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 INTERIM RESULTS ANNOUNCEMENT

The board (the "**Board**") of directors (the "**Directors**") of IRICO Group New Energy Company Limited* (the "**Company**") hereby announces the unaudited condensed consolidated interim results and financial position of the Company and its subsidiaries (collectively referred to as the "**Group**") as of and for the six months ended 30 June 2019, together with comparative figures, as follows.

BALANCE SHEET
As at 30 June 2019

Item	Closing Balance (Unaudited)	Opening Balance (Unaudited)
Current Assets:		
Cash at bank and on hand	**254,120,075.60**	260,546,684.16
Held-for-trading financial assets	**112,875.58**	679,095.34
Derivative financial assets		
Bills receivable	**107,450,883.04**	339,322,789.73
Accounts receivable	**721,756,594.55**	666,021,403.75
Receivables financing	**259,018,954.23**	
Prepayments	**60,010,713.66**	63,045,789.85
Other receivables	**92,895,618.64**	249,397,827.25
Inventories	**176,195,811.45**	166,308,583.08
Contract assets		
Held-for-sale assets		
Non-current assets due within one year		
Other current assets	**85,935,509.93**	85,627,181.99
Total current assets	**1,757,497,036.68**	1,830,949,355.15

Item	Closing Balance (Unaudited)	Opening Balance (Unaudited)
Non-current assets:		
Debt investment		
Other debt investment		
Long-term receivables		
Long-term equity investments	**179,885,645.26**	179,326,419.17
Other investments in equity instruments	**281,140,200.66**	250,009,608.42
Other non-current financial assets		
Investment properties		
Fixed assets	**1,498,193,496.38**	1,502,164,833.71
Construction in progress	**878,789,275.54**	772,497,652.24
Productive biological assets		
Oil and gas assets		
Right-of-use assets	**19,841,384.01**	
Intangible assets	**260,606,004.54**	264,864,756.84
Development expenditures	**6,550,203.36**	
Goodwill	**38,544,327.69**	38,544,327.69
Long-term deferred expenses	**1,047,877.05**	19,689,300.10
Deferred tax assets	**1,045,646.47**	861,194.97
Other non-current assets	**14,991,450.84**	11,869,754.47
Total non-current assets	**3,180,635,511.80**	3,039,827,847.61
Total assets	**4,938,132,548.48**	4,870,777,202.76

Item	Closing Balance (Unaudited)	Opening Balance (Unaudited)
Current liabilities:		
Short-term borrowings	**411,000,000.00**	434,252,466.63
Held-for-trading financial liabilities		
Derivative financial liabilities		
Bills payables	**547,331,168.64**	490,689,505.29
Accounts payables	**998,824,511.23**	889,384,282.44
Receipts in advance		
Contract liabilities	**47,816,612.01**	50,535,500.53
Employee benefits payable	**25,079,867.75**	42,518,480.81
Taxes payable	**11,828,985.32**	22,195,570.97
Other payables	**1,545,686,278.69**	1,539,489,454.26
Held-for-sale liabilities		
Non-current liabilities due within one year	**541,311,367.52**	497,519,566.90
Other current liabilities		
Total current liabilities	**4,128,878,791.16**	3,966,584,827.83
Non-current liabilities:		
Long-term borrowings	**158,501,800.00**	595,375,744.44
Bonds payable		
Including: Preference shares		
Perpetual bonds		
Lease liabilities	**16,236,720.64**	
Long-term payables	**268,240,435.83**	7,000,000.00
Long-term employee benefits payable	**11,321,052.85**	10,856,171.40
Estimated liabilities		
Deferred income	**71,688,451.91**	76,512,512.01
Deferred tax liabilities	**649,966.52**	664,907.28
Other non-current liabilities	**6,086,904.15**	
Total non-current liabilities	**532,725,331.90**	690,409,335.13
Total Liabilities	**4,661,604,123.06**	4,656,994,162.96

Item	Closing Balance (Unaudited)	Opening Balance (Unaudited)
Shareholders' 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	**-201,950,191.54**	-233,080,783.78
Surplus reserve	**22,477,267.06**	22,477,267.06
Undistributed profit	**-2,826,897,626.94**	-2,872,034,688.32
Total equity attributable to equity shareholders of the Company	**169,510,292.68**	93,242,639.06
Minority interests	**107,018,132.74**	120,540,400.74
Total equity	**276,528,425.42**	213,783,039.80
Total liabilities and shareholders' equity	**4,938,132,548.48**	4,870,777,202.76

INCOME STATEMENT

January – June 2019

Item	**January–June 2019 (Unaudited)**	January–June 2018 (Unaudited)
I. Operating revenue	**1,087,146,736.10**	1,167,280,933.43
Including: Principal operating revenue	**1,046,460,038.35**	1,148,086,553.01
Other operating revenue	**40,686,697.75**	19,194,380.42
Less: Operating costs	**987,418,284.27**	968,554,023.30
Including: Principal operating costs	**953,041,269.46**	962,808,239.96
Other operating costs	**34,377,014.81**	5,745,783.34
Taxes and surcharges	**5,428,494.64**	7,772,875.14
Selling expenses	**33,107,166.69**	37,179,655.38
Administrative expenses	**58,575,618.26**	50,015,508.60
Research and development expenses	**23,024,159.76**	18,331,534.54
Finance costs	**52,387,689.85**	32,571,112.44
Including: Interest expense	**44,795,136.31**	38,197,559.40
Interest income	**1,182,048.30**	782,621.13
Add: Other income	**105,731,436.00**	30,932,680.64
Investment income (loss is represented by "-")	**-990,532.79**	142,959,573.86
Including: Gains from investment in associates and joint ventures	**559,226.09**	-230,771.66
Income from derecognition of financial asset at the amortized cost	**-1,908,103.12**	-1,300,446.72
Gains from net exposure hedges (loss is represented by "-")		
Gains from changes in fair value (loss is represented by "-")	**39,390.82**	215,036.56
Credit impairment losses (loss is represented by "-")	**-1,375,283.46**	-695,722.81
Impairment losses on assets (loss is represented by "-")		
Gains from disposal of assets (loss is represented by "-")		
II. Operating profit (loss is represented by "-")	**30,610,333.20**	226,267,792.28
Add: Non-operating income	**28,787.30**	97,298.86
Less: Non-operating expenses	**124,742.12**	87,857.45
III. Total profit (total loss is represented by "-")	**30,514,378.38**	226,277,233.69
Less: Income tax expenses	**-1,100,415.00**	5,108,217.96

Item	**January–June 2019 (Unaudited)**	January–June 2018 (Unaudited)
IV. Net profit (net loss is represented by "-")	**31,614,793.38**	221,169,015.73
(I) Classified by continuity of operations:		
1. Net profit from continuing operations (net loss is represented by "-")	**31,614,793.38**	221,169,015.73
2. Net profit from discontinued operations (net loss is represented by "-")		
(II) Classified by ownership of equity:		
1. Net profit attributable to the shareholders of the Company (net loss is represented by "-")	**45,137,061.38**	202,029,611.62
2. Minority interests (net loss is represented by "-")	**-13,522,268.00**	19,139,404.11
V. Other comprehensive income, net of tax	**31,130,592.24**	-11,650,268.33
Other comprehensive income (net of tax) attributable to the shareholders of the Company	**31,130,592.24**	-11,650,268.33
(I) Other comprehensive income that cannot be reclassified to profit or loss	**31,130,592.24**	-11,673,972.09
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. Change in fair value of other equity instrument investments	**31,130,592.24**	-11,673,972.09
(II) Other comprehensive income that will be reclassified to profit or loss		23,703.76
1. Other comprehensive income that may be reclassified to profit or loss under equity method		
2. Gain or loss from change in fair value of available-for-sale financial assets		
3. Gain or loss from reclassification of held-to-maturity investments as available-for-sale financial assets		
4. Effective portion of gain or loss from cash flow hedges		
5. Exchange differences from translation of foreign currency financial statements		23,703.76
6. Others		
Other comprehensive income (net of tax) attributable to minority shareholders		

