Company determines whether the asset transfer in the after-sale and leaseback transaction is a sale in accordance with principles described in notes "III. (XXVIII) Revenue".

(1) *As a lessee*

If the asset transfer in the after-sale and leaseback transaction is a sale, the Company, as a lessee, measures the right-of-use assets formed by the after-sale and leaseback based on the part of the book value of the original assets related to the use rights obtained from the leaseback, and recognize relevant gains or losses only for the right to transfer to the lessor; if the transfer of assets in the after-sale and leaseback transaction is not a sale, the Company, as a lessee, continues to recognize the transferred assets and recognizes a financial liability equal to the transfer income. For details of accounting treatment for financial liabilities, please see Note "III. (X) Financial instruments".

(2) *As a lessor*

If the transfer of assets in the after-sale and leaseback transaction is a sale, the Company, as a lessor, accounts for asset purchase, and accounts for asset lease in accordance with policies in the aforementioned "2. The Company as a lessor"; if the transfer of assets in the after-sale and leaseback transaction is not a sale, the Company, as a lessor, does not recognize the transferred assets, but recognizes a financial asset equal to the transfer income. For details of accounting treatment for financial assets, please see Note "III. (X) Financial instruments".

(XXXIII) Other significant accounting policies and accounting estimates before 1 January 2019

Nil.

V. TAXATION

(I) Major tax categories and tax rates

Tax categories	Tax basis	Applicable tax rate *(%)*
Value-added tax	The VAT payable is the difference between output tax (calculated based on sales of goods and taxable service income under the tax laws) and the deductible input tax of the period	16%, 13%, 6%
Urban maintenance and construction tax	Based on value-added tax and consumption taxes paid	7%, 5%
Enterprise income tax	Based on taxable profits	25%, 15%
Hong Kong Profits Tax	Based on taxable profits	16.5%, 8.25%

Companies subject to different income tax rates are disclosed as follows:

Taxpayer	Income tax rate *(%)*
IRICO New Energy (Parent Company)	15
IRICO New Material	15
Hefei Photovoltaic	15
IRICO Yongneng	15
IRICO (Hong Kong) Company	The applicable profit tax rate is 8.25% for profit not more than RMB2 million or 16.5% for the subsequent profits

Note 1: According to the Announcement on Relevant Policies for Deepening the Value-Added Tax Reform (《關於深化增值稅改革有關政策的公告》) jointly issued by the MOF, the STA and the General Administration of Customs, where general taxpayers of value-added tax make value-added tax taxable sales or import goods, the applicable tax rates shall be adjusted from 16% to 13%, respectively, from 1 April 2019.

Note 2: IRICO (Hong Kong) Company, a subsidiary, is subject to a two-tiered profits tax rates regime from 1 April 2018 based on the taxation policy of Hong Kong, the place of registration. The applicable tax rate for the profits of not more than HK$2 million is 8.25%, and subsequent profits will be taxed at 16.5%.

(II) Preferential tax treatment

1. Pursuant to the "Notice on Tax Policies in relation to Further Implementation of the Western Development Strategy" (Cai Shui [2011] No. 58) (《關於深入實施西部大開發戰略有關稅收政策問題的通知》(財稅[2011]58號)), as the Company and its subsidiary Shaanxi IRICO New Material Co., Ltd* (the "**IRICO New Materials**") pertains to enterprises engaged in the industries encouraged by the government in the western region, they are entitled to relevant western development preferential policies upon filing with the tax branch directly under the Xianyang Municipal Office, SAT, and therefore enjoys the preferential EIT rate of 15% for the year.

2. As the income from power generation of Nanjing IRICO New Energy Co., Ltd.* (the "**Nanjing New Energy**") and IRICO (Hefei) Photovoltaic Co., Ltd.* (the "**Hefei Photovoltaic**"), the subsidiaries of the Company, applies to preferential policy of three years' exemption from EIT followed by three years of 50% tax reduction. As stipulated under Clause 88 of the "Implementation Rules of the Enterprise Income Tax Law of the People's Republic of China (No.512 Decree of the State Council of the People's Republic of China)" (《中華人民共和國企業所得稅法實施條例》(中華人民共和國國務院令第512號)), qualified environmental protection, energy and water saving projects mentioned in Article 27(3) of the Enterprise Income Tax Law include public sewage treatment, public refuse disposal, comprehensive development and utilization of biogas, technological upgrade of energy saving and remission reduction, seawater desalination, etc. Enterprises engaged in the abovementioned qualified environmental protection, energy and water conservation projects, shall be exempted from entire EIT on income derived therefrom for the first to third years, and entitled to a 50% tax reduction from the fourth to sixth years, commencing from the assessable year during which relevant projects start to generate manufacturing or operating revenue. Nanjing New Energy was in tax-free stage this year.

3. Jiangsu IRICO Yongneng New Energy Company Limited* (the "**IRICO Yongneng**"), a subsidiary of the Company was accredited as a High and New Technology Enterprise (Certificate No. GR201832005221) as approved by the Science and Technology Department of Jiangsu Province, the Department of Finance of Jiangsu Province, Jiangsu Tax Service, SAT and Jiangsu Local Tax Bureau on 30 November 2018, and has been entitled to a 15% preferential tax treatment for EIT.

4. Hefei Photovoltaic, a subsidiary of the Company was accredited as a High and New Technology Enterprise (Certificate No. CR201834000268) as approved by the Science and Technology Department of Anhui Province, Anhui Provincial Department of Finance and Anhui Provincial Tax Service, State Taxation Administration on 24 July 2018, and has been entitled to a 15% preferential tax treatment for EIT. It did not enjoy preferential tax treatment in the preceding year. It did not enjoy tax benefits for high-tech enterprises last year.

VI. SEGMENT REPORTING

Unit: Yuan

Amount for the period	Solar Photovoltaic business	New materials business	Others	Inter-segment eliminations	Total
External transaction income	1,593,470,236.91	603,399,924.54	48,242,629.09		2,245,112,790.54
Income for inter-segment transaction					
Gain from investments in associates and joint ventures	356,875.10				356,875.10
Asset impairment losses	1,991,116.32				1,991,116.32
Credit impairment losses	-179,210.35	4,253,385.67		-20,769.00	4,053,406.32
Depreciation and amortization	127,131,482.37	2,613,904.09			129,745,386.46
Total profit (total loss)	64,230,589.45	31,438,439.81	-3,537,444.51	-15,976,477.69	76,155,107.06
Income tax expenses	-1,032,150.47	3,102,140.87			2,069,990.40
Net profit (net loss)	65,262,739.92	28,336,298.94	-3,537,444.51	-15,976,477.69	74,085,116.66
Total assets	4,072,085,136.87	438,352,711.73	1,924,460,001.42	-1,522,803,202.05	4,912,094,647.97
Total liabilities	2,604,160,926.60	152,397,797.42	2,058,887,818.46	-192,422,908.21	4,623,023,634.27
Other non-cash expenses other than depreciation and amortisation					
Long-term equity investment in associate and jointly controlled enterprises	194,360,686.48				194,360,686.48
The amounts of additions to non-current assets other than long-term equity investments	95,863,097.49	34,090,933.76		-3,970,462.26	125,983,568.99

Geographical information

The Group's operation is located in the PRC (country of domicile).

Information about the Group's revenue from external customers is presented based on the location of the operations as below:

	2019	2018
	RMB	*RMB*
The PRC (excluding Hong Kong)	**2,015,535,538.08**	1,990,518,019.73
Hong Kong		
Other countries	**181,334,623.37**	300,217,863.88
	2,196,870,161.45	2,290,735,883.61

An analysis of non-current assets, excluding financial instruments, deferred tax assets and goodwill, by geographical location in which the assets are located has not been presented as the Group's non-current assets are all located in the PRC.

Information about major customers

In 2019, the Group has no customer (2018: one) which individually represented over 10% of the Group's total external sales.

The sales to the major customers during the years are as follows:

	2019	2018
	RMB	*RMB*
Customer A:		303,438,979.06
		303,438,979.06

The revenue for 2018 was from the products of new materials business.

VII. BILLS RECEIVABLE

1. Bills receivables by category

Item	**Closing amount**	Opening amount
Bank acceptance bills		
Commercial acceptance bills	**1,990,378.52**	56,270,058.70
Total	**1,990,378.52**	56,270,058.70

2. There were no pledged bill receivables at the end of the period.

3. There was no endorsed or discounted bills receivable that was not yet due at the end of the period.

4. There were no bills converted into accounts receivables due to the issuer's failure to perform at the end of the period.

