

Canadian Solar Inc.
Form 20-F
April 20, 2016

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Form 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2015

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ **to** _____

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Date of event requiring this shell company report

Commission file number: 001-33107

CANADIAN SOLAR INC.

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Canada

(Jurisdiction of incorporation or organization)

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(Address of principal executive offices)

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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common shares with no par value	The NASDAQ Stock Market LLC (The NASDAQ Global Select Market)

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

None

(Title of Class)

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.

55,965,443 common shares issued and outstanding which were not subject to restrictions on voting, dividend rights and transferability, as of December 31, 2015.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

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. Yes No

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. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate 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 for such shorter period that the registrant was required to submit and post such files). Yes No

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 Accelerated filer Non-accelerated filer

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

International Financial Reporting Standards as issued by the International Accounting Standards Board Other

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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. Item 17 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). Yes 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. Yes No

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INTRODUCTION

Unless otherwise indicated, references in this annual report on Form 20-F to:

"CSI," "we," "us," "our company" and "our" are to Canadian Solar Inc., a Canadian company, its predecessor entities and its consolidated subsidiaries;

"\$," "US\$" and "U.S. dollars" are to the legal currency of the United States of America, or U.S.;

"RMB" and "Renminbi" are to the legal currency of China;

"C\$" and "Canadian dollars" are to the legal currency of Canada;

"€" and "Euro" are to the legal currency of the Economic and Monetary Union of the European Union;

"£" and "British pounds" are to the legal currency of the United Kingdom;

"¥," "JPY" and "Japanese yen" are to the legal currency of Japan;

"W," "kW," "MW" and "GW" are to watts, kilowatts, megawatts and gigawatts, respectively;

"AC" and "DC" are to alternating current and direct current, respectively;

"PV" is to photovoltaic. The photovoltaic effect is a process by which sunlight is converted into electricity;

"EPC" is to engineering, procurement and construction;

"O&M services" is to operation and maintenance services;

"shares" and "common shares" are to common shares, with no par value, of Canadian Solar Inc.;

"China" and the "PRC" are to the People's Republic of China, excluding, for the purposes of this annual report on Form 20-F, Taiwan and the special administrative regions of Hong Kong and Macau; and

"EU" refers to the European Union.

This annual report on Form 20-F includes our audited consolidated financial statements for the years ended December 31, 2013, 2014 and 2015 and as of December 31, 2014 and 2015.

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We use the noon buying rate in The City of New York for cable transfers in Renminbi, Euros, British pounds, Japanese yen and Canadian dollars per U.S. dollar as certified for customs purposes by the Federal Reserve Bank of New York to translate Renminbi, Euros, British pounds, Japanese yen and Canadian dollars to U.S. dollars not otherwise recorded in our consolidated financial statements and included elsewhere in this annual report. Unless otherwise stated, the translation of Renminbi, Euros, British pounds, Japanese yen and Canadian dollars into U.S. dollars was made by the noon buying rate in effect on December 31, 2015, which was RMB6.4778 to \$1.00, €0.9209 to \$1.00, £0.6782 to \$1.00, ¥120.27 to \$1.00 and C\$1.3839 to \$1.00. We make no representation that the Renminbi, Euro, British pounds, Japanese yen, Canadian dollar or U.S. dollar amounts referred to in this annual report on Form 20-F could have been or could be converted into U.S. dollars, Euros, British pounds, Japanese yen, Canadian dollars or Renminbi, as the case may be, at any particular rate or at all. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Fluctuations in exchange rates could adversely affect our business, including our financial condition and results of operations."

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FORWARD-LOOKING INFORMATION

This annual report on Form 20-F contains forward-looking statements that relate to future events, including our future operating results, our prospects and our future financial performance and condition, results of operations, business strategy and financial needs, all of which are largely based on our current expectations and projections. These forward-looking statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. You can identify these statements by terminology such as "may," "will," "expect," "anticipate," "future," "intend," "plan," "believe," "estimate," "is/are likely to" or similar expressions. Forward-looking statements involve inherent risks and uncertainties. These forward-looking statements include, among other things, statements relating to:

our expectations regarding the worldwide demand for electricity and the market for solar power;

our beliefs regarding the importance of environmentally friendly power generation;

our expectations regarding governmental support for solar power;

our beliefs regarding the rate at which solar power technologies will be adopted and the continued growth of the solar power industry;

our beliefs regarding the competitiveness of our solar power products and services;

our expectations with respect to increased revenue growth and improved profitability;

our expectations regarding the benefits to be derived from our supply chain management and vertical integration manufacturing strategy;

our ability to continue developing our in-house solar components production capabilities and our expectations regarding the timing and production capacity of our internal manufacturing programs;

our ability to secure adequate volumes of silicon, solar wafers and cells at competitive cost to support our solar module production;

our beliefs regarding the effects of environmental regulation;

our future business development, results of operations and financial condition;

competition from other manufacturers of solar power products and conventional energy suppliers;

our ability to expand our products and services and to successfully grow our energy development and electricity generation segments;

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our ability to develop, build and sell solar power projects in Canada, the U.S., Japan, China, Brazil, the United Kingdom and elsewhere; and

our beliefs with respect to the outcome of the investigations and litigation to which we are a party.

Known and unknown risks, uncertainties and other factors may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by forward-looking statements. See "Item 3. Key Information D. Risk Factors" for a discussion of some of the risk factors that may affect our business and results of operations. These risks are not exhaustive. Other sections of this annual report may include additional factors that could adversely influence our business and financial performance. Moreover, because we operate in an emerging and evolving industry, new risk factors may emerge from time to time. We cannot predict all risk factors, nor can we assess the impact of all or any of these factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those expressed or implied in any forward-looking statement. We do not undertake any obligation to update or revise the forward-looking statements except as required under applicable law.

Table of Contents**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*****Selected Consolidated Financial and Operating Data***

The following selected statement of operations data for the years ended December 31, 2013, 2014 and 2015 and balance sheet data as of December 31, 2014 and 2015 have been derived from our consolidated financial statements, which are included elsewhere in this annual report on Form 20-F. You should read the selected consolidated financial and operating data in conjunction with those financial statements and the related notes and "Item 5. Operating and Financial Review and Prospects" included elsewhere in this annual report on Form 20-F.

Our selected consolidated statement of operations data for the years ended December 31, 2011 and 2012 and our consolidated balance sheet data as of December 31, 2011, 2012 and 2013 were derived from our consolidated financial statements that are not included in this annual report.

All of our financial statements are prepared and presented in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. Our historical results are not necessarily indicative of results for any future periods.

	For the years ended, or as of, December 31,				
	2011	2012	2013	2014	2015
	(In thousands of \$, except share and per share data, and operating data and percentages)				
Statement of operations data:					
Net revenues	1,898,922	1,294,829	1,654,356	2,960,627	3,467,626
Income (loss) from operations	6,833	(142,516)	130,816	366,314	247,371
Net income (loss)	(90,903)	(195,155)	45,565	243,887	173,316
Net income (loss) attributable to Canadian Solar Inc.	(90,804)	(195,469)	31,659	239,502	171,861
Earnings (loss) per share, basic	(2.11)	(4.53)	0.68	4.40	3.08
Shares used in computation, basic	43,076,489	43,190,778	46,306,739	54,408,037	55,728,903
Earnings (loss) per share, diluted	(2.11)	(4.53)	0.63	4.11	2.93
Shares used in computation, diluted	43,076,489	43,190,778	50,388,284	59,354,615	60,426,056
Other financial data:					
Gross margin	9.6%	7.0%	16.7%	19.6%	16.6%
Operating margin	0.4%	(11.0)%	7.9%	12.4%	7.1%
Net margin	(4.8)%	(15.1)%	2.8%	8.2%	5.0%

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	For the years ended, or as of, December 31,				
	2011	2012	2013	2014	2015
	(In thousands of \$, except share and per share data, and operating data and percentages)				
Selected operating data:					
Solar power products sold (in MW)					
Module segment ⁽¹⁾	1,291.5	1,528.9	1,809.0	2,436.4	4,085.0
Energy development and electricity generation segments ⁽²⁾	31.0	14.2	85.0	376.2	298.8
Total	1,322.5	1,543.1	1,894.0	2,812.6	4,383.8
Average selling price (in \$ per watt)					
Solar module	1.34	0.77	0.67	0.67	0.58
Balance Sheet Data:					
Net current assets (liabilities)	59,131	(98,046)	(59,003)	366,621	(392,231)
Total assets	1,879,809	2,259,313	2,453,735	3,072,424	4,417,254
Net assets	466,978	301,583	401,498	729,574	832,510
Long-term borrowings	88,249	214,563	151,392	134,300	606,577
Convertible notes	950			150,000	150,000
Common shares	502,403	502,562	561,242	675,236	677,103
Number of shares outstanding	43,155,767	43,242,426	51,034,343	55,161,856	55,965,443

- (1) Numbers are calculated after inter-segmentation elimination and represent solar power products sold to third parties.
- (2) Numbers are calculated after inter-segmentation elimination.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors**Risks Related to Our Company and Our Industry**

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

Our business is affected by conditions in the solar power market and industry. In 2010, as the effects of the global financial crisis subsided, demand for solar power products increased and many manufacturers increased their production capacity accordingly. In 2011, a decrease in payments to solar power producers in the form of feed-in tariffs and other reimbursements, a reduction in available financing and an excess supply of solar modules worldwide put severe downward pressure on solar module prices in European and other markets. As a result, many solar power project developers, solar system installers and solar power product distributors that purchase solar power products, including solar modules from manufacturers like us, were adversely affected and their financial condition weakened. Although our shipments of solar modules increased year-over-year in 2013, 2014 and 2015, average selling prices for our solar modules declined. Over the past several quarters, oversupply conditions across the value chain, difficult economic conditions in Europe and foreign trade disputes in the U.S., Europe, India and

China have affected industry-wide demand and put pressure on average

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selling prices, resulting in lower revenue for many industry participants. If the supply of solar modules grows faster than demand, and if governments continue to reduce financial support for the solar industry and impose trade barriers, demand for our products, as well as our average selling price, could be materially and adversely affected.

The solar power market is still at a relatively early stage of development and future demand for solar power products and services is uncertain. Market data for the solar power industry is not as readily available as for more established industries, where trends are more reliably assessed from data gathered over a longer period of time. In addition, demand for solar power products and services in our targeted markets, including Europe, the U.S., Japan, China, Canada, Brazil and India may not develop or may develop to a lesser extent than we anticipate. Many factors may affect the viability of solar power technology and the demand for solar power products, including:

the cost-effectiveness, performance and reliability of solar power products and services, including our solar power projects, compared to conventional and other renewable energy sources and products and services;

the availability of government subsidies and incentives to support the development of the solar power industry;

the availability and cost of capital, including long-term debt and tax equity, for solar power projects;

the success of other alternative energy technologies, such as wind power, hydroelectric power, geothermal power and biomass fuel;

fluctuations in economic and market conditions that affect the viability of conventional and other renewable energy sources, such as increases or decreases in the prices of oil, gas and other fossil fuels;

capital expenditures by end users of solar power products and services, which tend to decrease when the economy slows; and

the availability of favorable regulation for solar power within the electric power industry and the broader energy industry.

If solar power technology is not suitable for widespread adoption or if sufficient demand for solar power products and services does not develop or takes longer to develop than we anticipate, our revenues may suffer and we may be unable to sustain our profitability. Demand in Europe generally remains weak as a result of reductions in feed-in-tariffs in Germany and the elimination of feed-in-tariffs in Italy, the two largest European markets over the past several years. Although demand in other regions, including China, Japan, the U.S. and India, as well as many other emerging markets in Asia, the Middle East and Africa, has offset the decline in European demand, we cannot assure you that this demand will be sustainable or that any recent positive trends in supply or demand balance will persist.

We are preparing to potentially form a global Yieldco investment vehicle for our solar power business. If the formation of Yieldco or our management of Yieldco is not successful, our future growth and results of operations may be materially hindered.

We are preparing to potentially form a globally diversified, dividend growth-oriented partnership, or Yieldco, to own, operate and acquire long-term contracted renewable energy generation assets with consistent cash flows in attractive markets. If successful, we expect to own a general partner interest in Yieldco and offer economic interests to public shareholders. The cash produced from projects owned by the operating subsidiaries of Yieldco will be distributed up to Yieldco, which will in turn distribute the cash to Yieldco's public shareholders and, in certain circumstances, to us. Yieldco's strategy is to rapidly expand and diversify its portfolio of assets by acquiring, from us and unaffiliated third parties,

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utility-scale solar projects and commercial and industrial distributed solar energy assets, as well as other renewable energy generation assets equipped with proven and reliable technologies. We expect that Yieldco's initial target markets will be Canada, Japan, Spain, the United Kingdom and the United States, and other select markets, primarily within the member countries of Organization for Economic Cooperation and Development, or OECD countries.

Yieldco would have a right of first offer with respect to certain solar power projects developed by us and we expect that it will grow its portfolio through acquiring these projects, as well as acquiring other solar power and renewable energy projects from third parties. We are expected to continue to provide Yieldco with the opportunity to acquire additional qualifying projects, subject to certain conditions. In November 2015, we confidentially submitted a draft registration statement on Form S-1 to the Securities and Exchange Commission, or the SEC, relating to the proposed initial public offering of Yieldco, or the Yieldco IPO. We expect to launch the Yieldco IPO subject to market and other conditions.

While we intend to complete the Yieldco IPO, the offering may be significantly delayed or may not take place at all because of legal, accounting, commercial or marketing risks and considerations. We remain flexible on whether and when to launch Yieldco and our management constantly monitors the market conditions and evaluates other strategic alternatives to Yieldco. If the Yieldco IPO is not successful, we may not be able to recuperate the financial and human resources we have invested in the formation of Yieldco and our growth strategy for our solar power business may be disrupted, which would adversely affect our results of operation and distract our management from the operation of our company's other businesses. In the event the market condition for the proposed Yieldco IPO remains unfavorable, we may consider selling stakes in our Yieldco projects and/or selling entire projects to third parties. In addition, we have no experience in operating or managing Yieldcos. If the Yieldco IPO is completed, we, as the sponsor of Yieldco, may not succeed in delivering satisfactory results to us or the public shareholders of Yieldco, in which case the stock price of Yieldco may fall, which could in turn materially affect our financial conditions and results of operations.

The execution of our growth strategy depends upon the continued availability of third-party financing arrangements for our customers, which is affected by general economic conditions. Tight credit markets could depress demand or prices for solar power products and services, hamper our expansion and materially affect our results of operations.

Most solar power projects, including our own, require financing for development and construction with a mixture of equity and third party funding. The cost of capital affects both the demand and price of solar power systems. A high cost of capital may materially reduce the internal rate of return for solar power projects and therefore put downward pressure on the prices of both solar systems and solar modules, which typically comprise a major part of the cost of solar power projects.

Furthermore, solar power projects compete for capital with other forms of fixed income investments such as government and corporate bonds. Some classes of investors compare the returns of solar power projects with bond yields and expect a similar or higher internal rate of return, adjusted for risk and liquidity. Higher interest rates could increase the cost of existing funding and present an obstacle for potential funding that would otherwise spur the growth of the solar power industry. In addition, higher bond yields could result in increased yield expectations for solar power projects, which would result in lower system prices. In the event that suitable funding is unavailable, our customers may be unable to pay for products they have agreed to purchase. It may also be difficult to collect payments from customers facing liquidity challenges due to either customer defaults or financial institution defaults on project loans. Constricted credit markets may impede our expansion and materially and adversely affect our results of operations. Concerns about government deficits and debt in the EU have increased bond spreads in certain solar markets, such as Greece, Spain, Italy and Portugal. The cash flow of a solar power project is often derived from government-funded or

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government-backed feed-in tariffs. Consequently, the availability and cost of funding solar power projects is determined in part based on the perceived sovereign credit risk of the country where a particular project is located. Therefore, credit agency downgrades of nations in the EU or elsewhere could decrease the credit available for solar power projects, increase the expected rate of return compared to bond yields, and increase the cost of debt financing for solar power projects in countries with a higher perceived sovereign credit risk.

In light of the uncertainty in the global credit and lending environment, we cannot make assurances that financial institutions will continue to offer funding to solar power project developers at reasonable costs. An increase in interest rates or a decrease in funding of capital projects within the global financial market could make it difficult to fund solar power systems and potentially reduce the demand for solar modules and/or reduce the average selling prices for solar modules, which may materially and adversely affect our business, results of operations, financial condition and prospects.

Our future success depends partly on our ability to expand the pipeline of our energy development and electricity generation segments in several key markets, which exposes us to a number of risks and uncertainties.

Historically, our module segment has accounted for the majority of our net revenues, including 80.4%, 59.0% and 71.8% in 2013, 2014 and 2015, respectively. However, we have, in recent years, increased our investment in, and management attention on, (a) our energy development segment, which consists primarily of solar power project development, EPC services and O&M services, and (b) our electricity generation segment, which consists primarily of holding solar power plants for the purpose of generating and selling electricity to local and national grids.

In the future, we intend to grow our energy development and electricity generation segments by holding and operating more solar projects, including both those that we develop and those we acquire from third-parties. As we do, we will be increasingly exposed to the risks associated with these businesses. Further, our future success largely depends on our ability to expand our solar power project pipeline. The risks and uncertainties associated with our energy development and electricity generation segments, and our ability to expand our solar power project pipeline include:

the uncertainty of being able to sell the projects, receive full payment for them upon completion, or receive payment in a timely manner;

the need to raise significant additional funds to develop greenfield or purchase late-stage solar power projects, which we may be unable to obtain on commercially reasonable terms or at all;

delays and cost overruns as a result of a number of factors, many of which are beyond our control, including delays in regulatory approvals, construction, grid-connection and customer acceptance testing;

delays or denial of required regulatory approvals by relevant government authorities;

diversion of significant management attention and other resources; and

failure to execute our project pipeline expansion plan effectively.

If we are unable to successfully expand our energy development and electricity generation segments, and, in particular, our solar power project pipeline, we may be unable to expand our business, maintain our competitive position, improve our profitability and generate cash flows.

Governments may revise, reduce or eliminate subsidies and economic incentives for solar energy, which could cause demand for our products to decline.

The market for on-grid applications, where solar power supplements the electricity a customer purchases from the utility network or sells to a utility under a feed-in tariff, depends largely on the availability and size of government subsidy programs and economic incentives. At present, the cost of

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solar power exceeds retail electricity rates in many locations. Government incentives vary by geographic market. Governments in many countries, most notably Germany, Italy, the Czech Republic, the U.S., Japan, Canada (Ontario), South Korea, India, France, Australia and the United Kingdom, have provided incentives in the form of feed-in tariffs, rebates, tax credits, renewable portfolio standards and other incentives. These governments have implemented mandates to end-users, distributors, system integrators and manufacturers of solar power products to promote the use of solar energy in on-grid applications and to reduce dependency on other forms of energy. Some of these government mandates and economic incentives have been or are scheduled to be reduced or eliminated altogether. It is likely that this trend will continue, possibly until subsidies for solar energy are phased out completely.

While solar power projects may continue to offer attractive internal rates of return, it is unlikely internal rates of return will be as high as they were in the past. If internal rates of return fall below an acceptable rate for project investors, and governments continue to reduce or eliminate subsidies, this may cause a decrease in demand and considerable downward pressure on solar systems and therefore negatively impact both solar module prices and the value of our solar power projects. The reduction, modification or elimination of government mandates and economic incentives in one or more of our markets could therefore materially and adversely affect the growth of such markets or result in increased price competition, either of which could cause our revenues to decline and harm our financial results.

General global economic conditions may have an adverse impact on our operating performance and results of operations.

The demand for solar power products and services is influenced by macroeconomic factors, such as global economic conditions, demand for electricity, 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, the solar and other alternative energy industries and the environment. As a result of global economic conditions, some governments may implement measures that reduce the feed-in tariffs and other subsidies designed to benefit the solar industry. During 2013, 2014 and 2015, a decrease in solar power tariffs in many markets placed downward pressure on the price of solar systems in most regions. In addition, reductions in oil and coal prices may reduce the demand for and the prices of solar power products and services. For instance, in recent months, oil prices globally have experienced high volatility and, at points, have recorded historical lows. We cannot assure you that such volatility and significant reductions in the global price of oil will not have a material adverse effect on the demand for and prices of our products. Our growth and profitability depend on the demand for and the prices of solar power products and services. If these negative market and industry trends continue and demand for solar power projects and solar power products and services weakens as a result, our business and results of operations may be adversely affected.

Imposition of anti-dumping and countervailing duty orders or safeguard measures in one or more markets may result in additional costs to our customers, which could materially or adversely affect our business, results of operations, financial conditions and future prospects.

We have been in the past, and may be in the future, subject to the imposition of anti-dumping and countervailing duty orders in one or more of the markets in which we sell our products. In particular, we have been subject to the imposition of anti-dumping and countervailing duty orders in the U.S., the EU and Canada and have, as a result, been party to lengthy proceedings related thereto. See "Item 8. Financial Information A. Consolidated Statements and Other Financial Information Legal and Administrative Proceedings." The U.S., EU and Canada are important markets for us. Ongoing proceedings relating to, and the imposition of any new, anti-dumping and countervailing duty orders or safeguard measures in these markets may result in additional costs to us and/or our customers, which may materially and adversely affect our business, results of operations, financial conditions and future prospects.

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Our project development and construction activities may not be successful, projects under development may not receive required permits, property rights, power purchase agreements, or PPAs, interconnection and transmission arrangements, and financing or construction of projects may not commence or continue as scheduled, all of which could increase our costs, delay or cancel a project, and have a material adverse effect on our revenue and profitability.

The development and construction of solar power projects involve known and unknown risks. We may be required to invest significant amounts of money for land and interconnection rights, preliminary engineering, permitting, legal and other expenses before we can determine whether a project is feasible. Success in developing a particular project is contingent upon, among other things:

securing land rights and related permits, including satisfactory environmental assessments;

receipt of required land use and construction permits and approvals;

receipt of rights to interconnect to the electric grid;

availability of transmission capacity, potential upgrade costs to the transmission grid and other system constraints;

payment of interconnection and other deposits (some of which are non-refundable);

negotiation of satisfactory EPC agreements; and

obtaining construction financing, including debt, equity and tax credits.

In addition, successful completion of a particular project may be adversely affected by numerous factors, including:

delays in obtaining and maintaining required governmental permits and approvals;

potential challenges from local residents, environmental organizations, and others who may not support the project;

unforeseen engineering problems; subsurface land conditions; construction delays; cost over-runs; labor, equipment and materials supply shortages or disruptions (including labor strikes);

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

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

If we are unable to complete the development of a solar power project or we fail to meet any agreed upon system-level capacity or energy output guarantees or warranties (including 25 year power output performance guarantees) or other contract terms, or our projects cause grid interference or other damage, the EPC or other agreements related to the project may be terminated and/or we may be subject to significant damages, penalties and other obligations relating to the project, including obligations to repair, replace or supplement materials for the project.

We may enter into fixed-price EPC agreements in which we act as the general contractor for our customers in connection with the installation of their solar power systems. All essential costs are estimated at the time of entering into the EPC agreement for a particular project,

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and these costs are reflected in the overall fixed price that we charge our customers for the project. These cost estimates are preliminary and may or may not be covered by contracts between us and the subcontractors, suppliers and other parties involved in the project. In addition, we require qualified, licensed subcontractors to install most of our solar power systems. Shortages of skilled labor could significantly delay a project or otherwise increase our costs. Should miscalculations in planning a project occur, including those due to unexpected increases in commodity prices or labor costs, or delays in execution

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occur and we are unable to increase the EPC sales price commensurately, we may not achieve our expected margins or our results of operations may be adversely affected.

Developing solar power projects exposes us to different risks than producing solar modules.

In recent years, we have placed a greater focus on our energy development segment, which includes the development of solar power projects. These projects can take many months or years to complete and may be delayed for reasons beyond our control. They often require us to make significant up-front payments for, among other things, land rights and permitting in advance of commencing construction, and revenue from these projects may not be recognized for several additional months following contract signing. Any inability or significant delays in entering into sales contracts with customers after making such up-front payments could adversely affect our business and results of operations. Furthermore, we may become constrained in our ability to simultaneously fund our other business operations and the investment in these projects.

In contrast to developing solar modules, developing solar power projects requires more management attention to negotiate the terms of our engagement and monitor the progress of the projects which may divert management's attention from other matters. Our revenue and liquidity may be adversely affected to the extent the market for solar power projects weakens or we are not able to successfully complete the customer acceptance testing due to technical difficulties, equipment failure, or adverse weather, and we are unable to sell our solar power projects at prices and on terms and timing that are acceptable to us.

We have a limited history operating our electricity generation segment as an independent power producer, or IPP, and may not be successful in growing this segment.

In recent years, we have started operating as an IPP and increasing our investment in our electricity generation segment. Our electricity generation segment consists primarily of holding solar power projects for the purpose of generating and selling electricity to the local or national grid or other power purchasers. As an IPP, we are subject to a variety of risks associated with intense market competition, changing regulations and policies, insufficient demand for solar power, technological advancements and the failure of our power generation facilities.

We face competition from conventional and other renewable energy companies. The solar and renewable energy power industry is highly competitive and continually evolving as market participants strive to distinguish themselves within their markets and compete with large incumbent utilities and new market entrants. See " Because the markets in which we compete are highly competitive and quickly evolving, because many of our competitors have greater resources than we do or are more adaptive, and because we have a limited track record in our energy development and electricity generation segments, we may not be able to compete successfully and we may not be able to maintain or increase our market share."

