JA Solar Holdings Co., Ltd. Form 20-F April 27, 2015 <u>Table of Contents</u>

## **UNITED STATES**

## SECURITIES AND EXCHANGE COMMISSION

## WASHINGTON, D.C. 20549

## **FORM 20-F**

(Mark One)

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR** 0 (g) OF THE SECURITIES EXCHANGE ACT OF 1934 OR ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE Х **SECURITIES EXCHANGE ACT OF 1934** For the fiscal year ended December 31, 2014 OR TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF 0 **THE SECURITIES EXCHANGE ACT OF 1934** OR SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 0 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

to

Date of event requiring this shell company report .....

For the transition period from

Commission file number 001-33290

# JA Solar Holdings Co., Ltd.

(Exact name of Registrant as specified in its charter)

**The Cayman Islands** (Jurisdiction of incorporation or organization)

No. 36, Jiang Chang San Road

Zhabei, Shanghai

The People s Republic of China (Address of principal executive offices)

Mr. Hexu Zhao

JA Solar Holdings Co., Ltd.

No. 36, Jiang Chang San Road

Zhabei, Shanghai 200436

The People s Republic of China

Tel: +86-21-60955999

Fax: +86-21-60955727 (Name, Telephone, E-mail and/or Facsimile and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class American depositary shares, each representing five ordinary share, par value US\$0.0001 per share Ordinary shares, par value US\$0.0001 per share\* Name of each exchange on which registered The NASDAQ Stock Market LLC

\* Not for trading but only in connection with the registration of American depositary shares

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None (Title of Class)

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None (Title of Class)

Indicate the number of outstanding shares of each of the issuer s classes of capital or common stock as of the close of the period covered by the annual report: 252,301,917 ordinary shares, par value US\$0.0001 per share, as of December 31, 2014.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

x Yes o No

Indicate by check mark whether the registrant has submitted electronically and posted on its Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or such shorter period that the registrant was required to submit and post such files).

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o

Accelerated filer x

Non-accelerated filer o

o Yes x No

o Yes x No

x Yes o No

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

US GAAP x	International Financial Reporting Standards as issued	Other o
	by the International Accounting Standards Board o	

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

o Item 17 o Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

o Yes x No

#### (APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

o Yes o No

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#### CERTAIN TERMS AND CONVENTIONS

Unless otherwise indicated, in this annual report:

ADS refers to American depositary shares, each representing five ordinary share of JA Solar, par value US\$0.0001 per share;

• China and the PRC refer to the People's Republic of China, excluding, for the purposes of this annual report only, Taiwan and the special administrative regions of Hong Kong and Macau;

• conversion efficiency refers to the ability of solar power products to convert sunlight into electricity; conversion efficiency rate is commonly used in the solar power industry to measure the percentage of light energy from the sun that is actually converted into electricity;

• price per watt refer to the price of solar power products, respectively, relative to the number of watts of electricity a solar power product generates;

• Hebei Jinglong refers to Hebei Jinglong Industry and Commerce Group Co., Ltd., which is controlled by the shareholders of Jinglong BVI;

- JA BVI refers to JA Development Co., Ltd., our directly wholly-owned subsidiary, a British Virgin Islands company;
- JA Fengxian refers to Shanghai JA Solar Technology Co., Ltd., our indirectly wholly-owned subsidiary in Shanghai, China;
  - JA Hebei refers to JingAo Solar Co., Ltd., our predecessor and indirectly wholly-owned subsidiary in Hebei, China;
    - JA Hefei Technology refers to Hefei JA Solar Technology Co., Ltd., our indirectly wholly-owned subsidiary in Hefei, China;

• JA Lianyungang refers to Jing Hai Yang Semiconductor Material (Donghai) Co., Ltd., our indirectly wholly-owned subsidiary in Jiangsu, China;

• JA Solar, we, us, the company, our company and our refer to JA Solar Holdings Co., Ltd. and, unless otherwise indicated or a context may otherwise require, its predecessor entities and its consolidated subsidiaries;

• JA Wafer R&D refers to Donghai JA Solar Technology Co., Ltd., our indirectly wholly-owned subsidiary in Jiangsu, China;

• JA Yangzhou refers to JA Solar Technology Yangzhou Co., Ltd., our indirectly wholly-owned subsidiary in Jiangsu, China;

• Jinglong BVI refers to Jinglong Group Co., Ltd., a British Virgin Islands company and our largest shareholder;

• Jinglong Group refers to Hebei Jinglong and its consolidated subsidiaries;

• Lehman Entities shall include Lehman Brothers Holdings Inc. and its subsidiaries, including Lehman Brothers Inc., Lehman Brothers International (Europe), Lehman Brothers Treasury Co. BV and Lehman Brothers OTC Derivatives Inc.;

Ningjin Songgong refers to Hebei Ningjin Songgong Semiconductor Co., Ltd.;

• rated manufacturing capacity refers to the total amount of solar power products that can be made by a manufacturing line per annum operating at its maximum possible rate and is measured in megawatts, or MW;

RMB and Renminbi refer to the legal currency of the PRC;

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• Solar Silicon Valley refers to Solar Silicon Valley Electronics Science and Technology Co., Ltd., our indirectly wholly-owned subsidiary in Hebei, China;

US\$ and U.S. dollars refer to the legal currency of the United States;

• voltage or volts refers to the rating of the amount of electrical pressure that causes electricity to flow in the power line; and

• watts refers to the measurement of total electrical power, where kilowatts or KW means one thousand watts, megawatts or MW means one million watts and gigawatts or GW means one billion watts.

#### FORWARD-LOOKING STATEMENTS

This annual report includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this annual report that address activities, events or developments which we expect or anticipate will or may occur in the future are hereby identified as forward-looking statements for the purpose of the safe harbor provided by Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934.

Forward-looking statements typically are identified by words or phrases such as may, will, expect, anticipate, aim, estimate, intend, believe, potential, continue, is/are likely to or other similar expressions or the negative of these words or expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to:

- our expectations regarding the worldwide demand for electricity and the market for solar energy;
- our beliefs regarding the inability of traditional fossil fuel-based generation technologies to meet the demand for electricity;
- our beliefs regarding the importance of environmentally friendly power generation;
- our expectations regarding governmental incentives for the deployment of solar energy;

- our beliefs regarding the solar power industry revenue growth;
- our expectations with respect to advancements in our technologies;
- our beliefs regarding the low-cost advantage of solar power product production in China;
- our beliefs regarding the competitiveness of our solar power products;
- our expectations regarding the scaling of our solar power capacity;

• our expectations with respect to increased revenue growth and our ability to achieve profitability resulting from increases in our production volumes;

- our expectations with respect to our ability to secure raw materials in the future;
- our expectations regarding the price trends of solar power products;
- our expectations with respect to our ability to develop relationships with customers in our target markets;

• our expectations with respect to our ability to secure sufficient funds to meet our cash needs for our operations and to service our indebtedness;

• PRC government policies regarding foreign investments;

- our ability to maintain and strengthen our position as a low-cost vertically-integrated manufacturer of photovoltaic, or PV products;
- our future business development, results of operations and financial condition; and
- competition from other manufacturers of solar power products and conventional energy suppliers.

The forward-looking statements made in this annual report on Form 20-F relate only to events or information as of the date on which the statements are made in this annual report on Form 20-F. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this annual report on Form 20-F completely and with the understanding that our actual future results may be materially different from what we expect.

#### PART I

## ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

#### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

#### A. SELECTED FINANCIAL DATA

The selected consolidated statements of operations data presented below for the three years ended December 31, 2012, 2013 and 2014 and our balance sheet data as of December 31, 2013 and 2014 are derived from our audited consolidated financial statements which are included in this

annual report beginning on page F-1. Our consolidated financial statements are prepared and presented in accordance with U.S. generally accepted accounting principles (U.S. GAAP). Our selected consolidated statements of operations data for the years ended December 31, 2010 and 2011 and selected consolidated balance sheet data as of December 31, 2010, 2011 and 2012 have been derived from our audited consolidated financial statements that are not included in this annual report on Form 20-F. Historical results are not necessarily indicative of results to be expected in any future period.

<sup>3</sup> 

	2010	2011 (in mil	Year ended December 31, 2011 2012 2013 (in millions, except for share and per share data)		2014	
	RMB	RMB	RMB	RMB	RMB	US\$
Consolidated Statements of Operations and Comprehensive Income/(Loss) Data:						004
Revenues						
Solar modules	2,511	3,709	4,044	4,388	9,292	1,498
Solar cells and other products	8,184	6,223	2,357	2,386	1,825	294
Engineering, procurement and construction		147	136	28	23	4
Solar products processing	1,066	654	182	381	156	25
Total revenues	11,761	10,733	6,719	7,183	11,296	1,821
Cost of revenues						
Solar modules	(2,222)	(3,428)	(4,029)	(3,861)	(7,844)	(1,264)
Solar cells and other products Engineering, procurement	(6,485)	(6,243)	(2,476)	(2,254)	(1,594)	(257)
and construction		(108)	(85)	(16)	(8)	(1)
Solar products processing	(508)	(493)	(183)	(290)	(93)	(15)
Total cost of revenues	(9,215)	(10,272)	(6,773)	(6,421)	(9,539)	(1,537)
Gross profit (loss)	2,546	461	(54)	762	1,757	284
Operating expenses						
Selling, general and						
administrative expenses	(458)	(510)	(902)	(765)	(954)	(154)
Research and development expenses	(64)	(69)	(86)	(88)	(140)	(23)
Impairment loss on property, plant and equipment	(47)	(303)	(398)			
Total operating expenses	(569)	(882)	(1,386)	(853)	(1,094)	(177)
Income/(loss) from continuing operations	1,977	(421)	(1,440)	(91)	663	107
Change in fair value of			2			
derivatives	75	85	9	(52)	84	14
Convertible notes buy back (loss)/gain		4	(8)			
Interest expense	(221)	(374)	(489)	(285)	(230)	(37)
Interest income	13	26	36	17	28	(37)
Foreign exchange gain/(loss)	(74)	(69)	(25)	(44)	(62)	(10)
Loss for equity investment in						
a joint venture		(1)	(43)	(2)	3	0
Investment loss						
Other income, net	258	236	399	16	34	5
(Loss)/income from continuing operations before						
income taxes	2,028	(514)	(1,561)	(441)	520	84
Income tax (expense)/benefit	(253)	(58)	(101)	15	(73)	(12)
	1,775	(572)	(1,662)	(426)	447	72