VIII. ACCOUNTS RECEIVABLE

1. Accounts receivable shown by aging

Aging	**Closing balance**	Balance at the end of last year
Within 1 year		
Including: 0–6 months (inclusive)	**329,112,337.41**	565,433,028.78
7–12 months (inclusive)	**91,227,636.91**	80,411,320.42
Subtotal of within 1 year	**420,339,974.32**	645,844,349.20
1–2 years (inclusive)	**39,405,327.52**	15,503,186.07
2–3 years (inclusive)	**8,096,050.04**	20,972,753.16
Over 3 years	**26,144,065.25**	26,144,065.25
Subtotal	**493,985,417.13**	708,464,353.68
Less: provision for bad debts	**44,966,218.37**	42,442,949.93
Total	**449,019,198.76**	666,021,403.75

2. Accounts receivables disclosed according to provision for bad debts

Category	**Closing balance**					Balance at the end of last year				
	Book balance		**Allowance for bad debts**		**Cattying amount**	Book balance		Allowance for bad debts		Cattying amount
	Amount	**Proportion (%)**	**Amount**	**Appropriation proportion (%)**		Amount	Proportion (%)	Amount	Appropriation proportion (%)	
Allowance for bad debts is made based on individual assessment	**36,555,831.56**	**7.40**	**13,463,737.69**	**36.83**	**23,092,093.87**	13,815,737.69	1.95	13,815,737.69	100.00	
Allowance for bad debts is made on group basis	**457,429,585.57**	**92.60**	**31,502,480.68**	**6.89**	**425,927,104.89**	694,648,615.99	98.05	28,627,212.24	4.12	666,021,403.75
Including: By aging	**445,493,561.82**	**90.18**	**31,502,480.68**	**7.07**	**413,991,081.14**	663,258,361.58	93.62	28,627,212.24	4.32	634,631,149.34
By related parties	**11,936,023.75**	**2.42**			**11,936,023.75**	31,390,254.41	4.43			31,390,254.41
Total	**493,985,417.13**	**100.00**	**44,966,218.37**		**449,019,198.76**	708,464,353.68	100.00	42,442,949.93	5.99	666,021,403.75

1) *Allowance for bad debts made on individual basis:*

Name	Book balance	Allowance for bad debts	Appropriation proportion (%)	Reasons for making allowance
	Closing balance			
Wuxi Jianshan Photovoltaic Power Generation Co., Ltd. (巫溪縣兼善光伏發電有限公司)	**20,400,591.60**			Expected to be recoverable
Shenzhen Mascon Technology Co., Ltd (深圳市瑪斯科特科技有限公司)	**5,919,990.18**	**5,919,990.18**	**100.00**	Court judgment
Xianyang Weilike Energy Co., Ltd. (咸陽威力克能源有限公司)	**3,033,032.65**	**3,033,032.65**	**100.00**	Court judgment
Shenzhen Dikte Battery Science & Technology Co., Ltd. (深圳市迪凱特電池科技有限公司)	**2,739,320.00**	**2,739,320.00**	**100.00**	Court judgment
Tibet Caibang Energy Equipment Co., Ltd. (西藏財邦能源裝備有限公司)	**2,691,502.27**			Expected to be recoverable
Shenzhen Zhongtao Battery Co. Ltd (深圳市中韜電池有限公司)	**1,771,394.86**	**1,771,394.86**	**100.00**	Court judgment
Total	**36,555,831.56**	**13,463,737.69**		

Note: Accounts receivable from Wuxi Jianshan Photovoltaic Power Generation Co., Ltd. and Tibet Caibang Energy Equipment Co., Ltd. have won the lawsuit. The court froze the bank deposit of RMB23 million in Wuxi Jianshan Photovoltaic Power Generation Co., Ltd. and the bank deposit of RMB4.55 million in Tibet Caibang Energy Equipment Co., Ltd., both of which are larger than the accounts receivable and are expected to be recovered in 2020.

2) Allowance for bad debts made on group basis:

Items for which allowance is made on group basis: by aging

Name	Book balance	Closing balance Allowance for bad debts	Appropriation proportion (%)
0 to 6 months (inclusive)	**379,557,025.74**		
7 to 12 months (inclusive)	**22,577,929.47**	**225,779.29**	**1.00**
1 to 2 years (inclusive)	**11,477,311.13**	**3,443,193.32**	**30.00**
2 to 3 years (inclusive)	**8,095,574.84**	**4,047,787.43**	**50.00**
Over 3 years	**23,785,720.64**	**23,785,720.64**	**100.00**
Total	**445,493,561.82**	**31,502,480.68**	

Items for which allowance is made on group basis: by related parties

Name	Book balance	Closing balance Allowance for bad debts	Appropriation proportion (%)
By related parties	**11,936,023.75**		
Total	**11,936,023.75**		

3. Allowances for bad debts made, reversed or recovered for the period

Type	Balance at the end of last year	Changes during the period Made	Recovered or reversed	Charged off or written off	Closing balance
Single item of bad debt provision	13,815,737.69		352,000.00		13,463,737.69
Receivables with provision for bad debts based on credit risk characteristics	28,627,212.24	9,253,766.92	6,378,498.48		31,502,480.68
Including: by aging	28,627,212.24	9,253,766.92	6,378,498.48		31,502,480.68
by related parties					
Total	42,442,949.93	9,253,766.92	6,730,498.48		44,966,218.37

The significant situation of provision for bad debt received or reversed in current period:

Name	The amount of reversed or received	Basis of original provision of debt method and its rationality	Reasons of reversed or received	Receiving method
Shenzhen Dongfang Hualian Technology Co., Ltd (深圳東方華聯科技有限公司)	352,000.00	On individual basis	Monetary payment	Monetary payment
Xi'an Xidian High Voltage Switch Co., Ltd. (西安西電高壓開關有限責任公司)	1,735,500.00	On aging basis	Monetary payment	Monetary payment
Suzhou Shengda Zeri Photoelectric Trading Co., Ltd (蘇州勝達澤日光電貿易有限公司)	1,605,053.66	On aging basis	Monetary payment	Monetary payment
Shanxi Fenxi Mining (Group) Co., Ltd. (山西汾西礦業(集團)有限責任公司)	502,473.60	On aging basis	Monetary payment	Monetary payment
Other smaller summaries	2,183,471.22	On aging basis	Monetary payment	Monetary payment
Total	6,730,498.48			

4. Top five accounts receivable according to closing balance of debtors

Name of debtor	Book balance	Percentage of total accounts receivable (%)	Allowance for bad debts
Changshu CSI Sun Power Technology Co., Ltd. (常熟阿特斯陽光電力科技有限公司)	30,793,013.96	6.23	
Jinko Solar Co., Ltd (晶科能源有限公司)	30,601,880.60	6.19	
CSI Photovoltaic Power (Luoyang) Co., Ltd (阿特斯光伏電力(洛陽)有限公司)	28,978,353.08	5.87	
Zhejiang Meidu Hitrans Lithium Battery Technology Co. Ltd (浙江美都海創鋰電科技有限公司)	28,462,880.35	5.76	
Hefei JA Solar Technology Co., Ltd. (合肥晶澳太陽能科技有限公司)	24,757,492.71	5.01	
Total	143,593,602.70	29.06	

5. **Accounts receivable derecognised by transfer of financial assets:**

Name of debtors	Derecognition amount	Gains and losses related to derecognition (losses are listed with "-")
Jinko Solar Co., Ltd (晶科能源有限公司)	12,586,959.58	-573,205.36
Zhejiang Meidu Hitrans Lithium Battery Technology Co. Ltd (浙江美都海創鋰電科技有限公司)	12,609,243.00	-631,080.54
Suzhou Tenghui Photovoltaic Technology Co., Ltd. (蘇州騰暉光伏技術有限公司)	10,942,874.59	-511,361.02
Dongfang Risheng New Energy Co., Ltd. (東方日升新能源股份有限公司)	9,294,251.90	-434,320.81
Changshu CSI Sun Power Technology Co., Ltd. (常熟阿特斯陽光電力科技有限公司)	9,265,915.22	-432,996.64
Dongfang Risheng (Changzhou) New Energy Co., Ltd. (東方日升(常州)新能源有限公司)	8,006,122.80	-374,126.48
Dongguan Lingte Electronics Co., Ltd. (東莞令特電子有限公司)	3,070,947.23	-153,697.97
Guangxi New Future Information Industry Co., Ltd. (廣西新未來信息產業股份有限公司)	2,754,400.00	-137,855.08
Chengdu Tieda Electronics Co., Ltd. (成都鐵達電子股份有限公司)	1,689,000.00	-84,532.83
Shenzhen Dexin Electric Co., Ltd. (深圳市德欣電器有限公司)	1,563,800.00	-78,266.69
Anhui Tianshi New Energy Technology Co., Ltd. (安徽天時新能源科技有限公司)	1,395,000.00	-69,818.41
Shenzhen Jinheneng Battery Technology Co., Ltd. (深圳市金和能電池科技有限公司)	1,258,000.00	-62,961.70
Shantou Free Trade Zone Songtian Electronic Technology Co., Ltd. (汕頭保稅區松田電子科技有限公司)	1,222,600.00	-61,189.96
Shantou Ruisheng Electronics Co., Ltd. (汕頭市瑞升電子有限公司)	1,219,900.00	-61,054.83
State Power Investment Corporation Xi'an Solar Power Co., Ltd. Xining Branch (國家電投集團西安太陽能電力有限公司西寧分公司)	1,199,763.60	-66,144.10
Lianyungang Shenzhou New Energy Co., Ltd. (連雲港神舟新能源有限公司)	1,175,722.68	-64,456.59

Name of debtors	Derecognition amount	Gains and losses related to derecognition (losses are listed with "-")
Shanghai Leyan Trading Co., Ltd. (上海樂言貿易有限公司)	1,004,400.00	-50,269.26
Shandong Hongrong Electronics Co., Ltd. (山東鴻榮電子有限公司)	925,740.00	-46,332.40
Huizhou Haopeng Technology Co., Ltd. (惠州市豪鵬科技有限公司)	699,050.00	-34,986.78
Trina Solar (Changzhou) Technology Co., Ltd. (天合光能(常州)科技有限公司)	559,303.49	-26,136.28
Total	82,442,994.09	-3,954,793.74

Note: On 24 May 2019, the Company, Hefei Photovoltaic and IRICO New Materials respectively signed a receivables transfer agreement with China Electronics and Information Industry Group Co., Ltd. ("**China Electronics**"). Part of the receivables held were proposed to transfer to China Electronics.