The market for electricity generation in the areas where we operate our electricity generation segment is heavily influenced by national, regional and local regulations and policies concerning the electric utility industry. See " We are subject to numerous laws and regulations at the national, regional and local levels of government in the areas where we do business. Any changes to these regulations and policies may present technical, regulatory and economic barriers to the purchase and use of solar power products, solar projects and solar electricity, which may significantly reduce demand for our products and services or otherwise adversely affect our financial performance."

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The solar power market is still at a relatively early stage of development and future demand for solar power is uncertain. Market data for the solar power industry is not as readily available as for more established industries, where trends are more reliably assessed from data gathered over a longer period of time. In addition, demand for solar power in our targeted markets, including the United States, Japan, Canada, Spain and the United Kingdom, may not develop or may develop to a lesser extent than we anticipate.

The electricity industry is undergoing a transformative change. Technological advancements such as energy storage and distributed generation may change the nature of energy generation and delivery. These changes may materially affect our business model as an IPP and our ability to compete with new energy generation and delivery business models. In addition, our power generation facilities may require periodic upgrading and improvement. Any unexpected operational or mechanical failure, including failure associated with breakdowns and forced outages, and any decreased operational or management performance, could reduce our facilities' generating capacity below expected levels, thereby reducing our revenues.

We may not be able to enter into PPAs or face delays in entering into PPAs or may not be able to replace expiring PPAs with contracts on similar terms.

We may not be able to enter into PPAs for our solar power projects due to intense competition, increased supply of electricity from other sources, reduction in retail electricity price or other factors. There is a limited pool of potential buyers for electricity generated by our solar power plants since the transmission and distribution of electricity is either monopolized or highly concentrated in most jurisdictions. The willingness of buyers to purchase electricity from an IPP may be based on a number of factors and not solely on pricing and surety of supply. If we cannot enter into PPAs on terms favorable to us, or at all, it would negatively impact our revenue and our decisions regarding the development of additional power plants.

Generally, to the extent offtakers are not required to acquire the output from our solar power projects under tariff regulations, renewable portfolio standards or other arrangements, the decision by an end user to buy energy from our solar power projects is primarily driven by a deficit of available energy in such markets and the availability of domestic resources to meet those needs in a timely fashion. The end user's decision may also be affected by the cost of other conventional and alternative energy sources. Decreases in the retail prices of electricity supplied by utilities or other alternative energy sources could harm our ability to offer competitive pricing and to sign new customers. An increase in the availability of electricity or reduction in retail electricity prices in our target markets would make the purchase of solar energy less economically attractive. If the availability of energy were to increase or the price of electricity were to decrease in the markets in which we operate, we would be at a competitive disadvantage, we may be unable to attract new customers for our electricity generation segment and its growth may be limited.

We may experience delays in entering into PPAs for some of our solar power projects or may not be able to replace an expiring PPA with a contract on equivalent terms and conditions, or otherwise at prices that permit operation of the related facility on a profitable basis. Any delay in entering into PPAs may adversely affect our ability to enjoy the cash flows generated by such projects. If we are unable to replace an expiring PPA with an acceptable new PPA, the affected site may temporarily or permanently cease operations, which could materially and adversely affect our electricity generation segment, our financial condition, results of operations and cash flows.

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Counterparties to our PPAs may not fulfill their obligations, which could result in a material adverse impact on our business, financial condition, results of operations and cash flows.

Substantially all of the electric power generated by our solar power projects will be sold under long-term PPAs with public utilities, licensed suppliers or commercial, industrial or government end users and we expect our future projects will also have long-term PPAs or similar offtake arrangements such as tariff programs. If, for any reason, any of the purchasers of power under these contracts are unable or unwilling to fulfill their related contractual obligations or if they refuse to accept delivery of power delivered thereunder or if they otherwise terminate such agreements prior to the expiration thereof, our assets, liabilities, business, financial condition, results of operations and cash flows could be materially and adversely affected. Further, to the extent any of our power purchasers are, or are controlled by, governmental entities, our facilities may be subject to legislative or other political action that may impair their contractual performance or contain contractual remedies that do not provide adequate compensation in the event a counterparty defaults.

Our PPAs and project-level financing arrangements may contain price adjustment, termination, buy-out, acceleration or other clauses that could materially and adversely affect our electricity generation segment, our financial condition, results of operations and cash flows.

Some of our PPAs are subject to price adjustments over time. If the price under any of our PPAs is reduced below a level that makes a project economically viable, our electricity generation segment, financial conditions, cash flow and results of operations could be materially and adversely affected. Further, some of our long-term PPAs do not include inflation-based price increases. To the extent that the countries in which we conduct our business experience high rates of inflation, thereby increasing our operating costs in those countries, we may not be able to generate sufficient revenues to offset the effects of inflation.

Certain of the PPAs for our projects and those for projects that we have acquired and may acquire in the future contain or may contain provisions that allow the offtake purchaser to terminate or buy out the project or require us to pay liquidated damages upon the occurrence of certain events. In addition, certain of our project financing arrangements provide for acceleration upon the occurrence of such events. If these provisions are exercised, our electricity generation segment, financial condition, results of operations and cash flows could be materially and adversely affected. Additionally, certain of the project-level financing arrangements for projects allow, and certain of the projects that we may acquire in the future may allow, the lenders or investors to accelerate the repayment of the financing arrangement in the event that a PPA is terminated or if certain operating thresholds or performance measures are not achieved within specified time periods. We are therefore subject to the risk of lender or investor termination based on such criteria.

Certain of our PPAs and project-level financing arrangements include, and in the future may include, provisions that would permit the counterparty to terminate the contract or accelerate maturity in the event we own, directly or indirectly, less than 50% of the combined voting power or, in some cases, if we cease to be the majority owner, directly or indirectly, of the applicable project subsidiary. Generally, these provisions are, or will be, triggered in the event that we own, directly or indirectly, less than 50% of the combined voting power or, in some cases, cease to be the majority owner, directly or indirectly, of the applicable project subsidiary. As a result, if we cease to control or, in some cases, to be the majority owner of the project subsidiary, the counterparties could terminate the PPAs or accelerate the maturity of the financing arrangements. The termination of any of our PPAs or the acceleration of the maturity of any of our financing arrangements as a result of a change-in-control event could have a material adverse effect on our electricity generation segment, its financial condition, results of operations and cash flows.

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If the supply of solar wafers and cells increases in line with increases in the supply of polysilicon, then the corresponding oversupply of solar cells and modules may cause substantial downward pressure on the prices of our products and reduce our revenues and earnings.

Silicon production capacity has expanded rapidly in recent years. As a result of this expansion, coupled with the global economic downturn, the solar industry has experienced an oversupply of high-purity silicon since the beginning of 2009. This has contributed to an oversupply of solar wafers, cells and modules and resulted in substantial downward pressure on prices throughout the value chain. Demand for solar power products remained soft through 2012 but began to pick up in the second half of 2013, and continued to grow in 2014 and 2015. The average selling price of our solar modules decreased from \$1.34 per watt in 2011 to \$0.77 per watt in 2012, \$0.67 per watt in 2013 and 2014 and \$0.58 per watt in 2015, in large part because the increase in the supply of solar cells and modules was greater than the increase in the demand, thereby putting pressure on solar power products across all stages of the value chain. As a result of the decline in the selling prices of our solar modules, our revenue declined in 2012, even though our solar module shipment volume for the year increased. In addition, because solar module selling prices declined at a rapid rate, we suffered losses in the form of inventory write-downs, as the market price of solar modules consistently fell below the carrying cost of our inventory. Lower price realizations and inventory write-downs in 2012 put downward pressure on our gross profit and operating margins. While we believe that there is a relative balance between capacity and demand at low prices due to industry consolidation, increases in solar module production in excess of market demand may result in further downward pressure on the price of solar wafers, cells and modules, including our products. Increasing competition could also result in us losing sales or market share. Moreover, due to fluctuations in the supply and price of solar power products throughout the value chain, we cannot assure you that we will be able, on an ongoing basis, to procure silicon, wafers and cells at reasonable costs if any of the above risks materializes. If we are unable, on an ongoing basis, to procure silicon, solar wafers and solar cells at reasonable prices or mark up the price of our solar modules to cover our manufacturing and operating costs, our revenues and margins will be adversely impacted, either due to higher costs compared to our competitors or due to further write-downs of inventory, or both. In addition, our market share could decline if our competitors are able to price their products more competitively.

Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we terminate any of these agreements, we may not be able to recover all or any part of the advance payments we have made to these suppliers and we may be subject to litigation.

We have entered into a number of long-term supply agreements with several silicon and wafer suppliers in order to secure a stable supply of raw materials to meet our production requirements. These suppliers included GCL-Poly Energy Holdings Limited, or GCL, Neo Solar Power Corp., or Neo Solar, Deutsche Solar AG, or Deutsche Solar, Jiangxi LDK Solar Hi-Tech Co., Ltd., or LDK, and a UMG-Si supplier.

In 2009 and thereafter, we amended our agreements with certain of these suppliers to adjust the purchase price to prevailing market prices at the time we place a purchase order and to reduce the quantity of products that we were required to purchase. Under our supply agreements with certain suppliers, and consistent with historical industry practice, we make advance payments prior to scheduled delivery dates. These advance payments are made without collateral and are credited against the purchase prices payable by us. As of December 31, 2015, the balance of the advance payments that we have made to GCL, Deutsche Solar, LDK and the UMG-Si supplier totaled \$32.1 million.

Under our 12-year wafer supply agreement with Deutsche Solar, we purchased the contracted volume for 2009 but did not purchase the contracted volumes for 2010 and 2011. The agreement contains a provision stating that, if we do not order the contracted volume in a given year, Deutsche Solar can invoice us for the difference at the full contract price. We believe that the take-or-pay

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provisions of the agreement are void under German law. In December 2011, Deutsche Solar gave notice to us to terminate the agreement with immediate effect. Deutsche Solar stated that the reason for the termination was an alleged breach of the agreement by us. In the notice, Deutsche Solar reserved its right to claim damages of €148.6 million in court. As a result of the termination, we reclassified the accrued loss on firm purchase commitments reserve of \$27.9 million as of December 31, 2011 to loss contingency accruals. In addition, we made a full bad debt allowance of \$17.4 million against the balance of advance payments to Deutsche Solar. The accrued amount of \$27.9 million represents our best estimate for our loss contingency. Deutsche Solar did not specify the basis for its claimed damages of €148.6 million in the notice.

In 2007, we entered into a three-year agreement, or the 2007 Supply Contract, with LDK under which we purchased specified quantities of silicon wafers and LDK converted our reclaimed silicon feedstock into wafers. In June 2008, we entered into two 10-year wafer supply agreements, or the 2008 Supply Contracts, with LDK, under which we agreed to purchase specified volumes of wafers at pre-determined prices each year, commencing January 1, 2009. In April 2010, we gave LDK a termination notice for the 2007 Supply Contract and 2008 Supply Contracts on the grounds that they refused to deduct from the selling price the deposits paid by us previously. We also initiated arbitration proceedings against LDK under the supply contracts, seeking a refund of the initial deposits that we paid to them. In December 2012, Shanghai International Economic and Trade Arbitration Commission, formerly known as CIETAC Shanghai Branch, awarded RMB248.9 million (\$38.4 million) plus RMB2.32 million (\$0.4 million) in arbitration expenses in favor of LDK, including RMB60.0 million (\$9.3 million) of previously paid deposits, or the 2012 Arbitral Award. In February 2013, LDK filed for enforcement of the 2012 Arbitral Award with Jiangsu Suzhou Intermediate People's Court, or the Suzhou Intermediate Court. In 2013, LDK initiated two separate proceedings against us in Jiangxi Xinyu Intermediate People's Court, or the Xinyu Intermediate Court, claiming that we had forfeited our rights to the initial deposits under the 2007 Supply Contract and 2008 Supply Contracts because of the alleged breaches under these contracts. On October 18, 2013, the Xinyu Intermediate Court stayed these proceedings pending the decision by the Suzhou Intermediate Court as to the 2012 Arbitral Award. On September 9, 2015, the Suzhou Intermediate Court ruled in favor of LDK. On October 19, 2015, we reached a settlement agreement with LDK, or the 2015 Settlement Agreement. Under the 2015 Settlement Agreement, we agreed to pay RMB132.7 million (\$20.8 million) to LDK and to purchase 64.3 million pieces of silicon wafers from LDK at market price over a three year period starting in or around December 2015, in exchange for which LDK (a) would release us from the 2012 Arbitration Award and waive its rights and claims thereunder and (b) would withdraw its complaints from the Xinyu Intermediate Court and terminate such proceedings. The Suzhou Intermediate Court reviewed and approved the 2015 Settlement Agreement and terminated the enforcement proceeding relating to the 2012 Arbitral Award. We have already paid the required amounts and fulfilled our obligations under the 2015 Settlement Agreement. See "Item 8. Financial Information A. Consolidated Statements and Other Financial Information Legal and Administrative Proceedings." We recorded a charge of \$20.8 million related to the 2015 Settlement Agreement in general and administrative expense in the third quarter of 2015. Although we have reached the 2015 Settlement Agreement with LDK, we cannot assure you that LDK will not attempt to bring additional claims against us, the outcomes of which could potentially have an adverse effect on our results of operations and financial condition. In March 2014, LDK filed an application for arbitration with CIETAC, seeking compensation and enforcement expenses for damages LDK claimed to have suffered from the alleged breaches under the 2008 Supply Contracts between October 2010 and December 2013. We filed counterclaims against LDK in July 2014. On December 22, 2015, CIETAC ruled to reject both LDK's claims and our counterclaims.

Due to the default of a UMG-Si supplier in delivering its contracted volumes for 2010 and concerns regarding its financial position, we concluded that we were not likely to purchase any

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significant quantity of UMG-Si from this supplier in the future and made a full bad debt allowance against the advance payments of RMB59 million (\$9.1 million) to the UMG-Si supplier in 2010.

We have in the past entered, and may in the future, enter into long-term supply agreements for silicon wafers or solar cells with fixed price and quantity terms. If, during the term of these agreements, the price of materials decreases significantly and we are unable to renegotiate favorable terms with our suppliers, we may be placed at a competitive disadvantage compared to our competitors, and our earnings could decline. In addition, if demand for our solar power products decreases, yet our supply agreements require us to purchase more silicon wafers and solar cells than required to meet customer demand, we may incur costs associated with carrying excess inventory. To the extent that we are not able to pass these increased costs on to our customers, our business, cash flows, financial condition and results of operations may be materially and adversely affected. If our suppliers file lawsuits against us for early termination of these contracts, such events could be costly, may divert management's attention and other resources away from our business, and could have a material and adverse effect on our reputation, business, financial condition, results of operations and prospects.

We are subject to numerous laws and regulations at the national, regional and local levels of government in the areas where we do business. Any changes to these regulations and policies may present technical, regulatory and economic barriers to the purchase and use of solar power products, solar projects and solar electricity, which may significantly reduce demand for our products and services or otherwise adversely affect our financial performance.

We are expanding our international operations and are subject to a variety of laws and regulations, some of which may conflict with each other and all of which are subject to change, including energy regulations, export and import restrictions, tax laws and regulations, environmental regulations, labor laws and other government requirements, approvals, permits and licenses. We also face trade barriers and trade remedies 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. See " Imposition of anti-dumping and countervailing duty orders or safeguard measures in one or more markets may result in additional costs to our customers, which could materially or adversely affect our business, results of operations, financial conditions and future prospects."

In the countries where we do business, the market for solar power products, solar projects and solar electricity is heavily influenced by national, state and local government regulations and policies concerning the electric utility industry, as well as policies disseminated by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation, and could deter further investment in the research and development of alternative energy sources as well as customer purchases of solar power technology, which could result in a significant reduction in the potential demand for our solar power products, solar projects and solar electricity.

In our module segment, we expect that our solar power products and their installation will continue to be subject to national, state and local regulations and policies relating to safety, utility interconnection and metering, construction, environmental protection, and other related matters. Any new regulations or policies pertaining to our solar power products may result in significant additional expenses to us, our resellers and customers, which could cause a significant reduction in demand for our solar power products.

In our energy development and electricity generation segments, we are subject to numerous national, regional and local laws and regulations, including the Federal Power Act, or FPA, the Environmental Protection Act (Ontario) and other statutes altered by the Green Energy and Green Economy Act (Ontario), or GEGEA, in Ontario, Canada, the Electricity Business Act (Denki Jiygo Ho) in Japan and E.U. directives and other regulations in respect of our Europe based projects.

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Changes in applicable energy laws or regulations, or in the interpretations of these laws and regulations, could result in increased compliance costs or the need for additional capital expenditures. If we fail to comply with these requirements, we could also be subject to civil or criminal liability and the imposition of fines. Further, national, regional or local regulations and policies could be changed to provide for new rate programs that undermine the economic returns for both new and existing projects by charging additional, non-negotiable fixed or demand charges or other fees or reductions in the number of projects allowed under net metering policies. National, regional or local government energy policies, law and regulation supporting the creation of wholesale energy markets is currently, and may continue to be, subject to challenges, modifications and restructuring proposals, which may result in limitations on the commercial strategies available to us for the sale of our power.

Regulatory changes in a jurisdiction where we are developing a project may make the continued development of the project infeasible or economically disadvantageous and any expenditure we have made to date on such project may be wholly or partially written off. Any of these changes could significantly increase the regulatory related compliance and other expenses incurred by the projects and could significantly reduce or entirely eliminate any potential revenues that can be generated by one or more of the projects or result in significant additional expenses to us, our offtakers and customers, which could materially and adversely affect our business, financial condition, results of operations and cash flows.

We also face regulatory risks imposed by various transmission providers and operators, including regional transmission operators and independent system operators, and their corresponding market rules. These regulations may contain provisions that limit access to the transmission grid or allocate scarce transmission capacity in a particular manner, which could materially and adversely affect our business, financial condition, results of operations and cash flows.

We are also subject to the Foreign Corrupt Practices Act of 1977, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other anti-bribery and anti-money laundering laws in countries in which we conduct activities. We face significant liabilities if we fail to comply with the FCPA and other anticorruption laws that prohibit companies and their employees and third-party intermediaries from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties, and private-sector recipients for the purpose of obtaining or retaining business. We may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. For example, in China, we may contract with and sell electricity to the national grid, a state-owned enterprise. In other countries where we develop, acquire or sell solar projects, we need to obtain various approvals, permits and licenses from the local or national governments. We can be held liable for the illegal activities of our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities. Any violation of the FCPA, other applicable anticorruption laws, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions, which could have a material adverse effect on our business, financial condition, cash flows and reputation. In addition, responding to any enforcement action may result in the diversion of management's attention and resources, significant defense costs and other professional fees.

Because the markets in which we compete are highly competitive and quickly evolving, because many of our competitors have greater resources than we do or are more adaptive, and because we have a limited track record in our energy development and electricity generation segments, we may not be able to compete successfully and we may not be able to maintain or increase our market share.

We face intense competition in our module, energy development and electricity generation segments. We have a large number of competitors in our solar modules business, including non-China-based competitors such as First Solar, Inc., or First Solar, and SunPower Corporation, or SunPower,

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and China-based competitors such as Trina Solar Limited, or Trina, JinkoSolar Holding Co., Limited, or Jinko, JA Solar Co., Limited, or JA Solar, and Hanwha Q Cells Co., Ltd., or Hanwha Q Cells. Some of our competitors are developing or are currently producing products based on new solar power technologies that may ultimately have costs similar to or lower than our projected costs. These include products based on thin film PV technology, which requires either no silicon or significantly less silicon to produce than crystalline silicon solar modules, such as the ones that we produce, and is less susceptible to increases in silicon costs. Some of our competitors have longer operating histories, greater name and brand recognition, access to larger customer bases, greater resources and significantly greater economies of scale than we do. In addition, some of our competitors may have stronger relationships or may enter into exclusive relationships with some of the key distributors or system integrators to whom we sell our products. As a result, they may be able to respond more quickly to changing customer demands or devote greater resources to the development, promotion and sales of their products. Some of our competitors have more diversified product offerings, which may better position them to withstand a decline in demand for solar power products. Some of our competitors are more vertically integrated than we are, from upstream silicon wafer manufacturing to solar power system integration. This may allow them to capture higher margins or have lower costs. In addition, new competitors or alliances among existing competitors could emerge and rapidly acquire significant market share. If we fail to compete successfully, our business will suffer and we may not be able to maintain or increase our market share.

For our energy development segment, we compete in a more diversified and complicated landscape since the commercial and regulatory environments for solar power project development and operation vary significantly from region to region and country to country. Our primary competitors are local and international developers and operators of solar power projects. Some of our competitors may have advantages over us in terms of greater experience or resources in the operation, financing, technical support and management of solar power projects, in any particular markets or in general. We only started developing solar power projects and growing our energy development segment in recent years.

Our energy development segment has a global footprint and develops solar power projects primarily in Canada, Japan, the U.S., China, Brazil and the United Kingdom. There is no guarantee that we can compete successfully in the markets we currently operate or the ones we plan to enter in the future. For example, in certain of our target markets, such as China, state-owned and private companies have emerged to take advantage of the significant market opportunity created by attractive financial incentives and favorable regulatory environment provided by the governments. State-owned companies may have stronger relationships with local governments in certain regions and private companies may be more focused and experienced in developing solar power projects in the markets where we compete. Accordingly, we need to continue to be able to compete against both state-owned and private companies in these markets. Our energy development segment also provides EPC and/or O&M services in China, Canada, Australia and other countries. We face intense competition from other service providers in those markets.

For our electricity generation segment, we believe that our primary competitors in the electricity generation markets in which we operate are the incumbent utilities that supply energy to our potential customers under highly regulated rate and tariff structures. We compete with these conventional utilities primarily based on price, predictability of price, reliability of delivery and the ease with which customers can switch to electricity generated by our solar energy projects. If we cannot offer compelling value to our customers based on these factors, then our energy-based business will not grow. Conventional utilities generally have substantially greater financial, technical, operational and other resources than we do. As a result, these competitors may be able to devote more resources to the research, development, promotion and sale of their products or respond more quickly to evolving industry standards and changes in market conditions than we can. Conventional utilities could also offer other value-added products or services that could help them to compete with us even if the cost of

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electricity they offer is higher than ours. In addition, a majority of conventional utilities' sources of electricity is non-renewable, which may allow them to sell electricity more cheaply and deliver energy more consistently or reliably than electricity generated by our solar power projects.

We also face risks that conventional utilities could change their volumetric-based (i.e., cents per kilowatt-hour, or kWh) rate and tariff structures to make distributed solar generation and other renewable forms of energy less economically attractive to their retail customers. For example, net metering programs are currently utilized in most states in the U.S. to support the growth of distributed generation solar by requiring conventional utilities to reimburse their retail customers who are home and business owners for the excess power they generate at the level of the utilities' retail rates rather than the rates at which those utilities buy power at wholesale. However, Arizona has allowed its largest conventional utility to assess a surcharge on customers that reduces the economic returns for the excess electricity that the solar power systems produce. These types of changes or other types of changes that could reduce or eliminate the economic benefits of net-metering could be implemented by state public utility commissions or state legislatures in the other states throughout the United States that utilize net-metering programs, and could significantly change the economic benefits of solar energy as perceived by conventional utilities' retail customers.

As the solar power and renewable energy industry grows and evolves, we will also face new competitors who are not currently in the market. Our failure to adapt to changing market conditions and to compete successfully with existing or new competitors will limit our growth and will have a material adverse effect on our business and prospects.

We face risks associated with the marketing, distribution and sale of our solar power products and services internationally.

The international marketing, distribution and sale of our products expose us to a number of risks, including:

fluctuating sources of revenues;

difficulties in staffing and managing overseas operations;

fluctuations in foreign currency exchange rates;

differing regulatory and tax regimes across different markets;

the increased cost of understanding local markets and trends and developing and maintaining an effective marketing and distribution presence in various countries;

the difficulty of providing customer service and support in various countries;

the difficulty of managing our sales channels effectively as we expand beyond distributors to include direct sales to systems integrators, end users and installers;

the difficulty of managing the development, construction and sale of our solar power projects on a timely and profitable basis as a result of technical difficulties, commercial disputes with our customers and changes in regulations, among other factors;

the difficulties and costs of complying with the different commercial, legal and regulatory requirements in the overseas markets in which we operate;

any failure to develop appropriate risk management and internal control structures tailored to overseas operations;

any inability to obtain, maintain or enforce intellectual property rights;

any unanticipated changes in prevailing economic conditions and regulatory requirements; and

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any 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.

If we are unable to effectively manage these risks, our ability to expand our business abroad could suffer.

Our revenue sources have fluctuated significantly over recent years. For example, in 2008, 89.5% of our revenues were attributable to Europe, while only 4.6% and 5.9% were attributable to the Americas and Asia and others, respectively. However, in 2014, the Americas contributed 60.6% and Asia contributed 30.6% of our revenues, while Europe and other regions contributed only 8.8%; and in 2015, the Americas contributed 50.5% and Asia contributed 39.9% of our revenues, while Europe and other regions contributed 9.6%. As we shift the focus of our operations between different regions of the world, we have limited time to prepare for and address the risks identified above. Furthermore, some of these risks, such as currency fluctuations, will increase as our revenue contribution from certain global regions becomes more prominent. This may adversely influence our financial performance.

Our future business depends in part on our ability to make strategic acquisitions, investments and divestitures and to establish and maintain strategic relationships, and our failure to do so could have a material and adverse effect on our market penetration and revenue growth.