(Loss)/income from						
continuing operations						
Gain/(loss) from discontinued						
operations, net of tax	(20)	8				
Net (loss)/income	1,755	(564)	(1,662)	(426)	447	72
Less: earnings attributable to						
the noncontrolling interest				(3)	(23)	(4)
Net (loss)/income attributable						
to JA Solar Holdings	1,755	(564)	(1,662)	(429)	424	68
Less: fair value of warrants in						
excess of net proceeds of						
equity offering				(44)		
Less: allocation of net						
income to a participating						
warrant holder					(77)	(12)
Net (loss)/income attributable						
to JA Solar s ordinary						
shareholders	1,755	(564)	(1,662)	(473)	347	56
Net income/(loss) per share						
from continuing operations:						
Basic	10.90	(3.42)	(8.53)	(2.35)	1.43	0.23
Diluted	10.72	(3.42)	(8.53)	(2.35)	1.38	0.22
Net (loss)/income per share						
from discontinued operations:						
Basic	(0.12)	0.04				
Diluted	(0.12)	0.04				
Net (loss)/income per share						
Basic	10.78	(3.38)	(8.53)	(2.35)	1.43	0.23
Diluted	10.61	(3.38)	(8.53)	(2.35)	1.38	0.22
Net (loss)/income per ADS						
Basic	53.88	(16.90)	(42.67)	(11.76)	7.17	1.16
Diluted	53.03	(16.90)	(42.67)	(11.76)	6.88	1.11
Weighted average number of						
shares outstanding:						
Basic	162,900,657	167,101,076	194,788,429	201,317,884	242,192,859	242,192,859
Diluted	171,116,684	167,101,076	194,788,429	201,317,884	242,863,084	242,863,084

	As of December 31,					
	2010	2011	2012	2013	2014	
			(in milli	/		
	RMB	RMB	RMB	RMB	RMB	US\$
Consolidated Balance Sheet						
Data:						
Cash and cash equivalents	2,290	3,889	3,031	2,120	2,155	347
Total current assets	6,418	7,709	7,150	6,352	8,601	1,386
Total assets	11,619	14,736	13,132	11,882	14,484	2,334
						0
Total current liabilities	2,044	3,325	5,889	5,041	6,580	1,061
Total long-term liabilities	2,895	4,862	2,350	2,137	2,437	392
Total liabilities	4,939	8,187	8,239	7,178	9,017	1,453
Total Shareholders equity	6,680	6,549	4,893	4,704	5,467	881

	Year ended December 31,					
	2010	2011	2012	2013	2014	
			(in milli	ions)		
	RMB	RMB	RMB	RMB	RMB	US\$
Operating Data:						
Products sold (in MW)	1,462.6	1,694.7	1,702.1	2,072.0	3,057.9	
Average PV cells selling price						
per watt	8.7	5.7	2.8	2.4	2.3	0.37
Average PV modules selling						
price per watt	11.5	8.9	4.5	4.0	3.9	0.63

#### **Exchange Rate Information**

Our functional currency is Renminbi. The conversion of RMB into U.S. dollars in this annual report is based on the noon buying rate in New York City for cable transfers in RMB as certified for customs purposes by the Federal Reserve Board. Except as otherwise stated in this annual report, all amounts in this annual report have been translated from RMB to U.S. dollars and from U.S. dollars to RMB at a rate of RMB6.2046 to US\$1.00, the noon buying rate in effect as of December 31, 2014. We make no representation that any RMB or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or RMB, as the case may be, at any particular rate, or at all. See Item 3. Key Information D. Risk Factors Risks Related to Doing Business in China Fluctuation in exchange rates could have a material adverse effect on our results of operations and the value of your investment. The PRC government imposes control over its foreign currency reserves in part through direct regulation of the conversion of RMB into foreign exchange and through restrictions on foreign trade. On April 17, 2015, the noon buying rate was RMB6.1976 to US\$1.00.

The following table sets forth information concerning exchange rates between the RMB and the U.S. dollar for the periods indicated.

Period	Period-End	Average (1)	High	Low
		(RMB per U.S	. Dollar)	
2010	6.6000	6.7696	6.8330	6.6000
2011	6.2939	6.4475	6.6364	6.2939
2012	6.2301	6.3093	6.3879	6.2221
2013	6.0537	6.1412	6.2438	6.0537

2014	6.2046	6.1704	6.2591	6.0402
October	6.1124	6.1251	6.1385	6.1107
November	6.1429	6.1249	6.1429	6.1117
December	6.2046	6.1886	6.2256	6.1490
2015				
January	6.2495	6.2181	6.2535	6.1870
February	6.2695	6.2518	6.2695	6.2399
March	6.2145	6.2422	6.2741	6.1955
April (through April 17, 2015)	6.1976	6.2010	6.2152	6.1930

Source: Federal Reserve Statistical Release

<sup>(1)</sup> Annual averages are calculated by averaging the noon buying rates on the last business day of each month. Monthly averages are calculated using the average of the daily rates during the relevant period.

<sup>5</sup> 

#### B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

#### C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D. RISK FACTORS

#### **Risks Related to Our Business and Industry**

Our business is sensitive to domestic and global economic conditions. A severe or prolonged downturn in the global or Chinese economy could materially and adversely affect our business and our financial condition.

Our business is sensitive to domestic and global economic conditions. The global macroeconomic environment is facing new challenges, including the escalation of the European sovereign debt crisis since 2011, the end of quantitative easing by the U.S. Federal Reserve and the economic slowdown in the European in 2014. Continued concerns about the systemic impact of potential long-term and wide-spread recession, energy costs, geopolitical issues, and the availability and cost of credit have contributed to increased market volatility and diminished expectations for economic growth around the world. The difficult economic outlook has negatively affected business and consumer confidence and contributed to high volatility.

Although the economy in China has grown significantly in the past decades, it is unclear whether the Chinese economy will resume its high growth rate. The Chinese economy has slowed down in recent years. According to the National Bureau of Statistics of China, China s gross domestic product (GDP) growth slowed to 7.4% in 2014. There have been concerns about the territorial disputes involving China in Asia and the economic effects. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. Any severe or prolonged slowdown in the global and/or Chinese economy may have a negative impact on our business, results of operations and financial condition, and continued turbulence in the international markets may adversely affect our ability to access the capital markets to meet liquidity needs.

Changes in international trade policies and barriers have adversely affected, and may continue to adversely affect, our ability to export our products to customers in certain countries, or import raw materials from certain countries.

We generate a significant portion of our revenues from sales to customers located outside of China, including those in the United States and the European Union, and our customer mix varies geographically from period to period. Trade barriers, such as tariffs, taxes, duties, restrictions and expenses, have adversely affected, and may continue to adversely affect, our ability to export our products to customers in certain countries, especially the European Union and the United States. For the years ended December 31, 2012, 2013 and 2014, we generated 3.6%, 5.2% and 4.5%, respectively, of our revenue from sales to customers located in the United States, and during the same periods, we generated 32.5%, 15.3% and 12.5%, respectively, of our revenue from sales to customers located in the European Union.

<sup>6</sup> 

On September 6, 2012 and November 8, 2012, respectively, the European Commission announced the initiations of anti-dumping and anti-subsidy investigations regarding crystalline silicon PV modules and key components (i.e., cells and wafers) originating from China into the European Union. On June 4, 2013, the European Commission announced that it would, from June 6, 2013, impose a provisional anti-dumping duty, or AD, of 11.8% to all solar panels, cells and wafers imported from China into the European Union. This provisional anti-dumping duty at 11.8% lasted until August 6, 2013, at which point it could be increased to the proposed 47.6% for us unless a settlement was otherwise achieved between the PRC government and the European Commission. The European Commission made its decision after forming the opinion that Chinese solar companies in general were selling solar panels to European customers at prices that were far below their normal market value. The PRC Ministry of Commerce, or MOFCOM, refuted the finding by the European Commission. On August 2, 2013, the European Commission accepted a price undertaking offered by Chinese companies exporting solar panels, represented by China Chamber of Commerce for Import and Export of Machinery and Electronic Products, or CCCME. Under such undertaking, crystalline silicon PV modules and key components (i.e., cells) originated in or consigned from China will be sold to the European Union above fixed floor prices and subject to quota limitation. Companies that accept such fixed floor prices, including us, will not be subject to any anti-dumping and anti-subsidy tariffs. The fixed floor prices we accepted are higher than our selling prices prior to the acceptance of such undertaking and are subject to re-evaluation from time to time. The European Commission has re-evaluated and adjusted the fixed floor prices for several times base on the adjustment mechanism in the undertaking and the fixed floor prices after re-evaluation are still higher than our selling prices prior to the acceptance of such undertaking. Such fixed floor prices have had an adverse effect on our ability to secure orders from customers in the European Union due to the increase of our selling price under the undertaking. We expect the fixed floor prices after future re-evaluation continue to be higher than our selling prices prior to the acceptance of such undertaking, which will continue to have an adverse effect on our ability to secure orders from customers in the European Union. In addition, our sales to customers in the European Union are subject to quota limitations, which may further affect our ability to sell additional products in the European markets. In addition, the anti-dumping and anti-subsidy tariffs would be automatically imposed on us provided that we are found not conforming to the undertaking by the European Union, which would materially and adversely affect our revenues generated from the European Union. The petitioners of these investigations have appealed to the European Court to annul the price undertaking, and we, together with several other solar manufacturers, have filed a counter-claim with a motion to dismiss. The European court is still in the process of reviewing the case and there is no guarantee on how the court will rule.