6. The situation of overdue accounts receivable at the end of the period

Items	Closing balance
Accounts receivable not overdue and not impaired	383,036,052.81
Accounts receivable overdue and not impaired – within 3 months	15,504,174.38
Accounts receivable overdue and not impaired – over 3 months	50,478,971.57
Total	449,019,198.76

IX. RECEIVABLES FINANCING

1. Receivables financing

Category	Closing balance	Balance at the end of last year
Bills receivable	**455,599,031.06**	283,052,731.03
Accounts receivable		
Total	**455,599,031.06**	283,052,731.03

2. Changes in receivables financing for the period and changes in fair value

Item	Balance at the end of last year	New grants for the period	Derecognition for the period	Other changes	Closing balance	Accumulated allowance for losses recognized in other comprehensive income
Commercial acceptance bills	283,052,731.03	1,531,645,577.49	1,359,099,277.46		455,599,031.06	
Commercial acceptance bills						
Total	283,052,731.03	1,531,645,577.49	1,359,099,277.46		455,599,031.06	

3. Bills receivable pledged at the end of the period

Category	Amount pledged at the end of the period
Bank acceptance bills	**250,990,334.14**
Commercial acceptance bills	
Total	**250,990,334.14**

4. Bills receivable endorsed or discounted at the end of the period and not mature at the balance sheet date

Category	**Amount derecognized at the end of the period**	Amount not derecognized at the end of the period
Bank acceptance bills	**650,946,514.63**	
Commercial acceptance bills		
Total	**650,946,514.63**	

X. OTHER RECEIVABLES

Item	**Closing balance**	Balance at the end of last year
Interests receivable		
Dividends receivable		
Other receivable	**142,070,012.04**	249,397,827.25
Total	**142,070,012.04**	249,397,827.25

1. Other receivables

(1) Other receivables disclosed by aging

Aging	Closing balance	Balance at the end of last year
Within 1 year		
Including: 0–6 months (inclusive)	**51,927,701.51**	202,133,932.26
7–12 months (inclusive)	**58,853,984.78**	15,118,928.24
Subtotal of within 1 year	**110,781,686.29**	217,252,860.50
1–2 years (inclusive)	**22,910,836.74**	10,547,281.91
2–3 years (inclusive)	**10,235,515.28**	24,342,813.78
Over 3 years	**3,089,172.92**	676,972.59
Sub-total	**147,017,211.23**	252,819,928.78
Less: provision for bad debts	**4,947,199.19**	3,422,101.53
Total	**142,070,012.04**	249,397,827.25

(2) Other receivables disclosed by category

Category	**Closing balance**					Opening balance				
	Book balance		**Allowance for bad debts**		**Carrying amount**	Book balance		Allowance for bad debts		Carrying amount
	Amount	**Proportion (%)**	**Amount**	**Appropriation proportion (%)**		Amount	Proportion (%)	Amount	**Appropriation proportion (%)**	
Allowance for bad debts is made based on individual assessment	**261,217.37**	**0.18**	**261,217.37**	**100.00**		261,217.37	0.10	261,217.37	100.00	
Allowance for bad debts is made on group basis	**146,755,993.86**	**99.82**	**4,685,981.82**	**1.77**	**142,070,012.04**	252,558,711.41	99.90	3,160,884.16	1.25	249,397,827.25
Including: By aging	**13,658,648.99**	**9.29**	**4,340,610.82**	**13.71**	**9,318,038.17**	18,109,117.93	7.39	2,815,513.16	15.55	15,293,604.77
By related parties	**40,155,113.28**	**27.31**			**40,155,113.28**	209,344,710.76	82.49			209,344,710.76
By deposits, margins and reserves	**92,942,231.59**	**63.22**	**345,371.00**	**0.46**	**92,596,860.59**	25,104,882.72	10.12	345,371.00	1.38	24,759,511.72
Total	**147,017,211.23**	**100.00**	**4,947,199.19**	**-**	**142,070,012.04**	252,819,928.78	100.00	3,422,101.53		249,397,827.25

1) *Other receivables of allowance for bad debts made on individual basis*

Name	Closing amount Book balance	Allowance for bad debts	Appropriation proportion (%)	Reason for making allowance
Court transfer	**225,026.25**	**225,026.25**	**100.00**	**Unlikely to be recovered**
Shananxi Tiande Air Quality Improvement Co., Ltd. (陝西天德空氣品質改善有限公司)	**29,400.00**	**29,400.00**	**100.00**	**Unlikely to be recovered**
Guangzhou Yuegang Science and Technology Instrument Co., Ltd.(廣州粵港科藝儀器有限公司)	**3,388.00**	**3,388.00**	**100.00**	**Unlikely to be recovered**
Shanghai Kechuang Chemical Co., Ltd. (上海科創化工有限公司)	**2,173.12**	**2,173.12**	**100.00**	**Unlikely to be recovered**
Liaoyang Pharmaceutical Machinery Co., Ltd. (遼陽製藥機械股份有限公司)	**630.00**	**630.00**	**100.00**	**Unlikely to be recovered**
Xi'an Jiaotong University Fluid Compression National Engineering Center Xianyang Fan Factory(西安交大流體壓縮國家工程中心咸陽風機廠)	**600.00**	**600.00**	**100.00**	**Unlikely to be recovered**
Total	**261,217.37**	**261,217.37**		

2) *Other receivables of allowance for bad debts made on group basis*

Name	Closing balance Other receivable	Allowance for bad debts	Appropriation proportion (%)
By aging	**13,658,648.99**	**4,340,610.82**	**13.71**
By related parties	**40,155,113.28**		
By deposits, margins and reserves	**92,942,231.59**	**345,371.00**	**0.46**
Total	**146,755,993.86**	**4,685,981.82**	

Items for which allowance is made on group basis: by aging

Name	Other receivable	Closing balance Allowance for bad debts	Appropriation proportion *(%)*
0–6 months (inclusive)	**5,067,032.98**		
7–12 months (inclusive)	**12,624.44**	**126.24**	**1.00**
1–2 years (inclusive)	**690,731.05**	**207,219.31**	**30.00**
2–3 years (inclusive)	**7,509,990.52**	**3,754,995.26**	**50.00**
Over 3 years	**378,270.00**	**378,270.00**	**100.00**
Total	**13,658,648.99**	**4,340,610.82**	

Items for which allowance is made on group basis:
by related parties

Name	Accounts receivable	Closing balance Allowance for bad debts	Appropriation proportion *(%)*
By related parties	**40,155,113.28**		
Total	**40,155,113.28**		

Items for which allowance is made on group basis:
by deposits, margins and reserves

Name	Accounts receivable	Closing balance Allowance for bad debts	Appropriation proportion *(%)*
By deposits, margins and reserves	**92,942,231.59**	**345,371.00**	**0.37**
Total	**92,942,231.59**	**345,371.00**	**0.37**

(3) *Allowances for bad debts*

Allowances for bad debts	Stage I ECL for the following 12 months	Stage II Lifetime ECL (without credit impairment)	Stage III Lifetime ECL (with credit impairment)	Total
Balance at the end of last year	3,160,884.16		261,217.37	3,422,101.53
Balance at the end of last year during the period				
– Transferred to Stage II				
– Transferred to Stage III				
– Reversed to Stage II				
– Reversed to Stage I				
Made in the period	1,530,137.88			1,530,137.88
Reversed in the period				
Charged off in the period				
Written off in the period				
Other changes	-5,040.22			-5,040.22
Closing balance	4,685,981.82		261,217.37	4,947,199.19

Change in book balance of other receivables is as follows:

Allowances for bad debts	Stage I ECL for the following 12 months	Stage II Lifetime ECL (without credit impairment)	Stage III Lifetime ECL (with credit impairment)	Total
Balance at the end of last year	252,558,711.41		261,217.37	252,819,928.78
Balance at the end of last year during the period				
– Transferred to Stage II				
– Transferred to Stage III				
– Reversed to Stage II				
– Reversed to Stage I				
Addition in the period				
Written off directly in the period				
Derecognition in the period	104,292,516.15			104,292,516.15
Other changes	1,510,201.40			1,510,201.40
Closing balance	146,755,993.86		261,217.37	147,017,211.23

Note: Other changes are not include the impact of consolidation of Hanzhong Jiarunze during the current year.