We frequently look for and evaluate opportunities to acquire other businesses, make strategic investments or establish strategic relationships with third parties to improve our market position or expand our products and services. When market conditions permit and opportunities arise, we may also consider divesting part of our current business to focus management attention and improve our operating efficiency. Investments, strategic acquisitions and relationships with third parties could subject us to a number of risks, including risks associated with integrating their personnel, operations, services, internal controls and financial reporting into our operations as well as the loss of control of operations that are material to our business. If we divest any material part of our business, particularly our upstream manufacturing business or downstream energy development and electricity generation businesses, we may not be able to benefit from our investment and experience associated with that part of the business and may be subject to intensified concentration risks with less flexibility to respond to market fluctuations. Moreover, it could be expensive to make strategic acquisitions, investments, divestitures and establish and maintain relationships, and we may be subject to the risk of non-performance by a counterparty, which may in turn lead to monetary losses that materially and adversely affect our business. We cannot assure you that we will be able to successfully make strategic acquisitions and investments and successfully integrate them into our operations, or make strategic divestitures or establish strategic relationships with third parties that will prove to be effective for our business. Our inability to do so could materially and adversely affect our market penetration, our revenue growth and our profitability.

Our significant international operations expose us to a number of risks, including unfavorable political, regulatory, labor and tax conditions in the countries where we operate.

We intend to continue to extend our global reach and capture market share in various global markets. In doing so, we will be exposed to various risks, including political, regulatory, labor and tax risks. Furthermore, we may need to make substantial investments in our overseas operations, both initially and on an ongoing basis, in order to attain longer-term sustainable returns. These investments could negatively impact our financial performance before sustainable profitability is recognized.

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We face risks related to private securities litigation.

Our company and certain of our directors and executive officers were named as defendants in class action lawsuits in the U.S. and Canada alleging that our financial disclosures during 2009 and early 2010 were false or misleading and in violation of U.S. federal securities laws and Ontario securities laws, respectively. The lawsuits in the U.S. were consolidated into one class action, which was dismissed with prejudice by the district court in March 2013, and subsequently affirmed by the circuit court in December 2013. The lawsuit in Canada continues. As a preliminary matter, we challenged the Ontario Court's jurisdiction to hear the plaintiff's claim, but this motion was unsuccessful. In September 2014, the plaintiff obtained an order granting him leave to assert the statutory cause of action under the Ontario Securities Act for certain of his misrepresentation claims. In January 2015, the plaintiff obtained an order for class certification in respect of the claims for which he obtained leave to assert the statutory cause of action under the Ontario Securities Act, for certain negligent misrepresentation claims and for oppression remedy claims advanced under the Canada Business Corporations Act, or CBCA. The Court dismissed CSI's application for leave to appeal. The class action has moved to the merits stage. See "Item 8. Financial Information A. Consolidated Statements and Other Financial Information Legal and Administrative Proceedings." There is no guarantee that we will not become party to additional lawsuits. If the case goes to trial, the Canadian action could require significant management time and attention and result in significant legal expenses. In addition, we are generally obligated, to the extent permitted by law, to indemnify our directors and officers who are named defendants in these lawsuits. If we were to lose a class action lawsuit, we may be required to pay judgments or settlements and incur expenses in aggregate amounts that could have a material and adverse effect on our financial condition or results of operations.

Our quarterly operating results may fluctuate from period to period.

Our quarterly operating results may fluctuate from period to period based on a number of factors, including:

- the average selling prices of our solar power products and services;
- the timing of completion of construction of our solar power projects;
- changes in payments from power purchasers of solar power plants already in operation;
- the rate and cost at which we are able to expand our internal production capacity;
- the availability and cost of solar cells and wafers from our suppliers and toll manufacturers;
- the availability and cost of raw materials, particularly high-purity silicon;
- changes in government incentive programs and regulations, particularly in our key and target markets;
- the unpredictable volume and timing of customer orders;
- the loss of one or more key customers or the significant reduction or postponement of orders;
- the availability and cost of external financing for on-grid and off-grid solar power applications;
- acquisition and investment costs;

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the timing of successful completion of customer acceptance testing of our solar power projects;

geopolitical turmoil and natural disasters within any of the countries in which we operate;

foreign currency fluctuations, particularly in Euro, RMB, Canadian dollar and Japanese yen;

our ability to establish and expand customer relationships;

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changes in our manufacturing costs;

the timing of new products or technology introduced or announced by our competitors;

fluctuations in electricity rates due to changes in fossil fuel prices or other factors;

allowances for doubtful accounts and advances to suppliers;

inventory write-downs;

long-lived asset impairment;

depreciation charges relating to under-utilized assets;

loss on firm purchase commitments under long-term supply agreements; and

construction progress of solar power projects and related revenue recognition.

We base our planned operating expenses in part on our expectations of future revenues. A significant portion of our expenses will be fixed in the short-term. If our revenues for a particular quarter are lower than we expect, we may not be able to reduce our operating expenses proportionately, which would harm our operating results for the quarter. As a result, our results of operations may fluctuate from quarter to quarter and our interim and annual financial results may differ from our historical performance.

Fluctuations in exchange rates could adversely affect our business, including our financial condition and results of operations.

The majority of our sales in 2014 and in 2015 were denominated in U.S. dollars, Canadian dollars and Japanese yen, with the remainder in other currencies such as Renminbi, Euros and Australian dollars. Our Renminbi costs and expenses are primarily related to the sourcing of solar cells, silicon wafers and silicon, other raw materials, toll manufacturing fees, labor costs and local overhead expenses within the PRC. From time to time, we enter into loan arrangements with Chinese commercial banks that are denominated primarily in Renminbi or U.S. dollars. Most of our cash and cash equivalents and restricted cash are denominated in Renminbi. Fluctuations in exchange rates, particularly between the U.S. dollar, Euro, Renminbi, Canadian dollar and Japanese yen, may result in foreign exchange gains or losses. We recorded net foreign exchange losses of \$51.5 million and \$32.2 million in 2013 and 2014, respectively, and a net foreign exchange gain of \$22.9 million in 2015.

The value of the Renminbi against the U.S. dollar, Euro and other currencies is affected by, among other things, changes in China's political and economic conditions and China's foreign exchange policies. In late 2005, China amended its policy of tracking the value of the Renminbi to the U.S. dollar to instead fluctuate against a basket of foreign currencies, which caused the Renminbi to appreciate significantly against the U.S. dollar over the following three years. In June 2010, the PRC government announced that it would allow greater flexibility for the Renminbi to fluctuate against the U.S. dollar, which resulted in further appreciation of the Renminbi, although in 2014, the value of the Renminbi depreciated against the U.S. dollar. In 2015, the PRC government changed the way it calculates the mid-point price of Renminbi against the U.S. dollar, requiring the market-makers who submit for the People's Bank of China's reference rates to consider the previous day's closing spot rate and foreign-exchange demand and supply, as well as changes in major currency rates. This change resulted in further depreciation of the Renminbi against the U.S. dollar. We cannot provide any assurances that the policy of the PRC government will not affect or the manner in which it may affect the exchange rate between the Renminbi and the U.S. dollar or other foreign currencies in the future.

Since 2008, we have hedged part of our foreign currency exposures against the U.S. dollar using foreign currency forward or option contracts. In addition to collateral requirements to enter into hedging contracts, there are notional limits on the size of the hedging transactions that we may enter

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into with any particular counterparty at any given time. The effectiveness of our hedging program may be limited due to cost effectiveness, cash management, exchange rate visibility and downside protection. We recorded gains on change in foreign currency derivatives of \$10.8 million and \$19.7 million in 2013 and 2014, respectively, and a loss on change in foreign currency derivatives of \$3.7 million in 2015. The gains or losses on change in foreign currency derivatives are related to our hedging program.

Volatility in foreign exchange rates will hamper, to some extent, our ability to plan our pricing strategy. To the extent that we are unable to pass along increased costs resulting from exchange rate fluctuations to our customers, our profitability may be adversely impacted. As a result, fluctuations in foreign currency exchange rates could have a material and adverse effect on our financial condition and results of operations.

A change in our effective tax rate can have a significant adverse impact on our business.

A number of factors may adversely impact our future effective tax rates, such as the jurisdictions in which our profits are determined to be earned and taxed; changes in the valuation of our deferred tax assets and liabilities; adjustments to provisional taxes upon finalization of various tax returns; adjustments to the interpretation of transfer pricing standards; changes in available tax credits; changes in stock-based compensation expenses; changes in tax laws or the interpretation of such tax laws (for example, proposals for fundamental U.S. international tax reform); changes in U.S. GAAP; expiration or the inability to renew tax rulings or tax holiday incentives; and the repatriation of non-U.S. earnings for which we have not previously provided for U.S. taxes. A change in our effective tax rate due to any of these factors may adversely influence our future results of operations.

Seasonal variations in demand linked to construction cycles and weather conditions may influence our results of operations.

Our business is subject to seasonal variations in demand linked to construction cycles and weather conditions. Purchases of solar power products and services tend to decrease during the winter months in our key markets, such as Canada, due to adverse weather conditions that can complicate the installation of solar power systems and negatively impact the construction schedules of our solar power projects. Demand from other countries, such as the U.S. and China, may also be subject to significant seasonality. Seasonal variations could adversely affect our results of operations and make them more volatile and unpredictable.

Our future success depends partly on our ability to maintain and expand our solar components manufacturing capacity, which exposes us to a number of risks and uncertainties.

Our future success depends partly on our ability to maintain and expand our solar components manufacturing capacity. If we are unable to do so, we may be unable to expand our business, maintain our competitive position, and improve our profitability. Our ability to expand our solar components production capacity is subject to risks and uncertainties, including:

the need to raise significant additional funds to purchase raw materials and to build additional manufacturing facilities, which we may be unable to obtain on commercially reasonable terms or at all;

delays and cost overruns as a result of a number of factors, many of which are beyond our control, including delays in equipment delivery by vendors;

delays or denial of required regulatory approvals by relevant government authorities;

diversion of significant management attention and other resources; and

failure to execute our expansion plan effectively.

If we are unable to maintain and expand our internal production capacity, we may be unable to expand our business as planned. Moreover, even if we do maintain and expand our production capacity, we might still not be able to generate sufficient customer demand for our solar power products to support the increased production levels.

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We may be unable to generate sufficient cash flows or have access to external financing necessary to fund planned operations and make adequate capital investments.

We anticipate that our operating and capital expenditures requirements may increase. To develop new products, support future growth, achieve operating efficiencies and maintain product quality, we may need to make significant capital investments in manufacturing technology, facilities and capital equipment, research and development, and product and process technology. We also anticipate that our operating costs may increase as we expand our manufacturing operations, hire additional personnel, increase our sales and marketing efforts, invest in joint ventures and acquisitions, and continue our research and development efforts with respect to our products and manufacturing technologies.

Our operations are capital intensive. We rely on working capital financing primarily from PRC commercial banks for our manufacturing operations. Although we are currently able to obtain new working capital financing from PRC commercial banks, we cannot guarantee that we will continue to be able to do so on commercially reasonable terms or at all. See " Our dependence on Chinese banks to extend our existing loans and provide additional loans exposes us to funding risks, which may materially and adversely affect our operations." Also, even though we are a publicly-traded company, we may not be able to raise capital via public equity and debt issuances due to market conditions and other factors, many of which are beyond our control. Our ability to obtain external financing is subject to a variety of uncertainties, including:

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

general market conditions for financing activities by manufacturers of solar power products; and

economic, political and other conditions in the PRC and elsewhere.

If we are unable to obtain funding in a timely manner and on commercially acceptable terms, our growth prospects and future profitability may be adversely affected.

Construction of our solar power projects may require us to obtain project financing. There can be no assurance that we will be able to do so on terms acceptable to us or at all. If we are unable to obtain project financing, or if it is only available on terms which are not acceptable to us, we may be unable to fully execute our business plan. In addition, we generally expect to sell our projects to tax-oriented, strategic industry and other investors. Such investors may not be available or may only have limited resources, in which case our ability to sell our projects may be hindered or delayed and our business, financial condition, and results of operations may be adversely affected. There can be no assurance that we will be able to generate sufficient cash flows, find other sources of capital to fund our operations and solar power projects, make adequate capital investments to remain competitive in terms of technology development and cost efficiency required by our projects. If adequate funds and alternative resources are not available on acceptable terms, our ability to fund our operations, develop and construct solar power projects, develop and expand our manufacturing operations and distribution network, maintain our research and development efforts or otherwise respond to competitive pressures would be significantly impaired. Our inability to do the foregoing could have a material and adverse effect on our business and results of operations.

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.

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our outstanding and future debt obligations. Our substantial indebtedness could have important consequences to us and our shareholders. For example, it could:

limit our ability to satisfy our debt obligations;

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 for 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 with 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.

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. We cannot assure you that we will be able to generate sufficient cash flow from operations to support the repayment of our current indebtedness. 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. In addition, certain of our financing arrangements impose operating and financial restrictions on our business, which may negatively affect our ability to react to changes in market conditions, take advantage of business opportunities we believe to be desirable, obtain future financing, fund required capital expenditures, or withstand a continuing or future downturn in our business. Any of these factors could materially and adversely affect our ability to satisfy our debt obligations.

We must comply with certain financial and other covenants under the terms of our debt instruments and the failure to do so may put us in default under those instruments.

Many of our loan agreements include financial covenants and broad default provisions. The financial covenants primarily include current ratios, quick ratios, debt to asset ratios, contingent liability ratios and minimum equity requirements, which, in general, govern our existing long-term debt and debt we may incur in the future. These covenants could limit our ability to plan for or react to market conditions or to meet our capital needs in a timely manner and complying with these covenants may require us to curtail some of our operations and growth plans. In addition, any global or regional economic deterioration may cause us to incur significant net losses or force us to assume considerable liabilities, which would adversely impact our ability to comply with the financial and other covenants of our outstanding loans. If our creditors refuse to grant waivers for any non-compliance with these covenants, such non-compliance will constitute an event of default which may accelerate the amounts due under the applicable loan agreements. Some of our loan agreements also contain cross-default clauses, which could enable creditors under our debt instruments to declare an event of default should there be an event of default on our other loan agreements. We cannot assure you that we will be able to remain in compliance with these covenants in the future. We may not be able to cure future

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violations or obtain a waiver on a timely basis. An event of default under any agreement governing our existing or future debt, if not cured by us or waived by our creditors, could have a material adverse effect on our liquidity, financial condition and results of operations.

Our dependence on Chinese banks to extend our existing loans and provide additional loans exposes us to funding risks, which may materially and adversely affect our operations.

We require significant cash flow and funding to support our operations. As a result, we rely on short-term borrowings to provide working capital for our daily operations. Since the majority of our short-term borrowings come from Chinese banks, we are exposed to lending policy changes by the Chinese banks. In 2013, 2014 and 2015, we successfully extended our short-term borrowings and, as of December 31, 2015, we had outstanding short-term borrowings of \$828.0 million with Chinese banks. Between January 1, 2016 and March 31, 2016, we obtained new borrowings of approximately \$362.0 million from Chinese banks, including \$161.9 million with due dates beyond December 31, 2016. Also, between January 1, 2016 and March 31, 2016, we renewed existing bank facilities of approximately \$146.4 million from Chinese banks with due dates beyond December 31, 2016.

If the Chinese government changes its macroeconomic policies and forces Chinese banks to tighten their lending practices, or if Chinese banks are no longer willing to provide financing to solar power companies, including us, we may not be able to extend our short-term borrowings or make additional borrowings in the future. As a result, we may not be able to fund our operations to the same extent as in previous years, which may have a material and adverse effect on our operations.

Cancellations of customer orders may make us unable to recoup any prepayments made to suppliers.

In the past, we were required to make prepayments to certain suppliers of silicon wafers and cells and silicon raw materials. Although we require certain customers to make partial prepayments, there is generally a lag between the due date for the prepayment of purchased silicon wafers and cells and silicon raw materials and the time that our customers make prepayments. In the event that our customers cancel their orders, we may not be able to recoup prepayments made to suppliers, which could adversely influence our financial condition and results of operations.

Credit terms offered to some of our customers expose us to the credit risks of such customers and may increase our costs and expenses, which could in turn materially and adversely affect our revenues, liquidity and results of operations.

We offer unsecured short-term or medium-term credit to some of our customers based on their creditworthiness and market conditions. As a result, our claims for payments and sales credits rank as unsecured claims, which expose us to credit risk if our customers become insolvent or bankrupt.

From time to time, we sell our products to high credit risk customers in order to gain early access to emerging or promising markets, increase our market share in existing key markets or because of the prospects of future sales with a rapidly growing customer. There are high credit risks in doing business with these customers because they are often small, young and high-growth companies with significant unfunded working capital, inadequate balance sheets and credit metrics and limited operating histories. If these customers are not able to obtain satisfactory working capital, maintain adequate cash flow, or obtain construction financing for the projects where our solar products are used, they may be unable to pay for the products for which they have ordered or of which they have taken delivery. Our legal recourse under such circumstances may be limited if the customer's financial resources are already constrained or if we wish to continue to do business with that customer. Revenue recognition for this type of customer is deferred until cash is received. If more customers to whom we extend credit are unable to pay for our products, our revenues, liquidity and results of operations could be materially and adversely affected.

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Our dependence on a limited number of suppliers of silicon wafers, cells and silicon, and the limited number of suppliers for certain other components, such as silver metallization paste, solar module back-sheet, and ethylene vinyl acetate encapsulant, could prevent us from delivering our products to our customers in the required quantities or in a timely manner, which could result in order cancellations and decreased revenues.

We purchase silicon raw materials, which include solar grade silicon, silicon wafers and solar cells, from a limited number of third-party suppliers. Our largest supplier of raw materials by dollar amount of purchases accounted for approximately 23.8%, 19.6% and 23.4% of our total raw materials purchases in 2013, 2014 and 2015, respectively.

In 2015, we purchased the large majority of the silicon wafers used in our solar modules from third parties, and our major silicon wafers suppliers were GCL (who accounted for 79.7% of our silicon wafer purchases), Yichang CSG Polysilicon Co., Ltd., or Yichang, and LDK. Our major suppliers of solar cells in 2015 included Motech Industries, Inc., or Motech, Neo Solar and Tongwei Solar Co., Ltd., or Tongwei. These suppliers may not always be able to meet our quantity requirements, or keep pace with the price reductions or quality improvements, necessary for us to price our products competitively. Supply may also be interrupted by accidents, disasters or other unforeseen events beyond our control. The failure of a supplier, for whatever reason, to supply silicon wafers, solar cells, silicon raw materials or other essential components that meet our quality, quantity and cost requirements in a timely manner could impair our ability to manufacture our products or increase our costs. The impact could be more severe if we are unable to access alternative sources on a timely basis or on commercially reasonable terms, and could prevent us from delivering our products to our customers in the required quantities and at prices that are profitable. Problems of this kind could cause order cancellations, reduce our market share, harm our reputation and cause legal disputes with our customers.

We are developing and commercializing higher conversion efficiency cells, but we may not be able to mass-produce these cells in a cost effective way, if at all.

Higher efficiency cell structures are becoming an increasingly important factor in cost competitiveness and brand recognition in the solar power industry. Such cells may yield higher power outputs at the same cost to produce as lower efficiency cells, thereby lowering the manufactured cost per watt. The ability to manufacture and sell solar modules made from such cells may be an important competitive advantage because solar system owners can obtain a higher yield of electricity from the modules that have a similar infrastructure, footprint and system cost compared to systems with modules using lower efficiency cells. Higher conversion efficiency solar cells and the resulting higher output solar modules are one of the considerations in maintaining a price premium over thin-film products. However, while we are making the necessary investments to develop higher conversion efficiency solar power products, there is no assurance that we will be able to commercialize some or any of these products in a cost effective way, or at all. In the near term, such products may command a modest premium. In the longer term, if our competitors are able to manufacture such products and we cannot do the same at all or in a cost efficient manner, we will be at a competitive disadvantage, which will likely influence our product pricing and our financial performance.

We may be subject to unexpected warranty expense that may not be adequately covered by our insurance policies.

Our warranty against defects in materials and workmanship is for ten years and, effective June 1, 2015, we guarantee that, for a period of 25 years, our polycrystalline modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97.5% of the labeled power output;

from year 2 to year 24, the actual annual power output decline will be no more than 0.7%; and

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by the end of year 25, the actual power output of the module will be no less than 80.7% of the labeled power output.

Effective June 1, 2015, we guarantee that, for a period of 25 years, our monocrystalline modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97% of the labeled power output;

from year 2 to year 24, the actual annual power output decline will be no more than 0.7%; and

by the end of year 25, the actual power output of the module will be no less than 80.2% of the labeled power output.

In addition, effective January 1, 2015, we lengthened the warranty against decline in our Dymond modules to 30 years. We guarantee that, for a period of 30 years, our Dymond modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97.5% of the labeled power output;

from year 2 to year 29, the actual annual power output decline will be no more than 0.5%; and

by the end of year 30, the actual power output of the module will be no less than 83% of the labeled power output.

We believe our warranty periods are consistent with industry practice. Due to the long warranty period, we bear the risk of extensive warranty claims long after we have shipped our products and recognized revenue. We began selling specialty solar products in 2002 and began selling standard solar modules in 2004. Any increase in the defect rate of our products would require us to increase our warranty reserves and would have a corresponding negative impact on our results of operations. Although we conduct quality testing and inspection of our solar module products, our solar module products have not been and cannot be tested in an environment simulating the up-to-25-year warranty periods. In particular, unknown issues may surface after extended use. These issues could potentially affect our market reputation and adversely affect our revenues, giving rise to potential warranty claims by our customers. As a result, we may be subject to unexpected warranty costs and associated harm to our financial results as long as 25 years after the sale of our products. In addition, for utility-scale solar power projects built by us, we provide a limited workmanship or balance of system warranty against defects in engineering, design, installation and construction under normal use, operation and service conditions for a period of up to five years following the energizing of the solar power plant. In resolving claims under the workmanship or balance of system warranty, we have the option of remedying through repair, refurbishment or replacement of equipment. We have also entered into similar workmanship warranties with our suppliers to back up our warranties. See "Item 5. Operating and Financial Review and Prospects A. Operating Results Critical Accounting Policies Warranty Costs."

As part of our energy development and electricity generation businesses, before energizing solar power plants, we conduct performance testing to confirm that they meet the operational and capacity expectations set forth in the agreements. In limited cases, we also provide an energy generation performance test designed to demonstrate that the actual energy generation for up to the first three years meets or exceeds the modeled energy expectation. In the event that the energy generation performance test performs below expectations, we may incur liquidated damages capped at a percentage of the contract price.

We have entered into agreements with a group of insurance companies with high credit ratings to back up our warranties. Under the terms of the insurance policies, which are designed to match the

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terms of our solar module product warranty policy, the insurance companies are obliged to reimburse us, subject to certain maximum claim limits and certain deductibles, for the actual product warranty costs that we incur under the terms of our solar module product warranty policy. We record the insurance premiums initially as prepaid expenses and amortize them over the respective policy period of one year. Each prepaid policy provides insurance against warranty costs for panels sold within that policy year. However, potential warranty claims may exceed the scope or amount of coverage under this insurance and, if they do, they could materially and adversely affect our business.

We may not continue to be successful in developing and maintaining a cost-effective solar cell manufacturing capability.

We plan to continue expanding our in-house solar cell manufacturing capabilities to support our solar module manufacturing business. Our annual solar cell production capacity was at 2.7 GW as of December 31, 2015. To remain competitive going forward, we intend to expand our annual solar cell production capacity to meet expected growth in demand for our solar modules. However, we only have limited and recent operating experience in this area and may face significant product development challenges in our solar cell operations. Manufacturing solar cells is a complex process and we may not be able to produce solar cells of sufficient quality to meet our solar module manufacturing standards. Minor deviations in the manufacturing process can cause substantial decreases in yield and in some cases cause no yield output or production to be suspended. We will need to make capital expenditures to purchase manufacturing equipment for solar cell production and will also need to make significant investments in research and development to keep pace with technological advances in solar power technology. Any failure to successfully develop and maintain cost-effective solar cell manufacturing capability may have a material and adverse effect on our business and prospects. For example, we have in the past purchased a large percentage of solar cells from third parties. This negatively affected our margins compared with those of our competitors since it is less expensive to produce cells internally than to purchase them from third parties. Because third party solar cell purchases are usually made in a period of high demand, prices tend to be higher and availability reduced.

Although we intend to continue direct purchasing of solar cells and toll manufacturing arrangements through a limited number of strategic partners, our relationships with our solar cell suppliers may be disrupted if we engage in the large-scale production of solar cells ourselves. If solar cell suppliers discontinue or reduce the supply of solar cells to us, through direct sales or through toll manufacturing arrangements, and we are not able to compensate for the loss or reduction by manufacturing our own solar cells, our business and results of operations may be adversely affected.

We may not achieve acceptable yields and product performance as a result of manufacturing problems.

We need to continuously enhance and modify our ingot and silicon wafer production capabilities in order to improve yields and product performance. Microscopic impurities such as dust and other contaminants, difficulties in the manufacturing process, disruptions in the supply of utilities or defects in the key materials and tools used to manufacture silicon wafers can cause a percentage of the silicon wafers to be rejected, which would negatively affect our yields. We may experience manufacturing difficulties that cause production delays and lower than expected yields.