Item	**January–June 2019 (Unaudited)**	January–June 2018 (Unaudited)
VI. Total comprehensive income	**62,745,385.62**	209,518,747.40
Total comprehensive income attributable to the shareholders of the Company	**76,267,653.62**	190,379,343.29
Total comprehensive income attributable to minority shareholders	**-13,522,268.00**	19,139,404.11
VII. Earnings per share		
(I) Basic earnings per share	**0.02**	0.09
(II) Diluted earnings per share	**0.02**	0.09

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 interim 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*	Shaanxi New Material	2
2	Hanzhong IRICO Jiarunze Mining Co., Ltd* (漢中彩虹佳潤澤礦業有限公司)	Hanzhong Jiarunze	2
3	IRICO (Hefei) Photovoltaic Co., Ltd.*	Hefei Photovoltaic	2
4	IRICO Group Electronics (Hong Kong) Company Limited	Electronics Hong Kong	2
5	Xianyang IRICO Green Energy Co., Ltd.* (咸陽彩虹綠色能源有限公司)	Green Energy	2
6	IRICO Yan'an New Energy Co., Ltd.* (彩虹(延安)新能源有限公司)	Yan'an New Energy	2
7	Jiangsu IRICO Yongneng New Energy Company Limited*	Jiangsu Yongneng	2
8	Shaanxi IRICO Xinneng Glass Co., Ltd.* (陝西彩虹新能玻璃有限公司)	Xinneng Glass	2

II. BASIS OF PREPARATION

(I) Basis of preparation: The financial statements of the Company have been prepared on a going concern basis in respect of actual transactions and matters, in accordance with the Accounting Standards for Business Enterprises-Basic Standards and its relevant 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, as well as the disclosure requirements under the Rules for the Information Disclosure of Companies Offering Securities to the Public No. 15 – General Rules on Financial Reporting issued by China Securities Regulatory Commission.

(II) Going concern: During the period from January to June 2019, the Company recorded total profit of RMB30,514,400 and net cash flows from operating activities of RMB198,245,300. As at 30 June 2019, the Company had current liabilities of RMB4,128,078,800, and current assets of RMB1,757,497,000, with the former far higher than the latter, 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) 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. Meanwhile, the Group's asset-liability ratio and finance costs will be significantly reduced;

(2) As Phase II of Hefei Photovoltaic Glass has been put into operation and Yan'an Photovoltaic Glass project commenced operation in 2019, the Group's future production, sales volume, revenue and the market share of its products are expected to increase significantly;

(3) 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.

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 as disclosed in the note 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 business transformation 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 significant accounting policies and estimates set out in Note III headed "Significant Accounting Policies and Accounting Estimates".

III. SIGNIFICANT ACCOUNTING POLICIES

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

The financial statements of the Company have been prepared in compliance with the requirements of the Accounting Standards for Business Enterprises, reflecting the Company's financial position, operating results, cash flows and other relevant information during the reporting period on a true and complete basis.

(II) Accounting period

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

(III) Operating cycle

The Company takes one year or 12 months as its normal operating cycle which serves as the division standard for the liquidity of assets and liabilities.

(IV) Functional currency

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

(V) Business combinations

1. Business combinations under common control

Business combinations involving entities under common control: The assets and liabilities acquired by the Company through business combination shall be measured at the carrying value of the assets, liabilities of the acquiree (including goodwill incurred in the acquisition of the acquiree by ultimate controlling party) in the financial statements of the ultimate controlling party at the date of combination. The difference between the carrying amount of the net assets obtained and the 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.

2. Business combinations not under common control

Business combinations not involving entities under common control: The assets paid and liabilities incurred or committed as a consideration of business combination by the Company 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 acquiree in business combination, the Company shall recognize such difference 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.

(VI) Preparation method of consolidated financial statements

1. Scope of consolidated financial statements

The scope of consolidation of the consolidated financial statements of the Company is determined based on control, and all subsidiaries (including separable parts of investees controlled by the Company) are included in the consolidated financial statements.

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 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 of joint operations

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 pro-rata 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.

(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 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) Translation of foreign currency transactions and financial statements denominated in foreign currency

1. Translation of foreign currency transactions

For foreign currency transactions, amounts in foreign currency are translated into and recorded in RMB at the spot rates prevailing on the dates of transactions.

Balance of monetary items in foreign currency as at the balance sheet date is translated at the spot rates prevailing at the balance sheet date, and any translation difference arising therefrom is included in profit or loss of the period except for the translation difference arising from dedicated borrowings in foreign currency related to the construction of qualifying assets which is accounted for under the principle of capitalisation of borrowing expenses.

2. Translation of financial statements denominated in foreign currency

The assets and liabilities in the balance sheets are translated at the spot exchange rate on the balance sheet date. Except for "Retained earnings", all items under owner's equity are translated at the spot exchange rates when incurred. The income and expenses items in the income statement are translated at the spot exchange rates on the transaction dates.

On disposal of a foreign operation, the translation difference of the financial statements in foreign currency relating to that foreign operation is transferred from owners' equity to profit or loss of the period during which the disposal occurs.

(X) Financial instruments

1. Classification and reclassification of financial instruments

Financial instruments include financial assets, financial liabilities and equity 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 profit or loss, or other financial assets that are measured at fair value through profit or loss. For non-trading equity instrument investments, the Company determines at the initial recognition whether it is designated as a financial asset (equity instrument) that is measured at fair value through other comprehensive income.

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

When meeting any of the following criteria, the Company may, at initial recognition, irrevocably designate a financial liability as measured at fair value through 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 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.

On derecognition, the accumulated gain or loss previously included in other comprehensive income is transferred out from other comprehensive income and included in retained earnings.

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

Financial assets measured at fair value through 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 profit or loss.

On derecognition, the difference between the fair value and the initially recorded amount is recognized as investment income, with corresponding adjustment made to gain or loss from changes in fair value.

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

Financial liabilities measured at fair value through 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 profit or loss, and subsequently measured at fair value through profit or loss.

On derecognition, the difference between the fair value and the initially recorded amount is recognized as investment income, with corresponding adjustment made to gain or loss from changes in fair value.

(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 using 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; and

(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 an financial asset (debt instrument) at fair value through other comprehensive income).

When the partial transfer of a financial asset meet 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; and

(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 an financial asset (debt instrument) 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 (excluding receivables)*

For financial assets at amortized cost (including bills receivable and accounts receivable, other receivables), debt investments classified at fair value through other comprehensive income, lease receivables and contract assets, the Company perform impairment tests and recognizes provision for impairment losses based on expected credit losses.

On each balance sheet date, the Company assesses whether the credit risk of relevant financial instruments has increased significantly since the initial recognition. The process of credit impairment of a financial instrument is divided into three stages, and there are different accounting treatment methods for impairment of financial instruments at different stages: (1) In the first stage, if the credit risk of 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 and calculates interest income based on its book balance (inclusive of provision for impairment) and effective interest rate; (2) In the second stage, if the credit risk of the financial instrument has increased significantly since the initial recognition but no credit impairment has occurred, the Group measures the loss provisions according to the lifetime expected credit loss of the financial instrument and calculates interest income based on its book balance and effective interest rate; (3) In the third stage, if credit impairment occurs after the initial recognition, the Company will measure loss provisions according to the lifetime expected credit loss of the financial instrument and calculates interest income based on its amortized cost (book balance less the provision for impairment made) and effective interest rate.

1. *Method for measuring loss provisions for financial instruments with lower credit risk*

   For a financial instrument with lower credit risk on the balance sheet date, the Company assumes that its credit risk has not increased significantly since the initial recognition, and uses a simplified method, i.e. measurement of loss provisions at an amount equal to 12-month expected credit losses.

2. *Method for measurement of loss provisions for accounts receivable, contract assets and lease receivables*

For the accounts receivable or contract assets arising from transactions under Accounting Standards for Business Enterprises No. 14 –Revenue (whether or not containing significant financing components) and the lease receivables under Accounting Standards for Business Enterprises No. 21 – Leases, the Company applies a simplified method, i.e. measurement of loss provisions always at the lifetime expected credit loss.

3. *Method for measurement of loss provisions for other financial assets*

For financial assets other than those mentioned above, e.g. debt investment, other debt investment, other receivables, long-term receivables other than lease receivables, etc., the Group measures loss provisions with the general method, i.e. the "three-stage" model.