Although we have accepted the fixed floor prices for our solar products sold to the European Union countries, if the European Union tariffs were reinstated, the competitiveness of our products to customers located in the European Union would be significantly affected.

Furthermore, in December 2012, the U.S. Department of Commerce, or DOC, issued its final determination to impose AD and countervailing duties, or CVD, on crystalline silicon PV cells, whether or not assembled into modules from the PRC, as well as modules assembled from those cells that are exported to the United States. The combined AD/CVD rate applicable to us is 29.18%.

On December 23, 2014, DOC announced its final affirmative determinations in the anti-dumping investigation on imports of certain crystalline silicon PV products from China and Taiwan and a countervailing investigation on imports of certain crystalline silicon PV products from China. DOC determined that (i) imports of certain crystalline silicon PV products from China have been sold in the United States at dumping margins ranging from 26.71% to 165.04%; (ii) imports of certain crystalline silicon PV products from Taiwan have been sold in the United States at dumping margins ranging from 11.45% to 27.55%; and (iii) imports of certain crystalline silicon PV products from China have received subsidies ranging from 27.64% to 49.79%. The AD and CVD rate applicable to us is 52.13% and 38.43%, respectively, and the consolidated rate applicable to us is 68.49%. Following the affirmative injury determination made by U.S. International Trade Commission, DOC issued the AD order and CVD order and the new AD and CVD rates came into effect on February 18, 2015, which exist in parallel with the already existing AD/CVD rate of 29.18% as mentioned above. Subject merchandise in China includes modules, laminates and/or panels assembled in China consisting of crystalline silicon PV cells produced in a customs territory other than China; and subject merchandise in Taiwan includes modules, laminates, and/or panels produced in a third country from cells produced in Taiwan.

The AD and CVD rates are subject to annual administrative review by DOC. On December 31, 2014, DOC announced its preliminary review of AD and CVD rates imposed in December 2012, the combined AD/CVD rate of our competitors were lowered to 17.5% while the combined AD/CVD rate applicable to us remains unchanged, which may put us at a relative disadvantage. We have made a plea to DOC. The final determination is expected to be released in June 2015.

As a result of the tariffs, our ability to continue sourcing cells from suppliers overseas (including Taiwan) for our modules to be sold to the United States would be limited, and the competitiveness of our products to customers located in the United States would be significantly affected.

We are actively taking measures to alleviate the negative effects caused by the tariffs, including exploring new markets and securing additional order from customers located outside of the United States and the European Union. However, if our efforts to develop new markets fail and we are not able to gain additional orders from other customers to replace orders from those in the European Union and the United States, our revenue could be materially and adversely affected.

India has also initiated an anti-dumping and countervailing investigations against solar cell products imported from China, the United States, Malaysia and Taiwan. Indian finally determined not to impose any tariffs.

Australia has also initiated anti-dumping investigations against crystalline silicon solar panels imported from China. The Australian Anti-dumping Commission proposed to terminate this investigation and didn t recommend the imposition of any anti-dumping tariffs on imported solar panels. The final determination is expected to be released in May 2015.

On December 5, 2014, Canada initiated anti-dumping and countervailing investigations on imports of crystalline silicon PV modules from China. Based on the preliminary ruling issued by Canada Border Services Agency on March 5, 2015, JA Hefei Technology was provisionally determined to be subject to an AD rate of 47.5 % and a CVD rate of 3.1%. The final determination is expected to be released on June 3, 2015. If the applicable AD and CVD rates are imposed, our sales will be adversely affected.

Furthermore, we import some of our raw materials, including polysilicon, from suppliers located outside of China, such as the European Union, the United States and Korea. MOFCOM initiated investigations on solar grade polysilicon imported from the United States and the European Union in July 2012 and November 2012, respectively. In July 2013, MOFCOM announced in a preliminary ruling that it found exporters in the United States and South Korea dumped their products on the PRC market and caused material harm to China s domestic solar industry and decided that it planned to impose provisional AD on solar-grade polysilicon imported from the United States and South Korea. In January 2014, MOFCOM upheld its previous ruling that investigated products from South Korea and the United States are subject to import tariffs at different rates with the highest rate being 48.7% and 57%, respectively. South Korean polysilicon producer OCI Company Ltd., or OCI, is one of our main suppliers and its products are subject to a tariff of 2.4%. On March 18, 2014, MOFCOM and Wacker Chemie AG, or Wacker, one of our main suppliers, reached a mutual agreement concerning its polysilicon exports to China. Pursuant to this agreement, Wacker undertakes not to sell polysilicon produced at its European plants in China below a specific minimum price, in return, MOFCOM will refrain from applying anti-dumping and anti-subsidy tariffs on Wacker. Various import tariffs and limitations imposed on foreign polysilicon suppliers may lead to the increased prices of products from domestic suppliers and the price of polysilicon from domestic suppliers may increase in the future. We may not be able to pass on such cost increase to our customers and our earnings may be negatively affected. For 2012, 2013 and 2014, we sourced 54.5%, 78.7% and 88.1%, respectively, of our polysilicon purchases from suppliers located in the United States, the European Union and South Korea.

# Our revenues derived from Japan-based customers have increased significantly in recent years, and our results of operations may be adversely affected by various factors affecting Japan.

Our revenues derived from our Japan-based customers have increased significantly in recent years, accounting for 6.5%, 22.2% and 34.1% of our total revenues in 2012, 2013 and 2014, respectively. Our revenues generated from Japan-based customers have grown from RMB436.4 million in 2012 to RMB1.6 billion in 2013 and to RMB3.9 billion (US\$620.9 million) in 2014 due to the increase in demand for PV products resulting from Japan s feed-in tariff program. Various factors affecting Japan may have a negative impact on our results of operations.

From time to time, there have been tensions and conflicts between China and Japan. Adverse changes in political and economic policies, geopolitical uncertainties, and international conflicts between China and Japan may lead to a reduced demand of solar power products from Japan-based customers. Any future conflicts between China and Japan may have an adverse impact on the political and business relationship of the two countries. If the business activities between Japan and China decrease due to political, economic or other issues, demand for solar power products from Japan-based customers may decline and our business and results of operations may be adversely affected.

Japanese Yen, or JPY, has significantly depreciated against RMB in 2014 and as a result, our average selling price of solar cells and solar modules has declined, which has had a negative impact on our results of operations. If JPY continues to depreciate against RMB, our business and results of operations may continue to adversely affected.

Japan started to cut its feed-in tariff in 2013, the feed-in tariff for large-scale installation was reduced by 10% from 2012 to 2013, 11% from 2013 to 2014, and will be further reduced in 2015 in different phases. Further reduction of feed-in tariff in Japan could materially and adversely affect our business and results of operations.

Furthermore, events affecting Japan in general, such as natural disasters, may also have a negative impact on our business, financial condition and results of operations. Such crisis may have a negative impact on the business operation of Japan-based customers, which may in turn discourage them from importing our solar power products, thus adversely affecting our business and results of operations.

We may be adversely affected by volatile market and industry trends, in particular, the demand for our solar power products may decline, which may reduce our revenues and earnings.

We are affected by solar power market and industry trends. Industry-wide oversupply of solar power products has caused a substantial decline in prices of solar power products. In addition, various European countries have reduced subsidies, such as feed-in tariff, which was initially designed to require public utility companies to pay higher prices for solar power than for power generated through conventional means. Combined with other factors, such as the European sovereign debt crisis, economic slowdown in the European and an oversupply of solar power products, the average selling prices of solar power products have declined significantly. In addition, we expect that cost reduction in the solar power industry will continue and prices of our products may be materially and adversely affected.

The demand for solar power products is also influenced by macroeconomic factors, including global economic development, credit markets, the supply and prices of other energy products, such as oil, coal and natural gas, as well as government regulations and policies concerning the electric utility industry. If negative market and industry trends continue in the future, the prices of our solar power products could further decrease and our business and results of operations may be materially and adversely affected.

# The reduction or elimination of government subsidies and economic incentives or change in government policies and regulations may have a material adverse effect on our business and prospects.

Demand for our products depends substantially on government incentives aimed to promote greater use of solar power. Countries that provided significant incentives for solar power include Japan, Germany, Spain, Italy, Greece, Canada, the United States and China, among others. In many of the countries that constitute our major markets, solar power systems, particularly those for on-grid applications, would not be commercially viable without government incentives because the cost of generating electricity from solar power currently exceeds the cost of generating electricity from conventional or other non-solar renewable energy sources.

The scope of government incentives for solar power depends, to a large extent, on political and policy developments relating to environmental concerns in a given country. Policy shifts could reduce or eliminate these government economic incentives altogether. For example, the rapid growth of the German, Spanish and Italian solar power markets in 2010 was largely due to the government policies of those countries that set feed-in tariff terms at attractive rates. However, the escalation of the European sovereign debt crisis in 2011 affected the fiscal ability of several governments to offer incentives for the solar power industry. Japan, our largest overseas solar power products market in 2014, reduced its feed-in tariff for large-scale installation by 10% from 2012 to 2013, 11% from 2013 to 2014, which will be further reduced in 2015 in different phases. Our sales to Germany, which used to be our second largest overseas solar power products in 2013, has significantly decreased primarily due to decline in customer demands resulted from the reduction of feed-in tariffs. Any further significant reduction in the scope or discontinuation of government incentive programs, especially those in markets significant to our business, could cause demand for our products and our revenues to decline, and have a material and adverse effect on our business, financial condition, results of operations and prospects.