Problems in our facilities, including but not limited to production failures, human errors, weather conditions, equipment malfunction or process contamination, may limit our ability to manufacture products, which could seriously harm our operations. We are also susceptible to floods, droughts, power losses and similar events beyond our control that would affect our facilities. A disruption in any step of the manufacturing process will require us to repeat each step and recycle the silicon debris, which would adversely affect our yields and manufacturing cost.

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If we are unable to attract, train and retain technical personnel, our business may be materially and adversely affected.

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

Our dependence on a limited number of customers and our lack of long-term customer contracts in our solar modules business may cause significant fluctuations or declines in our revenues.

We sell a substantial portion of our solar module products to a limited number of customers, including distributors, system integrators, project developers and installers/EPC companies. Our top five customers by revenues collectively accounted for approximately 38.3%, 33.6% and 26.8% of our net revenues in 2013, 2014 and 2015, respectively. We anticipate that our dependence on a limited number of customers will continue for the foreseeable future. Consequently, any of the following events may cause material fluctuations or declines in our revenues:

reduced, delayed or cancelled orders from one or more of our significant customers;

the loss of one or more of our significant customers;

a significant customer's failure to pay for our products on time; and

a significant customer's financial difficulties or insolvency.

As we continue to expand our business and operations, our top customers continue to change. We cannot assure that we will be able to develop a consistent customer base.

There are a limited number of purchasers of utility-scale quantities of electricity, which exposes us and our utility-scale solar power projects to additional risk.

Since the transmission and distribution of electricity is either monopolized or highly concentrated in most jurisdictions, there are a limited number of possible purchasers for utility-scale quantities of electricity in a given geographic location, including transmission grid operators, state and investor-owned power companies, public utility districts and cooperatives. As a result, there is a concentrated pool of potential buyers for electricity generated by our solar power plants and projects, which may restrict our ability to negotiate favorable terms under new PPAs and could impact our ability to find new customers for the electricity generated by our generation facilities should this become necessary. Furthermore, if the financial condition of these utilities and/or power purchasers deteriorates or government policies or regulations to which they are currently subject that compel them to source renewable energy supplies change, demand for electricity produced by our plants could be negatively impacted. In addition, provisions in our PPAs or applicable laws may provide for the curtailment of delivery of electricity for various reasons, including preventing damage to transmission systems, system emergencies, force majeure or economic reasons. Such curtailment would reduce revenues to us from PPAs. If we cannot enter into PPAs on terms favorable to us, or at all, or if the purchaser under our PPAs were to exercise its curtailment or other rights to reduce purchases or payments under such arrangements, our revenues from electricity generation segment and our decisions regarding development of additional projects in the energy development segment may be adversely affected.

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Product liability claims against us could result in adverse publicity and potentially significant monetary damages.

We, along with other solar power product manufacturers, are exposed to risks associated with product liability claims if the use of our solar power products results in injury. Since our products generate electricity, it is possible that users could be injured or killed by our products due to product malfunctions, defects, improper installation or other causes. Although we carry limited product liability insurance, we may not have adequate resources to satisfy a judgment if a successful claim is brought against us. The successful assertion of product liability claims against us could result in potentially significant monetary damages and require us to make significant payments. Even if the product liability claims against us are determined in our favor, we may suffer significant damage to our reputation.

Our founder, Dr. Shawn Qu, has substantial influence over our company and his interests may not be aligned with the interests of our other shareholders.

As of March 31, 2016, Dr. Shawn Qu, our founder, Chairman, President and Chief Executive Officer, beneficially owned 13,611,336 common shares, or 23.6% of our outstanding shares. As a result, Dr. Qu has substantial influence over our business, including decisions regarding mergers and acquisition, consolidations and the sale of all or substantially all of our assets, the election of directors and other significant corporate actions. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could deprive our other shareholders of an opportunity to receive a premium for their shares as part of a sale of our company and might reduce the price of our common shares.

We may be exposed to infringement, misappropriation or other claims by third parties, which, if determined adversely to us, could require us to pay significant damage awards.

Our success depends on our ability to develop and use our technology and know-how and sell our solar power products and services without infringing the intellectual property or other rights of third parties. The validity and scope of claims relating to solar power technology patents involve complex scientific, legal and factual questions and analyses and are therefore highly uncertain. We may be subject to litigation involving claims of patent infringement or the violation of intellectual property rights of third parties. Defending 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. Additionally, we use both imported and China-made equipment in our production lines, sometimes without sufficient supplier guarantees that our use of such equipment does not infringe third-party intellectual property rights. This creates a potential source of litigation or infringement claims. 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 or require us to seek licenses from third parties, pay ongoing royalties, redesign our products or subject us to injunctions prohibiting the manufacture and sale of our products or the use of our technologies. Protracted litigation could also defer customers or potential customers or limit their purchase or use of our products until such litigation is resolved.

Compliance with environmental laws and regulations can be expensive, and noncompliance with these regulations may result in adverse publicity and potentially significant monetary damages, fines and the suspension or even termination of our business operations.

We are required to comply with all national and local environmental regulations. Our business generates noise, wastewater, gaseous wastes and other industrial waste in our operations and the risk of incidents with a potential environmental impact has increased as our business has expanded. We believe that we comply with all relevant environmental laws and regulations and have all necessary environmental permits to conduct our business as it is presently conducted. However, if more stringent

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regulations are adopted in the future, the costs of complying with these new regulations could be substantial. If we fail to comply with present or future environmental regulations, we may be required to pay substantial fines, suspend production or cease operations.

Our solar power products must comply with the environmental regulations of the jurisdictions in which they are installed, and we may incur expenses to design and manufacture our products to comply with such regulations. If compliance is unduly expensive or unduly difficult, we may lose market share and our financial results may be adversely affected. Any failure by us to control our use or to restrict adequately the discharge, of hazardous substances could subject us to potentially significant monetary damages, fines or suspensions of our business operations.

We may not be successful in establishing our brand name in important markets and the products we sell under our brand name may compete with the products we manufacture on an original equipment manufacturer, or OEM, basis for our customers.

We sell our products primarily under our own brand name but also on an OEM basis. In certain markets, our brand may not be as prominent as other more established solar power product vendors, and there can be no assurance that the brand names "Canadian Solar," or "CSI" or any of our possible future brand names will gain acceptance among customers. Moreover, because the range of products that we sell under our own brands and those we manufacture for our OEM customers may be substantially similar, we may end up directly or indirectly competing with our OEM customers, which could negatively affect our relationship with them.

Failure to protect our intellectual property rights in connection with new solar power products may undermine our competitive position.

As we develop and bring to market new solar power products, we may need to increase our expenditures to protect our intellectual property. Our failure to protect our intellectual property rights may undermine our competitive position. As of March 31, 2016, we had 468 patents and 165 patent applications pending in the PRC for products that contribute a relatively small percentage of our net revenues. We have seven U.S. patents. We also have three patents in Europe. We have registered the "Canadian Solar" trademark in the U.S., Australia, Canada, Europe, South Korea, Japan, the United Arab Emirates, Hong Kong and Peru and we have applied for registration of the "Canadian Solar" trademark in a number of other countries. As of March 31, 2016, we had 60 registered trademarks and nil trademark applications pending in the PRC, and 44 registered trademarks and 23 trademark applications pending outside of China. These intellectual property rights afford only limited protection and the actions we take to protect our rights as we develop new solar power products may not be adequate. Policing the unauthorized use of proprietary technology can be difficult and expensive. In addition, litigation, which can be costly and divert management attention, may be necessary to enforce our intellectual property rights, protect our trade secrets or determine the validity and scope of the proprietary rights of others.

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

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 interruption. Although we currently carry third-party liability insurance against property damages, the policies for this insurance are limited in scope and may not cover all claims relating to personal injury, property or environmental damage arising from incidents on our properties or relating to our operations. See "Item 4. Information on the Company B. Business Overview Insurance." Any occurrence of these or other incidents which are not insured under our existing insurance policies could have a material adverse effect on our business, financial condition or results of operations.

We are also exposed to risks associated with product liability claims in the event that the use of our solar power products results in injury. See " Product liability claims against us could result in adverse publicity and potentially significant monetary damages." Although we carry limited product liability insurance, we may not have adequate resources to satisfy a judgment if a successful claim is brought against us.

In addition, the normal operation of our manufacturing facilities may be interrupted by accidents caused by operating hazards, power supply disruptions, equipment failure, as well as natural disasters. While our manufacturing plants in China and elsewhere are covered by business interruption insurance, any significant damage or interruption to these plants could still have a material and adverse effect on our results of operations.

If our internal control over financial reporting or disclosure controls and procedures are not effective, investors may lose confidence in our reported financial information, which could lead to a decline in our share price.

We are subject to the reporting obligations under U.S. securities laws. The SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, has adopted rules requiring every public company to include a management report on its internal control over financial reporting in its annual report, which contains management's assessment of the effectiveness of its internal control over financial reporting. In addition, an independent registered public accounting firm must report on the effectiveness of our internal controls over financial reporting. As of December 31, 2015, our management concluded that our internal control over financial reporting was effective. However, we cannot assure you that material weaknesses in our internal controls over financial reporting will not be identified in the future. Any material weaknesses in our internal controls could cause us not to meet our periodic reporting obligations in a timely manner or result in material misstatements in our financial statements. Material weaknesses in our internal controls over financial reporting could also cause investors to lose confidence in our reported financial information, leading to a decline in the market price of our common shares.

The audit report included in our annual report on Form 20-F was prepared by auditors who are not inspected by the Public Company Accounting Oversight Board and, as a result, you are deprived of the benefits of such inspection.

The independent registered public accounting firm that issues the audit reports included in our annual reports filed with the SEC, as auditors of companies that are traded publicly in the U.S. and a firm registered with the Public Company Accounting Oversight Board (United States), or the PCAOB, is required by the laws of the U.S. to undergo regular inspections by the PCAOB to assess its compliance with the laws of the U.S. and professional standards. Because our auditors are located in

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the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the PRC authorities, our auditors are not currently inspected by the PCAOB.

Inspections of other firms that the PCAOB has conducted outside China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. This lack of PCAOB inspections in China prevents the PCAOB from regularly evaluating our auditor's audits and its quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections. As a result, investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

If additional remedial measures are imposed on the big four PRC-based accounting firms, including our independent registered public accounting firm, in administrative proceedings brought by the SEC alleging the firms' failure to meet specific criteria set by the SEC, with respect to requests for the production of documents, we could be unable to timely file future financial statements in compliance with the requirements of the Exchange Act.

Beginning in 2011, the Chinese affiliates of the "big four" accounting firms (including our independent registered public accounting firm) were affected by a conflict between the U.S. and Chinese law. Specifically, for certain U.S. listed companies operating and audited in the PRC, the SEC and the PCAOB sought to obtain access to the audit work papers and related documents of the Chinese affiliates of the "big four" accounting firms. The accounting firms were, however, advised and directed that, under Chinese law, they could not respond directly to the requests of the SEC and the PCAOB and that such requests, and similar requests by foreign regulators for access to such papers in China, had to be channeled through the China Securities Regulatory Commission, or CSRC.

In late 2012, this impasse led the SEC to commence administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against the "big four" accounting firms (including our independent registered public accounting firm). A first instance trial of these proceedings in July 2013 in the SEC's internal administrative court resulted in an adverse judgment against the firms. The administrative law judge proposed penalties on the firms, including a temporary suspension of their right to practice before the SEC. Implementation of the latter penalty was postponed pending review by the SEC Commissioners. On February 6, 2015, before a review by the Commissioner had taken place, the firms reached a settlement with the SEC. Under the settlement, the SEC accepts that future requests by the SEC for the production of documents will normally be made to the CSRC. The firms will receive matching Section 106 requests, and are required to abide by a detailed set of procedures with respect to such requests, which in substance require them to facilitate production via the CSRC. If the firms fail to follow these procedures and meet certain other specified criteria, the SEC retains the authority to impose a variety of additional remedial measures, including, as appropriate, an automatic six-month bar on a firm's ability to perform certain audit work, commencement of new proceedings against a firm or, in extreme cases, the resumption of the current administrative proceeding against all four firms.

In the event that the SEC restarts administrative proceedings, depending upon the final outcome, listed companies in the U.S. with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in their financial statements being determined to not be in compliance with the requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, including possible delisting. Moreover, any negative news about any

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such future proceedings against the firms may cause investor uncertainty regarding China-based, U.S.-listed companies and the market price of their shares may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delisting of our shares from the NASDAQ Stock Market LLC, or Nasdaq, or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our shares in the U.S.

Our independent registered public accounting firm, Deloitte China, recently advised our audit committee that they had identified a matter that raised concerns in relation to the SEC's auditor independence rules.

The Spanish Member Firm of Deloitte Touche Tohmatsu Limited, or Deloitte Spain, provided an element of impermissible services as part of certain otherwise permissible tax compliance services to our subsidiary in Spain, or the Spanish Subsidiary, which only became our subsidiary after we acquired Recurrent Energy, LLC, or Recurrent, in March 2015. These impermissible services were not consistent with the SEC's auditor independence rules. Specifically, it was discovered that Deloitte Spain processed certain tax payments at the request of the Spanish Subsidiary, after management had reviewed and approved such payments, which included cash handling by Deloitte Spain. These impermissible services continued through early September 2015, when upon identification they were promptly terminated. The fees paid to Deloitte Spain for such services were insignificant. Deloitte Touche Tohmatsu Certified Public Accountants LLP, or Deloitte China, informed our audit committee that, during the period that these services were being provided by Deloitte Spain, Deloitte China's audit team was not aware that these impermissible services were provided to the Spanish Subsidiary. As a measure taken in response to the matter described above, Deloitte China performed procedures to verify that the amount of cash handled related solely to the tax compliance services, that the amount of cash remitted to the tax authority equated to amounts included in tax filings and that cash was remitted to the tax authority timely. Accordingly, for the reasons noted above, Deloitte China advised our audit committee that their objectivity, integrity, and impartiality was not impaired with respect to planning and executing the audits during 2015.

Our audit committee also reviewed and considered the impact that these matters may have had on Deloitte China's independence with respect to it under the applicable SEC and PCAOB independence rules. After considering all the facts and circumstances, our audit committee determined that the matter would not impair Deloitte China's ability to exercise objective and impartial judgment on all issues encompassed within their audit engagements during 2015.

Risks Related to Doing Business in China

The enforcement of the labor contract law and increases in labor costs in the PRC may adversely affect our business and our profitability.

The Labor Contract Law came into effect on January 1, 2008, and was later revised on December 28, 2012; the Implementation Rules and the amendment thereunder became effective on September 18, 2008 and July 1, 2013, respectively. The Labor Contract Law and the Implementation Rules imposed stringent requirements on employers with regard to executing written employment contracts, hiring temporary employees, dismissing employees, consultation with the labor union and employee assembly, compensation upon termination and overtime work, collective bargaining and labor dispatch business. In addition, under the Regulations on Paid Annual Leave for Employees, which came into effect on January 1, 2008, and their Implementation Measures, which were promulgated and became effective on September 18, 2008, employees who have served for more than one year with an

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employer are entitled to a paid vacation ranging from five to 15 days, depending on their length of service. Employees who waive such vacation time at the request of the employer must be compensated for each vacation day waived at a rate equal to three times their normal daily salary. According to the Interim Provisions on Labor Dispatching, which came into effect on March 1, 2014, the number of dispatched workers used by an employer shall not exceed 10% of its total number of workers. Our labor costs are expected to continue to increase due to these new laws and regulations. Higher labor costs and labor disputes with our employees stemming from these new rules and regulations could adversely affect our business, financial condition, and results of operations.

In recent years, our subsidiaries have lost certain tax benefits and we expect to pay additional PRC taxes as a result, which could have a material and adverse impact on our financial condition and results of operations.

On January 1, 2008, the Enterprise Income Tax Law, or the EIT Law, came into effect in China. Under the EIT Law, both foreign-invested enterprises and domestic enterprises are subject to a uniform enterprise income tax rate of 25%. The EIT Law provides for preferential tax treatment for certain categories of industries and projects that are strongly supported and encouraged by the state. For example, enterprises qualified as a "High and New Technology Enterprise," or HNTE, are entitled to a 15% enterprise income tax rate provided that such HNTE satisfies other applicable statutory requirements.

Certain of our PRC subsidiaries, such as CSI New Energy Holding Co., Ltd. (formerly, CSI Solar Manufacture Inc.), or CSI New Energy Holding, CSI Cells Co., Ltd., or CSI Cells, Canadian Solar Manufacturing (Luoyang) Inc., or CSI Luoyang Manufacturing, Canadian Solar Manufacturing (Changshu) Inc., or CSI Changshu Manufacturing, once enjoyed preferential tax benefits, such as a reduced enterprise income tax rate of 12.5%, however, these benefits were expired. In 2015, only our partially owned subsidiary, Suzhou Sanysolar Materials Technology Co., Ltd., or Suzhou Sanysolar, which was qualified as an HNTE and satisfied applicable statutory requirements, enjoyed a reduced enterprise income tax rate of 15%. As most of the preferential tax benefits enjoyed by our PRC subsidiaries expired, their effective tax rates increased significantly.

There are significant uncertainties regarding our tax liabilities with respect to our income under the EIT Law.

We are a Canadian company with a significant portion of our manufacturing operations in China. Under the EIT Law and its implementation regulations, both of which became effective on January 1, 2008, enterprises established outside China whose "de facto management body" is located in China are considered PRC tax residents and will generally be subject to the uniform 25% enterprise income tax rate on their global income. Under the implementation regulations, the term "de facto management body" is defined as substantial and overall management and control over aspects such as the production and business, personnel, accounts and properties of an enterprise. The Circular on Identification of China-controlled Overseas-registered Enterprises as Resident Enterprises on the Basis of Actual Management Organization, or Circular 82, further provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled offshore incorporated enterprise is located in the PRC. The criteria include whether (a) the premises where the senior management and the senior management bodies responsible for the routine production and business management of the enterprise perform their functions are mainly located within the PRC, (b) decisions relating to the enterprise's financial and human resource matters are made or subject to approval by organizations or personnel in the PRC, (c) the enterprise's primary assets, accounting books and records, company seals, and board and shareholders' meeting minutes are located or maintained in the PRC and (d) 50% or more of voting board members or senior executives of the enterprise habitually reside in the PRC. Although Circular 82 only applies to offshore enterprises controlled by enterprises or enterprise groups located within the PRC, the determining criteria set forth in the Circular 82 may reflect the tax authorities' general position on how the "de facto management body" test may be

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applied in determining the tax resident status of offshore enterprises. As the tax resident status of an enterprise is subject to the determination by the PRC tax authorities, uncertainties remain with respect to the interpretation of the term "de facto management body" as applicable to our offshore entities. As a substantial number of the members of our management team are located in China, we may be considered as a PRC tax resident under the EIT Law and, therefore, subject to the uniform 25% enterprise income tax rate on our global income, but dividends received by us from our PRC subsidiaries may be exempt from the income tax. If our global income is subject to PRC enterprise income tax at the rate of 25%, our financial condition and results of operation may be materially and adversely affected.

Dividends paid by us to our non-PRC shareholders and gains on the sale of our common shares by our non-PRC shareholders may be subject to PRC enterprise income tax liabilities or individual income tax liabilities.

Under the EIT Law and its implementation regulations, dividends paid to a non-PRC investor are generally subject to a 10% PRC withholding tax, if such dividends are derived from sources within China and the non-PRC investor is considered to be a non-resident enterprise without any establishment or place within China or if the dividends paid have no connection with the non-PRC investor's establishment or place within China, unless such tax is eliminated or reduced under an applicable tax treaty. Similarly, any gain realized on the transfer of shares by such investor is also subject to a 10% PRC withholding tax if such gain is regarded as income derived from sources within China, unless such tax is eliminated or reduced under an applicable tax treaty.

The implementation regulations of the EIT Law provide that (a) if the enterprise that distributes dividends is domiciled in the PRC, or (b) if gains are realized from transferring equity interests of enterprises domiciled in the PRC, then such dividends or capital gains shall be treated as China-sourced income.

Currently there are no detailed rules applicable to us that govern the procedures and specific criteria for determining the meaning of being "domiciled" in the PRC. As a result, it is not clear how the concept of domicile will be interpreted under the EIT Law. Domicile may be interpreted as the jurisdiction where the enterprise is incorporated or where the enterprise is a tax resident. As a result, if we are considered a PRC "resident enterprise" for tax purposes, it is possible that the dividends we pay with respect to our common shares to non-PRC enterprises, or the gain non-PRC enterprises may realize from the transfer of our common shares or our convertible notes, would be treated as income derived from sources within China and be subject to the PRC withholding tax at a rate of 10% or a lower applicable treaty rate for enterprises.

Under the Law of the People's Republic of China on Individual Income Tax, or the IIT Law, individual income tax is payable on PRC-source dividend income. The implementation regulations of the IIT Law provide that income from dividends derived from companies, enterprises and other economic organizations in China as well as income realized from transfer of properties in China is considered derived from sources inside China, regardless of whether the place of payment was inside China. Therefore, if we are treated as a company in China for tax purposes, any dividends we pay to our non-PRC individual shareholders as well as any gains realized by our non-PRC individual shareholders or our non-PRC individual note holders from the transfer of our common shares or our convertible notes may be regarded as China-sourced income and, consequently, be subject to PRC withholding tax at a rate of up to 20% or a lower applicable treaty rate for individuals. The investment returns of our non-PRC investors may be materially and adversely affected if any dividends we pay, or any gains realized on a transfer of our common shares, are subject to PRC tax.

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We face uncertainty from the PRC State Administration of Taxation's Announcement on Several Issues Concerning the Enterprise Income Tax on Indirect Property Transfer by Non-Resident Enterprises.

The PRC State Administration of Taxation, or the SAT, issued the Circular on Strengthening the Management of Enterprise Income Tax Collection of Income Derived by Non-resident Enterprises from Equity Transfers, or Circular 698, on December 10, 2009. Under Circular 698, an overseas investor (actual controlling party) who "indirectly transfers" the equity of a PRC resident enterprise, is required to report such transfer to the PRC tax authority if certain statutory requirements are satisfied. In March 2015, the SAT issued the Announcement on Several Issues Concerning the Enterprise Income Tax on Indirect Property Transfer by Non-Resident Enterprises, or Announcement 7, which further regulated and strengthened the administration of enterprise income tax on indirect transfer of properties such as equity in a Chinese resident enterprise, and the above stipulations of Circular 698 were repealed simultaneously.

Under Announcement 7, where a non-resident enterprise indirectly transfers properties, such as equity of Chinese resident enterprises, without any reasonable commercial purposes with the aim of avoiding payment of enterprise income tax, such indirect transfer shall be reclassified as a direct transfer of equity of a Chinese resident enterprise. Properties such as equity in Chinese resident enterprises mentioned in Announcement 7 mean the properties, or Chinese taxable properties, which are directly held by non-resident enterprises and subject the transfer income to enterprise income tax in China according to the provisions of Chinese tax law. Indirect transfers of Chinese taxable properties are transactions which transfer the equity and other similar interests (hereinafter referred to as "equity") of enterprises abroad that directly or indirectly hold Chinese taxable properties (not including Chinese resident enterprises registered abroad). To estimate reasonable commercial purposes, all arrangements related to the indirect transfer of Chinese taxable properties must be considered comprehensively and certain factors, such as whether the main value of the equity of enterprises abroad is directly or indirectly from the Chinese taxable properties, must be comprehensively analyzed. Except for the circumstances stipulated therein, the overall arrangements related to the indirect transfer of Chinese taxable properties that fall in any of the following circumstances simultaneously are deemed as having no reasonable commercial purposes: (a) more than 75% of the equity of enterprises abroad is directly or indirectly from Chinese taxable properties; (b) more than 90% of the total assets (not including cash) of enterprises abroad are directly or indirectly composed of investment in the territory of China at any time in the year before the indirect transfer of Chinese taxable properties, or more than 90% of the income of enterprises abroad is directly or indirectly from the territory of China in the year before the indirect transfer of Chinese taxable properties; (c) although the enterprises abroad and their subordinate enterprises directly or indirectly hold Chinese taxable properties have registered in the host country (region) in order to satisfy the organization form required by law, the functions actually performed and the risks undertaken are limited and are not sufficient to prove the economic essence; or (d) the burden of income tax of indirect transfer of Chinese taxable properties payable abroad is lower than the possible burden of taxation in China as for the direct transfer of Chinese taxable properties. However, a non-resident enterprise's income obtained from indirect transfer of Chinese taxable properties by purchasing and selling equity of the same listed enterprise abroad in the open market will not be taxed under Announcement 7.

There is uncertainty as to the application of Announcement 7 and it is understood that the relevant PRC tax authorities have jurisdiction regarding reasonable commercial purposes. As a result, we may become at risk of being taxed under Announcement 7 and we may be required to expend valuable resources to comply with Announcement 7 or to establish that we should not be taxed under Announcement 7, which may materially adversely affect our financial condition and results of operations.

We do not believe that the transfer of our common shares or the convertible notes by our non-PRC shareholders would be treated as an indirect transfer of equity in our PRC subsidiaries

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subject to Announcement 7. However, there is uncertainty as to the interpretation and application of Announcement 7 by the PRC tax authorities in practice. If you are required to pay PRC tax on the transfer of our common shares or convertible notes, your investment in us may be materially and adversely affected. In addition, we cannot predict how Announcement 7 will affect our financial condition or results of operations.

Restrictions on currency exchange may limit our ability to receive and use our revenues effectively.