In case of credit impairment at measurement of financial instruments, the following information is taken into account when assessing whether credit risk has increased significantly: (1) Whether internal price indicator resulted from change in credit risk has changed significantly; (2) If the existing financial instruments are derived into or issued as new financial instruments at the reporting date, whether interest rates or other terms of the above financial instruments have changed significantly; (3) Whether external market indicators of credit risk for the same financial instrument or financial instruments with shared expected life have changed significantly; (4) Whether external credit rating of the financial instrument has actually changed significantly or is expected to change significantly; (5) Whether the borrower's internal credit rating is actually lowered or is expected to be lowered; (6) Whether expected detrimental changes in business, financial and economic conditions of the borrower which will affect borrower's ability to perform repayment obligation have changed significantly; (7) Whether the actual or expected financial performance of the borrower has changed significantly; (8) Whether credit risk of other financial instruments issued by the same borrower has increased significantly; (9) Whether supervisory, economic or technical environment for the borrower has significant detrimental changes; (10) Whether the value of the collateral supporting the obligation or the quality of third-party guarantees or credit enhancements has changed significantly; (11) Whether the economic motive that will lower the borrower's repayment based on contractual stipulation has changed significantly; (12) Expected changes in the loan contract including an expected breach of contract that may lead to covenant waivers or amendments, interest payment holidays, interest rate step-ups, requiring additional collateral or guarantees, or other changes to the contractual framework of the financial instrument; (13) Whether the borrower's expected performance and repayment activities have changed significantly; (14) Whether the Company's financial instrument management measures have changed.

In order to reflect the changes in the credit risk of financial instruments since the initial recognition, the Company re-measures the expected credit losses on each balance sheet date, and the resulting increase in or reversal of loss provision shall be included in current profit or loss as impairment losses or gains, and shall be deducted from the carrying amounts of the financial assets on the balance sheet or included in the accrued liabilities (loan commitments or financial guarantee contract) or other comprehensive income (debt investment at fair value through other comprehensive income) according to the type of financial instruments.

7. Offset of financial assets and financial liabilities

A financial asset and a financial liability shall be offset with the net amount presented in the balance sheet when the Company currently has a legally enforceable right of set-off and both parties intend either to settle on a net basis or to realize the financial asset and settle the financial liability simultaneously.

8. Distinction between financial liabilities and equity instruments and related treatment

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. If the Company cannot unconditionally avoid delivering a contractual obligation by delivering cash or other financial assets, the contractual obligation is a financial liability.

For a financial instrument that is a financial liability, relevant interest, dividends, gains, losses, and gains or losses arising from redemption or refinancing shall be included in current profit or loss.

For financial instruments that are equity instruments, when they are issued, repurchased, sold or canceled, the issuer shall deal with the change of equity, and shall not recognize the change in the fair value of the equity instruments. The issuer's distribution to the holder of the equity instruments shall be treated as profit distribution.

(XI) Inventories

1. Classification

Inventories are classified into raw materials, revolving materials, packaging materials, low-value consumables, unfinished products, finished goods (goods in stock), and others.

2. Measurement for inventories delivered

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

3. Determination basis of net realizable value of different types 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.

At the end of reporting period, provision for inventory depreciation is made based on individual inventory items; For large quantity and low-value items of inventories, provision 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 inventory depreciation 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 Company adopts perpetual inventory system.

5. Amortization of low-value consumables and packaging materials

Low-value consumables and packaging materials are amortized using one-off write-off method.

(XII) 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 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 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 initial 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 investment in a subsidiary is accounted for by 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, adjustment shall be made to the net profit of the investee. 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 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.

(3) Disposal of long-term equity investments

For disposal of a long-term equity investment, the difference between the book value and the consideration actually received shall be included in 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 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.

(XIII) Investment properties

Investment properties are those held to earn rentals or for capital appreciation or both, including leased land use rights, land use rights held for sale after appreciation, and leased buildings (including self-owned buildings constructed or developed for the purpose of leasing and those that are under construction or development for the purpose of leasing in future).

For the investment properties subsequently measured at fair value, no provision will be made for depreciation or no amortization will be made, and their carrying value will be adjusted based on the fair value of investment properties as at the balance sheet date with the balance between the fair value and original carrying value included in current profit or loss.

The basis for the Company to select fair value measurement:

(1) there are active real estate markets in the places where the investment properties are located; and

(2) the enterprise is able to obtain the market price and other relevant information of the same or similar properties from the real estate market, thereby making scientific and reasonable estimates on the fair value of investment properties.

(XIV) 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. A fixed asset is recognized when it meets the following conditions:

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

(2) its cost can be reliably measured.

2. Methods for classification and depreciation of fixed assets

Fixed assets 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.

For a fixed asset leased under finance lease, if it can be reasonably determined that the ownership of the leased asset can be acquired upon the expiry of the lease term, such asset will be depreciated over its remaining useful life; if it cannot be reasonably determined that the ownership of the leased asset can be acquired upon the expiry of the lease term, such asset will be depreciated over the shorter of the lease term and its remaining useful life. (Accounting policies applicable before 1 January 2019)

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

Category	**Estimated useful life** *(years)*	**Estimated net residual value rate** *(%)*	**Annual depreciation rate** *(%)*
Buildings and structures	10–30	3	3.23–9.70
Machinery and equipment	18	3	5.40
Electronic equipment	15	3	6.50
Office equipment	5	3	19.40
Transportation tools	5	3	19.40
Specialized glass equipment	6	3	16.20

3. Recognition and measurement of fixed assets under finance lease

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 inception of the lease, the leased asset shall be stated at the lower of the fair value of the leased asset and the present value of the minimum lease payments, and the minimum lease payments shall be recorded as the carrying amount of long-term payables. The difference between the recorded amount of the leased asset and the minimum lease payments shall be accounted for as unrecognized finance charge.

(XV) Construction in progress

Construction in progress is measured at all the expenditures incurred to bring the fixed assets ready for their intended use. 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.

(XVI) 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 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 reach its intended usable or saleable condition 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 and construction or production gets ready for intended use or sale.

If part of an asset being acquired, constructed or produced has been completed respectively and put into use individually, capitalisation of borrowing costs 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, then the borrowing costs will be capitalized until 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, when 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 and 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 and construction or production of the asset resumes, the capitalisation of borrowing costs commences.

4. Calculation of capitalisation rate and amount of borrowing costs

Specific borrowings for the acquisition, construction or production of qualifying assets, borrowing costs of 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 as investment income earned from temporary investment will be used to determine the amount of borrowing costs for capitalisation.

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 specifically borrowed loans by the capitalisation rate of the general borrowing used. The capitalisation rate shall be calculated and determined according to the weighted average interest rate of general borrowings.

(XVII) Intangible assets

1. Measurement of intangible assets

(1) Intangible assets are initially measured at cost upon acquisition;

The costs of an externally purchased intangible asset include the purchase price, relevant taxes and expenses paid, 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, the intangible assets received in the non-monetary assets transaction, shall be measured on the basis of the fair value of the assets surrendered, 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 cost of intangible assets received shall be the book value of the assets surrendered and the relevant taxes and expenses payable, and no gain or loss will be recognized.

(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. Determination basis of intangible assets with indefinite useful life and procedures for review of the useful life thereof

For intangible assets with indefinite useful life, basis for the determination of indefinite useful life and the procedures for review of the useful life thereof shall be disclosed.

3. 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: Scheduled innovative investigations and research activities to obtain and understand scientific or technological knowledge.

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

4. *Specific criteria for capitalisation at development phase*

Expenses 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 it 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; and

(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. Expenditure in the research phase is included in profit or loss when incurred.

(XVIII) Impairment of long-term assets

Long-term assets, such as long-term equity investment, investment properties, fixed assets, construction in progress, right-of-use assets, and intangible assets with finite useful life measured at cost are tested for impairment if there is any indication that an asset 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 to is determined. A group of assets is the smallest group of assets that is able to generate cash inflows independently.

Impairment tests for goodwill and intangible assets with indefinite useful life shall be carried out 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 group, or if there is a difficulty in allocation, to allocate it to the set of asset groups. When the carrying value of goodwill is allocated to the related asset group or sets of asset group, the allocation shall be made based on the proportion of the fair value of each asset group or set of asset groups to the total fair value of the relevant assets group or set of asset group. If there is difficulty for the fair value to be reliably measured, the allocation shall be made based on the proportion of the carrying value of each asset group or set of asset groups to the total carrying value of the relevant asset groups or set of asset groups.