(4) Allowances for bad debts made, reversed or recovered for the period

Category	Balance at the end of last year	Changes during the period Made	Charged off or written off	Recovered or reversed	Closing balance
Single item of bad debt provision	261,217.37				261,217.37
Other receivables that are subject to provision for bad debts collectively on credit risk characteristics	3,160,884.16	1,525,097.66			4,685,981.82
Including: By aging	2,815,513.16	1,525,097.66			4,340,610.82
By related parties					
By deposits, margins and reserves	345,371.00				345,371.00
Total	3,422,101.53	1,525,097.66			4,947,199.19

Note: The provision of RMB1,525,097.66 for the current period includes a reduction of bad debt provision of RMB5,040.22 due to the non-inclusion of Hanzhong in the balance sheet

(5) Receivables by nature

Nature	Closing balance	Balance at the end of last year
Deposits, margins and reserve	**92,942,231.59**	25,557,991.13
Amounts due from related	**40,155,113.28**	208,334,695.63
Other current amounts	**13,919,886.36**	18,927,242.02
Total	**147,017,211.23**	252,819,928.78

(6) Top five other account receivables according to closing balance of debtors

Name of debtor	Nature of payment	Book balance	Aging	Percentage of total other receivables (%)	Allowance for bad debts
SZYDLEWSKI BETEILIGUNGSGESELLSCHAFT UG (HAFTUNGSB)	Deposit	41,281,857.68	Within 1 year	28.08	
Hanzhong Jiarunze Mining Development Co., Ltd* (漢中佳潤澤礦業開發有限責任公)	Open credit	22,421,859.36	Within 1 year	15.25	
China Electronics Commercial Financial Leasing Co., Ltd. (中電通商融資租賃有限公司)	Margins	18,000,000.00	3 to 4 years	12.24	
Ping An International Financial Leasing Co., Ltd. (平安國際融資租賃有限公司)	Deposits	14,500,000.00	0 to 2 years	9.86	
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	Margins	9,000,000.00	1 to 2 years	6.12	
Total		105,203,717.04		71.55	

XI. OTHER INVESTMENT IN EQUITY INSTRUMENTS

1. Details of other investment in equity instruments

Items	Closing balance	Balance at the end of last year
IRICO Display Devices Co., Ltd. (彩虹顯示器件股份有限公司)	**148,577,826.60**	146,101,529.49
Shaanxi Caihong Electronics Glass Co., Ltd. (陝西彩虹電子玻璃有限公司)	**102,767,095.46**	103,908,078.93
Total	**251,344,922.06**	250,009,608.42

Note 1: There were 35,375,673 shares of IRICO Display Devices Co., Ltd. held at the end of the period, and the stock price was RMB4.20 per share.

Note 2: There were 7.2953% shareholding of Shaanxi Electronics Glass Co., Ltd. held at the end of the period.

2. Details of investment in non-trading equity instruments

Items	Dividend income recognized in the year	Accumulated Gains	Accumulated Losses	Amount of transferred to retained earnings from other comprehensive income	Reasons for designating as financial assets at fair value through other comprehensive income	Reasons for transferring to retained earnings from other comprehensive income
IRICO Display Devices Co., Ltd.			231,883,659.72		Non-trading investments	
Shaanxi IRICO Electronics Glass Co., Ltd.			149,162.35		Non-trading investments	

XII. SHORT-TERM BORROWINGS

1. Categories of short-term borrowings

Item	Closing balance	Balance at the end of last year
Guaranteed borrowings	**389,260,642.94**	236,000,000.00
Pledged borrowings	**147,131,587.50**	130,252,466.63
Guaranteed and mortgaged borrowings	**30,000,000.00**	50,000,000.00
Mortgaged borrowings	**18,000,000.00**	18,000,000.00
Total	**584,392,230.44**	434,252,466.63

2. Details of short-term borrowings:

Guaranteed borrowings:

Lender	Borrowing balance	Guarantor
China Construction Bank Corporation Hefei Chengdong Sub-branch (中國建設銀行股份有限公司合肥城東支行)	120,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Everbright Bank Xi'an Youyi Road Branch(光大銀行西安友誼路支行)	50,086,395.83	IRICO Group Corporation Limited* (彩虹集團有限公司)
China Guangfa Bank Hefei Feixi Branch (廣發銀行股份有限公司合肥肥西分行)	50,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)

Lender	Borrowing balance	Guarantor
Hefei Science & Technology Rural Commercial Bank Co., Ltd Xinzhan Sub-branch (合肥科技農村商業銀行股份有限公司新站支行)	50,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Huishang Bank Corporation Limited* Hefei Technology Sub-branch (徽商銀行股份有限公司合肥科技支行)	50,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Bank of Communications Xianyang Branch (交通銀行咸陽分行)	30,045,856.25	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Shanghai Pudong Development Bank Co. Ltd., Xi'an Branch (上海浦東發展銀行股份有限公司西安分行)	20,000,000.00	IRICO Group New Energy Company Limited. (彩虹集團新能源股份有限公司)
China Zheshang Bank Co., Ltd. Xianyang Branch (浙商銀行股份有限公司咸陽分行)	19,128,390.86	IRICO Group Corporation Limited* (彩虹集團有限公司), Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Total	389,260,642.94	

Pledged borrowings:

Lender	Borrowing balance	Pledge
China Electronics Financial Co., Ltd. (中國電子財務有限責任公司)	90,131,587.50	Pledged by the 35,375,673 shares held in IRICO Display Devices Co., Ltd.
China Zheshang Bank Co., Ltd. Xianyang Branch (浙商銀行股份有限公司咸陽分行)	57,000,000.00	Pledge of bills
Total	147,131,587.50	

Guaranteed and mortgaged borrowings:

Lender	Borrowing balance	Collateral and guarantor
Jiangsu Zhangjiagang Rural Commercial Bank Co., Ltd (江蘇張家港農村商業銀行股份有限公司)	30,000,000.00	Pledged with fixed assets and guaranteed by IRICO Group Corporation Limited* (彩虹集團有限公司) at the same time.
Total	30,000,000.00	

Mortgaged borrowings:

Lender	Borrowing balance	Collateral
Suzhou Bank Co., Ltd Zhangjiagang Economic & Technological Development Zone Subbranch (蘇州銀行股份有限公司張家港經濟技術開發區支行)	18,000,000.00	Property and land of IRICO Yongneng, ownership certificate no.: Su (2018) Zhangjiagang Real Estate Certificate No. 0040300.
Total	18,000,000.00	

XIII. NOTES PAYABLES

Category	Closing balance	Balance at the end of last year
Bank acceptance	**609,456,870.22**	490,689,505.29
Trade acceptance	**43,500,682.49**	
Total	**652,957,552.71**	490,689,505.29

At the end of the period, there were no notes payable due and not paid.

XIV. ACCOUNTS PAYABLE

1. Accounts payable

Aging	Closing balance	Balance at the end of last year
Within 1 year (inclusive)	**588,863,908.41**	758,391,661.66
1 to 2 years (inclusive)	**95,098,279.34**	88,207,014.92
2 to 3 years (inclusive)	**45,057,115.54**	8,715,723.71
Over 3 years	**31,356,211.23**	34,069,882.15
Total	**760,375,514.52**	889,384,282.44

2. Significant accounts payable aged over 1 year:

Item	Closing balance	Reasons for outstanding or carried forward
Wuxi Heguang New Energy Technology Co., Ltd. (無錫市和光新能源科技有限公司)	**31,669,918.20**	Not settled
Nanjing Qixia District Power Equipment Installation Engineering Co., Ltd.(南京市棲霞區電力設備安裝工程有限公司)	**7,766,432.72**	Not settled
South Glass Technology Co., Ltd. (廣東索奧斯玻璃技術有限公司)	**5,552,136.75**	Not settled
Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司)	**5,492,254.41**	Not settled
Qinhuangdao Qinhai Kiln Industry Co., Ltd. (秦皇島秦海窯業有限公司)	**3,390,000.00**	Not settled
No.9 Metallurgical Construction Co., Ltd. (九冶建設有限公司)	**3,015,923.61**	Not settled
Susheng Technology (Wuxi) Co., Ltd. (蘇聖科技(無錫)有限公司)	**2,820,908.00**	Not settled
Shanghai Precision Dosing & Weighing System Co., Ltd. (上海普利森配料系統有限公司)	**2,802,000.00**	Not settled
Guodian Zhaojing Optoelectronics Technology Jiangsu Co., Ltd.(國電兆晶光電科技江蘇有限公司)	**1,933,893.08**	Not settled
Qingdao Yuanding Special Machinery Manufacturing Co., Ltd.(青島元鼎特種機械製造有限公司)	**1,708,000.00**	Not settled

Item	Closing balance	Reasons for outstanding or carried forward
Jurong Guangxuan Optoelectronics Technology Co., Ltd. (句容光軒光電科技有限公司)	**1,426,200.01**	Not settled
Qinhuangdao Tucheng Glass Technology Co., Ltd. (秦皇島圖成玻璃技術有限公司)	**1,390,076.91**	Not settled
Shanghai Mingshuo Automation Technology Co., Ltd. (上海明碩自動化科技有限公司)	**1,353,333.36**	Not settled
Jiangsu Jinsha Construction Group Co., Ltd. (江蘇金廈建設集團有限公司)	**1,289,536.11**	Not settled
IRICO Group Corporation(彩虹集團有限公司)	**1,060,665.49**	Not settled
China Mic5Group Corp., Ltd.(中國五冶集團有限公司)	**1,056,000.00**	Not settled
Xidian Baoji Electric Co., Ltd.(西電寶雞電氣有限公司)	**1,021,000.00**	Not settled
Total	**74,748,278.65**	

3. Accounts payable by nature

Item	Closing balance	Balance at the end of last year
Payables for materials	**447,692,393.86**	515,375,477.77
Payables for construction	**115,051,988.61**	158,586,578.13
Payables for equipment	**135,327,683.41**	155,246,624.25
Payables for services	**41,405,795.22**	37,788,642.51
Payables for supplies	**12,134,647.81**	9,289,278.50
Payables for transportation	**785,915.90**	461,296.22
Others	**7,977,089.71**	12,636,385.06
Total	**760,375,514.52**	889,384,282.44

XV. OTHER PAYABLES

Items	Closing balance	Balance at the end of last year
Interests payable		24,484,848.54
Dividends payable	**19,689,811.54**	21,689,811.54
Other payables	**1,554,446,408.74**	1,493,314,794.18
Total	**1,574,136,220.28**	1,539,489,454.26

1. Interests payable

Items	Closing balance	Balance at the end of last year
Interest of long-term borrowings with interest paid in installments and principal repaid on maturity		7,827,581.46
Interest payables of short-term borrowings		867,805.90
Other interests		15,789,461.18
Total		24,484,848.54

2. Dividends payable

Items	Closing balance	Balance at the end of last year
Dividend of ordinary shares	**19,689,811.54**	21,689,811.54
Total	**19,689,811.54**	21,689,811.54

Major unpaid dividends payable over 1 year：

Item	Amounts payable	Reason for unsettlement
Yongneng Photoelectricity Holding Company Limited* (永能光電控股有限公司)	**11,808,897.39**	Haven't been collected by the counterparties yet
Suzhou Yongjin Investment Co., Ltd.* (蘇州永金投資有限公司)	**4,024,947.65**	Haven't been collected by the counterparties yet
Suzhou Huilian Solar Energy Technology Co., Ltd.* (蘇州惠利安太陽能科技有限公司)	**3,855,966.50**	Haven't been collected by the counterparties yet
Total	**19,689,811.54**	

RMB19,689,811.54 of the unpaid dividends payable over 1 year are the dividends payable by subsidiaries to minority shareholders.