Certain of our revenues and expenses are denominated in Renminbi. If our revenues denominated in Renminbi increase or our expenses denominated in Renminbi decrease in the future, we may need to convert a portion of our revenues into other currencies to meet our foreign currency obligations. Under China's existing foreign exchange regulations, our PRC subsidiaries are able to pay dividends in foreign currencies without prior approval from the State Administration of Foreign Exchange, or SAFE, by complying with certain procedural requirements. However, we cannot assure you that the PRC government will not take further measures in the future to restrict access to foreign currencies for current account transactions.

Foreign exchange transactions by our PRC subsidiaries under most capital accounts continue to be subject to significant foreign exchange controls and require the approval of or registration with PRC governmental authorities. In particular, if we finance our PRC subsidiaries by means of additional capital contributions, certain government authorities, including the Ministry of Commerce or its local counterparts, must approve these capital contributions. These limitations could affect the ability of our PRC subsidiaries to obtain foreign exchange through equity financing.

Uncertainties with respect to the Chinese legal system could materially and adversely affect us.

We conduct a significant portion of our manufacturing operations through our subsidiaries in China. These subsidiaries are generally subject to laws and regulations applicable to foreign investment in China and, in particular, laws applicable to wholly foreign-owned enterprises and joint venture companies. The PRC legal system is based on written statutes. Prior court decisions may be cited for reference but have limited precedential value. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, since these laws and regulations are relatively new and the PRC legal system is still developing, the implementation and enforcement of many laws, regulations and rules may be inconsistent, which may limit legal protections available to us. In addition, any litigation in China may be protracted and may result in substantial costs and divert our resources and the attention of our management.

Risks Related to Our Common Shares

We may issue additional common shares, other equity or equity-linked or debt securities, which may materially and adversely affect the price of our common shares. Hedging activities may depress the trading price of our common shares.

We may issue additional equity, equity-linked or debt securities for a number of reasons, including to finance our operations and business strategy (including in connection with acquisitions, strategic collaborations or other transactions), to satisfy our obligations for the repayment of existing indebtedness, to adjust our ratio of debt to equity, to satisfy our obligations upon the exercise of outstanding warrants or options or for other reasons. Any future issuances of equity securities or equity-linked securities could substantially dilute the interests of our existing shareholders and may materially and adversely affect the price of our common shares. We cannot predict the timing or size of any future issuances or sales of equity, equity-linked or debt securities, or the effect, if any, that such

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issuances or sales, may have on the market price of our common shares. Market conditions could require us to accept less favorable terms for the issuance of our securities in the future.

The market price for our common shares may be volatile.

The market price for our common shares has been highly volatile and subject to wide fluctuations. During the period from November 9, 2006, the first day on which our common shares were listed on the Nasdaq Global Market, until December 31, 2015, the market price of our common shares ranged from \$1.95 to \$51.80 per share. From January 1, 2015 to December 31, 2015, the market price of our common shares ranged from \$14.16 to \$40.08 per share. The closing market price of our common shares on December 31, 2015 was \$28.96 per share. The market price of our common shares may continue to be volatile and subject to wide fluctuations in response to a wide variety of factors, including the following:

- announcements of technological or competitive developments;
- regulatory developments in our target markets affecting us, our customers or our competitors;
- actual or anticipated fluctuations in our quarterly operating results;
- changes in financial estimates by securities research analysts;
- changes in the economic performance or market valuations of other solar power companies;
- the departure of executive officers and key research personnel;
- patent litigation and other intellectual property disputes;
- litigation and other disputes with our long-term suppliers;
- fluctuations in the exchange rates between the U.S. dollar, the Euro and the RMB;
- the release or expiration of lock-up or other transfer restrictions on our outstanding common shares; and
- sales or anticipated sales of additional common shares.

In addition, the securities market has from time to time experienced significant price and volume fluctuations that are not related to the operating performance of particular companies. These market fluctuations may also have a material and adverse effect on the price of our common shares.

Substantial future sales of our common shares in the public market, or the perception that such sales could occur, could cause the price of our common shares to decline.

Sales of our common shares in the public market, or the perception that such sales could occur, could cause the market price of our common shares to decline. As of December 31, 2015, we had 55,965,443 common shares outstanding. The number of common shares outstanding and available for sale will increase when our employees and former employees who are holders of restricted share units and options to acquire our common shares become entitled to the underlying shares under the terms of their units or options. In addition, in connection with a

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\$180 million senior loan facility, we issued warrants to purchase up to 1,348,040 of our common shares at an exercise price of \$24.48 per share in October 2015, and we issued additional warrants to purchase up to 940,171 of our common shares at an exercise price of \$28.08 per share in December 2015. The warrant holders are entitled to request to participate in any public offering of our common shares for which we undertake any marketing efforts. To the extent these shares are sold into the market, the market price of our common shares could decline.

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Your right to participate in any future rights offerings may be limited, which may cause dilution to your holdings.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. However, we cannot make these rights available in the United States unless we register the rights and the securities to which the rights relate under the Securities Act or an exemption from the registration requirements is available. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, you may be unable to participate in our rights offerings and may experience dilution in your holdings.

Our articles of continuance contain anti-takeover provisions that could adversely affect the rights of holders of our common shares.

The following provisions in our amended articles of continuance may deprive our shareholders of the opportunity to sell their shares at a premium over the prevailing market price by delaying or preventing a change of control of our company:

Our board of directors has the authority, without approval from the shareholders, to issue an unlimited number of preferred shares in one or more series. Our board of directors may establish the number of shares to be included in each such series and may fix the designations, preferences, powers and other rights of the shares of a series of preferred shares.

Our board of directors is entitled to fix and may change the number of directors within the minimum and maximum number of directors provided for in our articles. Our board of directors may appoint one or more additional directors to hold office for a term expiring no later than the close of the next annual meeting of shareholders, subject to the limitation that the total number of directors so appointed may not exceed one-third of the number of directors elected at the previous annual meeting of shareholders.

You may have difficulty enforcing judgments obtained against us.

We are a corporation organized under the laws of Canada and a substantial portion of our assets are located outside of the United States. A substantial portion of our current business operations is conducted in the PRC. In addition, a majority of our directors and officers are nationals and residents of countries other than the United States and a substantial portion of the assets of these persons are located outside the United States. As a result, it may be difficult for you to effect service of process within the United States upon these persons. It may also be difficult for you to enforce judgments obtained in U.S. courts based on the civil liability provisions of the U.S. federal securities laws against us and our officers and directors, many of whom are not residents of the United States and whose assets are located in significant part outside of the United States. In addition, there is uncertainty as to whether the courts of Canada or the PRC would recognize or enforce judgments of U.S. courts against us or such persons predicated upon the civil liability provisions of the securities laws of the United States or any state. In addition, it is uncertain whether such Canadian or PRC courts would be competent to hear original actions brought in Canada or the PRC against us or such persons predicated upon the securities laws of the United States or any state.

We may be classified as a passive foreign investment company, which could result in adverse United States federal income tax consequences to United States Holders of our common shares.

Based on the current value of our assets and the composition of our income and assets, we do not believe we were a passive foreign investment company, or PFIC, for United States federal income tax purposes for our taxable year ended December 31, 2015. The structuring of the Yieldco IPO is not

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complete and our PFIC status for 2016 or any future taxable year may depend, in part, on the manner in which we operate our current and future solar power project assets. Therefore, we currently cannot express a view as to whether we will be a PFIC for the current taxable year ending December 31, 2016 or any future taxable year, even though we will use reasonable efforts to structure the Yieldco IPO and operate our current and future solar power projects to mitigate the risk that we will be a PFIC for the current taxable year ending December 31, 2016. A non-United States corporation such as ourselves will be treated as a PFIC for United States federal income tax purposes for any taxable year if, applying applicable look-through rules, either (a) at least 75% of its gross income for such year is passive income or (b) at least 50% of the value of its assets (determined based on a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income. The determination of PFIC status is based on an annual determination that cannot be made until the close of a taxable year, involves extensive factual investigation, including ascertaining the fair market value of all of our assets on a quarterly basis and the character of each item of income that we earn, and is subject to uncertainty in several respects. In particular, the application of the PFIC rules to certain of our business lines is complex and unclear, and we cannot guarantee that the United States Internal Revenue Service, or IRS, will agree with any positions that we ultimately take. Accordingly, we cannot assure you that we will not be treated as a PFIC for any taxable year or that the U.S. IRS will not take a contrary position.

Changes in the composition of our income or composition of our assets may cause us to become a PFIC. The determination of whether we will be a PFIC for any taxable year may depend in part upon the value of our goodwill and other unbooked intangibles not reflected on our balance sheet (which may depend upon the market value of the common shares from time to time, which may be volatile) and also may be affected by how, and how quickly, we spend our liquid assets. Further, while we believe our classification methodology and valuation approach is reasonable, it is possible that the IRS may challenge our classification or valuation of our goodwill and other unbooked intangibles.

If we are a PFIC for any taxable year during which a United States Holder (as defined in "Item 10. Additional Information E. Taxation United States Federal Income Taxation") holds a common share, certain adverse United States federal income tax consequences could apply to such United States Holder. See "Item 10. Additional Information E. Taxation United States Federal Income Taxation Passive Foreign Investment Company."

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Our legal and commercial name is Canadian Solar Inc. We were incorporated under the laws of the Province of Ontario, Canada in October 2001. We changed our jurisdiction by continuing under the Canadian federal corporate statute, the Canada Business Corporations Act, or CBCA, effective June 1, 2006. As a result, we are governed by the CBCA. See " C. Organizational Structure" for additional information on our corporate structure, including a list of our major subsidiaries.

Our principal executive office and principal place of business is located at 545 Speedvale Avenue West, Guelph, Ontario, Canada N1K 1E6. Our telephone number at this address is (1-519) 837-1881 and our fax number is (1-519) 837-2550.

All inquiries to us should be directed at the address and telephone number of our principal executive office set forth above. Our website is www.canadiansolar.com. The information contained on or accessible through our website does not form part of this annual report.

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B. Business Overview

Overview

We are one of the world's largest and leading solar power companies. We are a leading vertically integrated provider of solar power products, services and system solutions with operations in North America, South America, Europe, Africa, the Middle East, Australia and Asia.

We design, develop, and manufacture solar wafers, solar cells and solar power products. Our solar power products include standard solar modules and specialty solar products. We are incorporated in Canada and conduct most of our manufacturing operations in China. Our products include a range of solar modules built to general specifications for use in a wide range of residential, commercial and industrial solar power generation systems. Specialty solar products consist of customized solar modules that our customers incorporate into their own products and complete specialty products, such as portable solar home systems. We sell our products primarily under our "Canadian Solar" brand name.

In recent years, we have increased our investment in, and management attention on, our energy development and electricity generation segments. Our energy development segment consists primarily of solar power project development, EPC services and O&M services. Our electricity generation segment consists primarily of holding solar power projects for the purpose of generating and selling electricity to the local or national grid or other power purchasers. As we have continued to expand our business into this downstream portion of the industry, our energy development and electricity generation segments combined have grown to 28.2% of our net revenues in 2015, compared to 41.0% in 2014 and 19.6% in 2013. In the future, we intend to grow our energy development segment by growing our project pipeline and the number of customers of our EPC services and O&M services. We also plan to grow our electricity generation segment by holding more projects to generate revenue from the sales of electricity. In March 2015, we significantly increased our solar project pipeline when we acquired Recurrent, a leading solar energy developer with solar power projects located principally in California and Texas. As of December 31, 2015, we had a total solar project pipeline of 10.3 GWp and a late-stage project pipeline, comprising self-owned and joint venture projects and EPC contracts, in Canada, Japan, the U.S., the United Kingdom, Brazil and China, totaling 2.0 GWp. See "Sales, Marketing and Customers - Energy Development Segment - Solar Project Development" for a description of the status of our solar power projects.

We are preparing to potentially form a globally diversified, dividend growth-oriented partnership, or Yieldco, to own, operate and acquire long-term contracted renewable energy generation assets with consistent cash flows in attractive markets. If successful, we expect to own a general partner interest in Yieldco and offer economic interests to public shareholders. The cash produced from projects owned by the operating subsidiaries of Yieldco will be distributed up to Yieldco, which will in turn distribute the cash to Yieldco's public shareholders and, in certain circumstances, to us. Yieldco's strategy is to rapidly expand and diversify its portfolio of assets by acquiring, from us and unaffiliated third parties, utility-scale solar projects and commercial and industrial distributed solar energy assets, as well as other renewable energy generation assets equipped with proven and reliable technologies. We expect that Yieldco's initial target markets will be Canada, Japan, Spain, the United Kingdom and the United States, and other selected markets primarily within OECD countries. In November 2015, we confidentially submitted a draft registration statement on Form S-1 to the SEC relating to the proposed initial public offering of the Yieldco. The initial public offering process is subject to the SEC review process and market and other conditions.

We believe that we offer one of the broadest crystalline silicon solar power product lines in the industry. Our product lines range from modules of medium power to high efficiency, high-power output mono-crystalline modules, as well as a range of specialty products. We currently sell our products to a diverse customer base in various markets worldwide, including China, Japan, the U.S., Germany, Spain,

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Italy, France, the Czech Republic, Canada, India and the United Kingdom. Our customers primarily include distributors, system integrators, project developers and installers/EPC companies.

We employ a flexible vertically integrated business model that combines internal manufacturing capacity with direct material purchases of both cells and wafers. We believe this approach has benefited us by lowering the cost of materials of our solar module products. We also believe that this approach provides us with greater flexibility to respond to short-term demand increases.

As of December 31, 2015, we had:

4.33 GW of total annual solar module manufacturing capacity, approximately 500 MW of which is located in Ontario, Canada, 330 MW in South East Asia and the rest in China;

2.7 GW of total annual solar cell manufacturing capacity located in China; and

400 MW of total annual ingot and wafer manufacturing capacity located in China.

We plan to expand our wafer, cell and module capacities to 1.0 GW, 3.9 GW and 5.73 GW, respectively, by December 31, 2016.

We intend to use substantially all of the silicon wafers that we manufacture to supply our own solar cell plants and to use substantially all of the solar cells that we manufacture to produce our own solar module products. We also intend to use some of the solar modules we produce in our energy development and electricity generation segments. Our total manufacturing costs in China, including purchased polysilicon, wafers and cells, decreased from \$0.52 per watt in December 2013 to \$0.48 per watt in December 2014 and to \$0.40 per watt in December 2015. We expect to continue to decrease the manufacturing costs for our production of wafers, cells and modules.

We continue to focus on reducing our manufacturing costs by improving solar cell conversion efficiency, enhancing manufacturing yields and reducing raw material costs. In January 2009, we established a new solar cell efficiency research center to develop more efficient cell structures, and we have been making ongoing improvements in solar cell conversion efficiency and product cost control. We began shipping new products, such as higher efficiency modules, in late 2011. We have successfully developed and launched additional new high efficiency cells and modules in the past few years and expect to increase the sales volumes of these products in the future.

Our Products and Services

Our business consists of the following three business segments: (a) module segment, (b) energy development segment and (c) electricity generation segment. Our module segment primarily involves the design, development, manufacturing and sale of a wide range of solar power products, including standard solar modules and specialty solar products, and solar system kits. Our energy development segment consists of solar power project development, EPC services and O&M services. Our electricity generation segment consists of holding solar power projects for the purpose of generating income from the sale of electricity to the local or national grid or other power purchasers.

Products Offered in Our Module Segment

Standard Solar Modules

Our standard solar modules are arrays of interconnected solar cells in weatherproof encapsulation. We produce a wide variety of standard solar modules, ranging from 3 W to over 335 W in power and using multi-crystalline or mono-crystalline cells in several different design patterns. Our mainstream solar modules include standard CS6V (50 cells), CS6P/CS6K (60 cells), CS6X/CS6XA (72 cells), Dymond CS6K-P-FG (60 cells, double-glass) and Dymond CS6X-P-FG (72 cells, double-glass) modules, all using 6-inch solar wafers with the majority being multi-crystalline. The mainstream modules are

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designed for residential, commercial and utility applications. Small modules are for specialty applications.

We launched our Quartech modules in March 2013. Quartech modules use 4-busbar solar cell technology which improves module reliability and efficiency. We produced and shipped Quartech modules in large volume in 2014. CS6P (6 × 10 cell layout) Quartech modules have power output between 255 W and 270 W, which enables us to offer customers modules with high power. We launched and started shipping Dymond modules in October 2014. Dymond modules are designed with double-glass encapsulation, which is more reliable for harsh environments and ready for 1500V solar systems.

We launched and started shipping SmartDC modules in September 2015. SmartDC modules feature an innovative integration of our module technology and power optimization for grid-tied PV applications. By replacing the traditional junction-box, SmartDC modules eliminate module power mismatch, mitigate shading losses and optimize power output at module-level. SmartDC modules also provide module-level data to minimize operational costs and to permit effective system management.

In March 2016, we launched our new Quintech SuperPower mono modules. Quintech SuperPower mono modules are made of cells with PERC technology and significantly improve module efficiency and reliability. CS6K (6 × 10 cell layout aligned with mainstream dimensions) Quintech SuperPower mono modules have a power output between 285 W and 295 W and are high efficiency and high reliability. We expect to start commercial production of Quintech modules with conventional multi and mono cells in the second quarter of 2016.

At the beginning of 2015, we started commercial production of Onyx cells with our in-house developed black silicon technology, Onyx technology. Onyx technology employs a nano-texturing process to make the multi-crystalline cell almost fully black, increasing cell efficiency and module wattage at the same time. We started increasing the production volume of Onyx cells in 2016, which have been incorporated into our Quartech and Quintech module families.

We design our standard solar modules to be durable under harsh weather conditions and easy to transport and install. We sell our standard solar modules primarily under our brand name. Since we began selling our solar module products in March 2002, we have increased our annual module production capacity to 4.33 GW as of December 31, 2015.

Specialty Solar Products

Our specialty solar products are mainly Andes Solar Home System, or Andes SHS, and Maple Solar System, or Maple SS.

Andes SHS is an off-grid solar system, designed to provide an economical source of electricity to homes and communities without access to grid electricity or where electricity supply is scarce. The Andes SHS is portable, light-weight, and easy to set-up, making it ideal for situations where emergency power is required.

Maple SS is an economical, safe and clean energy solution for families who burn kerosene for lighting when darkness falls. It is a very convenient mobile power source for outdoor activities, such as camping, boating and hiking. Maple SS includes a solar panel, energy-efficient LED lights, Li-ion batteries and multiple cell phone charger plugs.

Solar System Kits

A solar system kit is a ready-to-install package consisting of solar modules produced by us and components, such as inverters, racking system and other accessories, supplied by third parties. We began selling solar system kits in 2010 and in 2015 sold them primarily to customers in Japan and Europe.

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Products and Services Offered in Our Energy Development Segment

Solar Project Development

We develop, build and sell solar power projects. Our solar project development activities have grown over the past several years through a combination of organic growth and acquisitions. Our global solar power project business develops projects primarily in Canada, Japan, the U.S., China, Brazil and the United Kingdom. Our team of experts specializes in project development, evaluations, system designs, engineering, managing, project coordination and organizing financing. See "Sales, Marketing and Customers Solar Project Development" for a description of the status of our solar power projects.

EPC Services

Our EPC services include engineering, procurement and construction work for solar power projects owned either by us or by third-parties. In late 2010, we began providing EPC services primarily in Canada and China. In 2015, we provided EPC services for 153.5MW of solar projects in Canada, China and Australia. The EPC services in China were provided through our affiliated company, Suzhou Gaochuangte New Energy Sources Development Co., Ltd., or Gaochuangte, in which we own a 40% equity interest.

O&M Services

Our O&M services include inspections, repair and replacement of plant equipment, site management and administrative support services. In the second half of 2012, we started to provide O&M services for solar power projects in commercial operation. In 2015, we provided O&M services primarily to the North American market.

Products and Services Offered in Our Electricity Generation Segment

In the fourth quarter of 2014, we began to operate certain of our solar projects in China for the purpose of generating income from the sale of electricity. As of December 31, 2015, we had a fleet of solar power plants in operation with an aggregate capacity of approximately 398.1 megawatt peak, or MWp. Revenue from the sale of electricity in 2015 totaled \$32.1 million, compared to \$2.9 million in 2014. In the future, we plan to expand our electricity generation segment by increasing the number of solar projects we hold and operate, either by retaining solar projects we develop or acquiring solar projects from third-parties.

Supply Chain Management

Module Segment

Our module segment depends on our ability to obtain a stable and cost-effective supply of polysilicon, silicon wafers and solar cells. In 2015, we purchased the large majority of the silicon wafers used in our solar modules from third parties, and our major silicon wafers suppliers were GCL (who accounted for 79.7% of our silicon wafer purchases), Yichang and LDK. Our major suppliers of solar cells in 2015 include Motech, Neo Solar and Tongwei. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we terminate any of these agreements, we may not be able to recover all or any part of the advance payments we have made to these suppliers and we may be subject to litigation."

Since 2011, the supply of polysilicon and silicon wafers has generally exceeded demand, particularly polysilicon. Polysilicon prices increased from approximately \$17.89 per kilogram by December 31, 2013 to approximately \$20.6 per kilogram by December 31, 2014 due to more balanced supply and demand, but then significantly decreased to \$13.7 per kilogram by December 31, 2015 due to a modest

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oversupply. In the future, we expect that polysilicon prices will remain low. We plan to continue to purchase all of our polysilicon requirements externally. Although we plan to increase our solar wafer manufacturing capacity, we expect to continue purchasing most of our silicon wafer requirements externally. We expect to continue to diversify our wafer and polysilicon suppliers, with a focus on top tier international suppliers.

Silicon Raw Materials and Solar Wafers

Silicon feedstock, which consists of high-purity solar grade silicon, is the starting point of the silicon based solar module supply chain.

Our silicon wafer agreements set forth price and quantity information, delivery terms and technical specifications. These agreements usually set forth specific price terms. However, most agreements also include mechanisms to adjust the prices, either upwards or downwards, based on market conditions.

We have entered into a number of long-term supply agreements with several silicon and wafer suppliers in order to secure a stable supply of raw materials to meet our production requirements. These suppliers included GCL, Neo Solar, Deutsche Solar, LDK and a UMG-Si supplier. In 2009 and thereafter, we amended our agreements with certain of these suppliers to adjust the purchase price to prevailing market prices at the time we place a purchase order and to reduce the quantity of products that we are required to purchase. Under our supply agreements with certain suppliers, and consistent with historical industry practice, we make advance payments prior to scheduled delivery dates. These advance payments are made without collateral and are credited against the purchase prices payable by us. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we terminate any of these agreements, we may not be able to recover all or any part of the advance payments we have made to these suppliers and we may be subject to litigation."

Solar Cells

In addition to manufacturing our own solar cells and having toll manufacturing arrangements with our solar cell suppliers, we purchase solar cells from a number of international and local suppliers.

Our solar cell agreements set forth price and quantity information, delivery terms and technical specifications. These agreements generally provide for a period of time during which we can inspect the product and request the seller to make replacements for damaged goods. We generally require the seller to bear the costs and risks of transporting solar cells until they have been delivered to the location specified in the agreement. We currently do not have any long-term supply agreements for solar cells with fixed price or quantity terms.

As we expand our business, we expect to increase our solar cell manufacturing capacity and diversify our solar cell supply channel to ensure we have the flexibility to adapt to future changes in the supply of, and demand for, solar cells.

Energy Development Segment

Our module segment supplies part of the solar modules used in our energy development segment. We also use our own engineers, construction workers and plant managers or hire third party contractors to build and operate the plants prior to sale.

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Electricity Generation Segment

Of the power plants that we hold and operate to generate revenues from the sale of electricity, 308.8 MWp are solar power projects that we built ourselves, and 89.3 MWp are operating solar power projects that we acquired from third parties.

Manufacturing, Construction and Operation

Module Segment

We assemble our solar modules by interconnecting multiple solar cells by tabbing and stringing them into a desired electrical configuration. We lay the interconnected cells, laminate them in a vacuum, cure them by heating and package them in a protective lightweight anodized aluminum frame. We seal and weatherproof our solar modules to withstand high levels of ultraviolet radiation, moisture and extreme temperatures.

We selectively use automation to enhance the quality and consistency of our finished products and to improve the efficiency of our manufacturing processes. Key equipment in our manufacturing process includes automatic laminators, simulators and solar cell testers. The design of our assembly lines provides flexibility to adjust the ratio of automated equipment to skilled labor in order to maximize quality and efficiency.

Energy Development Segment

We design, construct and maintain solar power projects primarily in China, Canada, Japan, U.S., China, Brazil and the United Kingdom. We engage in all aspects of the development and operation of solar power projects, including project selection, design, permitting, engineering, procurement, construction, installation, monitoring, operation and maintenance. We also provide EPC and O&M services to third-parties.

Our solar power projects development process primarily consists of the following stages:

Market Due Diligence and Project selection. We search for project opportunities globally with the goal of maintaining a robust and geographically diversified project portfolio. Our business team closely monitors the global solar power projects market and gathers market intelligence to identify project development opportunities. Our development team prepares market analysis reports, financial models and feasibility studies to guide us in evaluating and selecting solar power projects. As we consider undertaking new solar power projects, we weigh a number of factors including location, local policies and regulatory environment, financing costs and potential internal rate of returns.

Project financing. We typically include project financing plans in our financial models and feasibility studies. We finance our projects through our working capital and debt financing from local banks or international financing sources that require us to pledge project assets.

Permitting and approval. We either obtain the permits and approvals necessary for solar projects ourselves or we acquire projects that have already received the necessary permits and approvals. The permitting and approval process for solar power projects varies from country to country and often among local jurisdictions within a country.

