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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**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, 2012.

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

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

For the transition period from      to

Commission file number: 001-33107

**CANADIAN SOLAR INC.**

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(Exact name of Registrant as specified in its charter)

N/A

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(Translation of Registrant's name into English)

Canada

---

(Jurisdiction of incorporation or organization)

545 Speedvale Avenue West  
Guelph, Ontario, Canada N1K 1E6

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(Address of principal executive offices)

Michael G. Potter, Chief Financial Officer  
545 Speedvale Avenue West  
Guelph, Ontario, Canada N1K 1E6  
Tel: (1-519) 837-1881  
Fax: (1-519) 837-2550

(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:

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common shares with no par value	The NASDAQ Stock Market LLC (The NASDAQ Global 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.

43,242,426 common shares issued and outstanding which were not subject to restrictions on voting, dividend rights and transferability, as of December 31, 2012.

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

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., its predecessor entities and its consolidated subsidiaries;
- "\$," "US\$" and "U.S. dollars" are to the legal currency of the United States;
- "RMB" and "Renminbi" are to the legal currency of China;
- "C\$", "CAD" and "Canadian dollars" are to the legal currency of Canada;
- "€" and "Euro" are to the legal currency of the European Economic and Monetary Union;
- "MW" and "GW" are to 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; and
- "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.

This annual report on Form 20-F includes our audited consolidated financial statements for the years ended December 31, 2010, 2011 and 2012 and as of December 31, 2011 and 2012.

We use the noon buying rate in The City of New York for cable transfers in Renminbi, Euros and Canadian dollars per U.S. dollar as certified for customs purposes by the Federal Reserve Bank of New York to translate Renminbi, Euros 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 and Canadian dollars into U.S. dollars was made by the noon buying rate in effect on December 31, 2012, which was RMB6.2301 to \$1.00, €0.7583 to \$1.00, and C\$0.9958 to \$1.00. We make no representation that the Renminbi, Euro, 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, Canadian dollars or Renminbi, as the case may be, at any particular rate or at all. See "Item 3. Key Information—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."

## 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;



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- our beliefs regarding the future shortage or availability of high-purity silicon;
- our beliefs regarding our ability to resolve our disputes with suppliers with respect to our long-term supply agreements;
- 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 module products;
- 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 volume of silicon, solar wafers and cells at competitive cost to support our solar module production;
- our beliefs regarding the effects of environmental regulation;
- our beliefs regarding the changing competitive environment in the solar power industry;
- 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 business lines, including the total solution business; and
- our ability to develop, build and sell utility-scale solar power plants in Canada, the U.S., Japan, China and elsewhere.

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 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 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.

**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, 2010, 2011 and 2012 and balance sheet data as of December 31, 2011 and 2012 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, 2008 and 2009 and our consolidated balance sheet data as of December 31, 2008, 2009 and 2010 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.

	As of December 31,				
	2008	2009	2010	2011	2012
	(In thousands of \$, except share and per share data, and operating data and percentages)				
<b>Statement of operations data:</b>					
Net revenues	705,006	630,961	1,495,509	1,898,922	1,294,829
Income (loss) from Operations	24,065	6,512	120,299	6,833	(142,516)
Net income (loss)	(7,534)	22,778	50,828	(90,903)	(195,155)
Net income (loss) attributable to Canadian Solar Inc.	(7,534)	22,646	50,569	(90,804)	(195,469)
Earnings (loss) per share, basic	(0.24)	0.61	1.18	(2.11)	(4.53)
Shares used in computation, basic	31,566,503	37,137,004	42,839,356	43,076,489	43,190,778
Earnings (loss) per share, diluted	(0.24)	0.60	1.16	(2.11)	(4.53)
Shares used in computation, diluted	31,566,503	37,727,138	43,678,208	43,076,489	43,190,778
Other financial data:					
Gross margin	10.1%	12.4%	15.3%	9.6%	7.0%
Operating margin	3.4%	1.0%	8.0%	0.4%	(11.0)%

Net margin	(1.1)%	3.6%	3.4%	(4.8)%	(15.1)%
Selected operating data:					
Products sold (in MW)					
—Solar module business	166.5	296.6	779.1	1,265.6	1,490.1
—Total solution business <sup>(1)</sup>	—	0.6	24.4	56.9	53.0
Total	166.5	297.2	803.5	1,322.5	1,543.1