3. Payables stated by nature

Item	Closing balance	Balance at the end of last year
Amounts due to related parties	**1,040,828,059.01**	1,012,668,566.67
Loans from non-financial institutions and interest thereon	**331,092,733.34**	431,092,733.24
Other current account	**162,781,863.21**	35,513,606.11
Amounts due to employees	**5,419,175.67**	4,126,527.51
Retention money and deposits	**5,080,209.77**	9,913,360.65
Total	**1,554,446,408.74**	1,493,314,794.18

4. Other major payables aged more than one year

Item	Closing balance	Reasons for outstanding or carried forward
Yan'an Dingyuan Investment Co., Ltd.* (延安市鼎源投資有限責任公司)	**300,000,000.00**	The contract has not expired
Zhuhai Caizhu Industrial Co., Ltd.* (珠海彩珠實業有限公司)	**99,927,674.25**	Haven't been collected by the related parties yet
Kunshan IRICO Industry Co., Ltd. (昆山彩虹實業有限公司)	**42,652,778.11**	Haven't been collected by the related parties yet
IRICO New Energy (Wuhan) Co., Ltd.(武漢彩虹綠色能源有限公司)	**10,406,022.65**	Haven't been collected by the related parties yet
Total	**452,986,475.01**	

XVI. NON-CURRENT LIABILITIES DUE WITHIN ONE YEAR

Items	Closing balance	Closing balance Balance at the end of last year
Long-term loans due within one year	**141,104,396.72**	495,437,200.00
Long-term payables due within one year	**394,217,469.08**	
Other long-term liabilities due within one year	**4,639,378.38**	2,082,366.90
Less: Amortized sale-and-lease back service payments due within one year	**6,927,600.00**	
Total	**533,033,644.18**	497,519,566.90

Explanations on long-term loans due within one year:

Guaranteed borrowings:

Lender	Borrowing balance	Guarantor
Hefei Science & Technology Rural Commercial Bank Co., Ltd. Xinzhan Branch(合肥科技農村商業銀行股份有限公司新站支行)	78,493,650.00	Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司)
Bank of Xi'an Xianyang Branch Co., Ltd. Xianyang Branch (西安銀行股份有限公司咸陽分行)	48,090,571.72	IRICO Group Corporation (彩虹集團有限公司)
China Bohai Bank Co., Ltd. Nanjing Branch (渤海銀行股份有限公司南京分行)	10,000,000.00	IRICO Group Corporation (彩虹集團有限公司), IRICO Group New Energy Company Limited (彩虹集團新能源股份有限公司)
Chang'an Bank Limited Xianyang Caihong Branch (長安銀行股份有限公司咸陽彩虹支行)	2,120,175.00	Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司)
Total	138,704,396.72	

Explanations on long-term payables due within one year:

Lender	Borrowing balance	Guarantor
China Electronics Commercial Financial Leasing Co., Ltd. (中電通商融資租賃有限公司)	115,300,000.00	Fixed assets/IRICO Group Corporation Limited* (彩虹集團有限公司)
Ping An International Financial Leasing Co., Ltd. (平安國際融資租賃有限公司)	104,614,998.92	Fixed assets/Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
International Far Eastern Leasing Co., Ltd* (遠東國際租賃有限公司)	76,500,000.00	Construction in progress/IRICO Group New Energy Company Limited (彩虹集團新能源股份有限公司), IRICO (Hefei) Photovoltaic Co., Ltd (彩虹(合肥)光伏有限公司), Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	65,865,022.24	Fixed assets/Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
Beijing International Financial Leasing Co., Ltd. (北京國際融資租賃股份有限公司)	31,937,447.92	Fixed assets/Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
Total	394,217,469.08	

XVII. LONG-TERM BORROWINGS

Items	Closing balance	Balance at the end of last year
Guaranteed loans	**130,021,800.00**	199,485,600.00
Credit loans	**2,300,000.00**	4,700,000.00
Mortgaged loans and guaranteed loans		391,190,144.44
Total	**132,321,800.00**	595,375,744.44

Explanations on classification of long-term borrowings:

Guaranteed borrowings:

Lender	Borrowing balance	Guarantor
Chang'an Bank Limited Xianyang Caihong Branch(長安銀行股份有限公司咸陽彩虹支行)	67,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司)
Hefei Science & Technology Rural Commercial Bank Co., Ltd. Xinzhan Branch (合肥科技農村商業銀行股份有限公司新站支行)	37,021,800.00	Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司)
China Bohai Bank Co., Ltd. Nanjing Branch (渤海銀行股份有限公司南京分行)	26,000,000.00	IRICO Group Corporation Limited* (彩虹集團限公司), IRICO Group New Energy Company Limited (彩虹集團新能源股份有限公司)
Total	130,021,800.00	

XVIII. LONG-TERM PAYABLES

Items	Closing balance	Balance at the end of last year
Long-term payables	**213,076,889.47**	
Special payables		7,000,000.00
Total	**213,076,889.47**	7,000,000.00

1. Long-term payables

The top 5 items with the largest closing balance:

Item	Closing balance	Balance at the end of last year
Rental for sale and leaseback	**221,201,980.67**	
Unrecognized financing expenses	**-8,125,091.20**	
Total	**213,076,889.47**	

Explanation on long-term payables:

Lender	Borrowing balance	Collateral/guarantor
Ping An International Financial Leasing Co., Ltd. (平安國際融資租賃有限公司)	59,651,980.67	Fixed assets/Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	50,000,000.00	Fixed assets/Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
China Electronics Commercial Financial Leasing Co., Ltd (中電通商融資租賃有限公司)	45,150,000.00	Fixed assets/IRICO Group Corporation Limited* (彩虹集團有限公司)
Beijing Guozi Financial Leasing Co., Ltd. (北京國資融資租賃股份有限公司)	43,400,000.00	Fixed assets/Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司), IRICO Group Corporation Limited* (彩虹集團有限公司)
International Far Eastern Leasing Co., Ltd* (遠東國際租賃有限公司)	23,000,000.00	Construction in progress/IRICO Group New Energy Company Limited (彩虹集團新能源股份有限公司), IRICO (Hefei) Photovoltaic Co., Ltd. (彩虹(合肥)光伏有限公司), Xianyang Zhongdian IRICO Group Holdings Ltd. (咸陽中電彩虹集團控股有限公司)
Total	221,201,980.67	

2. Special payables

Item	Balance at the end of last year	Increase for the period	Decrease for the period	Closing balance	Source
Appropriations for projection tube business	7,000,000.00		7,000,000.00		
Total	7,000,000.00		7,000,000.00		

XIX. FINANCE COSTS

Category	**Amount for period**	Amount for the previous period
Interest expenses	**109,203,148.48**	85,654,817.90
Including: Interest expenses on lease liabilities	**848,791.05**	
Less: Interest income	**10,864,454.05**	4,307,646.28
Exchange net losses	**-522,593.72**	-1,943,387.73
Handling fees and others	**8,861,388.26**	7,724,956.31
Total	**106,677,488.97**	87,128,740.20

XX. INVESTMENT INCOME

Item	**Amount for period**	Amount for the previous period
Income from long-term equity investments measured under equity method	**356,875.10**	-1,544,793.72
Investment income from disposal of long-term equity investment	**2,062,951.51**	73,518,487.64
Gain on revaluation of the fair value of remaining equity interests after losing control	**8,619,007.14**	70,635,409.69
Investment income from disposal of financial assets at fair value through current profit or loss	**713,165.07**	772,870.27
Bills discounted interest of receivables financing	**-8,988,122.44**	-4,146,105.11
Total	**2,763,876.38**	139,235,868.77

There are no significant restrictions on the repatriation of investment income of the Company.

XXI. EARNINGS PER SHARE

(1) Basic earnings per share

Basic earnings per share is calculated by dividing consolidated net profit attributable to holders of ordinary shares of the Company by weighted average number of ordinary shares in issue of the Company.