The market for power generation products is also heavily influenced by government regulations and policies concerning the electric utility industry, as well as internal policies of electric utilities companies. These regulations and policies often relate to electricity pricing, safety, utility interconnection, metering and related matters. End users purchases of alternative energy sources, including solar power products, could be deterred by unfavorable changes in regulations and policies, which could result in a significant reduction in the potential demand for our solar power products. For example, public utility companies commonly charge fees to larger, industrial customers for disconnecting from the electricity transmission grid or for having the capacity to use power from the electricity transmission grid for back-up purposes. These fees could increase end users costs of using our solar power products and make products that use our solar power products less desirable, thereby having an adverse effect on our business, financial condition, results of operations and prospects.

# Our growth depends on the financial capabilities of our customers, third-party financing arrangements for end-users of our products, and is affected by general economic conditions.

We have extended credit to many new and existing customers or provided them with improved credit terms, including increasing credit limits and extending the time period before payments are due, ultimately increasing our accounts receivable and exposure to credit risks of our customers. Some of our customers are new customers with whom we have not historically had extensive business dealings. Starting from May 2011, we began to insure part of our overseas sales through China Export & Credit Insurance Corporation, or Sinosure. As of December 31, 2014, 38% of our total overseas accounts receivable was insured by Sinosure. The amount of insurance coverage for each transaction is based on a rating assigned by Sinosure to the customer based on such customer s credit history. However, we cannot assure you that all our accounts receivable are sufficiently covered or that Sinosure will be able to make payments on our claims. Our balance of provision for doubtful accounts was RMB190.0 million, RMB281.0 million and RMB275.5 million (US\$44.4 million) in 2012, 2013 and 2014, respectively. During the year ended December 31, 2014, for sales of solar cells, we provided credit terms of up to 90 days to customers with good credit-worthiness as determined by our credit assessment. For sales of solar modules, which generally require a longer credit terms according to industry practice, credit terms of up to 180 days were granted to customers with good credit-worthiness. The failure of any of our new or existing customers to meet their payment obligations would deteriorate our working capital and materially and adversely affect our financial position, liquidity and results of operations.

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Furthermore, our products are components of solar power and energy systems, which are used in both on-grid applications and off-grid applications. Government agencies and the private sector have, from time to time, provided financing on preferential terms to promote the use of solar energy in both on-grid and off-grid applications. We believe that the availability and cost of such financing programs could have a significant effect on the level of sales of solar power products. If existing financing programs for on-grid and off-grid applications are eliminated or if financing in general become inaccessible or inadequate, the growth of the market for on-grid and off-grid applications may be materially and adversely affected, which could cause sales of our solar power products to decline significantly.

If there is a general reduction in available credit to would-be borrowers, customers may be unable or unwilling to finance the cost of our products, or parties that have historically provided this financing may cease to do so, or only do so on terms that are substantially less favorable for us or our customers. In addition, an increase in interest rates would likely increase the cost of financing to end users of our products and could reduce their profits and expected returns on investment in our products. A prolonged disruption in the ability of our significant customers or downstream players to access sources of liquidity could cause serious disruptions to or an overall deterioration in their businesses. This could lead to a significant reduction in their future orders for our products and cause their inability or failure to meet their payment obligations to us, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

# In light of our increased sales to customers outside China, we face risks associated with the marketing, distribution and sale of our products overseas, and if we are unable to effectively manage these risks, they could impair our ability to grow our business overall.

Historically, revenues from customers in China represented a significant portion of our overall revenues. Since 2010, in connection with our overseas marketing efforts as well as commercial manufacturing and selling of solar modules, we have substantially increased the portion of our products sold to customers outside China. Our revenues from customers outside China increased from 54.1% in 2012 to 58.2% in 2013 and to 66.9% in 2014. The stability and viability of any existing, new or potential overseas markets are subject to many uncertainties and may expose us to a number of risks, including:

• trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could increase the prices of our products and make us less competitive in some countries;

- fluctuations in currency exchange rates;
- difficulty in engaging and retaining distributors who are knowledgeable about, and can function effectively in, overseas markets;

• increased costs associated with maintaining the ability to understand local markets and follow their trends, as well as develop and maintain effective marketing and distribution presence in various countries;

increased costs associated with providing customer service and support in these markets;

• difficulty and costs relating to compliance with the different commercial and legal requirements of the overseas markets in which we offer our products;

- failure to develop appropriate risk management and internal control structures tailored to overseas operations;
- failure to obtain or maintain certifications for our products in these markets; and
- failure to obtain, maintain or enforce intellectual property rights.

If we are unable to effectively manage these risks, we may not be able to successfully grow our business as we have planned.

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#### Increases in electricity costs or a shortage or disruption in electricity supply may adversely affect our business.

We consume a significant amount of electricity in our operations. Electricity prices in China have increased in the past few years and are expected to continue to increase in the future. As a result, our electricity costs may become substantially higher than our competitors, which could diminish our competitive advantage and adversely affect our business, financial condition and results of operations. Moreover, with the rapid development of the PRC economy, demand for electricity has continued to increase. There have been shortages or disruptions in electricity supply in various regions across China, especially during peak seasons, such as the summer, or when there are severe weather conditions. We cannot assure you that there will not be any disruptions or shortages in our electricity supply or that there will be sufficient electricity available to us to meet our future requirements. Increases in electricity costs and shortages or disruptions in electricity supply may significantly disrupt our normal operations, cause us to incur additional costs and adversely affect our profitability.

# Decrease of oil price may reduce demand for investment in alternative energy, which may have a negative impact on the deployment of renewable energy and in turn have a negative impact on companies in the renewable energy industry, including us.

The oil price has dropped significantly since June 2014, which may reduce demand for investment in alternative energy. Historically, high oil price is one of the key drivers for renewable energy, with the decline of oil prices, the deployment of renewable energy may be affected and projects in the renewable energy may be delayed or even derailed. There are different voices on whether renewable energy will be affected and the extent of such impact, although companies in the renewable energy well not be adversely affected, and if affected, the impact will be minimal. If the renewable energy sector is adversely affected in general, our business and results of operations will also be adversely affected to some extent.

# Difficulties in identifying, consummating and integrating acquisitions and alliances and potential write-offs in connection with our investment or acquisitions may have a material and adverse effect on our business and results of operations.

As part of our growth strategy, we have acquired, and may in the future acquire, companies that are complementary to our business. From time to time, we may also make alternative investments and enter into strategic partnerships or alliances as we see fit. For instance, in January 2013, we completed the acquisition of 65% of the equity interests in Ningjin Songgong as a part of prepayment settlement arrangement with M.SETEK. In January 2014, we entered into a joint venture agreement with Powerway PV SA (Pty), Ltd, or PWSA, to establish JA Powerway South Africa (Proprietary) Limited, or JA South Africa, a solar module manufacturing facility in Port Elizabeth, South Africa, in which we hold 65% of the equity interests. Past and future acquisitions, partnerships or alliances may expose us to potential risks, including risks related to:

- the integration of new operations and the retention of customers and personnel;
- the potential write-offs in connection with acquisitions;

unforeseen or hidden liabilities;

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- the diversion of resources from our existing business and technology;
- failure to achieve synergies with our existing business as anticipated and generate revenues as anticipated;
- failure of the newly acquired business, technologies, services and products to perform as anticipated;
- inability to generate sufficient revenue to offset additional costs and expenses;
- breach or termination of key agreements by the counterparties;
- the costs of acquisitions; or

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• the potential loss of or harm to relationships with our employees, customers or suppliers resulting from our integration of new businesses.

Any of the potential risks listed above could have a material and adverse effect on our ability to manage our business and our results of operations.

#### Our business is subject to the risks associated with international operations.

As part of our business development plan, we have expanded our business to the overseas markets, including the United States, Germany, Japan and South Africa. We also plans to continue expanding our business to the overseas market. For example, we plan to set up a new cell manufacturing factory in Malaysia, which is expected to operate in the fourth quarter of 2015. Expanding our business internationally exposes us to a number of risks, including:

- fluctuations in currency exchange rates;
- our ability to select the appropriate geographical regions for international expansion;
- difficulty in identifying appropriate partners and establishing and maintaining good cooperative relationships with them;
- difficulty in understanding local markets and culture;
- failure to complete construction of our overseas facilities as planned; and
- increased costs associated with doing business in foreign jurisdictions.

Our financial condition and operating results also could be significantly affected by these and other risks associated with international activities. Furthermore, we have implemented policies and procedures designed to facilitate compliance with laws and regulations in foreign jurisdictions applicable to us, but there can be no assurance that our employees, contractors, or agents will not violate such laws and regulations or our policies. Any such violations could individually or in the aggregate materially and adversely affect our financial condition or operating results.

We have expanded our business into upstream and downstream markets for a relatively short period of time and plan to continue implementing our integration strategy. Any failure to successfully implement this strategy could have a material adverse effect on our growth, results of operations and business prospects.