Project design, engineering, procurement and construction. Our engineering team generally designs solar power projects to optimize performance while minimizing construction and operational costs and risks. The engineering design process includes the site layout and electrical design as well choosing the appropriate technology, in particular module and inverter types. We use solar modules produced by us and by third party manufacturers, and procure inverters and other equipment from third party suppliers. We generally construct solar projects in China through

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Gaochuangte, our affiliate in which we own a 40% equity interest and engage third-party contractors in some other countries.

Electricity Generation Segment

We operate and maintain our solar power projects in United Kingdom, United States, Canada, China, Japan and Spain. We sign grid-connection agreements and/or PPAs with the local grid companies. After a project is connected to the grid, we regularly inspect, monitor and manage the project site with the intention to maximize the utilization rate, rate of power generation and system life of the project.

Quality Control and Certifications

Module Segment

We have registered our quality control system according to the requirements of ISO 9001:2008 and ISO/TS 16949 standards. TUV Rheinland Group, a leading international service company that documents the safety and quality of products, systems and services, audits our quality systems. We inspect and test incoming raw materials to ensure their quality. We monitor our manufacturing processes to ensure quality control and we inspect finished products by conducting reliability and other tests.

We have obtained IEC 61215 and IEC 61730 (previously TUV Class II safety) European standards for sales in Europe. We have also obtained certifications of CAN ORD-UL 1703 and UL 1703, which allow us to sell products in North America. In 2009, we obtained the necessary certifications to sell our modules in Japan, South Korea and Great Britain and to several of the Chinese solar programs, including Golden Sun. In 2011, we completed IEC 61215, IEC 61730 and UL1703 certification for modules designed to be assembled from metal wrap-through cells. We also completed DLG ammonia resistance testing and obtained the salt mist certification for our leading module CS6P-P in 2011. In 2012, we achieved the highest ratings possible in the two most significant standard tests for ammonia resistance of solar modules, which were the IEC 62716 draft C ammonia corrosion test and the DLG standard test. In 2013, we extended the salt mist certification under IEC 61701 ed.2 Severity 1 to all of our standard modules at VDE (Verband Deutscher Elektrotechniker). In addition, we were able to register more key module types at JET for Japan; enhanced the maximum system voltage up to 1000V for our CSA (Canadian Standards Association) certification (North America), allowing significant cost reduction for our EPC partners; and again raised the ranking of CEC PTC ratings. In 2013, we extended our IEC and UL certifications to cover higher-power modules, up to 275 W for 60 cell models and 330 W for 72 cell models, through key technology improvements such as introduction of 4 bus bar cell design. We also again improved our CEC PTC ratings for the spearhead CS6P-P model, and have demonstrated suitability of our product portfolio for reliable long-term operation under various climates, through SGS IEC 60068-2-68 sand blowing certification and extensive Potential Induced Degradation, or PID, resistance testing at respected laboratories, such as Fraunhofer ISE, VDE and TUV SUD (Technischer Überwachungs-Verein Südteil Deutschland).

In 2012, the new half-cell module designed by our R&D team was fully certified by CSA and VDE, two worldwide recognized certification bodies. We also started providing our customers with third-party-approved PAN files (testing per IEC 61853-1) for all our key module series, allowing more accurate energy yield simulation and better return-on-investment analysis for their projects. In 2013, we obtained certifications for double glasses and DC-to-AC module designs. We will continue our efforts for general improvements in module and component designs and seek to obtain corresponding certifications. With the emergence of new markets that we are expanding into, we have made and expect to make efforts to comply with new certification schemes that apply to us, such as INMETRO for Brazil and the UNI9177 fire test for Italy that we have now complied with.

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In 2014, we received JET certification for our new high efficiency module series CS6V targeting the residential market, and also extended the highest power range of our mainstream CS6P-P model to 275 W in JET. We also completed full certification for our new Quartech (4 busbar cells), covering VDE/CSA/MCS-BBA/JET, which allows us to launch these products worldwide. Several state-of-the-art demonstration trials were implemented, such as a 5 kW system located in the desert-like environment of Australian Alice Springs DKASC center.

In 2015, we received several product certifications that support our new product launches. Our 60 and 72 cell double glass module series were certified by VDE, CSA and MCS-BBA, which allows us to launch these products worldwide. We also completed VDE and TUV-Rheinland certification (IEC61215/61730) of our new PERC mono 5 busbar premium module series. The PV connector T4 designed by us was certified by TUV-Rheinland and CSA to satisfy the latest and most stringent standards, namely IEC61852 and UL6703. We have updated our mainstream modules Life Cycle Analysis evaluation and have been granted verification certificate from TUV SUD to meet the PAS2050 and ISO14067 standards.

To support our electricity generation segment, we started implementing a state-of-the-art OPCT (On-going Performance Characterization Testing) program in cooperation with PVEL-DNVGL laboratory in 2015, which delivered extensive module performance characterization per IEC61853 series standards.

Our PV test laboratory is registered with the ISO 17025 quality improvement program, and has been accepted for the Mutual Data Acceptance Program by the CSA in Canada, VDE in Germany, Intertek in the U.S. and CGC in China (China General Certification Center). The PV test laboratory allows us to conduct some product certification testing in-house, which should decrease time-to-market and certification costs.

Energy Development and Electricity Generation Segments

As of the end of 2015, we have received global certifications of ISO 9001: 2008, ISO 14001: 2004 and OHSAS 18001: 2007 for development and engineering with management of construction and O&M services of solar power solutions in the Americas and Asia-Pacific regions.

Our residential energy storage system (ESS) product, specifically conceived for the Australian market, has been certified by TUV SUD and SAA (Standards Australia International Limited), according to standards IEC62109 and IEC62040.

Sales, Marketing and Customers

The following table sets forth, for the periods indicated, certain information relating to our total net revenues derived from our customers categorized by their geographic locations for the periods indicated:

Region	Years Ended December 31,					
	2013		2014		2015	
	Total Net Revenues	%	Total Net Revenues	%	Total Net Revenues	%
(In thousands of \$, except for percentages)						
Asia	870,189	52.6	905,092	30.6	1,384,243	39.9
Americas	588,279	35.6	1,795,490	60.6	1,750,000	50.5
Europe and others	195,888	11.8	260,045	8.8	333,383	9.6
Total	1,654,356	100.0	2,960,627	100.0	3,467,626	100.0

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Module Segment

Our primary customers are distributors, system integrators, project developers and installers/EPC companies. A small number of customers have historically accounted for a major portion of our net revenues. In 2013, 2014 and 2015, our top five customers by net revenues collectively accounted for approximately 38.3%, 33.6% and 26.8%, respectively, of our total net revenues. Sales to our largest customer in those years accounted for 13.3%, 7.4% and 7.4%, respectively, of our total net revenues.

We market and sell solar modules worldwide for residential, commercial and utility-scale solar energy solutions. We primarily sell our products to distributors and large-scale installers through our own, home-grown sales teams, who operate throughout Europe, the Americas, the Middle East and the Asia-Pacific regions.

Our marketing activities include brand sponsorship, social media discussions and digital marketing. Our teams also develop channel marketing programs to support our customers' marketing of our business and products, while also providing various services such as product training, new product briefing, and sales training. Additionally, our marketing team focuses heavily on public relations and crisis management to safeguard our public image. By working closely with our sales teams and other leading solar research companies, our marketing team provides up-to-date market information on a constant basis, supporting the efforts of our sales team. Our marketing staff is located throughout the U.S., Canada, Europe, Japan, Australia, and South Korea.

We sell our standard solar module products primarily under three types of arrangements: (a) sales contracts to distributors; (b) sales to systems integrators, installers/EPC companies and project developers; and (c) OEM/tolling manufacturing arrangements.

We target our sales and marketing efforts for our specialty solar products at companies in selected industry sectors, including the automotive, telecommunications and light-emitting diode, or LED, lighting sectors. As standard solar modules increasingly become commoditized and technology advancements allow solar power to be used in more off-grid applications, we intend to expand our sales and marketing focus on our specialty solar products and capabilities. Our sales and marketing team works with our specialty solar products development team to take into account changing customer preferences and demands to ensure that our sales and marketing team is able to effectively communicate to customers our product development changes and innovations. We intend to establish additional relationships in other market sectors as the specialty solar products market expands.

As we expand our manufacturing capacity and enhance our brand name, we continue to develop new customer relationships in a wider range of geographic markets to decrease our market concentration. In 2013, we significantly increased our total number of customers and achieved a leading market share in Canada, Japan, Thailand and the Central America, which we maintained in 2014. In 2015, we both maintained our leading market share in those markets and expanded our customer base in several emerging solar markets, such as Southeast Asia. We plan to expand into Middle East and Africa. While we expect to expand into new markets, we expect that our near term major markets will be North America and the Asia Pacific region.

In 2010, we commenced the sale of solar system kits. A solar system kit is a ready-to-install package consisting of solar modules produced by us and components, such as inverters, racking system and other accessories, supplied by third parties. In 2015, we sold approximately 89.7 MW of system kits primarily in Japan and Europe.

Energy Development Segment

We develop and sell solar projects primarily in Canada, Japan, U.S., China, Brazil and the United Kingdom. We provide EPC services primarily in Canada, China and Australia, and O&M services

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primarily in Canada. We sell our projects to large utility companies and other power producers. Customers of our EPC and O&M services are solar project developers and owners.

In order to continue to grow our energy development segment, we conduct market due diligence, routinely meet with industry players and interested investors and attend industry conferences and events to identify project development opportunities. Our energy development segment team has extensive industry expertise and significant experience in working with government authorities and developing new projects for our target markets.

Solar Project Development

We divide our solar power project pipeline into early- to mid-stage pipeline and late-stage pipeline. Early- to mid-stage pipeline includes projects that are under assessment for co-development and acquisition, or are being developed by us, that have identified or secured the land for development, and that have signed energy off-take agreements or have a reasonable probability to sign such agreements. Late-stage pipeline includes nearly all projects that have energy off-take agreements and are expected to be built within the next 2-4 years. However, some of the late-stage projects may not be completed due to failure to secure permits or grid connection, among other risks. In March 2015, we acquired Recurrent, a leading solar energy developer with solar power projects located principally in California and Texas for approximately \$261 million. The acquisition increased our total solar project pipeline by approximately 4.0 GWp, and our late-stage, utility-scale solar project pipeline by approximately 1.0 GWp. As of March 10, 2016, we had a geographically diverse solar project pipeline totaling 10.3 GWp, of which 2.0 GWp were in late-stage of development and 8.3 GWp in early- to mid-stage of development. Our project pipeline included approximately 2.6 GWp of projects under development by Recurrent in the U.S., which are expected to be constructed over the next five years and qualify for the investment tax credit.

In Canada

During 2015, we completed the construction and grid connection of nine solar power projects totaling 127 MWp. We sold seven of these projects totaling approximately 98.3 MWp. We intend to own and operate the remaining two projects, Alfred and Beam Light.

In Japan

During 2015, we completed the construction and grid connection of ten solar power plants, with a total capacity of approximately 20 MWp. As of March 10, 2016, our pipeline of projects under development was approximately 582.2 MWp, of which 81.5 MWp was in construction and 107.4 MWp at the ready-to-build stage. Pursuant to a recent regulatory change, the Ministry of Economy, Trade and Industry will give developers a grace period to submit a signed grid-connection contract in order for existing projects under development to lock in the feed-in-tariff. Projects that are not able to reach this milestone within the grace period will have their respective feed-in-tariff rates reduced to the applicable rate at that time. The exact length of this grace period is still to be announced. We have signed interconnection agreements for projects totaling approximately 200 MWp, and believe we can sign interconnection agreements for an additional 170-215 MWp within the next 12 months. We will reassess the options for the projects that do not secure interconnection agreements within this grace period.

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The following table summarizes the status of our project pipeline in the U.S. as of March 10, 2016:

Late-stage Pipeline	Gross MW (DC)	Net⁽¹⁾ MW (DC)	State	Status	Expected COD
Astoria 1	130.8	130.8	CA	In Construction	2016
Astoria 2	100.0	100.0	CA	In Construction	2016
Barren Ridge	78.0	62.4	CA	In Construction	2016
Mustang	134.4	114.2	CA	In Construction	2016
Tranquillity	257.7	126.3	CA	In Construction	2016
Roserock	212.1	103.9	TX	In Construction	2016
Garland	272.1	133.3	CA	In Construction	2016
Total	1,185.1	770.9			

(1)

Reflects our net ownership after sales and tax equity financing.

During 2015, we sold controlling interests in three solar power projects, Tranquillity, Roserock and Garland, to Southern Power, a subsidiary of Southern Company (NYSE: SO). By the end of January 2016, we had secured debt commitments totaling \$1.8 billion with a syndicate of banks and tax-equity investment commitments totaling \$1.3 billion from several investors to fund the build-out of all of our utility-scale projects currently under construction.

In China

In China, we recently connected eight solar power plants to the grid, including five solar plants totaling 85.1 MWp in the fourth quarter of 2015 and three solar plants totaling 15.7 MWp in the first quarter of 2016.

The following table summarizes the status of our project pipeline in China as of March 10, 2016, which are expected to be connected to grid in 2016:

Late-stage Pipeline	MW (DC)
Northern China	45
Eastern China	75
Xinjiang Province	20
Yunnan Province	10
Total	150

In Brazil

In Brazil, our late-stage solar project pipeline was 384.0 MWp as of March 10, 2016. We expect our solar power plants in Brazil to be connected to grid in 2017 and 2018. Once connected, the electricity generated will be purchased by a Brazilian government entity under a 20-year PPA.

In the United Kingdom

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During 2015, we completed the construction of nine solar power projects totaling approximately 63.1 MWp. Our pipeline of solar power projects totaled 57.0 MWp as of March 10, 2016, all of which we expect to be connected to the grid in 2016.

Table of ContentsEPC Services

Beginning in late 2010, we started entering into EPC contracting arrangements in Canada and China. Under these arrangements, the solar power project developer owns the projects and we are contracted to perform the EPC work. We completed the EPC contracts in China through our affiliated company, Gaochuangte, in which we own a 40% equity interest.

In 2013, we completed approximately 30.2 MWp of solar system EPC contracts in Ontario, Canada. In 2014, we completed approximately 180.5 MWp and 3.1 MW (DC) of solar system EPC contracts in Ontario, Canada and Australia, respectively. In 2015, we completed approximately 152.1 MW (DC) and 1.4 MW (DC) of solar system EPC contracts in Ontario, Canada and Australia, respectively.

O&M Services

Since 2012, we have started to provide O&M services for solar power projects in commercial operation. Our O&M services include inspections, repair and replacement of plant equipment, site management and administrative support services.

Electricity Generation Segment

We operate solar power projects and sell electricity to local customers in the United Kingdom, United States, Canada, China, Japan and Spain. We usually enter into PPAs with and sell electricity to public utilities, licensed suppliers or commercial, industrial or government end users.

As of March 10, 2016, our operating solar power plants totaled approximately 398.1 MWp, of which 308.8 MWp were developed and built by us and 89.3 MWp were acquired from third parties, as set out in the table below:

Solar Power Plants in Operation	MW (DC)
China	196.2
Canada	100.1
United Kingdom	63.3
Japan	21.2
U.S.	12.5
Spain	4.8
Total	398.1

Customer Support and Service

We typically sell our standard solar modules with a ten-year warranty against defects in materials and workmanship and a linear power performance warranty that guarantees the actual power output of our modules.

For utility-scale solar power projects built by us, we provide a limited workmanship or balance of system warranty against defects in engineering, design, installation and construction under normal use, operation and service conditions for a period of up to five years following the energizing of the solar power plant. In resolving claims under the workmanship or balance of system warranty, we have the option of remedying through repair, refurbishment or replacement of equipment. We have also entered into similar workmanship warranties with our suppliers to back up our warranties.

As part of our energy development and electricity generation segments, before energizing solar power plants, we conduct performance testing to confirm that they meet the operational and capacity expectations set forth in the agreements. In limited cases, we also provide an energy generation

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performance test designed to demonstrate that the actual energy generation for up to the first three years meets or exceeds the modeled energy expectation. In the event that the energy generation performance test performs below expectation, we may incur liquidated damages capped at a percentage of the contract price. In addition, a bonus payment may be received if the energy generation performance test results in over performance.

Our customer support and service handles technical inquiries and warranty-related issues. In 2015, we expanded our capacity in these areas to better enable us to handle our customer's questions and concerns in a timely and professional manner.

In 2015, we renewed our product warranty insurance coverage to provide additional security to our customers. See " Insurance" below. The customer support and service function will continue to expand and to improve services to our customers.

Competition

Module Segment

The market for solar power products is competitive and evolving. We compete with American companies, such as First Solar and SunPower, and China-based companies such as Trina, Jinko, JA Solar and Hanwha Q Cells. Some of our competitors are developing or producing products based on alternative solar technologies, such as thin film PV materials, that may ultimately have costs similar to, or lower than, our projected costs. Solar modules produced using thin film materials, such as cadmium telluride and copper indium gallium selenide technology, generally have lower conversion efficiency but do not use silicon for production, compared to our crystalline silicon solar module products, and as such are less susceptible to increases in the costs of silicon. Some of our competitors have also become vertically integrated, from upstream polysilicon manufacturing to solar system integration. In addition, the solar power market in general competes with other sources of renewable and alternative energy as well as conventional power generation.

We believe that the key competitive factors in the market for solar power products include:

price;

the ability to deliver products to customers on time and in the required volumes;

product quality and associated service issues;

nameplate power and other performance parameters of the module, such as power tolerances;

value-added services such as system design and installation;

value-added features such as those that make a module easier or cheaper to install;

additional system components such as mounting systems, delivered as a package or bundle;

brand equity and any good reputation resulting from the above items, including the willingness of banks to finance projects using modules produced by a particular supplier;

customer relationships and distribution channels; and

the aesthetic appearance of solar power products.

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In the immediate future, we believe that our ability to compete depends on delivering a cost-effective product in a timely manner and developing and maintaining a strong brand name based on high quality products and strong relationships with downstream customers. Our competitiveness also depends on our ability to effectively manage our cash flow and balance sheet and to maintain our relationships with the financial institutions that fund solar power projects. Consolidation of the solar industry is already occurring and is expected to continue in the near future. We believe that such

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consolidation will benefit our company in the long-term. We believe that the key to competing successfully in the long-term is to produce innovative, high quality products at competitive prices and develop an integrated sales approach that includes services, ancillary products, such as mounting systems and inverters, and value-added product features. We believe that a good marketing program and the strong relationships that we are building with customers and suppliers will support us in this competitive environment.

Energy Development Segment

Our energy development segment is a capital intensive business with numerous industry participants. We face competition from a large and diverse group of local and international project developers, financial investors and certain utility companies. These competitors range in terms of size, geographic focus, financial resources and operating capabilities and are active in Canada, Japan, the U.S., China, Brazil, the United Kingdom and other markets where we operate or intend to enter. We compete in a diversified and complicated landscape since the commercial and regulatory environments for solar power project development and operation vary significantly from region to region and country to country. Our primary competitors are local and international developers and operators of solar power projects. We believe the key competitive factors in the global solar power project development industry include:

vertical integration with upstream manufacturing;

permit and project development experience and expertise;

reputation and track record;

relationship with government authorities and knowledge of local policies;

strong internal working capital and good relationship with banks and international organizations that enhance access to external financing;

experienced technicians and executives who are familiar with the industry and the implementation of our business plans; and

expertise and experience in providing EPC and O&M services.

However, we cannot guarantee that some of our competitors do not or will not have advantages over us in terms of greater operational, financial, technical, management or other resources in particular markets or in general.

Electricity Generation Segment

Currently, we operate our electricity generation segment in the United Kingdom, the U.S., Canada, China, Japan and Spain. We compete to supply energy to our potential customers with a limited number of utilities and providers of distributed generation in these markets. If we wish to enter into new PPAs for our solar power projects upon termination of previous PPAs, we compete with conventional utilities primarily based on cost of capital, generation located at customer sites, operations and management expertise, price (including predictability of price), green attributes of power, the ease by which customers can switch to electricity generated by our energy systems and our open architecture approach to working within the industry, which facilitates collaboration and project acquisitions. If we cannot offer compelling value to our customers based on these factors, then our energy-based business will not grow. The decision by an end-user to buy electricity from our solar power projects is primarily driven by a deficit of available energy in the applicable market and the availability of domestic resources to meet those needs in a timely fashion. An increase in the availability of electricity or reduction in retail electricity prices in our target markets would make the purchase of solar energy less economically attractive.

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For further discussion of the competitive risks that we face, see "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Because the markets in which we compete are highly competitive and quickly evolving, because many of our competitors have greater resources than we do or are more adaptive, and because we have a limited track record in our energy development and electricity generation segments, we may not be able to compete successfully and we may not be able to maintain or increase our market share."

Insurance

We maintain property risk insurance policies with reputable insurance companies to cover our equipment, facilities, buildings and inventories. The coverage of these insurance policies includes losses due to natural hazards and losses arising from unforeseen accidents. Our manufacturing plants in China and elsewhere are covered by business interruption insurance. However, significant damage or interruption to any of our manufacturing plants, whether as a result of fire or other causes, could still have a material and adverse effect on our results of operations. We also maintain commercial general liability (including product liability) coverage. We have been actively working with China Export & Credit Insurance Corporation, or Sinasure. Credit insurance is designed to offset the collection risk of our account receivables for certain customers within the credit limits approved by Sinasure. Risks related to marine, air and inland transit for the export of our products and domestic transportation of materials and products are covered under cargo transportation insurance. We also maintain director and officer liability insurance.

In April 2010, we began entering into agreements with a group of insurance companies to reduce some of the risks associated with our warranties. Under the terms of the insurance policies, the insurance companies are obliged to reimburse us, subject to certain maximum claim limits and certain deductibles, for the actual product warranty costs that we incur under the terms of our warranty against defects in workmanship and material and our warranty relating to power output. The warranty insurance is renewable annually. We believe that our warranty improves the marketability of our products and our customers are willing to pay more for products with warranties backed by insurance.

Environmental Matters

Except as disclosed in the "Item 3. Key Information D. Risk Factors Risks Related to Doing Business in China," we believe we have obtained the environmental permits necessary to conduct the business currently carried on by us at our existing manufacturing facilities. We have also conducted environmental studies in conjunction with our solar power projects to assess and reduce the environmental impact of such projects.

Our products must comply with the environmental regulations of the jurisdictions in which they are installed. We make efforts to ensure that our products comply with the EU's Restriction of Hazardous Substances Directive, which took effect in July 2006, by reducing the amount of lead and other restricted substances used in our solar module products.

Our operations are subject to regulation and periodic monitoring by local environmental protection authorities. If we fail to comply with present or future environmental laws and regulations, we could be subject to fines, suspension of production or cessation of operations.

Government Regulations

This section sets forth a summary of certain significant regulations or requirements that affect our business activities in China or our shareholders' right to receive dividends and other distributions from us.

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Renewable Energy Law and Other Government Directives

In February 2005, China enacted its Renewable Energy Law, which became effective on January 1, 2006 and was revised in December 2009. The revised Renewable Energy Law, which became effective on April 1, 2010, sets forth policies to encourage the development and use of solar energy and other non-fossil energy and their on-grid generation. It also authorizes the relevant pricing authorities to set favorable prices for the purchase of electricity generated by solar and other renewable power generation systems.

The law also sets forth the national policy to encourage the installation and use of solar energy water-heating systems, solar energy heating and cooling systems, solar PV systems and other solar energy utilization systems. It also provides financial incentives, such as national funding, preferential loans and tax preferences for the development of renewable energy projects subject to certain regulations of the relevant authorities.

In November 2005, the National Development and Reform Commission, or the NDRC, promulgated the Renewable Energy Industry Development Guidance Catalogue, in which solar power figured prominently. In January 2006, the NDRC promulgated two implementation directives with respect to the Renewable Energy Law. In January 2007, the NDRC promulgated another related implementation directive. These directives set forth specific measures for setting the price of electricity generated by solar and other renewable power generation systems, for sharing additional expenses, and for allocating administrative and supervisory authority among different government agencies at the national and provincial levels. They also stipulate the responsibilities of electricity grid companies and power generation companies with respect to the implementation of the Renewable Energy Law.

In August 2007, the NDRC promulgated the Medium and Long-Term Development Plan for the Renewable Energy Industry. This plan sets forth national policy to provide financial allowance and preferential tax regulations for the renewable energy industry. A similar demonstration of the PRC government's commitment to renewable energy was also stipulated in the Eleventh Five-Year Plan for Renewable Energy Development, which was promulgated by the NDRC in March 2008. The Outline of the Twelfth Five-Year Plan for National Economic and Social Development of the PRC, which was approved by the National People's Congress in March 2011, the Twelfth Five-Year Plan for Renewable Energy Development, which was promulgated by the NDRC in July 2012, and the Twelfth Five-Year Plan for Solar Power Generation, which was promulgated by the National Energy Administration in July 2012 also demonstrates a commitment to promote the development of renewable energy to enhance the competitiveness of the renewable energy industry, including the solar energy industry.