Item	**Amount for period**	Amount for the previous period
Consolidated net profit attributable to holders of ordinary shares of the Company	**93,141,994.89**	81,297,979.57
Weighted average number of ordinary shares in issue of the Company	**2,232,349,400.00**	2,232,349,400.00
Basic earnings per share *(RMB/share)*	**0.0417**	0.0364

The weighted average of ordinary shares is calculated as follows:

Item	**Amount for period**	Amount for the previous period
Number of ordinary shares in issue at the beginning of year	**2,232,349,400.00**	2,232,349,400.00
Add: Weighted average number of ordinary shares issued during the period		
Less: Weighted average number of ordinary shares repurchased during the period		
Number of ordinary shares in issue at the end of year	**2,232,349,400.00**	2,232,349,400.00

(2) Diluted earnings per share

Diluted earnings per share is calculated by adjusted consolidated net profit attributable to holders of ordinary shares of the Company by the adjusted weighted average number of ordinary shares in issue of the Company.

Item	**Amount for period**	Amount for the previous period
Consolidated net profit attributable to holders of ordinary shares of the Company (diluted)	**93,141,994.89**	81,297,979.57
Weighted average number of ordinary shares in issue of the Company (diluted)	**2,232,349,400.00**	2,232,349,400.00
Diluted earnings per share *(RMB/share)*	**0.0417**	0.0364

Weighted average number (diluted) of ordinary shares is calculated as follows:

Item	Amount for period	Amount for the previous period
Weighted average number of ordinary shares in issue at the end of year when the basic earnings per share is calculated	**2,232,349,400.00**	2,232,349,400.00
Effects of convertible bonds		
Effects of share options		
Weighted average number (diluted) of ordinary shares at the end of the year	**2,232,349,400.00**	2,232,349,400.00

XXII. DIVIDEND

As at 31 December 2019, the Board did not declare any dividend.

XXIII. OTHER MATTERS

(I) Compensation to Xianyang Zhongdian IRICO Group Holdings Ltd.* on shutdown of furnaces

Xianyang Photovoltaic Glass Factory* (咸陽光伏玻璃廠) ("**Xianyang Photovoltaic**"), a subsidiary of the Company, is primarily engaged in production and sales of photovoltaic glass. It shut down two furnaces with a daily production volume of 250 tons in March 2017 and May 2019, respectively, due to service life of furnaces and out of consideration for economies of scale; and shut down one furnace with a daily production volume of 250 tons at the beginning of July 2017.

As the land of Xianyang Zhongdian IRICO Group Holdings Ltd.* ("**Zhongdian Holdings**") leased and occupied for the shutdown of furnaces by Xianyang Photovoltaic will be purchased and reserved for development in the future, the Company failed to obtain approval of our controlling shareholder, IRICO Group Corporation Limited (the second largest shareholder of Zhongdian Holdings with CEC as its de facto controller) for the cold repair proposal, the fees on idle personnel and losses on production suspension all exerted material impact on the Company. Upon mutual friendly negotiation, the "Compensation Framework Agreement" was signed in June 2019, which provides that Zhongdian Holdings will compensate the Company for the loss on work stoppages arising from production suspension and cold repair cessation of the above-mentioned furnaces with a total amount of RMB121,747,400, of which, a compensation of RMB81,167,400 will be provided for the two furnaces shut down in 2017 and a compensation of RMB40,580,000 will be provided for the loss on work stoppages to be incurred in the future for the furnace shut down on 31 May 2019.

In addition, a compensation of RMB13,940,000 was made for wages and social security losses of idle workers during the shutdown caused by the two furnaces shut down in 2017.

In 2019, the Company confirmed that the compensation of furnaces of Zhongdian Holdings is RMB106,943,200, which is included in other income.

(II) Accounts receivable assignment

In order to explore new financing channels, on 24 May 2019, the Company, Hefei Photovoltaic and Shaanxi New Material entered into the Accounts Receivable Assignment Agreements with China Electronics Corporation* (中國電子信息產業集團有限公司) ("**CEC**") to transfer the subject assets to CEC at considerations of RMB14,238,601.45, RMB36,238,527.33 and RMB27,900,768.28, respectively. The Company disclosed the above related party transaction on 28 June 2019. On 16 July 2019, the matter was authorised, approved and ratified at the extraordinary general meeting of the Company and the Accounts Receivable Assignment Agreements were authorised and approved. The transfer of accounts receivable by the Company, Hefei Photovoltaic and Shaanxi New Material to CEC was authorised and approved; and any director of the Company or his proxy(ies) was authorised to proceed with and complete the matter. The Company received the consideration for the above accounts receivable assignment with a total of RMB78,377,897.06 in July 2019.

(III) With China Electronics Financial Co., Ltd.

Related parties	Content of transactions with related parties	Closing balance/amount for the period
China Electronics Financial Co., Ltd.	Bank deposit	108,624,110.00
China Electronics Financial Co., Ltd.	Receipts from interest	93,148.90
China Electronics Financial Co., Ltd.	Balance of loan	90,000,000.00
China Electronics Financial Co., Ltd.	Payment of interest	4,345,045.84
China Electronics Financial Co., Ltd.	Bill discounted interest	395,168.18

The closing balance of the Company's deposits with China Electronics Financial Co., Ltd. amounted to RMB108,624,110.00, which generated deposit interest of RMB93,148.90 for the Company during the period; the closing balance of the Company's borrowings amounted to RMB90,000,000.00, which resulted in interest expenses of RMB4,345,045.84 during the period. The bill discounted interest of the Company is RMB395,168.18.

EXTRACT FROM INDEPENDENT AUDITOR'S REPORT PREPARED BY INDEPENDENT AUDITOR

The Company would like to provide an extract of the independent auditor's report prepared by BDO China Shu Lun Pan Certified Public Accountants LLP (立信會計師事務所(特殊普通合夥)), the independent auditor, on the Group's annual financial statements for the year ended 31 December 2019 as set out below:

"Material uncertainty related to going concern

We hereby remind the readers of the financial statements that, as set out in the financial statements, as at 31 December 2019, the net current liabilities of the Company amounted to RMB2,455,429,600. Notwithstanding that the Company has given full disclosure on its proposed improvement measures in the notes to the financial statements, there are still risks in its continuing operations. It is hoped that the Company will speed up the implementation of improvement measures and improve the Company's ability to continue as a going concern and product competitiveness while strengthening risk management and control."

RESULTS AND DIVIDEND

During the reporting period, the Group recorded operating revenue of RMB2,245.11 million, representing a year-on-year decrease of RMB86.81 million or 3.72%, and net profits attributable to the owners of the parent of RMB93.14 million, representing a year-on-year increase of RMB11.84 million or 14.57%.

The Company's original dividend policy will remain unchanged. In light of the absence of accumulated surplus in 2019, the Board has resolved not to distribute any final dividends for the year ended 31 December 2019, which is subject to the approval from shareholders at the 2019 annual general meeting held in 2020. Further details in relation to the closure of register of member for H shares will be announced by the Company after confirming the arrangement of such general meeting.

BUSINESS REVIEW

During the reporting period, the Group continued to strengthen and optimize solar photovoltaic business and new electronic materials business. The principal business developed rapidly, the business scale continued to expand, and the overall layout of high-quality development basically took shape.

(1) Solar photovoltaic business

Solar photovoltaic glass

During the reporting period, as the worldwide largest oxygen-fuel combustion photovoltaic glass production base, Hefei Photovoltaic has two oxygen-fuel combustion photovoltaic glass furnaces with a daily melting capacity of 750 tonnes and 800 tonnes, respectively. With the improvement of quality and efficiency in all-round of the production lines of Hefei Photovoltaic, the production capacity continues hitting new highs and the proportion of qualified products reaches the first-class standard in the industry. The Company grasped the opportunity of industry demand recovery and adhered to the strategy of large customers, therefore achieving fast increasing orders, a boom in production and sales and a significant year-on-year increase in the revenue and profit of photovoltaic glass business, which further enhanced the core competitiveness of the Company and laid a solid foundation for the development of the Group. The construction of the phase III production lines in the Hefei base is being accelerated, and upon completion of the project, the scale effect will be further enlarged. In addition, it has won the honorary title of "Advanced Central Enterprise" at the Advanced Central Enterprises and Model Workers Commendation Conference.

The Group's largest, in terms of scale, oxygen-fuel combustion photovoltaic glass production lines in Yan'an base, with the most optimum cost advantages, the most advanced technology, and a daily melting capacity of 850 tonnes, has been put into full operation. The products have been accredited by customers, and the sales-to-production ratio has maintained a good level, so that it has achieved a steadily access into the market and helped the areal landscape of the Group's business to develop in a balanced manner.

The solar photovoltaic glass bases of the Group continued to transform and upgrade their production lines to produce thin glass by enhancing process control and technical innovation in equipment, and has achieved mass production of thin photovoltaic glass in more than half of its production lines and completed the certification and mass sales of double-glazed glass and other products, which created a new profit growth driver for the Group. The Group's "R&D project on energy conservation and emission reduction technology for oxygen-fuel combustion furnace and main production line", a 2016 green manufacturing system integration project of the Ministry of Industry and Information Technology, has passed the acceptance. The production capacity and technology of relevant production lines maintained stability, and the consumption and nitrogen oxide emissions involved therein were far lower than the national standards, which signified significant social benefits, environmental benefits and economic profits. In addition, the Group and LONGi Group entered into the sales agreement for photovoltaic glass with a contract amount of approximately RMB1.8 billion, further enhanced the Group's share in the photovoltaic glass market and its position in the industry and promoted the sustainable and steady development of its operating performance.