For the purpose of impairment test on the relevant asset group or the set of asset groups containing goodwill, if any evidence shows that the impairment of asset group or set of asset groups related to goodwill is possible, an impairment test will be made firstly on the asset group 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 assets group 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.

(XIX) Long-term deferred expenses

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

(XX) Employee benefits

1. Accounting treatment 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 profit or loss or cost of relevant assets,

With regard to contributions to social insurance schemes and housing provident funds and provision for labour union expenses and employee education expenses 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 benefits will be accounted for in accordance with their fair value if they can be measured reliably.

2. Accounting treatment of post-employment benefits

(1) Defined contribution scheme

The Company will pay basic pension insurance and unemployment insurance in accordance with the relevant provisions of the local government for the staff. 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 profits and loss or costs of assets.

(2) Defined benefit scheme

The welfare responsibilities generated from defined benefit scheme based on the formula determined by projected unit credit method would be vested to the service period of the staff and charged into current profit or loss or costs of relevant 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. 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 re-measurement 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 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 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).

4. Accounting treatment of other long-term employee benefits

Other long-term benefits provided by the Group to the employees, when meeting the conditions under the defined contribution scheme, will be accounted for in accordance with the requirements of the defined contribution scheme. Apart from the above, net liabilities or net assets shall be recognized and measured for other long-term employee benefits in accordance with relevant provisions of the defined benefit scheme.

(XXI) Estimated liabilities

1. Recognition criteria of estimated liabilities

The Company shall recognize an obligation related to contingency involving litigation, debt guarantee, loss-making contract or restructuring as an 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 out of the Company; and

(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.

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.

(XXII) Revenue

Accounting policies adopted for revenue recognition and measurement

When the Company has implemented the performance obligation in the contract, namely, when the customer obtains the right to control relevant goods, revenues will be recognized as per transaction prices allocated to such performance obligation. Obtaining the right to control relevant goods means that it is able to dominate the use of the goods and derive almost all economic benefits therefrom. Performance obligation represents the Company's commitment to transfer distinct goods to the customer in the contract. The transaction price is the amount of consideration to which the Company expects to be entitled in exchange for transferring goods to a customer, excluding amounts collected on behalf of third parties and amounts expected to be refunded to a customer.

The Company should recognize revenue when the customer acquires control of relevant goods after the contract between the Company and the customer meeting the following conditions:

1. Parties to the contracts have approved such contract and committed that they would perform their respective obligations;

2. the contracts specified the rights and obligations of all parties on the goods transferred or services provided (hereafter referred to as "goods transferred");

3. the contracts have clear payment terms on the goods transferred;

4. the contracts are of commercial nature, namely that the performance of the contracts will change of risks, time or amount of the future cash flows of the Company; and

5. the consideration the Company is entitled to from the transfer of goods to the customer is likely to be recoverable.

Obligation in the contract at a point in time:

Sales are recognized as revenue when the goods have been shipped to specific locations agreed in sales contracts and both parties sign delivery sheets or confirm the delivery of goods (or delivery of bill of lading in case of delivery by the customer according to the contracts) upon the execution of sales contracts.

Obligation in the contract over time:

The Company is capable of making reliable estimates over the transaction's stage of completion and outcome at the balance sheet date. Besides, where the costs of the transaction incurred and to be incurred can be measured reliably, revenue from rendering of services is recognized using the percentage of completion method, and the stage of completion is determined at the proportion of costs incurred to the estimated total costs.

(XXIII) Government grants

1. Types

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

No government grants shall be recognized unless the following conditions are met simultaneously as follows:

(I) the enterprise can meet the conditions attached to the government grants; and

(II) the enterprise can obtain the government grants.

3. Accounting treatment

Asset-related government grant 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).

Government grants related to income that are used to compensate relevant costs or losses of the Company 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 Company 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.

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.

(XXIV) Deferred tax assets/deferred 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 shall be presented as the net amount after offsetting.

(XXV) Lease

Accounting policies applicable from 1 January 2019

1. *Accounting treatment of assets leased in*

At the commencement date of lease term, the Company recognizes right-of-use assets and lease liabilities for leases (excluding short-term leases and leases of low-value assets), and recognizes depreciation and interest expenses separately.

Short-term leases and leases of low-value assets are included in the current expenses by the Company on a straight-line basis over the respective lease terms.

(1) Right-of-use assets

Right-of-use assets represent the lessee's right to use the leased asset for the lease term. At the commencement date of lease term, 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 lessee;

- an estimate of costs to be incurred by the lessee in dismantling and removing the leased assets, restoring the site on which it is located or restoring the leased assets to the condition required by the terms and conditions of the lease. The Company recognizes and measures the costs by using recognition criteria and measurement methods of estimated liabilities (see note "III. (XXIV) Estimated liabilities" for details). Such costs are incurred to produce inventories and included in the costs of inventory.

Right-of-use assets are depreciated by categories using the straight-line method. If there is reasonable certainty that the Group will obtain ownership of a leased asset at the end of the lease term, depreciation rates are determined by reference to categories of right-of-use assets and estimated residual value rates over the estimated remaining useful life of leased asset; if there is no reasonable certainty that the Group will obtain ownership of a leased asset at the end of the lease term, depreciation rates are determined by reference to categories of right-of-use assets over the shorter of the lease term and the estimated remaining useful life.

(2) Lease liabilities

Lease liabilities are initially measured based on the present value of outstanding lease payment at the inception of the lease. 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 lessee;

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

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

The Company adopts the interest rate implicit in the lease as the discount rate. If that rate cannot be determined, 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 financial expenses. The periodic interest rate refers to the discount rate adopted by the Company or the revised discount rate.

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

When the Company's evaluation results on extension, termination or purchase options change, the lease liabilities are remeasured by the present value calculated from the changed lease payments and revised discount rate and the carrying amount of the right-of-use assets will be adjusted accordingly. When the in-substance leased payments, amounts expected to be payable under the guaranteed residual value and the variable lease payments that depend on an index or a rate change, the lease liabilities are remeasured by the present value calculated from the changed lease payments and original discount rate and the carrying amount of the right-of-use assets will be adjusted accordingly.

2. *Accounting treatment of assets leased out*

(1) Accounting treatment of operating leases

The Company recognizes the lease payments derived from operating leases as rental income on a straight-line basis over the respective lease terms. Initial direct costs relating to operating leases 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 whole lease term.

(2) Accounting treatment of financing leases

At the commencement date of lease term, the Company recognizes the difference between the sum of financing lease receivable and the unguaranteed residual value, and the present value thereof as unrealized financing income, and recognizes the same as rental income over the periods when rent is received in the future. The Company's initial direct costs associated with rental transactions shall be included in the initial measurement of the finance lease receivables, and the amount of the income recognized during the lease term shall be reduced.

Accounting policies applicable prior to 1 January 2019

1. Accounting treatment of operating leases

(1) Lease fees paid by the Company for leased asset shall be amortized at straight line method over the whole lease period (including rent-free period) and will be included in the current expenses. Initial direct costs relating to lease transactions paid by the Company shall be included in the current expenses.

If the expense related to the lease which shall be paid by the Company is assumed by the lessor of the asset, then such expenses shall be deducted from total lease fees, and the balances shall be amortized over the lease term s and charged to the current expenses.

(2) The Company's rental expenses collected for leased assets shall, within the whole lease term including the rent-free period, be amortized with the straight-line method and recognized as relevant rental income. Initial direct costs related to lease transactions paid by the Company are included in current expenses; in case of a large amount, such costs shall be capitalized and then included in the current revenue by stages at the same base as the recognition of rental income over the whole lease term.

When the Company bears costs related to the lease borne by the leasee, the Company shall deduct the part of expenses from the total rents and amortize the rents after deduction over the lease term.

2. Accounting treatment of financing leases

(1) Assets acquired under financing leases: 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. The Company adopts effective interest rate method to amortize unrecognized financing expenses over the lease period of the asset and includes them into financial expenses. The initial direct costs incurred by the company are included in the value of the leased asset.