China's Ministry of Housing and Urban-Rural Development (formerly, the Ministry of Construction) also issued a directive in June 2005 which seeks to expand the use of solar energy in residential and commercial buildings and encourages the increased application of solar energy in different townships. Similarly, China's State Council promulgated a directive in July 2005, which sets forth specific measures to conserve energy resources. In November 2005, China's Ministry of Housing and Urban-Rural Development promulgated the Administrative Provisions on Energy Conservation for Civil Constructions which encourages the development of solar energy. In August 2006, the State Council issued the Decision on Strengthening the Work of Energy Conservation which encourages the great development of the solar energy and other renewable energy. In addition, on April 1, 2008, the PRC Energy Conservation Law came into effect. Among other objectives, this law encourages the installation of solar power facilities in buildings to improve energy efficiency. In July 2009, China's Ministry of Finance and Ministry of Housing and Urban-Rural Development jointly promulgated "the Urban Demonstration Implementation Program of the Renewable Energy Building Construction" and "the Implementation Program of Acceleration in Rural Application of the Renewable Energy Building Construction" to support the development of the new energy industry and the new energy-saving industry.

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On March 8, 2011, China's Ministry of Finance and Ministry of Housing and Urban-Rural Development jointly promulgated the Notice on Further Application of Renewable Energy in Building Construction, which aims to raise the percentage of renewable energy used in buildings.

In September 2009, the PRC State Council approved and circulated the Opinions of the National Development and Reform Commission and other Nine Governmental Authorities on Restraining the Production Capacity Surplus and Duplicate Construction in Certain Industries and Guiding the Industries for Healthy Development. These opinions concluded that polysilicon production capacity in China has exceeded the demand and adopted the policy of imposing more stringent requirements on the construction of new polysilicon manufacturing projects in China. These opinions also stated in general terms that the government should encourage polysilicon manufacturers to enhance cooperation and affiliation with downstream solar product manufacturers to extend their product lines. However, these opinions do not provide any detailed measures for the implementation of this policy. As we are not a polysilicon manufacturer and do not expect to manufacture polysilicon in the future, we believe the issuance and circulation of these opinions will not have any material impact on our business or our silicon wafer, solar cell and solar module capacity expansion plans.

On August 21, 2012, China's Ministry of Finance and Ministry of Housing and Urban-Rural Development jointly promulgated the Notice on Improving Policies for Application of Renewal Energy in Building and Adjusting Fund Allocation and Management Method, which aims to promote the use of solar energy and other new energy products in public facilities and residences, further amplifying the effect of the policies for application of renewable energy in buildings.

In June 2014, the General Office of the State Council issued its Notice on Printing and Distributing the Action Plan for the Solar project Strategy (2014-2020), which requested accelerating the development of solar power generation, including promoting the construction of photovoltaic base construction, among others.

In April 2015, China's Ministry of Finance promulgated the Interim Measures for Administration of the Special Fund for the Development of Renewable Energy Sources, which stipulated the division of regulation of special fund for the development of renewable energy sources and the main scopes to be supported.

In December 2015, the NDRC issued the Circular on Improving the On-Grid Benchmark Price Policy for Onshore Wind Power and Photovoltaic Power, which aims to promote sound and healthy development of the onshore wind power and PV power industry by regulating the price of wind power and PV power.

Environmental Regulations

As we have expanded our ingot, silicon wafer and solar cell manufacturing capacities, we have begun to generate material levels of noise, wastewater, gaseous wastes and other industrial waste. Additionally, as we expand our internal solar components production capacity, our risk of facility incidents that would negatively affect the environment also increases. We are subject to a variety of governmental regulations related to the storage, use and disposal of hazardous materials. The major environmental laws and regulations applicable to us include the PRC Environmental Protection Law, which became effective in 1989, as amended and promulgated in 2014, the PRC Law on the Prevention and Control of Noise Pollution, which became effective in 1997, the PRC Law on the Prevention and Control of Air Pollution, which became effective in 1988, as amended and promulgated in 1995, 2000 and 2015, the PRC Law on the Prevention and Control of Water Pollution, which became effective in 1984, as amended and promulgated in 1996 and 2008, the PRC Law on the Prevention and Control of Solid Waste Pollution, which became effective in 1996, as amended and promulgated in 2004, 2013 and 2015, the PRC Law on Evaluation of Environmental Affects, which became effective in 2003, the PRC Law on Promotion of Clean Production, which became effective in 2003, as amended and promulgated

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in 2012, and the Regulations on the Administration of Construction Project Environmental Protection, which became effective in 1998.

Some of our PRC subsidiaries are located in Suzhou, China, which is adjacent to Taihu Lake, a nationally renowned and protected body of water. As a result, production at these subsidiaries is subject to the Regulations on the Administration of Taihu Basin, which became effective on 2011, the Regulation of Jiangsu Province on Preventing Water Pollution in Taihu Lake, which became effective in 1996 and was further revised and promulgated in 2007, 2010 and 2012, and the Implementation Plan of Jiangsu Province on Comprehensive Treatment of Water Environment in Taihu Lake Basin, which was promulgated in February 2009. Because of these regulations, the environmental protection requirements imposed on nearby manufacturing projects, especially new projects, have increased noticeably, and Jiangsu Province has stopped approving construction of new manufacturing projects that increase the amount of nitrogen and phosphorus released into Taihu Lake.

Admission of Foreign Investment

The principal regulation governing foreign ownership of solar power businesses in the PRC is the Foreign Investment Industrial Guidance Catalogue. Under the current catalogue, which was amended in March 2015 and became effective on April 10, 2015, the solar power related business is classified as an "encouraged foreign investment industry." Companies that operate in encouraged foreign investment industries and satisfy applicable statutory requirements are eligible for preferential treatment, including exemption from customs of certain self-used equipment and priority consideration in obtaining land use rights provided by certain local governments.

While the 2004 catalogue only applied to the construction and operation of solar power stations, the 2007 catalogue expanded its application also applies to the production of solar cell manufacturing machines, the production of solar powered air conditioning, heating and drying systems and the manufacture of solar cells, and the 2011 catalogue and the current 2015 catalogue also covers the manufacture of solar light collector glass and etc.

Administration of Foreign Invested Companies

The establishment, approval, registered capital requirement and day-to-day operational matters of wholly foreign-owned enterprises, are regulated by the Wholly Foreign-Owned Enterprise Law of the PRC, effective in 1986 and amended in 2000, and the Implementation Rules of the Wholly Foreign-owned Enterprise Law of the PRC, effective in 1990 and amended in 2001 and 2014. The establishment, operation and management of corporate entities in China are governed by the Company Law of the PRC, or the Company Law, effective in 1994 and amended in 1999, 2004, 2005 and 2013. The Company Law is applicable to our PRC subsidiaries unless PRC laws on foreign investment stipulate otherwise.

Income Tax and VAT

PRC enterprise income tax is calculated based on taxable income determined under PRC accounting principles. Our major operating subsidiaries, CSI Solartronics (Changshu) Co., Ltd., or CSI Solartronics, CSI New Energy Holding, CSI Cells, CSI Solar Technologies Inc., or CSI Technologies, CSI Changshu Manufacturing and CSI Luoyang Manufacturing, are governed by the EIT Law, which became effective on January 1, 2008.

Under the EIT Law, both foreign-invested enterprises and domestic enterprises are subject to a uniform enterprise income tax rate of 25%. The EIT Law provides for preferential tax treatment for certain categories of industries and projects that are strongly supported and encouraged by the state. For example, enterprises qualified as HNTes are entitled to a 15% enterprise income tax rate, provided that such HNTes satisfy other applicable statutory requirements.

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Certain of our subsidiaries, such as CSI New Energy Holding, CSI Cells, CSI Luoyang Manufacturing and CSI Changshu Manufacturing, once enjoyed preferential tax benefits, such as a reduced enterprise income tax rate of 12.5%, however, these benefits were expired. In 2015, only our partially owned subsidiary, Suzhou Sanysolar, which was qualified as an HNTE and satisfied applicable statutory requirements, enjoyed a reduced enterprise income tax rate of 15%. As most of the preferential tax benefits enjoyed by our PRC subsidiaries expired, their effective tax rates increased significantly.

The EIT Law also provides that enterprises established outside China whose "de facto management body" is located in China are considered PRC tax residents and will generally be subject to the uniform 25% enterprise income tax rate on their global income. Under the implementation regulations, the term "de facto management body" is defined as substantial and overall management and control over aspects such as the production and business, personnel, accounts and properties of an enterprise. Circular 82 further provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled offshore incorporated enterprise is located in the PRC. The criteria include whether (a) the premises where the senior management and the senior management bodies responsible for the routine production and business management of the enterprise perform their functions are mainly located within the PRC, (b) decisions relating to the enterprise's financial and human resource matters are made or subject to approval by organizations or personnel in the PRC, (c) the enterprise's primary assets, accounting books and records, company seals, and board and shareholders' meeting minutes are located or maintained in the PRC and (d) 50% or more of voting board members or senior executives of the enterprise habitually reside in the PRC. Although Circular 82 only applies to offshore enterprises controlled by enterprises or enterprise groups located within the PRC, the determining criteria set forth in the Circular 82 may reflect the tax authorities' general position on how the "de facto management body" test may be applied in determining the tax resident status of offshore enterprises. As the tax resident status of an enterprise is subject to the determination by the PRC tax authorities, uncertainties remain with respect to the interpretation of the term "de facto management body" as applicable to our offshore entities. As a substantial number of the members of our management team are located in China, we may be considered as a PRC tax resident under the EIT Law and, therefore, subject to the uniform 25% enterprise income tax rate on our global income.

Under the EIT Law and implementing regulations issued by the State Council, the PRC withholding tax rate of 10% is generally applicable to interest and dividends payable to investors from companies that are not "resident enterprises" in the PRC, to the extent such interest or dividends have their sources within the PRC. If our Canadian parent entity is deemed a PRC tax resident under the EIT Law based on the location of our "de facto management body," dividends distributed from our PRC subsidiaries to our Canadian parent entity could be exempt from Chinese dividend withholding tax. However, in that case, dividends from us to our shareholders may be regarded as China-sourced income and, consequently, be subject to Chinese withholding tax at the rate of 10%, or at a lower treaty rate if applicable. Similarly, if we are considered a PRC tax resident, any gain realized by our shareholders from the transfer of our common shares is also subject to Chinese withholding tax at the rate of 10% if such gain is regarded as income derived from sources within the PRC. It is unclear whether any dividends that we pay on our common shares or any gains that our shareholders may realize from the transfer of our common shares would be treated as income derived from sources within the PRC and subject to PRC tax.

In addition, under Announcement 7, where a non-resident enterprise indirectly transfers properties, such as equity in Chinese resident enterprises, without any reasonable commercial purposes with the aim of avoiding payment of enterprise income tax, such indirect transfer shall be reclassified as a direct transfer of equity in a Chinese resident enterprise. Properties such as equity in Chinese resident enterprises mentioned in Announcement 7 mean the properties, or Chinese taxable properties,

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which are directly held by non-resident enterprises and subject the transfer income to enterprise income tax in China according to the provisions of Chinese tax law. Indirect transfers of Chinese taxable properties are transactions which transfer the equity of enterprises abroad that directly or indirectly hold Chinese taxable properties (not including Chinese resident enterprises registered abroad). To estimate reasonable commercial purposes, all arrangements related to the indirect transfer of Chinese taxable properties must be considered comprehensively and certain factors, such as whether the main value of the equity of enterprises abroad is directly or indirectly from the Chinese taxable properties, must be comprehensively analyzed. Except for the circumstances stipulated therein, the overall arrangements related to the indirect transfer of Chinese taxable properties that fall in any of the following circumstances simultaneously are deemed as having no reasonable commercial purposes: (a) more than 75% of the equity of enterprises abroad is directly or indirectly from Chinese taxable properties; (b) more than 90% of the total assets (not including cash) of enterprises abroad is directly or indirectly composed of investment in the territory of China at any time in the year before the indirect transfer of Chinese taxable properties, or more than 90% of the income of enterprises abroad is directly or indirectly from the territory of China in the year before the indirect transfer of Chinese taxable properties; (c) although the enterprises abroad and their subordinate enterprises directly or indirectly hold Chinese taxable properties have registered in the host country (region) in order to satisfy the organization form required by law, the functions actually performed and the risks undertaken are limited and are not sufficient to prove the economic essence; or (d) the burden of income tax of indirect transfer of Chinese taxable properties payable abroad is lower than the possible burden of taxation in China as for the direct transfer of Chinese taxable properties. However, a non-resident enterprise's income obtained from indirect transfer of Chinese taxable properties by purchasing and selling equity of the same listed enterprise abroad in the open market will not be taxed under Announcement 7.

There is uncertainty as to the application of Announcement 7 and it is understood that the relevant PRC tax authorities have jurisdiction regarding reasonable commercial purposes. As a result, we may become at risk of being taxed under Announcement 7 and we may be required to expend valuable resources to comply with Announcement 7 or to establish that we should not be taxed under Announcement 7, which may materially adversely affect our financial condition and results of operations.

Pursuant to a November 2008 amendment to the Provisional Regulation of the PRC on Value Added Tax issued by the PRC State Council, all entities and individuals that are engaged in the sale of goods, the provision of repairs and replacement services and the importation of goods in China are required to pay VAT. Gross proceeds from sales and importation of goods and provision of services are generally subject to VAT at a rate of 17%, with exceptions for certain categories of goods that are taxed at a rate of 13%. When exporting certain goods, the exporter is entitled to a refund of a portion or all of the VAT that it has already paid or borne.

Under the amended Provisional Regulation of the PRC on Value Added Tax and its implementation rules, which became effective in 2009 and were amended in 2011, and relevant regulations, fixed assets (mainly including equipment and manufacturing facilities) are now eligible for credit for input VAT. Previously, input VAT on fixed assets purchases was not deductible from the current period's output VAT derived from the sales of goods, but had to be included in the cost of the assets. The new rule permits this deduction except in the case of equipment purchased for non-taxable projects or tax-exempted projects where the deduction of input VAT is not allowed. However, the qualified fixed assets could also be eligible for input VAT if the fixed assets are used for both taxable projects and non-taxable projects or tax-exempted projects. Presently, no further detailed rules clarify under what circumstance the fixed assets are considered as being used for both taxable and non-taxable or tax exempt projects. Because of the new VAT rules, our PRC subsidiaries may benefit from future input VAT credit on our capital expenditures.

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Under the former rules, equipment imported for qualified projects was entitled to an import VAT exemption and domestic equipment purchased for qualified projects were entitled to a VAT refund. However, such exemption and refund were both eliminated as of January 1, 2009.

Foreign Currency Exchange

Foreign currency exchange regulation in China is primarily governed by the Foreign Currency Administration Rules, which became effective in 1996 and were amended in 1997 and 2008, and the Settlement, Sale and Payment of Foreign Exchange Administration Rules (1996), or the Settlement Rules.

Currently, the Renminbi is convertible for current account items, including the distribution of dividends, interest payments, trade and service-related foreign exchange transactions. Conversion of the Renminbi for most capital account items, such as security investment and repatriation of investment, however, is still subject to limitation and requires the approval by or registration with SAFE.

However, SAFE began to reform the foreign exchange administration system and issued the Notice on Reforming the Administrative Approach Regarding the Settlement of the Foreign Exchange Capitals of Foreign-invested Enterprises on March 30, 2015, which allows foreign invested enterprises to settle their foreign exchange capital on a discretionary basis according to the actual needs of their business operation and allows a foreign-invested enterprise with a business scope including "investment" to use the RMB capital converted from foreign currency registered capital for equity investments within the PRC.

On February 13, 2015, SAFE promulgated the Circular on Further Simplifying and Improving the Policies Concerning Foreign Exchange Control on Direct Investment, or SAFE Circular No. 13, which delegates the authority to enforce the foreign exchange registration in connection with the inbound and outbound direct investment under relevant SAFE rules to certain banks and therefore further simplifies the foreign exchange registration procedures for inbound and outbound direct investment.

Dividend Distribution

The principal regulations governing distribution of dividends paid by wholly foreign owned enterprises include the Wholly Foreign-Owned Enterprise Law of the PRC, effective in 1986 and amended in 2000, the Implementation Rules of the Wholly Foreign-Owned Enterprise Law of the PRC, effective in 1990 and amended in 2001 and 2014, the Company Law effective in 1994 and amended in 1999, 2004, 2005 and 2013 and the EIT Law and its implementation rules, both effective in 2008.

Under these laws, foreign-invested enterprises in China may pay dividends only out of their accumulated profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, a wholly foreign owned enterprise in China is required to set aside at least 10% of its after-tax profits determined in accordance with PRC accounting standards each year to its general reserves until the accumulative amount of such reserves reach 50% of its registered capital. These reserves are not distributable as cash dividends. The board of directors of a foreign-invested enterprise has the discretion to allocate a portion of its after-tax profits to staff welfare and bonus funds, which may not be distributed to equity owners except in the event of liquidation.

Employment

The major laws and regulations governing the employment relationship, including wage and hour requirements, working and safety conditions, social insurance, housing funds and other welfare. The PRC Labor Law which became effective on January 1, 1995 and amended on August 27, 2009, the Labor Contract Law of the People's Republic of China, which became effective on January 1, 2008, and was later revised on December 28, 2012, its Implementing Regulation and the amendment thereunder,

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which became effective on September 18, 2008 and July 1, 2013, respectively, permit workers in both state-owned and private enterprises in the PRC to bargain collectively. The PRC Labor Law and the PRC Labor Contract Law provide for collective contracts to be developed through collaboration between the labor unions (or worker representatives in the absence of a union) and management that specify such matters as working conditions, wage scales, and hours of work. The PRC Labor Contract Law and its Implementing Regulation impose certain requirements with respect to human resources management, including, among other things, signing labor contracts with employees, terminating labor contracts, paying remuneration and compensation and making social insurance contributions. In addition, the PRC Labor Contract Law requires employers to provide remuneration packages that meet the relevant local minimum standards. The PRC Labor Contract Law has enhanced rights for the nation's workers, including permitting open-ended labor contracts and severance payments. It requires employers to provide written contracts to their workers, restricts the use of temporary labor and makes it harder for employers to lay off employees. It also requires that employees with fixed-term contracts be entitled to an indefinite-term contract after a fixed-term contract is renewed twice or the employee has worked for the employer for a consecutive ten-year period. According to the Interim Provisions on Labor Dispatching, which came into effect on January 3, 2014, the number of dispatched workers used by an employer shall not exceed 10% of its total number of workers.

Under applicable PRC laws, rules and regulations, including the Social Insurance Law promulgated by the Standing Committee of the National People's Congress and effective as of July 1, 2011, the Rules on Implementing the Social Insurance Law issued by Ministry of Human Resource and Social Security and effective as of July 1, 2011, the Interim Regulations on the Collection and Payment of Social Security Funds promulgated by the State Council and effective as of January 22, 1999, the Interim Measures Concerning Maternity Insurance promulgated by the Ministry of Labor and effective as of January 1, 1995, the Regulations on Occupational Injury Insurance promulgated by the State Council and effective as of January 1, 2004 and amended on December 20, 2010, and the Regulations on the Administration of Housing Accumulation Funds promulgated by the State Council and effective as of April 3, 1999 and amended on March 24, 2002, employers are required to contribute, on behalf of their employees, to a number of social security funds, including funds for basic pension insurance, unemployment insurance, basic medical insurance, occupational injury insurance, maternity leave insurance, and to housing accumulation funds. These payments are made to local administrative authorities and any employer who fails to contribute may be fined and ordered to remediate on payments within a stipulated time period.

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The following table sets out our major subsidiaries, including their place of incorporation and our ownership interest, as of March 31, 2016.

Name of entity	Place of incorporation	Ownership interest
CSI Solartronics (Changshu) Co., Ltd.	PRC	100%
CSI Solar Technologies Inc.	PRC	100%
CSI New Energy Holding Co., Ltd.	PRC	100%
Canadian Solar Manufacturing (Luoyang) Inc.	PRC	100%
Canadian Solar Manufacturing (Changshu) Inc.	PRC	100%
CSI Cells Co., Ltd.	PRC	100%
Canadian Solar (USA) Inc.	USA	100%
CSI Project Consulting GmbH	Germany	70%
Canadian Solar Japan K.K.	Japan	100%
Canadian Solar Solutions Inc.	Canada	100%
CSI Solar Power (China) Inc.	PRC	100%
Canadian Solar EMEA GmbH	Germany	100%
Canadian Solar (Australia) Pty Limited	Australia	100%
Canadian Solar International Limited	Hong Kong	100%
Canadian Solar O and M (Ontario) Inc.	Canada	100%
Suzhou SanySolar Materials Technology Co., Ltd.	PRC	76%
Canadian Solar South East Asia Pte. Ltd.	Singapore	100%
Canadian Solar South Africa Pty., Ltd.	South Africa	100%
Canadian Solar Brazil Commerce, Import and Export of Solar Panels Ltd.	Brazil	100%
Canadian Solar Middle East Limited	United Arab Emirates	100%
Canadian Solar (Thailand) Ltd.	Thailand	100%
Canadian Solar Construction (USA) LLC	USA	100%
Canadian Solar Project K.K.	Japan	100%
CSI-GCL Solar Manufacturing (Yancheng) Co., Ltd.	PRC	80%
Canadian Solar UK Ltd	United Kingdom	100%
Canadian Solar UK Projects Ltd	United Kingdom	100%
Changshu Tegu New Material Technology Co., Ltd.	PRC	75%
Changshu Tlian Co., LTD	PRC	100%
Canadian Solar Trading (Changshu) Inc.	PRC	100%
Canadian Solar Energy Acquisition Co.	USA	100%
Canadian Solar UK Intermediate Limited	United Kingdom	100%
Canadian Solar UK Securities Limited	United Kingdom	100%
Canadian Solar UK Strategies Limited	United Kingdom	100%
Recurrent Energy, LLC	USA	100%
PT. Canadian Solar Indonesia	Indonesia	67%
Canadian Solar Manufacturing Vietnam Co., Ltd	Vietnam	100%
Canadian Solar Energy Private Limited	India	100%
Canadian Solar Australia 1 Pty Ltd	Australia	100%
Canadian Solar Energy Holding Company Limited	Hong Kong	100%
Canadian Solar UK Holding Limited	United Kingdom	100%
Canadian Solar UK Parent Limited	United Kingdom	100%
Canadian Solar UK Investment Limited	United Kingdom	100%
Canadian Solar Manufacturing (Thailand) Co.,Ltd.	Thailand	99.99992%

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D. Property, Plant and Equipment

The following is a summary of our material properties, including information on our manufacturing facilities and office buildings as of the date of this annual report:

CSI Changshu Manufacturing holds a land use rights certificate for approximately 40,000 square meters of land in Changshu, on which we have built manufacturing facilities of approximately 23,559 square meters. Production in these facilities began in April 2008. We also constructed a canteen, a dormitory for employees and a liquefied gas station in September 2010 with a total floor area of 11,316 square meters. The property ownership certificates were granted in 2011.

CSI Changshu Manufacturing also holds a land use rights certificate for approximately 180,000 square meters of land in Changshu, on which we have built two module manufacturing facilities, two warehouses and other buildings with a total floor area of approximately 60,576 square meters. Construction of the central warehouses was completed in April 2010. We also completed the construction of a module manufacturing facility with an additional warehouse and three other buildings, which have approximately 46,539 square meters of floor area, in the first half of 2011.

CSI Luoyang Manufacturing holds a land use rights certificate for approximately 35,345 square meters of land in Luoyang (Phase I), on which we have constructed manufacturing facilities. The floor area of Phase I is approximately 6,761 square meters. The property ownership certificates were granted in June 2008. In 2008, CSI Luoyang Manufacturing obtained the land use rights for approximately 79,685 square meters of adjacent land (Phase II), on which we have constructed manufacturing facilities. The floor area of Phase II is approximately 29,811 square meters. The property ownership certificates were granted in September 2013.

CSI Cells holds a land use rights certificate for approximately 65,661 square meters of land in Suzhou. We completed the construction of our first solar cell manufacturing facilities on this site in the first quarter of 2007. The Phase I manufacturing facilities have 14,077 square meters, for which we obtained the property ownership certificate. The Phase II cell manufacturing facilities, with 30,102 square meters of workshop space, were completed in 2009. The Phase III cell manufacturing facilities, with a total floor area of approximately 21,448 square meters of manufacturing and office space, were completed in August 2011. We have passed the required inspection and are in the process of obtaining property ownership certificate from the competent government authority. CSI Cells merged with CSI Solar New Energy (Suzhou) Co., Ltd. in 2012. CSI Solar New Energy (Suzhou) Co., Ltd. had a land use rights certificate for approximately 10,000 square meters of land in Suzhou and a property ownership certificate for approximately 4,833 square meters of floor area. The process of recertification of the land use rights certificate and property ownership certificate have been completed and both are now registered under the name of CSI Cells.

The construction of cell manufacturing facilities (Phase I) of CSI-GCL Solar Manufacturing (Yancheng) Co., Ltd., or CSI-GCL Solar Manufacturing, was completed in Yancheng in 2015. The floor area of Phase I is approximately 19,360 square meters. CSI-GCL Solar Manufacturing currently leases the manufacturing facilities but has the right and expects to purchase those facilities and obtain the land use rights certificate between 2018 and 2020. CSI-GCL Solar Manufacturing commenced commercial production in the first quarter of 2016. CSI-GCL Solar Manufacturing was established under a strategic partnership agreement with GCL-Poly Solar System Integration (China) Co., Ltd. and is 80% owned by us.

In Ontario, we lease approximately 14,851 square meters of manufacturing facilities in Guelph, Ontario, Canada for a term of 10 years commencing September 1, 2010 and approximately 8,685 square meters of manufacturing facilities in London, Ontario, Canada for a term of five years

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commencing October 1, 2013. We also lease a warehouse of 7,912 square meters and an office building of 1,146 square meters on the same premises as the Guelph, Ontario, Canada manufacturing facilities for the same term.