Solar photovoltaic modules

During the reporting period, Jiangsu IRICO Yongneng New Energy Company Limited* (江蘇彩虹永能新能源有限公司) ("**IRICO Yongneng**") completed upgrading on the existing production lines of modules by conducting technical renovation, equipment updating and other measures. As a result, the production efficiency of production lines and added-value of product have been significantly improved, and breakthrough progress was seen in double-glass module production lines. Meanwhile, the Group seized development opportunity of grid-parity and increased industrial investment, further boosted the efficient integration of photovoltaic business chain in the Group and is therefore conducive to developing economies of scale.

Solar photovoltaic power station

During the reporting period, the Group's solar photovoltaic power stations in Nanjing, Hefei, Wuhan and Liquan were in stable operation. Besides, the construction of project of poverty alleviation power station in Changwu has been fully completed and put into use. The Group also capitalised on its photovoltaic glass furnace equipment and technical advantage to promote cogeneration for boosting interconnected and win-win development of industries. Meanwhile, the Group actively negotiated with potential partners in terms of projects in a number of places including Jiangsu and Anhui for enhancing business scale.

In addition, the Group energetically conducted intelligent operation model of digitalization and informatization for solar photovoltaic power stations and has realized informatization management for power station data in some areas, and the intelligent and automatic cleaning transformation project has been put into trial operation.

Quartz sand business

During the reporting period, the construction of main work of the Group's Hanzhong Jiarunze quartz sand mine project has been completed and met acceptance conditions. Meanwhile, significant achievements have been made in respect of environmental protection work and safety construction at the diggings. Besides, the production capacity and quality of quartz sand processing lines were comprehensively improved.

(2) New materials business

During the reporting period, the Group focused on the development of electronic functional materials and actively expanded new businesses. The total profit of new material business realized a year-on-year increase of 19%.

The Group successfully introduced advanced manufacturing technology of photoresist from Merck KGaA in Germany. As a result, production lines of the project operated smoothly, and self-produced photoresist was accredited by customers and realized stable bulk supply, which further promoted the deep integration of photoresist business of the Group and the industry chain of liquid crystal display panel of China Electronics Corporation. In respect of cathode materials for lithium batteries, the NCM811 battery material production line of the Group, with technology and production capacity in the top three in the industry, achieved full production capacity and was put into operation. The products possessed significant competitive advantage and the profitability continued to improve. At the same time, the construction and mass production of projects of silver paste and silver powder for solar batteries were accelerated, and the battery materials and electronic silver paste business markets were expanded, forming a new source for sales growth of the Group.

In addition, the Group established a science and technology committee, communicated and cooperated with universities and research institutions such as Fudan University and Northwest University, and established an integrated innovation mechanism of production, teaching and research with enterprises as the mainstay, which has achieved fruitful results; among those, joint applications have been made for four patents with shared intellectual property rights in respect of joint research projects with Northwest University in field of new energy.

FUTURE PROSPECTS

The Group will go all out to focus on the vision of "providing products and solutions of strategic advanced materials for the China". Based on the existing new energy and electronic functional materials industry and guided by value investment, the Group will adhere to the development path of technology leadership and cost leadership under the innovative business model to continuously improve the industrial layout, accelerate technological innovation, further expand the global top three production capacity scale of photovoltaic glass, and expand the leading edge of electronic functional materials. At the same time, the Group will actively explore the reform of mixed ownership, introduce incentive mechanisms such as share options, and improve core competitiveness, so as to create greater profit margins and build an industry leader with brand advantages.

Starting from 2020, the Group will launch a new three-year industry development plan and take the grid parity in 2020 as an opportunity to vigorously promote the global strategy of replacement of traditional energy with sustainable new energy. Through continuous structural innovation and technological leadership, the Group will focus on promoting the production capacity layout of ultra-thin, high-transmittance photovoltaic glass, developing new energy high-end lithium battery cathode materials, electronic pastes and photoresists, and other advanced electronic functional materials to provide material support for the national strategic industry.

In the future, with the gradual improvement and advancement of the Group's strategy, the Group is expected to achieve better performance that matches the size of the Group. The value as central enterprise, structural optimization, industrial effectiveness and market value enhancement of the Group will further emerge.

SUBSEQUENT EVENTS

At the beginning of 2020, after the outbreak of the novel coronavirus pneumonia (COVID-19), the Group quickly launched the "dual-line battle" of prevention and control in epidemic and production and operation in business. The photovoltaic glass, main business of the Group, maintained continuous production, showing a booming trend in production and sales. The momentum for the high-quality, high-efficiency and rapid development of the Group's business has been further stimulated. At the same time, in accordance with industrial planning, a new production capacity enhancement plan was launched this year to further consolidate the top three position in the world's photovoltaic glass production capacity. The Group assesses that COVID-19 will not have a significant impact on the Group. Benefiting from the strong demand for new installed capacity in the global photovoltaic industry, the operating revenue of the Group in the first quarter of 2020 is expected to increase significantly as compared to the same period in last year.

The Company (as the supplier) and JA Solar Technology (as the purchaser) entered into the strategic cooperation agreement on 18 March 2020 for the supply and purchase of the production and services of photovoltaic glass with an estimated total contract amount of approximately RMB2.1 billion (tax inclusive) from 18 March 2020 to 31 March 2022.

The cooperation will be beneficial to the Group in its sale and promotion of photovoltaic glass products, improvement of the Group's market share and industrial position in the photovoltaic glass market and safeguarding the stabilization of long-term operating results of the Group, and therefore, is in the interests of the Group and its shareholders as a whole.

For details, please refer to the announcement of the Company dated 18 March 2020.

FINANCIAL REVIEW

1. Overall performance

(1) Revenue and profit from principal business

During the reporting period, the Group recorded operating revenue from its principal business of RMB2,196.87 million, representing a year-on-year decrease of RMB93.87 million or 4.1%, which was mainly due to the following reasons: the revenue from photovoltaic glass was RMB1,300.35 million, representing a year-on-year increase of RMB455.57 million; the revenue from solar cell modules was RMB265.91 million, representing a year-on-year decrease of RMB604.88 million due to technological transformation; the revenue from power stations was RMB27.21 million, representing a year-on-year increase of RMB12.99 million, the revenue from new materials business was RMB603.40 million, representing a year-on-year increase of RMB151.31 million; the revenue from trading was RMB0, representing a year-on-year decrease of RMB108.86 million due to the Group's focusing on principal business and enhancing the competition.

The net profit attributable to the owner of the parent amounted to RMB93.14 million, representing a year-on-year increase of RMB11.84 million or 14.57%, which was mainly due to the increased operating capacity by improving quality and efficiency.

(2) Administrative expenses

During the reporting period, the Group's administrative expenses was RMB128.48 million (2018: RMB120.97 million), representing a year-on-year increase of RMB7.51 million or 6.21%, which was mainly due to depreciation.

(3) Finance costs

During the reporting period, the Group's finance costs included in profit and loss was RMB106.68 million (2018: RMB87.13 million), representing a year-on-year increase of RMB19.55 million or 22.44%, which was mainly due to the increased average borrowings of the Company.

(4) Selling expenses

During the reporting period, the Group's selling expenses was RMB69.73 million (2018: RMB62.35 million), representing a year-on-year increase of RMB7.38 million or 11.84%, which was mainly due to the increase of the volume of sales of photovoltaic glass.

(5) Research and development expenses

During the reporting period, the Group's research and development expenses was RMB50.46 million (2018: RMB43.68 million), representing a year-on-year increase of RMB6.78 million or 15.52%, which was mainly due to the increase in research and development costs of of RMB14.51 million of Hefei Photovoltaic, while the decrease in research and development costs of RMB7.73 million of Xianyang Photovoltaic and IRICO Yongneng and other companies.

2. Capital structure

As at 31 December 2019, the Group will continue to maintain a suitable ratio of share capital to liabilities to ensure an effective capital structure.

As at 31 December 2019, the total assets of the Group amounted to RMB4,912.09 million (31 December 2018: RMB4,870.78 million), including cash and bank balances of RMB405.45 million (31 December 2018: RMB260.55 million).

As at 31 December 2019, the total liabilities of the Group were RMB4,623.02 million (31 December 2018: RMB4,656.99 million), including bank and other borrowings of RMB2,677.14 million (31 December 2018: RMB2,832.18 million).

As at 31 December 2019, the total owners' equity of the Group was RMB289.07 million (31 December 2018: RMB213.78 million).

As at 31 December 2019, the gearing ratio of the Group was 94.12% (31 December 2018: 95.61%).

During the reporting period, the turnover days for accounts receivable of the Group was 98 days, which remained the same as last year.

During the reporting period, the inventory turnover days of the Group was 31 days, representing a year-on-year decrease of 2 days, which was mainly due to the increased control over inventory of the Company.

3. Foreign exchange risk

The Group's income and most of its expenses were denominated in Renminbi and US dollar. For the year ended 31 December 2019, the net foreign exchange gain of the Group was RMB0.52 million (2018：RMB1.94 million) as a result of exchange rate fluctuations. Exchange rate fluctuations had no material effect on the Group's working capital or liquidity.

4. Commitments

As at 31 December 2019, the capital expenditure commitments of the Group amounted to RMB201.25 million (31 December 2018: RMB471.60 million).

5. Contingent liabilities

As at 31 December 2019, the Group had no material contingent liability.