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	As of December 31,				
	2008	2009	2010	2011	2012
	(In thousands of \$, except share and per share data, and operating data and percentages)				
Average selling price (in \$ per watt)					
—Solar module business	4.23	2.13	1.80	1.34	0.77
—Total solution business	—	3.36	3.21	3.49	2.80
<b>Balance Sheet</b>					
<b>Data:</b>					
Net current assets (liabilities)	166,361	239,047	259,332	59,131	(98,046)
Total assets	570,654	1,038,703	1,423,367	1,879,809	2,259,313
Net assets	332,254	466,001	534,984	466,978	301,583
Long-term borrowings	45,357	29,290	69,458	88,249	214,563
Convertible notes	830	866	906	950	—
Common shares	395,154	500,322	501,146	502,403	502,562
Number of shares outstanding	35,686,313 <sup>(2)</sup>	42,745,360 <sup>(2)</sup>	42,893,044	43,155,767	43,242,426

- (1) Total solution business includes solar power project development and sales, engineering, procurement and construction, or EPC, services, operating and maintenance, or O&M, services and sales of solar system kits.
- (2) Excludes 58,250 and 29,125 restricted shares, which were subject to restrictions on voting and dividend rights and transferability as of December 31, 2008 and 2009, respectively.

**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 may decline, which may reduce our revenues and earnings.*

We are influenced by conditions in the solar power market and industry. In 2010, demand for solar power products increased and many manufacturers increased their production capacity accordingly as the effects of the global financial crisis subsided. 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 PV modules worldwide put severe downward pressure on solar PV module prices in European and other markets. As a result, many solar power plant developers, solar system installers and solar PV products distributors that purchase solar power products, including solar PV modules from manufacturers like us, were adversely affected and their financial condition weakened. Although our shipments increased year-over-year in 2011 and 2012, average selling prices for our solar PV modules declined significantly. In 2012, oversupply conditions across the value chain, difficult economic conditions in Europe as well as escalating foreign trade disputes in the U.S., Europe, India and China affected industry-wide demand and put continued pressure on average selling prices, resulting in lower revenue for many industry participants. If the supply of solar PV 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.

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The demand for solar power products is influenced by macroeconomic factors, such as global economic conditions, demand for electricity, the supply and prices of other energy products, such as oil, coal and natural gas, as well as government regulations and policies concerning the electric utility industry, the solar and other alternative energy industries and the environment. For example, a reduction in oil and coal prices may reduce the demand for alternative energy. Also, during 2011 and 2012, a decrease in solar power tariffs and a difficult financing environment caused a decrease in the demand for solar PV systems. Solar power prices decreased as governments, forced by the global economic crisis to implement austerity measures, reduced subsidies, such as feed-in tariffs. Further, many downstream purchasers of solar power products were unable to secure sufficient financing for their PV projects. As a result, many purchasers of solar power products were unable or unwilling to expand their operations. 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 PV 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 PV systems and potentially reduce the demand for PV modules and/or reduce the average selling prices for PV modules, which may materially and adversely affect our business, results of operations, financial condition and prospects.

***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 experienced an oversupply of high-purity silicon in 2009, which contributed to an oversupply of solar wafers, cells and modules and resulted in substantial downward pressure on prices throughout the value chain in 2009. Strong demand in 2010 stabilized and strengthened prices across the value chain, particularly in the second half of 2010, and, according to Solarbuzz, an independent solar energy research and consulting firm, from the end of 2009 to the end of 2010, module pricing increased from approximately \$1.65 to approximately \$1.90 per watt, cell pricing increased from approximately \$1.25 to approximately \$1.40 per watt and wafer pricing increased from approximately \$0.80 to approximately \$1.00 per watt. Polysilicon prices also increased in 2010 compared to 2009, from approximately \$50 to \$55 per kilogram to approximately \$80 to \$90 per kilogram. In 2011, the solar industry again experienced oversupply across the value chain, and by the end of the year, module pricing was approximately \$1.00 per watt, cell pricing was approximately \$0.55 per watt and wafer pricing was approximately \$0.41 per watt. According to Solarbuzz, demand for solar products remained soft in 2012 and at the end of 2012, module pricing was approximately \$0.78 per watt, cell pricing was approximately \$0.43 per watt, wafer pricing was approximately \$0.25 per watt and polysilicon pricing was approximately \$24.66 per kilogram. Our average module selling price has decreased from \$1.80 per watt in 2010 to \$1.34 per watt in 2011 and to \$0.77 per watt in 2012, in large part because the increase in the supply of solar cells and modules was greater than the increase in the demand therefor. As a result of the decline in our module selling prices, our revenue declined in 2012, even though our module shipment volume for the year increased. In addition, because module prices declined at a rapid rate, we suffered losses in the form of inventory write-downs, as the market price of 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. Continued increases in solar module production in excess of market demand may result in further downward pressure on the price of solar cells and modules, including our products. Increasing competition could also result in us losing sales or market share. 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 continue to be adversely impacted, either due to higher costs compared to our competitors or due to further write-

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downs of inventory, or both. In addition, our market share could decline if our competitors are able to price their products more competitively.