We have expanded into upstream and downstream markets, such as silicon wafer and solar module businesses since the fourth quarter of 2009, engineering, procurement and construction services, or EPC services, since the third quarter of 2011, and the project development business since 2013. Our ability to successfully implement our upstream and downstream business integration is subject to various risks and uncertainties, including:

- our short history in the new businesses;
- our possible lack of competitiveness in product quality and cost structure in the new businesses;
- the need for additional capital to finance our new business operations, which may not be available on reasonable terms or at all;
- the need to recruit additional skilled employees, including technicians and managers at different levels;

• the need to grant longer credit terms to our customers and to maintain a higher level of inventory, resulting in longer cash conversion cycles compared with our traditional solar cell business;

• the need to expand warranty liabilities associated with the solar module business, with the warranty period for solar modules lasting for 10 to 25 years;

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• the need to accrue warranty from sales of solar modules, which may not be adequate and we may have to incur substantial expense to repair or replace defective solar modules in the future;

• the nature of the business model and key success factors of our EPC service, which are significantly different from those of our traditional business in solar power product manufacturing;

- potential conflict with our customers as a result of our direct competition with them in the solar module and EPC businesses; and
- new risks associated with the EPC service and project development businesses yet to be fully understood by the industry and market.

If we are unable to effectively manage these risks, we may not be able to successfully operate these new businesses and achieve the expected value of vertical business integration.

In addition, the expansion into the solar module market has resulted in substantial changes to our business, including, among others, the change of our customer base and product mix. Our customer base has evolved from primarily module manufacturers and distributors to include system integrators and solar power project developers. We have limited experience managing relationships with these new customers. The expansion to project development business has also exposed us to risks related to the development and construction of solar power plants, such as risks related to (i) receipt of or delays in obtaining land rights and related permits and other required governmental permits and approvals; (ii) unforeseen engineering problems; (iii) potential challenges from local residents, environmental organizations and others who may not support the project; and (iv) grid connection and curtailment issues. We may not be able to manage our business growth strategy as planned and our results of operations may be adversely affected.

# We may encounter various risks and uncertainties in our project development business, all of which could increase our costs, delay or cancel a project, and have a material adverse effect on our results of operations and business prospects.

The project development business involves various risks and uncertainties. We may be required to invest significant amounts of capital for land and interconnection rights, preliminary engineering, licenses and permits, legal and other expenses before we can determine whether a project is feasible. Developing and completing a particular project face various risks and uncertainties, including without limitation to the following:

• failure to identify suitable sites in a timely manner;

• failure to secure and receive required governmental permits, licenses and approvals, such as land use rights, construction permits and approvals, as well as satisfactory environmental assessments;

- potential challenges from local residents, environmental organizations, and others who may not support the project;
- failure to obtain construction financing, including debt, equity and tax credits;
- failure to receive rights to interconnect to the electric grid;
- curtailment by utilities or grid operating companies;
- unable to pay interconnection and other deposits (some of which are non-refundable);
- failure to negotiate satisfactory EPC agreements;

• unforeseen engineering problems; construction delays; subsurface land conditions; cost over-runs; shortage of labor, equipment and materials supply;

• disruptions (including labor strikes);

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• additional complexities when conducting project development or construction activities in foreign jurisdictions, including operating in accordance with the U.S. Foreign Corrupt Practices Act and applicable local laws and customs; and

force majeure events, including adverse weather conditions and other events out of our control.

If we fail to address the above risks and uncertainties, our costs may be increased and construction of our projects may be delayed or even cancelled; therefore, our financial condition, results of operations and growth prospects may be materially and adversely affected.

# Lack of transmission capacity availability and other system constraints could significantly impact our ability to build solar power plants and generate revenue from electricity generation or project sales.

In order to deliver electricity, the solar power plants need to connect to the transmission grid. The lack of available capacity on the transmission grid could substantially impact our projects and cause reductions in project size, delays in project implementation, increases in costs from transmission upgrades and potential forfeiture of deposits that we may have made with respect to a given project. These transmission issues, issues relating to the availability of large systems such as transformers and switch gear as well as grid curtailment, could significantly impact our ability to build solar power plants, connect them to the grid, successfully complete customer acceptance testing, and receive payment for such solar power plants. These issues could also materially and adversely impact our sales price to project purchasers for solar power plants.

# Curtailment of power purchases by the grid could significantly impact our project sales price and our ability to generate revenue from electricity generation.

Due to various reasons, such as mismatch between output and demand of power and the grid s dispatch among different sources of energy within its network, the electricity generated by our solar power plants may be prevented from feeding into the grid even if our solar power plants are connected to the transmission grid. Grid curtailment exists in both China and foreign countries, such as Japan. Grid curtailment also varies among different regions in China, but mainly occurring in China s northwest regions, such as Qinghai and Gansu provinces. As a result, our project sales price could be materially and adversely effected, the electricity that has already been generated will be wasted and we will not generate revenue from electricity generation, we may also be forced to reduce our output, all of which will significantly affect our results of operations.

# We may be required to make significant upfront investment prior to commencing construction of solar power projects, which could adversely affect our business and results of operations.

It may take many months or years before our solar power plant development cycles can mature. As a result, we may be required to invest significant amounts of capital for land and interconnection rights, preliminary engineering, licenses and permits, legal and other expenses in advance of commencing construction, and the receipt of any revenue, much of which is not recognized for several additional months following contract signing.

Furthermore, we may not be able to simultaneously fund our other business operations and these system investments through our long project development cycles. Our liquidity may be adversely affected to the extent the project sales market weakens or we are not able to successfully complete the customer acceptance testing due to various reasons, such as technical difficulties, equipment failure, or adverse weather, and we are unable to sell our solar projects at prices and on terms and timing that are acceptable to us. Accordingly, our business and results of operations may be materially and adversely affected.

# We rely on local grid companies for grid connection and grid companies may not have adequate transmission capacity or may be unwilling to purchase and transmit electricity generated by our solar power plants.

We have developed a solar power plant in Dunhuang, Gansu province, which started production in 2015. Once our power plant commences production, we must obtain consents from local grid companies to connect our solar power plants to their power grids before constructing an on-grid integrated solar system. Such consent depends on a number of external factors, including the availability of existing grids with adequate transmission capacity, progress of grid construction or system upgrades, the distance between our preferred sites and the local grids, and the costs of additional interconnection facilities. Many of these factors are beyond our control. We may not be able to obtain all necessary consents for our new solar power system integration projects in a timely manner, or at all. In addition, even if we are able to get the consents from local grid companies and connect our solar power grids, we may experience delays in receiving payments and applicable subsidies, which are not directly paid to us.

Further, under the current regulatory framework in the PRC, grid companies generally must purchase and dispatch all electricity generated by renewable energy producers within the coverage of their grids. Solar power stations with grid connection voltage of not more than 10 Kilovolts and installation capacity of not more than 6 MW are all allowed to apply for connection to large grid, with State Grid Corporation of China offering free connection service throughout the entire process. In case of PV power generation projects connected to public grids, grid companies are responsible for investment and construction of the connection projects and related modification of public grids, and for PV power generation projects connected to users end through the public grid, grid companies are responsible for investment and construction of the connection grid companies are responsible for investment and construction of the public grid, grid companies are responsible for investment and construction of public grids, modification related to the connection. However, we cannot assure you that local grid companies will comply with these obligations at all times or at all. In addition, solar power plants and other renewable energy facilities of our competitors located near our solar power system integration projects may compete with us to secure grid connections. Grid companies may not have adequate transmission capacity or may be unwilling to purchase and transmit electricity generated by our solar power plants. We may not be able to dispatch electricity when our solar power system integration projects commence operations, which could have a material adverse effect on our revenue and results of operations.

Prepayment arrangements for procurement of silicon wafers and/or polysilicon from our major suppliers expose us to the credit risks of such suppliers and may also significantly increase our costs and expenses, either of which could in turn have a material adverse effect on our financial condition, results of operations and liquidity.

We face significant specific counterparty risk under long-term supply contracts when dealing with suppliers without a long, stable production and financial history. We make prepayments to these suppliers for procurement of polysilicon, ingots or wafers without receiving collateral to secure such payments. In the event any such supplier experiences financial difficulties, or even bankruptcy, it may be difficult or impossible, or may require substantial time and expenses, for us to recover any or all of our prepayments.

For example, in 2011, one of our long-term suppliers failed to deliver silicon wafers pursuant to the applicable contracts, and we recorded a provision of prepayment and other payment due totaling RMB42.2 million. We reached a settlement with such supplier in August 2013, under which such supplier agreed to pay us RMB21 million and we finally recovered RMB6,351,200 (US\$1.0 million) in September 2014 pursuant to a court allocation plan. In March 2011, M.SETEK, historically one of our major suppliers, failed to make majority of its scheduled delivery after a magnitude-9 earthquake struck Japan and triggered a tsunami affecting vast areas in Japan. As a result, we entered into a framework agreement with M.SETEK in March 2012 for the repayment of prepayment amounts made by us to M.SETEK, under which (i) M.SETEK will use the dividends distributed by Ningjin Songgong, which was 65% owned by M.SETEK prior to the transfer to us, to repay part of prepayments, (ii) M.SETEK will transfer its 65% equity interests in Ningjin Songgong to us to offset part of the remaining unpaid prepayments, and (iii) M.SETEK will continue to deliver polysilicon to fully utilize the remaining unpaid prepayments, if any. The share transfer agreement was signed on July 23, 2012 and the share transfer was completed in January 2013.

These efforts incurred legal expenses and distracted our management. In addition, legal actions are required to recover our prepayments. Our claims for prepayments would rank as unsecured claims, which expose us to the credit risks of our suppliers in the case of an insolvency or bankruptcy of such suppliers. Under such circumstances, our claims against the suppliers would rank below those of secured creditors, which would undermine our chances of obtaining the return of the prepayments. Accordingly, if a supplier to which we make prepayment defaults on its obligations under a supply contract, we may not be able to recover all or a portion of our outstanding prepayment, which may have a material adverse effect on our financial condition, results of operations and liquidity.