6. Pledged assets

As at 31 December 2019, the bank and other borrowings of the Group amounted to approximately RMB807.80 million, which were secured by certain properties, plants, equipment, land use rights, investments in other equity instruments and bills receivable of the Group with an aggregate amount of approximately RMB795.37 million. As at 31 December 2018, the bank and other borrowings of the Group amounted to approximately RMB911.02 million, which were secured by certain properties, plants, equipment, land use rights, investments in other equity instruments and bills receivable of the Group with an aggregate amount of approximately RMB912.69 million.

PURCHASE, REDEMPTION AND SALE OF SHARES OF THE COMPANY

Neither has the Company nor any of its subsidiaries purchased, redeemed or sold any shares of the Company during this reporting period.

CORPORATE GOVERNANCE CODE

The Company's corporate governance practices are based on the principles and code provisions (the "**Code Provisions**") set out in the Corporate Governance Code (the "**CG Code**") contained in Appendix 14 of the Rules Governing the Listing of Securities on the Stock Exchange (the "**Listing Rules**"). During the year ended 31 December 2019, the Company has complied with the Code Provisions of the CG Code.

AUDIT COMMITTEE

The Company established an audit committee under the Board (the "**Audit Committee**"). The Board adopted all contents set out in code provision C.3.3 of the CG Code as the terms of reference of the Audit Committee. The Audit Committee has considered and reviewed the accounting standards and methods adopted by the Company and other matters relating to auditing, risk management and internal controls as well as financial reporting, including the audited consolidated financial statements for the year ended 31 December 2019.

MATERIAL ACQUISITION AND DISPOSAL

During the reporting period, the Company had no material acquisition or disposal of subsidiaries or associates.

OTHER MATTERS

1. Changes in information of directors, supervisors and chief executives

On 13 February 2019, Mr. Zou Changfu retired from his office as an executive director and ceased to be the general manager and legal representative of the Company; Mr. Chen Xiaoning was re-designated from a non-executive director of the Company to an executive director of the Company, and was appointed as the general manager and legal representative of the Company and ceased to be an executive deputy general manager of the Company. On 1 April 2019, Mr. Tang Haobo ceased to be the employee representative supervisor of the Company due to work re-allocation, Mr. Wu Mingli was elected as an employee representative supervisor of the Company at the meeting of the group leaders for employees' delegation of the Company. On 28 May 2019, Mr. Ni Huadong was elected as a non-executive director of the Company at the 2018 annual general meeting of the Company. On 31 December 2019, Mr. Chen Xiaoning ceased to serve as an executive director and the general manager of the Company due to changes in job arrangements, and Mr. Tong Xiaofei was appointed as an executive deputy general manager of the Company. On 20 January 2020, Mr. Tong Xiaofei was elected as an executive director of the Company at the extraordinary general meeting of the Company.

For details, please refer to the announcements of the Company dated 13 February 2019, 1 April 2019, 28 May 2019, 31 December 2019 and 20 January 2020.

2. Proposed issue of new H shares under specific mandate; connected transaction relating to proposed subscription of new H shares by a connected person; and proposed subscription of new H shares by independent third parties

On 24 July 2017, the Board approved the proposed H share issue (including the proposed subscription by each of Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司) ("**Zhongdian IRICO**") and Yan'an Dingyuan Investment Co., Ltd.* (延安市鼎源投資有限責任公司) ("**Yan'an Dingyuan**") under a specific mandate, pursuant to which the Company shall issue not more than 2 billion new H shares to not more than 10 target subscribers (including Zhongdian IRICO and Yan'an Dingyuan) and therefore the aggregate nominal value of the H shares to be issued shall not exceed RMB2 billion. The gross proceeds to be raised from the proposed H share issue shall not exceed RMB2 billion.

On 1 February 2018, the Board approved the resolution regarding the adjustments to the proposed H share issue. The number of new H shares to be issued by the Company under the proposed H share issue would be adjusted to not more than 2.3 billion new H shares as compared to the previous number of not more than 2 billion new H shares. The amount of gross proceeds to be raised from the proposed H share issue after adjustments was expected to be not more than RMB2.3 billion. Taking into account the fact that the reporting work in respect of the proposed H share issue has been affected by the original power station projects due to their complex examination and approval procedures, the proceeds to be raised from the proposed H share issue will no longer be used in Shenmu-Caijing 50MWp Grid-connected Photovoltaic Power Station Project and Yangjiang 50MWp Surface Power Station Project as disclosed in the announcement of the Company dated 24 July 2017, but will be used in IRICO Yongneng 2GW Photovoltaic Modules Project instead.

As part of the proposed H share issue, the Company entered into the subscription agreements with each of Zhongdian IRICO and Yan'an Dingyuan on 24 July 2017. Pursuant to these subscription agreements, each of Zhongdian IRICO and Yan'an Dingyuan conditionally agreed to subscribe in cash for, and the Company conditionally agreed to allot and issue, not more than 900 million and 300 million new H shares at a consideration of RMB900 million and RMB300 million, respectively. The proposed subscription by Zhongdian IRICO constituted a connected transaction of the Company and was subject to the reporting, announcement and independent shareholders' approval requirements under Chapter 14A of the Listing Rules. On 16 October 2017, the Company entered into the subscription agreement with Zhangjiagang Yuefeng Jinchuang Investment Co., Ltd.* (張家港市悦豐金創投資有限公司) ("**Zhangjiagang Investment**"). Pursuant to such agreement, Zhangjiagang Investment conditionally agreed to subscribe in cash for, and the Company conditionally agreed to allot and issue, not more than 500 million new H shares at a consideration of RMB500 million. On 18 April 2018, the Company entered into the subscription agreement with Hefei Xincheng State-owned Assets Management Co., Ltd.* (合肥鑫城國有資產經營有限公司) ("**Hefei Xincheng**"). Pursuant to such agreement, Hefei Xincheng conditionally agreed to subscribe in cash for, and the Company conditionally agreed to allot and issue, not more than 200 million new H shares at a consideration of RMB200 million.

On 10 December 2018, the Company received the Approval of the Non-public Issue of H Shares by IRICO Group New Energy Company Limited (Guo Zi Chan Quan [2018] No. 880) (《關於彩虹集團新能源股份有限公司非公開發行H股股份有關問題的批覆》(國資產權[2018]880號)) issued by the State-owned Assets Supervision and Administration Commission ("**SASAC**"), pursuant to which the SASAC approved in principle the overall plan of the Company on its non-public issue of no more than 2,300,000,000 new H shares.

On 23 January 2019, the resolutions in relation to the proposed H share issue under a specific mandate was approved at the extraordinary general meeting and the H share class meeting, respectively, by the shareholders or the holders of H shares (as the case may be); the resolutions in relation to the proposed subscription by Zhongdian IRICO was approved at the extraordinary general meeting by the independent shareholders.

On 6 June 2019, the Company received the Approval of the Issue of Overseas Listed Foreign Shares by IRICO Group New Energy Company Limited (Zheng Jian Xu Ke [2019] No. 965) (《關於核准彩虹集團新能源股份有限公司發行境外上市外資股的批覆》(證監許可[2019]965號))issued by China Securities Regulatory Commission ("**CSRC**"), pursuant to which CSRC has approved the issue of not more than 2,300,000,000 new H shares by the Company. All such shares are ordinary shares with a par value of RMB1.00 each.

As the Company still needs time to approach and negotiate with other potential investors and deal with the administrative matters concerning the implementation of the proposed H share issue, in order to ensure the smooth implementation of the proposed H share issue, the Company held the extraordinary general meeting and the H share class meeting on 20 January 2020 to consider and approve the extension of validity period of resolution in respect of the proposed H share issue and related matters, including the extension of validity period of the authorisation to the Board to deal with matters relating to the proposed H share issue. The above validity period shall be extended for a period of 12 months from the date on which the resolution was approved.

For details, please refer to the announcements of the Company dated 24 July 2017, 16 October 2017, 1 February 2018, 18 April 2018, 6 December 2018, 10 December 2018, 23 January 2019, 6 June 2019, 6 December 2019 and 20 January 2020, as well as the circulars of the Company dated 31 December 2018 and 31 December 2019.

3. Change of auditor

As the term of WUYIGE Certified Public Accountants LLP (大信會計師事務所(特殊普通合夥)) for provision of auditing services within the central enterprise systems which the Company pertains to has reached the time limit prescribed by the Ministry of Finance of the People's Republic of China and the State-owned Assets Supervision and Administration Commission of the State Council, it resigned as the auditor of the Company after the closing of the 2018 annual general meeting of the Company. As considered and approved by the shareholders of the Company at the 2018 annual general meeting of the Company held on 28 May 2019, BDO China Shu Lun Pan Certified Public Accountants LLP (立信會計師事務所(特殊普通合夥)) was appointed as the auditor of the Company for year 2019. For details, please refer to the announcements of the Company dated 15 May 2019 and 28 May 2019.

PUBLICATION OF THE ANNUAL REPORT ON THE WEBSITE OF THE STOCK EXCHANGE

The 2019 annual report of the Company will be published on the Company's website at http://www.irico.com.cn and the website of the Stock Exchange in due course.

By order of the Board
IRICO Group New Energy Company Limited*
Si Yuncong
Chairman

Shaanxi Province, the People's Republic of China
26 March 2020

As at the date of this announcement, the Board consists of Mr. Si Yuncong and Mr. Tong Xiaofei as executive directors, Mr. Fan Laiying and Mr. Ni Huadong as non-executive directors, and Mr. Feng Bing, Mr. Wang Jialu and Mr. Wang Zhicheng as independent non-executive directors.

* *For identification purposes only*