***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 products, hamper our expansion and materially affect our results of operations.***

General economic conditions, liquidity and the availability and cost of capital could materially and adversely affect our business and 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 approximately 40% to 50% of the cost of solar power projects.

Furthermore, solar power projects compete for capital with other forms of investment such as 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 render existing funding more expensive 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 European Union, or EU, our major market, 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 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 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 for solar power projects in countries with a higher perceived sovereign credit risk.

***Governments may revise, reduce or eliminate subsidies and economic incentives for solar power, 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 solar power exceeds retail electricity rates in many locations. Government incentives vary by geographic market. Government bodies in many countries, most notably Germany, Italy, the Czech Republic, the United States, Japan, Canada (Ontario), South Korea, Greece, France, Australia and Spain, 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, such as the German Renewable Energy Law, are scheduled to be reduced and could be altered or eliminated altogether through new legislation. For example, in January, July and October of 2010, Germany introduced reductions in solar feed-in tariffs of approximately 24-26% for rooftop systems and 20-25% for ground-based systems. Germany further reduced its feed-in tariffs in

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the beginning of 2012 by 15% to up to 24.43 Euro cents per kilowatt hour for rooftop systems and up to 18.76 Euro cents per kilowatt hour for ground-based systems. In June of 2012 the German government approved further changes to the Renewable Energy Law. Under the new rules solar systems smaller than 10 kW will receive subsidies of 19.5 Euro cents per kWh, solar systems between 10kW and 40 kW will receive subsidies of 18.5 Euro cents per kWh, systems over 40 kW to 1 MW will receive subsidies of 16.5 Euro cents per kWh and systems between 1MW and 10 MW will receive subsidies of 13.5 Euro cents per kWh. Systems larger than 10MW will no longer receive subsidies. In addition, for systems that still qualify for subsidies, the tariff will be adjusted downward on a monthly basis to limit growth in solar systems installations to a range of 2.5-3.0 GW per year. Under the new plan, photovoltaic subsidies will be stopped when a cumulative capacity of 52 GW is reached; cumulative capacity in the first quarter of 2013 was approximately 32 GW. In Italy, another important market for solar products in the past several years, total cumulative capacity reached 15.9 GW in October of 2012 and just €241 million is left in the country's solar subsidy program. Once this amount is used up and the funding limit of €6.7 billion is reached, Italy will no longer pay out subsidies on photovoltaic solar systems. Many other countries in Europe have reduced or eliminated their subsidies in the past few years and it is likely that this trend will continue, possibly until subsidies are phased out completely for solar energy.

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 system and therefore solar module prices. 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.

***We have, from time to time, entered into long-term supply agreements with polysilicon and wafer suppliers. Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we chose to prematurely 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.***

In 2007 and 2008, due to shortages of polysilicon and silicon wafers, we entered into a number of long-term supply agreements with several silicon and wafer suppliers in an effort to secure 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 response to the decline in the price of polysilicon, beginning in 2009, we began discussing adjustments in the unit price and volume terms under our supply agreements with these suppliers.

In 2009 and thereafter, we agreed to amend our agreements with certain of them, including GCL, Neo Solar, LDK and the UMG-Si supplier, 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 silicon wafer suppliers, and consistent with historical industry practice, we made advance payments prior to scheduled delivery dates. The advance payments were made without collateral and were to be credited against the purchase prices payable by us. As of December 31, 2012, the balance of advance payments that we have made to GCL, Deutsche Solar, LDK and the UMG-Si supplier totaled \$45.4 million.

We purchased the contracted volume for 2009 under our 12-year supply agreement with Deutsche Solar, but we 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

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invoice us for the difference at the full contract price. We believe that it is more likely than not that the take-or-pay provisions of the agreement are void under German law. In December 2011, Deutsche Solar gave notice to us to terminate the 12-year wafer supply 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 (\$196.0 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 (\$196.0 million) on the notice.

In 2007, we entered into a three-year agreement with LDK under which we purchased specified quantities of silicon wafers and LDK converted our reclaimed silicon feedstock into wafers under a toll manufacturing arrangement. In 2008, we entered into two ten-year wafer supply agreements 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 termination notice regarding our two ten-year supply agreements with them. We also initiated arbitration proceedings against LDK seeking a refund of certain advance payments that we made to them. In December of 2012, the Shanghai Branch of China International Economic and Trade Arbitration Commission, or CIETAC Shanghai Branch, awarded RMB248.9 million (\$40.0 million) plus RMB2.2 million (\$0.4 million) in arbitration expenses in favor of LDK. The total amount of the award includes an RMB60.0 million (\$9.6 million) initial deposit. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings." We recorded a full bad debt allowance against this initial deposit in 2009. We made a loss provision totaling RMB188.9 million (\$30.3 million) in 2012 following the arbitration award in favor of LDK. We dispute the merits of the arbitration award and will pursue all legal means to overturn or resist the implementation of the award. If we do not succeed, payment of the award to LDK could have an adverse effect on our financial condition.