# Our ability to adjust our raw materials costs may be limited as a result of our entering into long-term supply agreements with many of our polysilicon and silicon wafer suppliers, and it may be difficult for us to respond in a timely manner to rapidly changing market conditions, which could materially and adversely affect our cost of revenues and profitability.

In order to secure adequate and timely supply of polysilicon and silicon wafers, we entered into a number of long-term supply agreements for polysilicon, ingots and wafers with a limited number of suppliers, including Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. (an affiliate of GCL-Poly Energy Holdings Limited), or GCL, OCI, Wacker, Jinglong Group and Hemlock Semiconductor Pte. Ltd., or Hemlock. Some agreements provide for fixed pricing or pricing adjustable within a relatively small range of plus or minus 5% to 10%, substantial prepayment obligations, and/or firm purchase commitments that require us to pay for the supply whether or not we accept delivery. The prices of polysilicon and silicon wafers declined in the second half of 2008, increased since the second half of 2010 but declined again in 2011 and 2012. In 2013 and 2014, polysilicon prices stabilized as market conditions improved. In this regard, we have renegotiated the unit price and volume terms of many of our long-term supply agreements and have entered into amendments for many of them, but cannot always adjust terms to fully take advantage of market changes. In view of the significant volatility of the polysilicon prices during the past few years, we plan to continue to renegotiate the unit price and volume terms of our long-term supply agreements, but if prices of polysilicon or silicon wafers we pay to our suppliers continue to be higher than the market prices after such re-negotiations, we may be placed at a competitive disadvantage versus our competitors, and our cost of revenues as well as profitability would be materially and adversely affected. In addition, if demand for our solar power products decreases and such agreements require us to purchase more raw materials than required to meet our demand, we may incur costs associated with carrying excess inventory, which may have a material adverse effect on our cash flow. To the extent we are not able to pass these increased costs to our customers, our business and results of

We entered into a long-term polysilicon supply contract with one of our suppliers in March 2011 and the agreement is structured as fixed price and quantity take or pay arrangement from 2013 to 2020. Under the long-term supply contract, we are required to make the advance payments and purchase a contracted minimum volume of polysilicon at predetermined fixed prices and in accordance with a pre-determined schedule, commencing January 1, 2013. Due to significant decrease of silicon price in the market and uncertainties brought by high anti-dumping and anti-subsidy tariff imposed after the supply contract was signed, we believe performance of the contract is commercially unreasonable and therefore, we did not make full advance payment and accept any delivery in 2013 and 2014. On March 31, 2015, such supplier gave notice to us to terminate the long-term polysilicon supply contract with immediate effect. Such supplier stated that the reason for the termination was an alleged breach of the supply contract by us and demanded that we pay US\$921 million, which comprised of the remaining advance prepayments, take-or-pay for the period from 2013 to 2020 and the financial penalty for the late payments till March 31, 2015. We are still in the process of

renegotiating with such supplier on various terms. However, our efforts to renegotiate with such supplier may not be successful. We have assessed whether there would be loss on firm purchase commitments by applying a methodology similar to that used in the lower of cost or market evaluation with respect to inventory, and concluded that no loss provision under the supply contract with the suppler is required as of December 31, 2013 and 2014. As of December 31, 2014, full provision of RMB63.3 million (US\$10.2 million) was however provided against the prepayment made to such supplier under the long-term supply contract in light of the circumstance. At this point, we assessed the loss is reasonably possible, however, the outcome cannot be reasonably estimated because the negotiations are ongoing within a wide range of possible outcomes. In the event we are unable to reach an agreement with the negotiations, we may be subject to lawsuit or other forms of dispute resolutions and be exposed to potential judgment of damages, which may have a material and adverse effect on our business, financial condition, results of operations and prospects.

Furthermore, we may choose not to procure polysilicon, ingots or wafers under certain contracts if we deem the prices under such contracts are unfavorable to us under prevailing market conditions and/ or we are unable to renegotiate the price or volume terms to our satisfaction. In the event we choose not to procure polysilicon, ingots or wafers under these contracts, we may be forced to forfeit certain prepayment amounts to, and face contractual damage claims from, these suppliers if no mutual agreement can be reached. We cannot assure you that the outcome of any such potential litigation would be in our favor. Such litigation may be costly and may divert management attention and other resources away from our business and could materially and adversely affect our reputation, business, financial condition, results of operations and prospects.

## Disposal of outdated production lines can result in an increased impairment on property, plant and equipment, which may have a negative impact on our results of operations.

In the fourth quarter of 2012, we retired some outdated production lines of solar cells and solar modules in each of our facilities in Ningjin, Hebei and Fengxian, Shanghai. We recorded impairment loss for property, plant and equipment of RMB147.1 million related to the retirement of such production lines in 2012, accounting for 2.2% of our total revenues in 2012. With our business development, we may introduce new manufacturing equipment with higher production efficiency rates to replace old manufacturing equipment or we may eliminate outdated production capacity from time to time. If we continue to retire outdated production lines or replace outdated manufacturing equipment in the future, we may incur increased impairment loss on property, plant and equipment, which may have a negative impact on our results of operations.

# We may require a significant amount of cash to fund our future capital expenditure requirements and working capital needs; if we cannot obtain additional sources of liquidity when we need it, our growth prospects and future profitability may be materially and adversely affected.

We expect that we will need a significant amount of cash to fund our future capital expenditures. Besides capital expenditures, we have significant working capital commitments because suppliers of silicon wafers and polysilicon usually require us to make prepayments in advance of shipments. Future acquisitions, market changes or other developments may also cause us to require additional funds. Historically, we have relied on equity and debt offerings, borrowings and operating cash flow to finance our capital expenditure and working capital requirements. If we cannot generate sufficient operating cash flow to fund our capital expenditure and working capital needs, we may seek to sell additional equity or debt securities or borrow from lending institutions, which may not be available when needed. Our existing borrowings may decrease if our existing loans are cancelled or not renewed. Since the end of 2013, approximately RMB868.5 million (US\$140.0 million) of our borrowings matured and were not extended or renewed. See Risk Factors Risks Related to Our Business and Industry We have substantial indebtedness and may incur substantial additional indebtedness in the future, which could adversely affect our financial health and our ability to generate sufficient cash to satisfy our outstanding and future debt obligations.

In addition, we historically required our customers to make prepayments to us to help us reduce the amount of funds that we need to finance our working capital requirements. The balance of prepayments we received from our customers increased from RMB76.9 million as of December 31, 2012 to RMB202.7 million as of December 31, 2013 and to RMB244.0 million (US\$39.3 million) as of December 31, 2014 as the market slowly recovered.

Therefore, we expect that we may need to obtain additional financing to meet our working capital requirements. Our ability to obtain external financing is subject to a number of uncertainties, including:

our future financial condition, results of operations and cash flows;

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- the state of global credit markets;
- general market conditions for financing activities by companies in our industry; and
- economic, political and other conditions in China and elsewhere.

If we are unable to obtain funding in a timely manner or on commercially acceptable terms, or at all, our growth prospects and future profitability may be materially and adversely affected. In addition, the sale of additional equity securities, including convertible debt securities, would dilute our existing shareholders. The incurrence of debt would result in increased interest rate risk, divert cash for working capital and capital expenditures to service debt obligations and could result in operating and financial covenants that restrict our operations and our ability to pay dividends to our shareholders, if any. A shortage of such funds could in turn impose limitations on our ability to plan for, or react effectively to, changing market conditions or to expand through organic and acquisitive growth, thereby reducing our competitiveness.

We have substantial indebtedness and may incur substantial additional indebtedness in the future, which could adversely affect our financial health and our ability to generate sufficient cash to satisfy our outstanding and future debt obligations.

As of December 31, 2014, our total short-term borrowings and long-term borrowings (current portions) were RMB2.3 billion (US\$366.7 million), and our total long-term borrowings (excluding current portions) were RMB1.9 billion (US\$306.6 million), among which RMB22 million (US\$3.5 million) were due in one year.

Our substantial indebtedness could have important consequences to you. For example, it could:

- limit our ability to satisfy our obligations under our debt;
- increase our vulnerability to adverse general economic and industry conditions;

• require us to dedicate a substantial portion of our cash flow from operations to servicing and repaying our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures and other general corporate purposes;

• limit our flexibility in planning for or reacting to changes in our businesses and the industry in which we operate;

place us at a competitive disadvantage compared to our competitors that have less debt;

• limit, along with the financial and other restrictive covenants of our indebtedness, among other things, our ability to borrow additional funds; and

• increase the cost of additional financing.

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In the future, we may from time to time incur substantial additional indebtedness and contingent liabilities. If we incur additional debt, the risks that we face as a result of our already substantial indebtedness and leverage could intensify.

Our ability to generate sufficient cash to satisfy our outstanding and future debt obligations will depend upon our future operating performance, which will be affected by prevailing economic conditions and financial, business and other factors, many of which are beyond our control. Banks may lower our credit lines or reject our loan applications, and we cannot assure you that our existing credit facilities will not be cancelled, or will be renewed in the future on reasonable commercial terms or at all. As a result, we may not generate or obtain sufficient cash flow to meet our anticipated operating expenses and to service our debt obligation as they become due. If we are unable to service our indebtedness, we will be forced to adopt an alternative strategy that may include actions such as reducing or delaying capital expenditures, selling assets, restructuring or refinancing our indebtedness or seeking equity capital. These strategies may not be instituted on satisfactory terms, if at all.

# Our efforts to further develop our technology and know-how through increased research and development of crystalline silicon technology may not yield satisfactory results, if any.

The solar power industry is rapidly evolving and becoming more competitive. We will need to invest significant financial resources in research and development to keep pace with technological advances in the solar power industry and to effectively compete in the future. We have expended and may continue to expend significant financial resources in research and development of crystalline silicon and commercialization of new technologies to effectively compete with other market players in the future. However, research and development activities are inherently uncertain, and we might encounter practical difficulties in commercializing our research results. A variety of competing PV technologies that other companies may develop could prove to be more cost-effective and have better performance than solar power products that we develop. Therefore, our development efforts may be rendered obsolete by the technological advances of others.