In Vietnam, we lease approximately 15,784 square meters of manufacturing facilities in Haiphong City, Vietnam for a term of three years commencing August 1, 2015.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes thereto included elsewhere in this annual report on Form 20-F. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Item 3. Key Information D. Risk Factors" or in other parts of this annual report on Form 20-F.

A. Operating Results

Factors Affecting Our Results of Operations

The most significant factors that affect our financial performance and results of operations are:

solar power products pricing;

solar wafers and cells and silicon raw materials costs relative to the selling prices of modules;

government subsidies and the availability of financing for solar projects;

industry and seasonal demand;

impact of certain of our long-term purchase commitments;

solar power project development and EPC services;

the growth of our electricity generation segment; and

foreign exchange.

Solar Power Products Pricing

Before 2004, all of our net revenues were generated from sales of specialty solar modules and products. We began selling standard solar modules in 2004. In 2013, we generated net revenues of 80.4% from our module segment, which primarily comprises the design, development, manufacture and sale of solar power products and solar system kits, 19.5% from our energy development segment, which involves solar power project development, EPC serves and O&M services, and 0.1% from our electricity generation segment, which holds solar power projects for the

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purpose of generating income from the sale of electricity. In 2014 and 2015, we generated 59.0% and 71.8%, respectively, of our net revenues from our module segment, 40.9% and 27.3%, respectively, from our energy development segment, and 0.1% and 0.9%, respectively, from our electricity generation segment.

Our standard solar modules are priced based on either the actual flash test result or the nameplate capacity of our panels, expressed in watts-peak. The actual price per watt is affected by overall demand in the solar power industry and increasingly also by the total power of the module. Higher-powered

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modules usually command slightly higher prices per watt. We price our standard solar modules based on the prevailing market price at the time we enter into sales contracts with our customers, taking into account the size of the contract, the strength and history of our relationship with each customer and our silicon wafer, solar cell and silicon raw materials costs. During the first few years of our operations, the average selling prices for standard solar modules rose year-to-year across the industry, primarily because of high demand. Correspondingly, the average selling price of our standard solar module products ranged from \$3.62 to \$4.23 during the period from 2004 to 2008. Following a peak in the third quarter of 2008, the industry-wide average selling price of solar modules declined sharply, as market demand declined and competition increased due to the worldwide credit crisis, reduction in subsidies in certain solar markets and increased manufacturing output. In 2009, the average selling price of our standard solar modules continued to fall, with an average selling price of \$1.93 per watt in the fourth quarter of 2009. Thereafter, the average selling price of our standard solar modules has generally continued to fall due to an oversupply of solar modules. In 2013 and 2014, the average selling price was \$0.67 per watt and, in 2015, it was approximately \$ 0.58 per watt. We expect the averaging selling price of standard solar modules to continue to drop, albeit at a moderate rate, mainly resulting from efficiency enhancements and other innovations.

Solar Wafers and Cells and Silicon Raw Materials Costs Relative to the Pricing of Modules

We produce solar modules, which are an array of interconnected solar cells encased in a weatherproof frame, and products that use solar modules. Solar cells are the most important component of solar modules. Our solar cells are currently made from mono-crystalline and multi-crystalline silicon wafers through multiple manufacturing steps. Silicon wafers are the most important material for making solar cells. If we are unable to procure silicon, wafers and cells at prices that decline in line with our solar module pricing, our revenues and margins could be adversely impacted, either due to relatively high costs compared to our competitors or further write-downs of inventory, or both. Our market share could decline if competitors are able to offer better pricing than we are.

Government Subsidies and the Availability of Financing for Solar Projects

We believe that the near-term growth of the market for on-grid applications depends in large part on the availability and size of government subsidies and economic incentives, and the availability and cost of financing for solar projects.

For a detailed discussion of the impact of government subsidies and incentives, possible changes in government policy and associated risks to our business, see "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Governments may revise, reduce or eliminate subsidies and economic incentives for solar energy, which could cause demand for our products to decline." and "Item 4. Information on the Company B. Business Overview Sales, Marketing and Customers."

For a detailed discussion of the impact of the continuing weak global economy and uncertain global economic outlook, especially in Europe, and associated risks to the availability and cost of debt or equity for solar power projects and our customers' ability to finance the purchase of our products or to construct solar power projects, see "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry The execution of our growth strategy depends upon the continued availability of third-party financing arrangements for our customers, which is affected by general economic conditions. Tight credit markets could depress demand or prices for solar power products and services, hamper our expansion and materially affect our results of operations."

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Industry and Seasonal Demand

Our business and revenue growth depend on the demand for solar power. Although solar power technology has been used for several decades, the solar power market has only started to grow significantly in the past few years. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry We may be adversely affected by volatile solar power market and industry conditions; in particular, the demand for our solar power products and services may decline, which may reduce our revenues and earnings." Industry demand is affected by seasonality. Demand tends to be lower in winter, particularly in Europe, where adverse weather conditions can complicate the installation of solar power systems, thereby decreasing demand for solar modules. Seasonal changes can also significantly impact the construction schedules of our solar power projects in countries such as Canada, the U.S. and China thereby also decreasing demand. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Seasonal variations in demand linked to construction cycles and weather conditions may influence our results of operations."

Impact of Certain of Our Long-term Purchase Commitments

Currently, we acquire a large percentage of our requirements of solar wafers through purchasing arrangements. We also acquire a large portion of our requirements of solar cells through purchase arrangements. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we terminate any of these agreements, we may not be able to recover all or any part of the advance payments we have made to these suppliers and we may be subject to litigation."

Solar Power Project Development and EPC Services

In 2015, 27.3% of our total net revenues were generated from our energy development segment. The majority of these revenues came from the sale of solar power projects and the provision of EPC services. Our solar power project development activities have grown over the past several years through a combination of organic growth and acquisitions.

Solar power project development and EPC services involve numerous risks and uncertainties. For a detailed discussion of these risks and uncertainties, see "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Our future success depends partly on our ability to expand the pipeline of our energy development and electricity generation segments in several key markets, which exposes us to a number of risks and uncertainties" and "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Our project development and construction activities may not be successful, projects under development may not receive required permits, property rights, power purchase agreements, or PPAs, interconnection and transmission arrangements, and financing or construction of projects may not commence or continue as scheduled, all of which could increase our costs, delay or cancel a project, and have a material adverse effect on our revenue and profitability."

In 2015, we recognized \$947.2 million of revenues from our energy development segment, including the sale of solar power projects and the provision of EPC services. See "Item 4. Information on the Company B. Business Overview" for additional information on our solar power project development and EPC services.

Growth of Electricity Generation Segment

In 2015, 0.9% of our total net revenues were generated from our electricity generation segment. We began operating certain of our solar project in China for the purpose of generating income from the sale of electricity in the fourth quarter of 2014 and we anticipate increasing the amount and size of

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these projects going forward. See "Item 4. Information on the Company B. Business Overview" for additional information on our energy development segment.

Foreign Exchange

The majority of our sales in 2015 were denominated in U.S. dollars, Canadian dollars and Japanese yen, with the remainder in other currencies such as Renminbi, Euros and Australian dollars. Our Renminbi costs and expenses are primarily related to the sourcing of solar cells, silicon wafers and silicon, other raw materials, toll manufacturing fees, labor costs and local overhead expenses within the PRC. From time to time, we enter into loan arrangements with Chinese commercial banks that are denominated primarily in Renminbi or U.S. dollars. The greater part of our cash and cash equivalents and restricted cash are denominated in Renminbi. See "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Fluctuations in exchange rates could adversely affect our business, including our financial condition and results of operations."

New Segment Reporting

We use the management approach to determine operating segments. The management approach considers the internal organization and reporting used by our chief operating decision maker for making decisions, allocating resources and assessing performance. We have identified our chief executive officer as our chief operating decision maker, as he reviews consolidated and segment results when making decisions about allocating resources and assessing performance for us.

With our decision to expand our business in both building and selling and building and operating project assets, beginning in 2015, we report our financial performance based on the following three segments:

Module Segment. The module segment primarily involves the design, development, manufacture and sales of solar power products and solar system kits;

Energy Development Segment. The energy development segment primarily involves solar power project development, EPC services, and O&M services; and

Electricity Generation Segment. The electronic generation segment primarily holds solar power projects for the purpose of generating income from the sale of electricity.

Overview of Financial Results

We evaluate our business using a variety of key financial measures.

Net Revenues

Module Segment

Revenues generated from our module segment accounted for 80.4%, 59.0% and 71.8% of our net revenues in 2013, 2014 and 2015, respectively. The main factors affecting our net revenues from our module segment include average selling prices per watt and unit volumes shipped, both of which depend on product supply and demand.

Energy Development Segment

Revenues generated from our energy development segment accounted for 19.5%, 40.9% and 27.3% of our net revenues in 2013, 2014 and 2015, respectively. Our revenues in the energy development segment are affected by the timing of the completion of solar power projects. See "Item 4. Information on the Company B. Business Overview Sales, Marketing and Customers Solar Project Development" for a description of the status of our solar power projects.

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Revenue recognition for our energy development segment, especially our solar power projects, are, in many cases, not linear in nature due to the timing of when all relevant revenue recognition criteria have been met. During 2015, we recognized \$557.1 million of revenue from the sale of solar power projects using the full accrual method and \$0.9 million of revenue from the percentage-of-completion method. Our revenue recognition policies for the solar power project development are described in " Critical Accounting Policies Revenue Recognition."

Our revenues from sales to customers are recorded net of estimated returns.

Electricity Generation Segment

Revenues contributed by our electricity generation segment represented 0.1%, 0.1% and 0.9% of our net revenues in 2013, 2014 and 2015, respectively. Our revenues in the electricity generation segment are primarily affected by the operation capacity of our solar power system and average electricity selling price. Our revenue recognition policies for the electricity generation segment are described in " Critical Accounting Policies Revenue Recognition."

Cost of Revenues

Module Segment

The cost of revenues of our module segment consists primarily of the costs of:

solar cells;

silicon wafers;

high purity and solar grade silicon materials;

materials used in solar cell production, such as metallic pastes;

other materials for the production of solar modules such as glass, aluminum frames, EVA (ethylene vinyl acetate, an encapsulant used to seal the module), junction boxes and polymer back sheets;

production labor, including salaries and benefits for manufacturing personnel;

warranty costs;

overhead, including utilities, production equipment maintenance, share-based compensation expenses for options granted to employees in our manufacturing department and other support expenses associated with the manufacture of our solar power products;

depreciation and amortization of manufacturing equipment and facilities, which are increasing as we expand our manufacturing capabilities;

inventory write-downs; and

depreciation charges relating to under-utilized assets.

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Our cost of revenues increased in 2013, 2014 and 2015, in each instance in line with the change in net revenues for the year.

Before June 2009, we typically sold our standard solar modules with a two-year guarantee for defects in materials and workmanship and a 10-year and 25-year warranty against declines of more than 10% and 20%, respectively, from the initial minimum power generation capacity at the time of delivery. In June 2009, we increased our warranty against defects in materials and workmanship to six years. Effective August 1, 2011, we increased our warranty against defects in materials and workmanship to

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ten years and we guarantee that, for a period of 25 years, our standard solar modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97% of the labeled power output;

from year 2 to year 24, the actual annual power output decline of the module will be no more than 0.7%; and

by the end of year 25, the actual power output of the module will be no less than 80% of the labeled power output.

Effective June 1, 2015, we guarantee that, for a period of 25 years, our polycrystalline modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97.5% of the labeled power output;

from year 2 to year 24, the actual annual power output decline will be no more than 0.7%; and

by the end of year 25, the actual power output of the module will be no less than 80.7% of the labeled power output.

Effective June 1, 2015, we guarantee that, for a period of 25 years, our monocrystalline modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97% of the labeled power output;

from year 2 to year 24, the actual annual power output decline will be no more than 0.7%; and

by the end of year 25, the actual power output of the module will be no less than 80.2% of the labeled power output.

Effective January 1, 2016, we lengthened the warranty against decline in our Dymond modules to 30 years. We guarantee that, for a period of 30 years, our Dymond modules will maintain the following performance levels:

during the first year, the actual power output of the module will be no less than 97.5% of the labeled power output;

from year 2 to year 29, the actual annual power output decline will be no more than 0.5%; and

by the end of year 30, the actual power output of the module will be no less than 83% of the labeled power output.

In resolving claims under the workmanship warranty, we have the option of remedying through repair, refurbishment or replacement of equipment. In resolving claims under the performance warranty, we have the right to repair or replace solar modules at our option.

We maintain warranty reserves to cover potential liabilities that could arise under these guarantees and warranties. We currently take a 1% warranty provision against our revenue for sales of solar power products.

In April 2010, we began entering into agreements with a group of insurance companies with high credit ratings to back up our warranties. Under the terms of the insurance policies, which are designed to match the terms of our solar module product warranty policy, the insurance companies are obliged to reimburse us, subject to certain maximum claim limits and certain deductibles, for the actual product warranty costs

that we incur under the terms of our solar module product warranty policy. We record the insurance premiums initially as prepaid expenses and amortize them over the respective policy

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period of one year. Each prepaid policy provides insurance against warranty costs for panels sold within that policy year. The warranty insurance is renewable annually. See "Critical Accounting Policies Warranty Costs."

Total write-downs of inventory included in our cost of revenue were \$0.7 million, \$17.0 million and \$23.0 million in 2013, 2014 and 2015, respectively.

On occasion, we enter into firm purchase commitments to acquire materials from our suppliers. A firm purchase commitment represents an agreement that specifies all significant terms, including the price and timing of the transactions, and includes a disincentive for non-performance that is sufficiently large to make performance probable. This disincentive is generally in the form of a take-or-pay provision, which requires us to pay for committed volumes regardless of whether we actually acquire the materials. We evaluate these agreements and record a loss, if any, on firm purchase commitments using the same lower of cost or market approach as that used to value inventory. We record the expected loss only as it relates to the succeeding year, as we are unable to reasonably estimate future market prices beyond one year, in cost of revenues in the consolidated statements of operations. As a result, changes in the cost of materials or sales price of modules will directly affect the computation of the estimated loss on firm purchase commitments and our consolidated financial statements in the following years. We did not record a loss on firm purchase commitments for the years ended December 31, 2013, 2014 and 2015.

In addition, see "Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we terminate any of these agreements, we may not be able to recover all or any part of the advance payments we have made to these suppliers and we may be subject to litigation."

Energy Development Segment

The cost of revenues of our energy development segment consists primarily of the costs of:

acquisition of solar power projects;

development of solar power projects, including interconnection fees and permitting costs;

project management and engineering;

EPC (consisting of costs of the components of solar power system other than solar modules, such as inverters, electrical and mounting hardware, trackers, grid interconnection equipment, wiring and other devices);

interest capitalized for solar power projects during construction period; and

site-specific costs.

For utility-scale solar power projects built by us, we provide a limited workmanship or balance of system warranty against defects in engineering design, installation and construction under normal use, operation and service conditions for a period of up to five years following the energizing of the solar power plant. In resolving claims under the workmanship or balance of system warranty, we have the option of remedying through repair, refurbishment or replacement of equipment. We have entered into similar workmanship warranties with our suppliers to back up our warranties. We maintain warranty reserves to cover potential liabilities that could arise under these guarantees and warranties.

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Electricity Generation Segment

The cost of revenues of our electricity generation segment consists primarily of the costs of:

depreciation and amortization of solar projects equipment and facilities;

labor, including salaries and benefits for operational and maintenance personnel; and

other operational and maintenance costs of solar power projects.

Gross Profit/Gross Margin

Our gross profit is affected by a number of factors, including the success of and contribution from all three of our operating segments, the average selling price of our solar power products, our product mix, loss on firm purchase commitments under long-term supply agreements, and our ability to cost-effectively manage our supply chain.

Operating Expenses

Our operating expenses include selling expenses, general and administrative expenses, and research development expenses. Our operating expenses decreased in 2013, increased in 2014 and 2015. We expect our operating expenses to increase as our net revenues grow in the future. On a percentage basis, however, we expect our operating expenses to remain constant with the growth of our operations.

Selling Expenses

Selling expenses consist primarily of salaries and benefits, transportation and customs expenses for delivery of our products, sales commissions for our sales personnel and sales agents, advertising, promotional and trade show expenses, and other sales and marketing expenses. Our selling expenses decreased in 2013, increased in 2014 and increased in 2015. We expect as we increase our sales volumes in the future, our selling expenses will increase as we hire additional sales personnel, target more markets and initiate additional marketing programs to reach our goal of continuing to be a leading global brand.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and benefits for our administrative and finance personnel, consulting and professional service fees, government and administration fees and insurance fees. Our general and administrative expenses decreased in 2013, increased in 2014 and increased in 2015. We expect our general and administrative expenses to increase to support the anticipated growth of our business.

Research and Development Expenses

Research and development expenses consist primarily of costs of raw materials used in our research and development activities, salaries and benefits for research and development personnel and prototype and equipment costs related to the design, development, testing and enhancement of our products and our silicon reclamation program. In 2013, 2014 and 2015, our research and development expenses accounted for 0.7%, 0.4% and 0.5% of our total net revenues. We expect that our research and development expenses will increase as we devote more efforts to research and development in the future.

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Under our share incentive plan, as of December 31, 2015, we had outstanding:

675,709 stock options;

349,500 restricted shares; and

1,311,410 restricted share unit.

For a description of the stock options, restricted share units and restricted shares granted, including the exercise prices and vesting periods, see "Item 6. Directors, Senior Management and Employees B. Compensation of Directors and Executive Officers Share-based Compensation Share Incentive Plan." We recognize share-based compensation to employees as expenses in our statement of operations based on the fair value of the equity awarded on the date of the grant. The compensation expense is recognized over the period in which the recipient is required to provide services in exchange for the equity award.

We have made an estimate of expected forfeitures and are recognizing compensation costs only for those equity awards that we expect to vest. We estimate our forfeitures based on past employee retention rates and our expectations of future retention rates. We will prospectively revise our forfeiture rates based on actual history. Our share-based compensation expenses may change based on changes to our actual forfeitures.

For the year ended December 31, 2015, we recorded share-based compensation expenses of approximately \$6.0 million, compared to approximately \$5.1 million for the year ended December 31, 2014. We have categorized these share-based compensation expenses in our:

cost of revenues;

selling expenses;

general and administrative expenses; and

research and development expenses,

depending on the job functions of the individuals to whom we granted the options, restricted shares and restricted share units. The following table sets forth, for the periods indicated, the allocation of our share-based compensation expenses both in absolute amounts and as a percentage of total share-based compensation expenses.

	Years Ended December 31,					
	2013		2014		2015	
	(In thousands of \$, except for percentages)					
Share-based compensation expenses included in:						
Cost of revenues	740	16.4%	807	15.9%	697	11.7%
Selling expenses	760	16.9	974	19.1	1,088	18.2
General and administrative expenses	2,661	59.0	3,008	59.1	3,889	65.2
Research and development expenses	347	7.7	298	5.9	292	4.9
Total share-based compensation expenses	4,508	100.0%	5,087	100.0%	5,966	100.0%

We expect to incur additional share-based compensation expenses as we expand our operations.

Interest Expense

Interest expense consists primarily of interest incurred with respect to our short and long-term borrowings from Chinese commercial banks, borrowings from international banks and \$150 million convertible senior notes issued in February 2014.

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Gain (Loss) on Change in Fair Value of Derivatives

We have entered into foreign currency derivatives to hedge part of the risks of our expected cash flows, mainly in Japanese yen, Euros, Canadian dollars and Renminbi. We had a gain on the change in fair value of derivatives in our 2013 and 2014 associated with our hedging activities. In 2015, we had a loss on the change in fair value of derivatives of \$12.2 million, which included a \$3.7 million loss on change in fair value of foreign currency derivatives, a \$8.9 million loss on change in fair value of warrants and a \$0.4 million gain in change in fair value of interest rate swap/swaption contracts. The warrants were issued in conjunction with the \$180 million in financing arranged by Credit Suisse AG, Singapore Branch, or Credit Suisse, in the fourth quarter of 2015. These warrants can be settled in cash at the discretion of the holder and as a result they are derivative liabilities that were recorded at fair value at issuance and subsequently marked to market at the end of each reporting period.

Income Tax Expense

We recognize deferred tax assets and liabilities for temporary differences between the financial statement and income tax bases of assets and liabilities. Valuation allowances are provided against deferred tax assets when management cannot conclude that it is more likely than not that some portion or all deferred tax assets will be realized.

We are governed by the CBCA, a federal statute of Canada and are registered to carry on business in Ontario. This subjects us to both Canadian federal and Ontario provincial corporate income taxes. Our combined tax rates were all 26.5% for the years ended 2013, 2014 and 2015.

PRC enterprise income tax is calculated based on taxable income determined under PRC accounting principles with a uniform enterprise income tax rate of 25%. Our major operating subsidiaries, CSI Solartronics, CSI New Energy Holding, CSI Cells, CSI Luoyang Manufacturing, CSI Technologies and CSI Changshu Manufacturing, are subject to taxation in China. Certain of these subsidiaries once enjoyed preferential tax benefits, such as a reduced enterprise income tax rate of 12.5%. However, these benefits have now expired. In 2015, only our partially owned subsidiary, Suzhou Sanysolar, which was recognized as an HNTE and satisfied applicable statutory requirements, enjoyed a reduced enterprise income tax rate of 15%. As most of the preferential tax benefits enjoyed by our PRC subsidiaries expired, their effective tax rates increased significantly.

The EIT Law provides that enterprises established outside China whose "de facto management body" is located in China are considered PRC tax residents and will generally be subject to the uniform 25% enterprise income tax rate on their global income. Under the implementation regulations, the term "de facto management body" is defined as substantial and overall management and control over such aspects as the production and business, personnel, accounts and properties of an enterprise. Circular 82 further provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled offshore incorporated enterprise is located in the PRC. The criteria include whether (a) the premises where the senior management and the senior management bodies responsible for the routine production and business management of the enterprise perform their functions are mainly located within the PRC, (b) decisions relating to the enterprise's financial and human resource matters are made or subject to approval by organizations or personnel in the PRC, (c) the enterprise's primary assets, accounting books and records, company seals, and board and shareholders' meeting minutes are located or maintained in the PRC and (d) 50% or more of voting board members or senior executives of the enterprise habitually reside in the PRC. Although Circular 82 only applies to offshore enterprises controlled by enterprises or enterprise groups located within the PRC, the determining criteria set forth in the Circular 82 may reflect the tax authorities' general position on how the "de facto management body" test may be applied in determining the tax resident status of offshore enterprises. As the tax resident status of an enterprise is subject to the determination by the PRC tax authorities, uncertainties remain with respect to the interpretation of the term "de facto management

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body" as applicable to our offshore entities. As a substantial number of the members of our management team are located in China, we may be considered as a PRC tax resident under the EIT Law and, therefore, subject to the uniform 25% enterprise income tax rate on our global income.

Under the EIT Law and implementing regulations issued by the State Council, the PRC withholding tax rate of 10% is generally applicable to interest and dividends payable to investors that are not "resident enterprises" in the PRC, to the extent such interest or dividends have their sources within the PRC. We consider the undistributed earnings of our PRC subsidiaries (approximately \$197.6 million as of December 31, 2015) to be indefinitely reinvested in China, and, consequently, we have made no provision for withholding taxes for those amounts.

Critical Accounting Policies

We prepare financial statements in accordance with U.S. GAAP, which requires us to make judgments, estimates and assumptions that affect (a) the reported amounts of our assets and liabilities, (b) the disclosure of our contingent assets and liabilities at the end of each fiscal period and (c) the reported amounts of revenues and expenses during each fiscal period. We regularly evaluate these estimates based on our own historical experience, knowledge and assessment of current business and other conditions, our expectations regarding the future based on available information and reasonable assumptions, which together form our basis for making judgments about matters that are not readily apparent from other sources. Since the use of estimates is an integral component of the financial reporting process, our actual results could differ from those estimates. Some of our accounting policies require a higher degree of judgment than others in their application.

When reviewing our financial statements, the following should be considered: (a) our selection of critical accounting policies, (b) the judgment and other uncertainties affecting the application of such policies and (c) the sensitivity of reported results to changes in conditions and assumptions. We believe the following accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

Module Segment

We recognize revenues for solar product sales when persuasive evidence of an arrangement exists, delivery of the product has occurred and title and risk of loss has passed to the customers, the sales price is fixed or determinable and the collectability of the resulting receivable is reasonably assured. If collectability is not reasonably assured, we recognize revenue only upon collection of cash. Revenues also include reimbursements received from customers for shipping and handling costs. Sales agreements typically contain the customary product warranties but do not contain any post-shipment obligations nor any return or credit provisions.

A majority of our contracts provide that products are shipped under the terms of free on board, or FOB, ex-works, or cost, insurance and freight, or CIF, and delivered duty paid, or DDP. Under FOB, we fulfill our obligation to deliver when the goods have passed over the ship's rail at the named port of shipment. The customer has to bear all costs and risks of loss or damage to the goods from that point. Under ex-works, we fulfill our obligation to deliver when we have made the goods available at our premises to the customer. The customer bears all costs and risks involved in taking the goods from our premises to the desired destination. Under CIF, we must pay the costs, marine insurance and freight necessary to bring the goods to the named port of destination but the risk of loss of or damage to the goods as well as any additional costs due to events occurring after the time the goods have been delivered on board the vessel, is transferred to the customer when the goods pass the ship's rail in the port of shipment. Under DDP, we are responsible for making a safe delivery of goods to a named