(2) Assets leased out under financing leases: At the commencement date of lease term, the Company recognizes the difference between the sum of financing lease receivable and the unguaranteed residual value, and the present value thereof as unrealized financing income, and recognizes the same as rental income over the periods when rent is received in the future. The Company's initial direct costs associated with rental transactions shall be included in the initial measurement of the finance lease receivables, and the amount of the income recognized during the lease term shall be reduced.

IV. SEGMENT REPORTING

1. Preparation basis and accounting policy of the segment reporting

The Company operating segments are mainly based on the information reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance, and focus on types of goods. The Company has the following four major operating segments: (a) solar photovoltaic business, (b) new materials business – production and sales of luminous materials and lithium battery anode materials, (c) trading business – trading of solar modules and other related accessories, and (d) others.

2. Financial information of the segment reporting

Amounts for the period:

Unit: RMB0'000

Items	Solar photovoltaic business	New materials business	Trading business	Others	Intersegment eliminations
I. Operating revenue	84,417.16	20,152.43		4,145.08	
II. Operating cost	76,616.92	18,667.98		3,456.93	
III. Gain from investments in associates and joint ventures	-40.23	-58.82		-353.78	353.78
IV. Asset impairment losses and credit impairment losses	-5.74	145.34			-2.07
V. Depreciation and amortization	6,649.55	66.11			173.17
VI. Total profit	5,521.07	1,025.07		-3,811.72	317.02
VII. Income tax expenses	-91.59	-18.45			
VIII. Net profit	5,612.66	1,043.51		-3,811.72	317.02
IX. Total assets	437,507.24	47,723.69		148,394.34	-130,301.28
X. Total liabilities	293,402.22	20,918.32		245,797.13	-84,446.52

Amounts for the same period last year:

Items	Solar photovoltaic business	New materials business	Trading business	Others	Intersegment eliminations
I. Operating revenue	89,444.50	17,670.61	7,413.59	2,648.67	-449.27
II. Operating cost	73,532.95	15,739.85	6,885.53	1,146.35	-449.27
III. Gain from investments in associates and joint ventures			-23.72	481.45	-480.81
IV. Asset impairment losses and credit impairment losses	-4.14	73.50			0.21
V. Depreciation and amortization	3,704.76	67.03	158.94	93.00	1.88
VI. Total profit	9,941.13	1,556.26	280.35	5,034.66	5,815.32
VII. Income tax expenses	510.82	-10.79			10.79
VIII. Net profit	9.430.31	1,567.05	280.35	5,034.66	5,804.53
IX. Total assets	346,926.51	39,055.10	21,598.22	261,547.23	-164,444.11
X. Total liabilities	198,180.78	14,859.49	11,307.49	267,558.51	-32,334.08

V. TAXATION

(I) Major tax categories and tax rates

Tax categories	Tax basis	Rate
Value-added tax ("VAT")	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	17%, 16%, 13%, 6%, 5%
Urban maintenance and construction tax	Based on the turnover taxes paid	7%, 5%
Enterprise income tax	Based on taxable profits	25%, 15%
Hong Kong profits tax	Based on taxable profits	8.25%-16.5%

Taxpayer	Income tax rate
IRICO (Hefei) Photovoltaic Co., Ltd.* (彩虹(合肥)光伏有限公司)	15%
Shaanxi IRICO New Material Co., Ltd* (陝西彩虹新材料有限公司)	15%
Jiangsu IRICO Yongneng New Energy Company Limited* (江蘇彩虹永能新能源有限公司)	15%
The Company	15%

(II) Major preferential tax treatment and approvals

1. Pursuant to the "Notice on Tax Policies in relation to Further Implementation of the Western Development Strategy" ([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》([2011]58號)), as the Company and its subsidiary Shaanxi New Materials (陝西新材料) 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 New Energy and 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.

3. 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.

VI. OTHER EQUITY INVESTMENTS

1. Financial assets designated at fair value through other comprehensive income

Item	Closing balance	Balance at the end of last year
IRICO Display Devices Co., Ltd.* (彩虹顯示器股份有限公司)	**177,232,121.73**	146,101,529.49
Shaanxi Caihong Electronics Glass Co., Ltd. (陝西彩虹電子玻璃有限公司)	**103,908,078.93**	103,908,078.93
Total	**281,140,200.66**	250,009,608.42

Note 1: As at the end of the Reporting Period, the Group held 35,375,673 shares of IRICO Display Devices Co., Ltd. ("IRICO Display") and the share price was RMB5.01 per share.

Note 2: As at the end of the Reporting Period, the Group held 7.2953% of the equity interests in Shaanxi Caihong Electronics Glass Co., Ltd.

VII. BILLS RECEIVABLE

1. Bills receivables by category

Item	Closing balance	Balance at the end of last year
Bank acceptance bills		283,052,731.03
Commercial acceptance bills	**107,450,883.04**	56,270,058.70
Total	**107,450,883.04**	339,322,789.73

2. No bills receivable pledged by the Company at the end of the period

VIII. ACCOUNTS RECEIVABLE

1. Accounts receivable by aging

Aging	Closing balance	Balance at the end of last year
Within 1 year		
Including: 0-6 months (inclusive)	**600,899,974.69**	**565,433,028.78**
7-12 months (inclusive)	**73,048,840.53**	**80,411,320.42**
Subtotal of within 1 year	**673,948,815.22**	**645,844,349.2**
1-2 years	**40,280,309.14**	**15,503,186.07**
2-3 years	**15,853,556.01**	**20,972,753.16**
Over 3 years	**35,492,147.57**	**26,144,065.25**
Total original value of accounts receivable	**765,574,827.94**	**708,464,353.68**
Less: provision for bad debts	**43,818,233.39**	**42,442,949.93**
Total net value of accounts receivable	**721,756,594.55**	**666,021,403.75**

2. Accounts receivable disclosed according to provision for bad debts

Item	**Book balance**					Balance at the end of last year				
	Book balance		**Allowance for bad debts**			Book balance		Allowance for bad debts		
	Amount	***Proportion (%)***	***Amount***	***Appropriation proportion (%)***	***Carrying amount***	*Amount*	*Proportion (%)*	*Amount*	*Appropriation proportion (%)*	*Carrying amount*
Allowance for bad debts is made based on individual assessment	**13,463,737.69**	**1.76**	**13,463,737.69**	**100.00**		13,815,737.69	1.95	13,815,737.69	100.00	
Allowance for bad debts is made on group basis	**752,111,090.25**	**98.24**	**30,354,495.70**	**4.04**	**721,756,594.55**	694,648,615.99	98.05	28,627,212.24	4.12	666,021,403.75
Including: By aging	**739,579,985.76**	**96.60**	**30,354,495.70**	**4.10**	**709,225,490.06**	663,258,361.58	93.62	28,627,212.24	4.32	634,631,149.34
By related parties	**12,531,104.49**	**1.64**			**12,531,104.49**	31,390,254.41	4.43			31,390,254.41
Total	**765,574,827.94**	**100.00**	**43,818,233.39**		**721,756,594.55**	708,464,353.68	100.00	42,442,949.93		666,021,403.75

Note: Grouping by:1.Provision for bad debts of ordinary accounts receivables is made based on the characteristics of credit risks.

2.No provision for bad debts is made for related parties based on the individual recognition method.