Breakthroughs in PV technologies that do not use crystalline silicon could mean that companies such as us that rely entirely on crystalline silicon would encounter a sudden, sharp drop in sales. One of the alternative technologies in the production of solar cells is thin film technology. The use of thin film technology in the production of solar cells would significantly reduce the consumption of silicon materials and manufacturing costs. New developments in commercialization of thin film technology may render our existing technologies obsolete and our products uncompetitive, which would result in loss in our profitability and market share and could materially and adversely affect our business, financial condition and results of operations.

#### A small number of our customers account for a significant portion of our revenues.

A significant portion of our revenues is derived from a small number of customers. Our three largest customers for the three years ended December 31, 2012, 2013 and 2014 accounted for 12.9%, 28.6% and 39.1%, respectively, of our total revenues. There is no individual customer accounting for 10% or more of our total revenues for the years ended December 31, 2012. For the years ended December 31, 2013 and 2014, there is one customer located in Japan accounting for 18.6% and 28.8% of our total revenues, respectively.

Our results of operations and financial condition will continue to depend on, among others, the following:

- our ability to continue to obtain orders from these customers;
- the financial condition and success of these customers; and
- the commercial success of our customers products which incorporate our solar power products.

Our ability to maintain close relationships with these key customers is essential to our strategies and to the ongoing growth of our business. We cannot guarantee that we will be able to retain any of our largest customers or any other customers. We have in the past been, and may in the future be, requested to reduce prices, and in an industry downturn, order cancellations may be expected. Any material delay, cancellation or reduction of orders from our major customers could cause our net sales to decline significantly and, in any such event, our results of operations may be materially and adversely affected.

Our results of operations and financial condition also depend on the financial condition and commercial success of these customers. If one or more of our customers were to become insolvent or otherwise were unable to pay for the services provided or products supplied by us, this could have a material adverse effect on our business, financial condition, results of operations and future prospects.

#### Cancellation of customer orders could cause our operating results to fluctuate.

We have signed long-term sales arrangements with certain customers and required them to make prepayments. However, even though we charge a prepayment under many contracts, our customers may still cancel or reschedule purchase orders with us on relatively short notice. Cancellations or rescheduling of customer orders could result in delay or loss of anticipated sales without allowing us sufficient time to reduce, or delay the incurrence of, our corresponding inventory and operating expenses. In addition, changes in forecasts or the timing of orders from these or other customers expose us to the risks of inventory shortages or excess inventory. These circumstances, in addition to variations in average selling prices, and the fact that our supply agreements are generally long-term in nature and many of our other operating costs are fixed, in turn could cause our operating results to fluctuate and may result in a material adverse effect in our business.

#### We may be subject to non-competition or other similar restrictions or arrangements relating our business.

We may from time to time enter into non-competition, exclusivity or other restrictions or arrangements of a similar nature as part of our sales agreements with our customers. Such restrictions or arrangements may significantly hinder our ability to sell additional products, or enter into sales agreements with new or existing customers that plan to sell our products, in certain markets. As a result, such restrictions or arrangements may have a material adverse effect on our business, financial condition and results of operations.

#### We compete in a highly competitive market and many of our competitors have greater resources.

The solar power market is intensely competitive and rapidly evolving. We expect to face increased competition, which may result in price reductions, reduced margins or loss of market share. Although we have expanded into silicon wafer manufacturing and solar module business since the fourth quarter of 2009, some of our competitors have become vertically integrated for a longer period of time than us. We expect to compete with future entrants to the PV market that offer new technological solutions. Furthermore, many of our competitors are developing or currently producing products based on new PV technologies, including thin film, ribbon, sheet and nano technologies, which they believe will ultimately cost the same as or less than crystalline silicon technologies used by us. In addition, the entire PV industry also faces competition from conventional and non-solar renewable energy technologies. Due to the relatively high manufacturing costs compared to many other energy sources, solar energy is generally not competitive without government incentive programs.

Many of our existing and potential competitors have substantially greater financial, technical, manufacturing and other resources than we do. Our competitors greater size and longer operating history in some cases provide them with a competitive advantage with respect to manufacturing costs because of their economies of scale and their ability to purchase raw materials at lower prices. Many of our competitors also have greater brand name recognition, more established distribution networks and larger customer bases. In addition, many of our competitors have well-established relationships with our existing and potential customers and have extensive knowledge of our target markets. As a result, they may be able to devote greater resources to the research, development, promotion and sale of their products and respond more quickly to evolving industry standards and changes in market conditions. Our failure to adapt to changing market conditions and to compete successfully with existing or new competitors may materially and adversely affect our financial condition, results of operations and business prospects.

#### We obtain certain manufacturing equipment from sole or a limited number of suppliers and if such equipment is damaged or otherwise unavailable, our ability to deliver products on time will suffer, which in turn could result in order cancellations and loss of revenue.

Some of our equipment used in the manufacture of our solar power products has been developed and made specifically for us, is not readily available from alternative vendors and would be difficult to repair or replace if it were to become damaged or stop working. In addition, we obtain some equipment from sole or a limited number of suppliers. If any of these suppliers were to experience financial difficulties or go out of business, or if there were any damage to or a breakdown of our manufacturing equipment at a time when we are manufacturing commercial quantities of our products, our business would suffer. In addition, a supplier s failure to supply our ordered equipment in a timely manner, with adequate quality and on terms acceptable to us, could delay and otherwise disrupt our production schedule or increase our costs of production.

Problems with product quality or product performance may cause us to incur warranty expenses, damage our market reputation and prevent us from achieving increased sales and market share, or result in a decrease in our revenues and market share.

Our solar power products may contain defects that are not detected until after they are shipped or installed. These defects could cause us to incur significant re-engineering costs, divert the attention of our engineering personnel from product development efforts, lead to returns of, or requests to return our products and significantly affect our customer relations and business reputation. If we deliver solar power products with errors or defects, or if there is a perception that our solar power products contain errors or defects, our credibility and the market acceptance and sales of our products could be harmed.

With respect to our solar module business, in 2011, we extended our product warranty period from five years to ten years, warranting that the modules will be free from defects in materials and workmanship from the time of delivery. Starting from the third quarter of 2012, we began to provide a 25-year linear performance warranty against declines of power generation capacity from the time of delivery. As a result of these warranties, we bear the risk of extensive warranty claims long after we have sold our products and recognized revenues. We therefore, in accordance with our own history, industry data and industry practices, accrue 1% of our net revenues from sales of solar modules as general warranty costs and also separately accrue specific warranty costs to cover potential liabilities that could arise from customer claims base on an individual assessment. However, such warranty cost accruals may not be adequate. Starting from 2012, we also began to work with PowerGuard Specialty Insurance Services to provide a range of long-term insurance and warranty-related coverage for our products. Because we only started to manufacture and sell solar modules in the fourth quarter of 2009, which have been in use for only a relatively short period, we cannot assure you that our assumptions regarding the durability and reliability of our products are reasonable. Our warranty provisions and insurance coverage may be inadequate, and we may have to incur substantial expense to repair or replace defective products in the future.

### Our failure to maintain sufficient collateral under certain mortgage contracts for our loans may materially and adversely affect our financial condition and results of operations.

From time to time, we may enter into bank loans secured by our real property or other assets. For example, as of December 31, 2014, our long-term borrowings of RMB114 million (US\$18.4 million) with Agricultural Bank of China were secured by certain of our buildings and land use right in Shanghai Jinglong Solar Technology Co., Ltd., or Shanghai Jinglong. In January 2014, we renewed an entrustment loan of RMB1.4 billion (US\$232.1 million) with Hefei High-Tech Industrial Development Zone Management Co., Ltd., which is secured by buildings, machinery and equipment, construction in progress and land use rights owned by JA Hefei Technology and all our equity interests in JA Hefei Technology. Our short-term entrustment loan of RMB40.0 million (US\$6.4 million) with Shanghai Pudong Development Bank was secured by buildings and land use right in JA Lianyungang. Our short-term borrowings of RMB140.0 million (RMB22.6 million) were secured by certain of our buildings in Shanghai JA Solar PV Technology Co., Ltd. We cannot assure you that we will not be requested by the mortgagees to provide additional collateral to bring the value of the collateral to the level required by the mortgagees. If we fail to provide additional collateral, the mortgagees will be entitled to require the immediate repayment by us of the outstanding loans, otherwise, the mortgagees may auction or sell our mortgaged assets and negotiate with us to apply the proceeds from the auction or sale to the repayment of the underlying borrowings. Furthermore, we may be subject to liquidated damages pursuant to relevant mortgage contracts. If any of the foregoing occurs, our financial condition and results of operations may be materially and adversely affected.

If we fail to adequately protect our intellectual property rights, our business and results of operations could be materially and adversely affected.

Given the importance of intellectual property to our business, we rely primarily on a combination of patent, trademark, trade secret and copyright, as well as employee and third party confidentiality agreements to safeguard our intellectual property. As of the date of this annual report, we had a total of 203 issued patents and 102 pending patent applications in China. However, we cannot assure you that the steps which we have taken will be sufficient to protect our intellectual property rights or that third parties would not infringe upon or misappropriate any such rights. Moreover, it is costly to litigate in order to protect any of our intellectual property rights. If we are unable to prevent third parties from infringing or misappropriating these rights in our self-owned products, the future financial condition and the ability to develop our business could be materially adversely affected.

# We may be exposed to infringement or misappropriation claims by third parties, which, if determined adversely to us, could cause us to lose significant rights and pay significant damage awards.