Allowance for bad debts made on individual basis:

Name	Closing balance			
	Book balance	Allowance for bad debts	Appropriation proportion (%)	Reasons for making allowance
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. Not yet recovered and expected to be unrecoverable
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. Not yet recovered and expected to be unrecoverable
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. Not yet recovered and expected to be unrecoverable
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. Not yet recovered and expected to be unrecoverable
Total	**13,463,737.69**	**13,463,737.69**		

Allowance for bad debts made on group basis:

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

Aging	Closing balance
Within 1 year	
Including: 0 to 6 months (inclusive)	**601,236,843.41**
7 to 12 months (inclusive)	**65,770,595.06**
Subtotal of within 1 year	**667,007,438.47**
1 to 2 years (inclusive)	**35,482,595.67**
2 to 3 years (inclusive)	**15,061,541.74**
Over 3 years	**22,028,409.88**
Total of original value of accounts receivable	**739,579,985.76**
Less: allowances for bad debts	**30,354,495.70**
Total of net value of accounts receivable	**709,225,490.06**

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

Name	Closing balance Accounts receivable	Allowance for bad debts	Appropriation proportion (%)
By related parties	**12,531,104.49**		
Total	**12,531,104.49**		

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
Allowances for bad debts	42,442,949.93	1,375,283.46			**43,818,233.39**

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

Name	Closing balance Accounts receivable	Percentage of total accounts receivable (%)	Allowance for bad debts
GCL System Integration Technology Co., Ltd. (協鑫集成科技股份有限公司)	**77,632,265.13**	**10.14**	**29,606.88**
Jinko Solar Co., Ltd (晶科能源有限公司)	**57,798,415.00**	**7.55**	
SZYDLEWSKI BETEILIGUNGSGESELLSCHAFT UG (HAFTUNGSB)	**43,228,109.44**	**5.65**	
Zhejiang Meidu Hitrans Lithium Battery Technology Co. Ltd (浙江美都海創鋰電科技有限公司)	**42,737,224.64**	**5.58**	
Hefei JA Solar Technology Co., Ltd. (合肥晶澳太陽能科技有限公司)	**33,017,896.22**	**4.31**	
Total	**254,413,910.43**	**33.23**	**29,606.88**

IX. RECEIVABLES FINANCING

1. Receivables financing

Item	Closing balance
Bills receivable	**259,018,954.23**
Total	**259,018,954.23**

2. Changes in receivables financing

Item	Balance at the end of last year	Opening balance	Accrued interest	Fair value changes during the period	Closing balance	Cost	Accumulated fair value changes	Accumulated allowance for losses recognized in other comprehensive income	Note
Bank acceptance bills		283,052,731.03			259,018,954.23	259,018,954.23			
Total		283,052,731.03			259,018,954.23	259,018,954.23			

X. OTHER RECEIVABLES

Item	Closing balance	Balance at the end of last year
Interests receivable		
Dividends receivable		
Other receivables	**92,895,618.64**	249,397,827.25
Total	**92,895,618.64**	249,397,827.25

1. Other receivables

(1) Other receivables disclosed by aging

Aging	Closing balance
Within 1 year	
Including: 0 to 6 months (inclusive)	**30,269,922.11**
7 to 12 months (inclusive)	**534,486.94**
Subtotal of within 1 year	**30,804,409.05**
1 to 2 years (inclusive)	**24,155,500.69**
2 to 3 years (inclusive)	**7,795,202.22**
Over 3 years	**33,562,608.21**
Total of original value of other receivables	**96,317,720.17**
Less: allowances for bad debts	**3,422,101.53**
Total of net value of other receivables	**92,895,618.64**

(2) Other receivables by nature

Nature	Closing balance	Balance at the end of last year
Amounts due from related parties	**26,126,273.84**	208,334,695.63
Deposits and margins	**26,354,233.49**	25,557,991.13
Other current amounts	**42,804,681.40**	13,459,817.97
Withheld amount	**840,354.44**	272,024.05
Government grants	**192,177.00**	5,195,400.00
Total of original value of other receivables	**96,317,720.17**	252,819,928.78
Less: allowances for bad debts	**3,422,101.53**	3,422,101.53
Total	**92,895,618.64**	249,397,827.25

(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	3,422,101.53			3,422,101.53
Book balance of other receivables 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				
Reversed in the period				
Charged off in the period				
Written off in the period				
Other changes				
Closing balance	3,422,101.53			3,422,101.53

(4) *Top five other receivables according to closing balance of debtors*

Name	Nature	Closing balance	Aging	Percentage of closing balance of total other receivables (%)	Closing balance of bad debt allowance
China Electronics Commercial Financial Leasing Co., Ltd. (中電通商融資租賃有限公司)	Deposits	18,438,721.42	Over 3 years	19.14	
IRICO Group Corporation Limited (彩虹集團有限公司)	Open credit	12,766,799.70	0 to 6 months	13.25	
Ping An International Financial Leasing Company Limited (平安國際融資租賃有限公司)	Deposits	10,500,000.00	1 to 2 years	10.90	
CGNPC International Financial Leasing Co., Ltd. (中廣核國際融資租賃有限公司)	Deposits	9,000,000.00	1 to 2 years	9.34	
HONGKONG SUNLINK PV	Open credit	4,002,726.52	2 to 3 years	4.16	
Total		54,708,247.64		56.80	

XI. NOTES PAYABLE

Type	Closing balance	Balance at the end of last year
Bank acceptance	**543,545,938.24**	490,689,505.29
Trade acceptance	**3,785,230.40**	
Total	**547,331,168.64**	490,689,505.29

XII. ACCOUNTS PAYABLE

1. Accounts payable by aging

Item	Closing balance	Balance at the end of last year
within 1 year (inclusive)	**669,960,950.20**	758,391,661.66
1-2 years (inclusive)	**219,511,432.17**	88,207,014.92
2-3 years (inclusive)	**76,077,665.61**	8,715,723.71
Over 3 years	**33,274,463.25**	34,069,882.15
Total	**998,824,511.23**	889,384,282.44

2. Accounts payable by nature

Item	Closing balance	Balance at the end of last year
Payments for materials	**547,692,393.86**	515,375,477.77
Construction payments	**215,051,988.61**	158,586,578.13
Payments for equipment	**173,776,680.12**	155,246,624.25
Payments for services	**41,405,795.22**	37,788,642.51
Payments for supplies	**12,134,647.81**	9,289,278.50
Transportation expenses payable	**785,915.90**	461,296.22
Others	**7,977,089.71**	12,636,385.06
Total	**998,824,511.23**	889,384,282.44

3. Significant accounts payable aged over 1 year

Item	Closing balance	Reasons for outstanding or carried forward
Heifei Gas Group Company Limited (合肥燃氣集團有限公司)	9,754,756.90	Unsettled
Shanghai Ruixin Equipment & Engineering of Glass Technology Co., Ltd	7,700,000.00	Unsettled
Yunyan Materials Science (Shanghai) Company Limited (運研材料科技(上海)有限公司)	7,657,682.20	Unsettled
Liquefied Gas (Hefei) Company Limited (液化空氣(合肥)有限公司)	7,047,806.09	Unsettled
Hainan Zhongdi Mining Co., Ltd (海南中地礦業有限公司)	6,895,987.10	Unsettled
Bengbu Chengxin Chemical Co., Ltd (蚌埠市誠鑫化輕有限公司)	6,724,385.12	Unsettled
Shaanxi Jiarunze Industrial Co., Ltd. (陝西佳潤澤實業有限公司)	6,091,500.00	Unsettled
South Glass Technology Co., Ltd (廣東索奧斯玻璃技術有限公司)	5,552,136.75	Unsettled
Xianyang Caiqin Electronic Device Co., Ltd. (咸陽彩秦電子器件有限責任公司)	4,740,348.60	Unsettled
Total	62,164,602.76	

XIII. SHORT-TERM BORROWINGS

Item	Closing balance	Balance at the end of last year
Pledged borrowings	**94,000,000.00**	130,252,466.63
Mortgaged borrowings	**18,000,000.00**	18,000,000.00
Guaranteed borrowings	**239,000,000.00**	236,000,000.00
Guaranteed and mortgaged borrowings	**60,000,000.00**	50,000,000.00
Total	**411,000,000.00**	434,252,466.63

Explanations on classification of short-term borrowings:

Pledged borrowings:

Lender	Borrowing balance	Pledge
China Electronics Financial Co., Ltd. (中國電子財務有限責任公司)	90,000,000.00	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)	4,000,000.00	Bank acceptance bills held by the Company
Total	94,000,000.00	

Mortgaged borrowings:

Lender	Borrowing balance	Collateral
Suzhou Bank Co., Ltd Zhangjiagang Economic & Technological Development Zone Sub-branch (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 Jiangsu Yongneng, ownership certificate no.: Su (2018) Zhangjiagang Real Estate Certificate No. 0040300
Total	18,000,000.00	

Guaranteed borrowings:

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)
China Guangfa Bank Hefei Branch (廣發銀行股份有限公司合肥分行)	50,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
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)	40,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Bank of China Limited Xianyang Branch (中國銀行股份有限公司咸陽分行)	30,000,000.00	IRICO Group Corporation Limited * (彩虹集團有限公司)
China Zheshang Bank Co., Ltd. Xianyang Branch (浙商銀行股份有限公司咸陽分行)	19,000,000.00	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	239,000,000.00	

Guaranteed and mortgaged borrowings:

Lender	**Borrowing balance**	**Collateral and guarantor**
Industrial and Commercial Bank of China Limited Xianyang Caihong Sub-branch (中國工商銀行股份有限公司咸陽彩虹支行)	10,000,000.00	Buildings and structures of Shaanxi IRICO New Materials Company Limited* (陝西彩虹新材料有限公司), ownership certificate no.: Shaan (2018) Xianyang Real Estate No. 0260004, Shaan (2018) Xianyang Real Estate No. G0000957, Shaan (2018) Xianyang Real Estate No. G0000976, Shaan (2018) Xianyang Real Estate No. G0000975, Shaan (2018) Xianyang Real Estate No. G0000974, and the guarantee facilities of RMB15 million provided by IRICO Group New Energy Company Limited
Jiangsu Zhangjiagang Rural Commercial Bank Co., Ltd (江蘇張家港農村商業銀行股份有限公司)	50,000,000.00	Pledged with fixed assets and guaranteed by IRICO Group Corporation Limited * (彩虹集團有限公司) at the same time.
Total	60,000,000.00	

XIV. LONG-TERM BORROWINGS

Classification of long-term borrowings:

Item	Closing balance	Balance at the end of last year
Guaranteed borrowings	**155,001,800.00**	199,485,600.00
Credit borrowings	**3,500,000.00**	4,700,000.00
Mortgaged + guaranteed borrowings		391,190,144.44
Total	**158,501,800.00**	595,375,744.44

Explanations on classification of long-term borrowings:

Guaranteed borrowings:

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)	41,201,400.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Anhui Xiuning Rural Commercial Bank Co., Ltd. (安徽休寧農村商業銀行股份有限公司)	4,932,100.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Anhui She County Rural Commercial Bank Co., Ltd. (安徽歙縣農村商業銀行股份有限公司)	9,868,300.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Chang'an Bank Limited Xianyang Caihong Branch (長安銀行股份有限公司咸陽彩虹支行)	68,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
China Bohai Bank Limited Nanjing Branch (渤海銀行股份有限公司南京分行)	31,000,000.00	IRICO Group Corporation Limited *(彩虹集團有限公司), IRICO Group New Energy Company Limited
Total	155,001,800.00	

XV. NON-CURRENT LIABILITIES DUE WITHIN ONE YEAR

Item	Closing balance	Balance at the end of last year
Long-term borrowings due within one year	**542,622,468.91**	495,437,200.00
Amortized sale-and-leaseback service payments due within one year	**-5,124,000.00**	
Other long-term liabilities due within one year	**3,812,898.61**	2,082,366.90
Total	**541,311,367.52**	497,519,566.90

Explanations on long-term borrowings due within one year:

Guaranteed borrowings:

Lender	Borrowing balance	Guarantor
Bank of Xi'an Xianyang Branch(西安銀行股份有限公司咸陽分行)	50,000,000.00	IRICO Group Corporation Limited *(彩虹集團有限公司)
Huaxia Bank Xi'an Branch (華夏銀行股份有限公司西安分行)	49,700,000.00	IRICO Group New Energy Company Limited
Chang'an Bank Limited Xianyang Caihong Branch (長安銀行股份有限公司咸陽彩虹支行)	2,000,000.00	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 Sub-branch (合肥科技農村商業銀行股份有限公司新站支行)	18,000,000.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Anhui Xiuning Rural Commercial Bank (安徽休寧農村商業銀行股份有限公司)	15,796,050.00	Xianyang Zhongdian IRICO Group Holdings Ltd.* (咸陽中電彩虹集團控股有限公司)
Anhui She County Rural Commercial Bank Co., Ltd (安徽歙縣農村商業銀行股份有限公司)	34,583,500.00	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 Xinzhan Subbranch (合肥科技農村商業銀行股份有限公司新站支行)	50,099,100.00	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)	10,000,000.00	IRICO Group Corporation Limited *(彩虹集團有限公司), IRICO Group New Energy Company Limited
Total	230,178,650.00	

Mortgaged and guaranteed borrowings:

Lender	Borrowing balance	Collateral/guarantor
China Electronics Commercial Financial Leasing Co., Ltd (中電通商融資租賃有限公司)	67,800,000.00	Fixed assets/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)	66,666,666.66	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)
Ping An International Financial Leasing Co., Ltd. (平安國際融資租賃有限公司)	66,077,152.25	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)

Lender	Borrowing balance	Collateral/guarantor
International Far Eastern Leasing Co., Ltd* (遠東國際租賃有限公司)	59,500,000.00	Fixed assets/IRICO Group Corporation Limited *(彩虹集團有限公司), IRICO (Hefei) Photovoltaic Co., Ltd. (彩虹(合肥)光伏有限公司), IRICO Group New Energy Company Limited
China Electronics Commercial Financial Leasing Co., Ltd (中電通商融資租賃有限公司)	50,000,000.00	Fixed assets/IRICO Group Corporation Limited *(彩虹集團有限公司)
Total	310,043,818.91	

XVI. LONG-TERM PAYABLES

Item	Closing Balance	Balance at the end of last year
Long-term payables	**261,240,435.83**	
Special payables	**7,000,000.00**	7,000,000.00
Total	**268,240,435.83**	7,000,000.00

1. Long-term payables

Item	Closing Balance	Balance at the end of last year
Rental for sale and leaseback	**270,448,191.33**	
Unrecognized financing expenses	**-9,207,755.50**	
Total	**261,240,435.83**	

Explanation on long-term payables:

Security and guarantee:

Lender	Borrowing balance	Collateral/guarantor
China Electronics Commercial Financial Leasing Co., Ltd (中電通商融資租賃有限公司)	112,800,000.00	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)	48,314,857.99	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)	83,333,333.34	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)	3,500,000.00	Fixed assets/IRICO (Hefei) Photovoltaic Co., Ltd.(彩虹(合肥)光伏有限公司), IRICO Group New Energy Company Limited
International Far Eastern Leasing Co., Ltd* (遠東國際租賃有限公司)	22,500,000.00	Fixed assets/IRICO Group Corporation Limited *(彩虹集團有限公司), IRICO (Hefei) Photovoltaic Co., Ltd. (彩虹(合肥)光伏有限公司), IRICO Group New Energy Company Limited
Total	270,448,191.33	

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	

XVII. FINANCE COSTS

Item	Amount for the period	Amount for the previous period
Interest expenses	**44,795,136.31**	38,197,559.40
Including: Interest expenses for lease liabilities	**534,724.82**	
Less: Interest income	**1,182,048.30**	782,621.13
Exchange losses or gains	**-1,185,013.02**	-6,127,947.10
Others	**9,959,614.86**	1,284,121.27
Total	**52,387,689.85**	32,571,112.44

XVIII. INVESTMENT GAINS

Item	Amount for the period	Amount for the previous period
Long-term equity investment gains measured under equity method	**559,226.09**	-230,771.66
Investment gains from disposal of long-term equity investment		144,153,897.33
Investment gains from disposal of held-for-trading financial assets	**358,344.24**	336,894.91
Income from derecognition of financial asset at amortized cost	**-1,908,103.12**	-1,300,446.72
Total	**-990,532.79**	142,959,573.86

XIX. EARNINGS PER SHARE

Item	Basic earnings per share *(RMB)* January to June 2019	January to June 2018
Gains: Net profit attributable to holders of ordinary shares of the Company	**45,137,061.38**	202,029,611.62
Shares: Weighted average number of ordinary shares in issue of the Company	**2,232,349,400.00**	2,232,349,400.00
Earnings per share	**0.02**	0.09

XX. INTERIM DIVIDEND

As at 30 June 2019, the Board did not declare any interim dividend.

XXI. OTHER RELATED PARTY TRANSACTIONS

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

Xianyang IRICO Photovoltaic Glass Factory (彩虹光伏玻璃廠) ("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 support of 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 March 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 provided for the losses on the salaries and social insurance of idle personnel during the production suspension arising from the shutdown of the two furnaces in 2017.