Our success also depends largely on our ability to use and develop our technology and know-how without infringing the intellectual property rights of third parties. Although we are not currently aware of any parties pursuing or intending to pursue infringement claims against us, we cannot assure you that we will not be subject to such claims in the future. Also, because patent applications in many jurisdictions are kept confidential for 18 months before they are published, we may be unaware of other persons pending patent applications that relate to our products or processes. Our suppliers may also become subject to infringement claims, which in turn could negatively impact our business as they may no longer be able to fulfill their delivery obligations under their contracts with us or refund our outstanding prepayments in a timely manner or at all. The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time consuming and may significantly divert the efforts and resources of our technical and management personnel. An adverse determination in any such litigation or proceedings to which we may become a party could subject us to significant liability to third parties, require us to seek licenses from third parties, to pay ongoing royalties, or to redesign our products or subject us to injunctions prohibiting the manufacture and sale of our products until resolution of such litigation. The occurrence of any of the foregoing could have a material adverse effect on our business, results of operations and financial condition.

# Our quarterly revenues and operating results may be difficult to predict and could fall below investor expectations, which could cause the market price of our ADSs to decline.

Our quarterly revenues and operating results have fluctuated in the past and may continue to fluctuate significantly depending upon numerous factors, including seasonality of demand for solar power products, changes in market conditions and industry environment, and changes in government policies or regulations. For example, purchases of solar power products tend to decrease due to severe weather conditions in winter months, which complicate the installation of solar power systems. Many of these factors are beyond our control, making our quarterly results difficult to predict, which could cause the trading price of our ADSs and the rule of our other securities to decline if our operating results for any particular quarter fall below investor expectations.

# Our senior management has worked together for a relatively short period of time, which may make it difficult for you to evaluate their effectiveness and ability to address challenges.

Due to recent changes to our management team, certain of our senior management and employees have worked together at our company for a relatively short period of time. For example, we have experienced turnover in our senior management ranks and hired or appointed a number of executive officers and senior management in the past few years. In light of the foregoing circumstances, it may be difficult for you to evaluate the effectiveness of our senior management and their ability to address future challenges to our business. Members of our senior management may not work together effectively as a team to manage our growth successfully, which may expose us to a higher risk of internal control deficiencies and result in us losing market share, business opportunity and revenues.

# The success of our business depends on the continuing efforts of our key personnel and our business may be severely disrupted if we lose their services.

Our future success depends, to a significant extent, on our ability to attract, train and retain qualified technical personnel, particularly those with expertise in the solar power industry. There is substantial competition for qualified technical personnel, and there can be no assurance that we will be able to attract or retain our qualified technical personnel. If we are unable to attract and retain qualified technical personnel, our business may be materially and adversely affected.

We rely heavily on the continued services of our executive officers. If one or more of our executive officers are unable or unwilling to continue in their present positions, we may not be able to replace them easily or at all. As a result, our business may be severely disrupted and we may incur additional expenses to recruit and retain new officers. In addition, if any of our executive officers joins a competitor or forms a competing company, we may lose some or all of our customers. We believe our future success will depend upon our ability to retain these key employees and our ability to attract and retain other skilled managerial, engineering and sales and marketing personnel. Each of our executive officers and other key personnel has entered into an employment agreement with us, which contains confidentiality and non-competition provisions. However, if any disputes arise between our employees and us, we cannot assure you, in light of uncertainties associated with the PRC legal system, the extent to which any of these agreements could be enforced in China, where some of our executive officers reside and hold some of their assets.

## As we have awarded and will continue to award employee share options and other share-based compensation to certain of our directors, officers, employees and consultants, our net income will be adversely affected.

As of March 31, 2015, we have granted options to purchase 23,299,000 ordinary shares and awarded 4,912,000 restricted share units to a number of our directors, employees and consultants, pursuant to our 2006 stock incentive plan, or 2006 Plan, and the 2014 stock incentive plan, or 2014 Plan. See Item 6. Directors, Senior Management and Employees B. Compensation Stock Option Plans.

In accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, Compensation-Stock Compensation, which requires all companies to recognize, as an expense, the fair value of share options and other share-based compensation to employees, we are required to account for compensation costs for all restricted share units and share options granted to our directors, employees and consultants using a fair-value based method and recognize expenses in our consolidated statement of operations and comprehensive income/(loss) in accordance with the relevant rules under U.S. GAAP. Our share-based compensation expenses have a material and adverse effect on our reported earnings for the year during which the share-based compensation are granted and over their vesting periods.

Moreover, the additional expenses associated with administrating share-based compensation may reduce the attractiveness of such incentive plan to us. However, if we stop granting options, or reduce the number of options granted, under our stock incentive plan, we may not be able to attract and retain key personnel, as share options are an important employee recruitment and retention tool. In addition, the decline in the price of our ADSs representing our ordinary shares below the exercise price of many of the previously granted options has lessened the effectiveness of the options as a means to retain the services of the option holders. As a result, we have granted more stock options to certain individuals and will continue to grant employee share options or other share-based compensation in the future that may adversely affect our net income/(loss).

Change in the fair value of warrants issued by us to a single institutional investor in conjunction with our issuance of ordinary shares in August 2013 may have an material and adverse effect on our net income.

On August 14, 2013, we entered into a securities purchase agreement with a single institutional investor, or institutional investor, to issue 15,228,425 ordinary shares, US\$0.0001 par value per share, represented by 3,045,685 ADSs at a price of US\$7.88 per ADS, for an aggregate consideration of US\$24 million. The offering price is 94% of the volume-weighted average price of our ADSs on August 13, 2013 (i.e. US\$8.383 per ADS per Bloomberg on August 13, 2013). In conjunction with the ordinary share offering, we also issued to the institutional investor Series A-1 Warrant, Series A-2 Warrant, Series A-3 Warrant, and Series B Warrant to acquire up to 12,724,164 ordinary shares (or 2,544,833 ADSs), 12,724,164 ordinary shares (or 2,544,833 ADSs), 12,724,164 ordinary shares (or 10,179,332 ADSs), respectively. In November 2013, February 2014 and May 2014, Series A-1 Warrant, Series A-2 Warrant and

Series A-3 Warrant were exercised in full at the price of US\$9.43 per ADS.

The warrants are deemed legally detachable and separately exercisable from the ordinary shares and thus accounted for as a freestanding instrument in according with U.S. GAAP. As the warrants are denominated in U.S. dollar, yet our functional currency is RMB, warrants are not considered indexed to our own stock. Accordingly, the warrants are liability derivatives which need to be fair valued on day one and mark to market subsequently at the end of each reporting period, and the fair value gain or loss arising from the re-measurement may have a material and adverse effect on our net income/(loss).

#### There are potential conflicts of interest between us and our largest shareholder, Jinglong BVI.

Jinglong BVI, which is controlled by the shareholders of Hebei Jinglong, is our largest shareholder. In addition, Mr. Baofang Jin, the executive chairman of our board of directors and our chief executive officer, is a shareholder of Jinglong BVI and is also the chairman of Hebei Jinglong. Jinglong Group currently provides a number of products and services to us, including silicon wafer supply (on prepayment terms) and real property leases. Our transactions with Jinglong Group are governed by a number of contracts, the terms of which were negotiated at what we believe are on an arm s length basis. In November 2011, we also completed the acquisition of Silver Age Holdings Limited, or Silver Age, a British Virgin Islands company controlled by Jinglong BVI. However, the interest of Jinglong BVI may conflict with our own interest with respect to our transactions with Jinglong Group. As a result, we may have limited ability to negotiate with Jinglong Group. Imay be able to prevent us from taking actions to enforce or exercise our rights under the agreements we entered into with Jinglong Group. Furthermore, we cannot assure you that our transactions with Jinglong Group will always be concluded on terms favorable to us or maintained at the current level or at all in the future. As a result, when these situations arise, our financial condition, results of operations and implementation of strategy may be materially and adversely affected.

## We have limited insurance coverage and may incur significant losses resulting from operating hazards, product liability claims or business interruptions.

As with other solar power product manufacturers, our operations involve the use, handling, generation, processing, storage, transportation and disposal of hazardous materials, which may result in fires, explosions, spills and other unexpected or dangerous accidents causing personal injuries or death, property damages, environmental damages and business interruptions. Although we currently carry third-party liability insurance against property damages, these insurance policies are limited in scope and may not cover all claims relating to personal injury, property or environmental damage arising from accidents on our properties or relating to our operations. Any occurrence of these or other accidents in our operations that are not insured under our existing insurance policies could have a material adverse effect on our business, financial condition or results of operations.

In addition, the normal operation of our manufacturing facilities may be interrupted by accidents caused by operating hazards, power supply disruptions, equipment failures, as well as natural disasters. As the insurance industry in China is still in an early stage of development, business interruption insurance available in China offers limited coverage compared to that offered in many other countries, and we do not carry any business interruption insurance. Any business disruption or natural disaster could result in substantial costs and diversion of resources, and our business and results of operations may be materially and adversely affected.

We are also exposed to risks associated with product liability claims in the event that the use of the solar power products we sell results in injury. Because our solar products are generally incorporated into solar power devices to generate electricity, it is possible that users could be injured or even killed by the solar power devices incorporating our solar products, whether by product malfunctions, defects, improper installation or other causes. While we have not experienced any product liability claims brought against us, we are unable to predict whether such claims will be

brought against us in the future or the effect of any resulting adverse publicity on our business. Although we began purchasing product liability insurances in 2010, there is no assurance that our insurance policies will provide adequate coverage in the event of a successful product liability claim against us. If our product liability insurances are not adequate, the successful assertion of product liability claims against us could result in potentially significant monetary damages and require us to make significant payments.