(2) The closing balance of the Company's deposits with China Electronics Financial Co., Ltd. amounted to RMB10,622,979.75, which generated deposit interest of RMB32,977.45 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 RMB2,177,174.99 during the period.

(3) 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.

EXTRACT FROM INDEPENDENT REVIEW REPORT PREPARED BY INDEPENDENT AUDITOR

The Company would like to provide an extract of the independent review 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 financial information for the six months ended 30 June 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 of 30 June 2019, the net current liabilities of the Company amounted to RMB2,371,381,800. Notwithstanding that the Company has given full disclosure on its proposed improvement measures in the notes to the financial statements, there are uncertainties as to the ability to continue as a going concern."

RESULTS AND DIVIDEND

During the reporting period, the Group recorded operating revenue of RMB1,087.15 million, representing a year-on-year decrease of RMB80.13 million or 6.87%; total profit of RMB30.51 million, representing a year-on-year decrease of RMB195.76 million or 86.51%.

As there was no accumulated surplus in the first half of 2019，the Board resolved not to distribute any interim dividend for the six months ended 30 June 2019.

BUSINESS REVIEW AND PROSPECTS

1. Operation summary

During the reporting period, the Group capitalized on the recovery of the photovoltaic market to increase its marketing efforts targeting strategic customers and major customers. The solar photovoltaic business continued to maintain strong production and sales performance, with the sales-to-production ratio reaching 100%, further enhancing the Group's share in the photovoltaic glass market and its position in the industry. In addition, the Group realised technological upgrading and stable bulk supply by accelerating the industrialization of new material business and the capability of large-scale application.

2. Business progress

(1) Solar photovoltaic business

- *Solar photovoltaic glass*

  During the reporting period, the Group, by simply sticking to its original aspiration, focused on its principal business and devoted great efforts to promoting its solar photovoltaic glass business. Thanks to such endeavors, new production lines made headway smoothly and sales of solar photovoltaic glass business increased by 42% year-on-year.

  As the worldwide largest oxygen-fuel combustion photovoltaic glass production base, the production lines in Hefei base achieved a relatively high yield in the industry by cementing its foundation in all fronts and to improve quality and efficiency. Breakthrough progress was made owing to the "5321" cost reduction project.

  The production lines in Yan'an base were put into full operation and received batch orders after being accredited by customers, which signified that the Group embraced a more reasonable areal landscape of the photovoltaic glass business, significantly increased scale and cost strengths and further highlighted industrial position as one of the top three players in the world.

During the reporting period, 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 of the People's Republic of China, passed the acceptance. Consumption and nitrogen oxide emissions involved therein were far lower than the national standards, which signified significant economic profits and social benefits and exerted guiding and exemplary effects in the industry.

The photovoltaic glass bases of the Group continued to transform and upgrade their production lines to produce thin glass, and achieved mass production and sales of new products such as thin photovoltaic glass for solar double-glazed modules, which will become a new profit growth driver of the Group thanks to such technical progress and development of new products.

- *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**") conducted technical upgrading and renovation on all existing production lines of modules, which upgraded the existing regular production lines into those being compatible with the production of modules with PERC technology. Meanwhile, the Group seized marketing opportunities and increased investment in market, further sharpening the Group's competitive edges in photovoltaic market.

- *Solar photovoltaic power station*

During the reporting period, the Group's solar photovoltaic power stations in Nanjing, Hefei, Wuhan and Suzhou were in stable operation. Besides, the Group conducted project research and negotiated with potential partners in a number of places, aiming to push forward the construction of distributed solar power stations in a steady way.

In active response to the new development trends of digitalization and intelligentization of solar photovoltaic power stations, the Group made great efforts to develop a big-data based intelligent operation model.

In addition, the Group also capitalised on its photovoltaic glass furnace equipment and technical innovation to energetically promote cogeneration for effective reduction of energy consumption.

- *Quartz sand business*

  During the reporting period, the construction of the Group's Hanzhong Jiarunze quartz sand mine project progressed smoothly, and significant achievements were made in respect of engineering treatment and ecological restoration. In addition, environmental protection work at the diggings was also carried forward constructively and drew the compliments of the competent governmental authorities.

(2) New materials business

During the reporting period, the Group introduced advanced manufacturing technology of photoresist from Merck KGaA in Germany, production lines of the project operated smoothly and stable bulk supply was realised. In respect of anode materials for lithium batteries, the Group further advanced the strategy of focusing on quality customers, and achieved significant increase in product sales. In addition, the Group maintained stable business operations in respect of electronic silver paste and luminescent materials.

The Group established a science and technology committee, and set up a cooperation platform on scientific research jointly with Northwest University. Joint applications have been made for four patents with shared intellectual property rights in respect of joint research projects in field of new energy.

In the future, with the rapid development of the Group's photovoltaic glass business, the Group, as the leading enterprise in the photovoltaic glass industry, will continue to build an industrial ecosphere around its development objectives and strive to become an internationally renowned green energy service provider and a worldwide top-notch new material supplier.

FINANCIAL REVIEW

1. Overall performance

During the reporting period, the Group recorded operating revenue from its principal business of RMB1,046.46 million, representing a year-on-year decrease of RMB101.63 million or 8.85%, which mainly comprised revenue from solar photovoltaic business of RMB844.17 million, representing a year-on-year decrease of RMB50.27 million; revenue from new materials business of RMB201.52 million, representing a year-on-year increase of RMB24.82 million; and revenue from trading and other businesses of RMB0.77 million, representing a year-on-year decrease of RMB76.18 million.

During the reporting period, the Group recorded total profit of RMB30.51 million, representing a year-on-year decrease of RMB195.76 million or 86.51%; and net profit of RMB31.61 million, representing a year-on-year decrease of RMB189.55 million or 85.71%. The decrease was mainly due to losses of approximately RMB96 million from the decrease in the price of photovoltaic glass and compensation of RMB95.11 million for the shutdown of Xianyang photovoltaic project, while investment gains of RMB144.15 million from the transfer of 51% equity interests in Zhuhai Caizhu Industrial Co., Ltd.* (珠海彩珠實業有限公司) were received by the Group in the same period last year.

2. Capital structure

As at 30 June 2019, the Group will continue to maintain a suitable ratio of share capital to liabilities to ensure an effective capital structure.

As at 30 June 2019, the total assets of the Group amounted to RMB4,938.13 million (31 December 2018: RMB4,870.78 million), including cash and bank balances of RMB254.12 million (31 December 2018: RMB260.55 million).

As at 30 June 2019, the total liabilities of the Group were RMB4,661.60 million (31 December 2018: RMB4,656.99 million), including bank and other borrowings of RMB2,689.69 million (31 December 2018: RMB2,832.18 million).

As at 30 June 2019, the total owners' equity of the Group was RMB276.53 million (31 December 2018: RMB213.78 million).

As at 30 June 2019, the gearing ratio of the Group was 94.4% (31 December 2018: 95.61%).

3. Foreign exchange risk

The Group's income and most of its expenses were denominated in Renminbi and US dollar. For the six months ended 30 June 2019, the operating costs of the Group decreased by RMB1.19 million (30 June 2018: decreased by RMB6.12 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 30 June 2019, the capital expenditure commitments of the Group amounted to RMB276.95 million (31 December 2018: RMB471.60 million).

5. Contingent liabilities

As at 30 June 2019, the Group had no material contingent liability.

6. Pledged assets

As at 30 June 2019, the bank and other borrowings of the Group amounted to approximately RMB752.49 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 RMB606.30 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 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 six months ended 30 June 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 unaudited condensed interim consolidated financial statements for the six months ended 30 June 2019.

The interim financial report has been reviewed by the Company's auditor in accordance with the requirements of China Certified Public Accountant Review Standard No. 2101 – Review of Financial Statements.

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 appointed as a non-executive director of the Company at the 2018 annual general meeting of the Company. For details, please refer to the announcements of the Company dated 13 February 2019, 1 April 2019 and 28 May 2019, respectively.

2. **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, respectively.

3. **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.* (張家港市悅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 (《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》) (Guo Zi Chan Quan [2018] No. 880) 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.

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 and 6 June 2019, as well as the circular dated 31 December 2018.

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

The 2019 interim 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
27 August 2019

As at the date of this announcement, the Board consists of Mr. Si Yuncong and Mr. Chen Xiaoning 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*