Due to the default of the 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 significant quantity of UMG-Si from this supplier in the future and made a full bad debt allowance against the advance payments of RMB64 million (\$10.3 million) to the UMG-Si supplier in 2010.

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.

While we currently do not have any such agreements, in the future, we may enter into new medium or 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 PV products decreases, yet our supply agreements require us to purchase more polysilicon 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.

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***Existing regulations and policies, and changes to these regulations and policies, may present technical, regulatory and economic barriers to the purchase and use of solar power products, which may significantly reduce demand for our products and services.***

The market for electricity generation products in the countries where we sell our products is heavily influenced by federal, 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. We expect that our solar power products and installation will continue to be subject to federal, 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.

***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 through the establishment of manufacturing sites and logistic centers in key global markets. Throughout the process of establishing operating facilities in these markets, we could be exposed to risks, including political, regulatory, labor and tax risks. Furthermore, we may need to make substantial investments in these overseas operations, both initially and on an ongoing basis, in order to attain longer-term sustainable returns. These investments could influence our financial performance before sustainable profitability is recognized.

***Because the markets in which we compete are highly competitive and many of our competitors have greater resources than we do, we may not be able to compete successfully and we may not be able to maintain or increase our market share.***

We have a large number of competitors, including non-China-based competitors such as First Solar, Inc., or First Solar, and Sharp Solar Corporation, or Sharp Solar, and China-based competitors such as Yingli Green Energy Holding Company Limited, or Yingli, Trina Solar Limited, or Trina, and Suntech Power Holdings Co. Ltd., or Suntech. 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.

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***If sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our revenues may not increase or may continue to decline, and we may be unable to sustain our profitability.***

The solar power market is still at a relatively early stage of development and future demand for solar power products 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. In addition, demand for solar power products in our targeted markets, including Germany, the U.S., Japan, China, Canada, Spain, Korea, the United Kingdom, Italy, India and France 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, including our utility-scale solar power plants, compared to conventional and other renewable energy sources and products;
- the availability of government subsidies and incentives to support the development of the solar power industry;
- the cost and availability of capital, including long-term debt and tax equity, for solar 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, which tend to decrease when the economy slows; and
- the lack of favorable regulation for solar power within the electric power industry and broader energy industry.

If solar power technology is not suitable for widespread adoption or if sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our revenues may suffer and we may be unable to sustain our profitability.

***We face risks associated with the marketing, distribution and sale of our solar power products internationally and, if we are unable to effectively manage these risks, they could impair our ability to expand our business abroad.***

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

- difficulties staffing and managing overseas operations;
- fluctuations in foreign currency exchange rates;
- 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 utility-scale solar power projects on a timely and profitable basis as a result of technical difficulties, commercial disputes with our customers, changes in regulations among other factors;

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- the difficulties and costs of complying with the different commercial, legal and regulatory requirements in the overseas markets in which we offer our products;
- our failure to develop appropriate risk management and internal control structures tailored to overseas operations;
- our inability to obtain, maintain or enforce intellectual property rights;
- unanticipated changes in prevailing economic conditions and regulatory requirements; and
- 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. Furthermore, some of these risks, such as currency fluctuations, could influence our financial performance.

***Imposition of anti-dumping and countervailing orders 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 October 2011, a trade action was filed with the U.S. Department of Commerce, or USDOC, and the U.S. International Trade Commission, or USITC, by the U.S. unit of SolarWorld AG and six other U.S. firms, accusing Chinese producers of crystalline silicon photovoltaic cells, or CSPV cells, whether or not incorporated into modules, of selling their products (i.e., CSPV cells or modules incorporating these cells) into the United States at less than fair value, or dumping, and of receiving countervailable subsidies from the Chinese authorities. These firms asked the U.S. government to impose anti-dumping and countervailing duties on CSPV cells imported from China. The USDOC and the USITC investigated the validity of these claims. We were identified as one of a number of Chinese exporting producers of the subject goods to the U.S. market. We also have affiliate U.S. operations that import the subject goods from China.

On October 9, 2012, the USDOC issued final affirmative determinations in the anti-dumping and countervailing duty investigations. On November 7, 2012, the USITC ruled that imports of CSPV cells had caused material injury to the U.S. CSPV industry. As a result of these rulings, the Company is required to pay cash deposits on CSPV cells imported into the U.S. from China, whether alone or incorporated into modules. The announced cash deposit rates applicable to the Company were 13.94% (anti-dumping duty) and 15.24% (countervailing duty). The actual rates at which duties will be assessed and payable may be subject to administrative review next year and may differ from the announced deposit rates. These duties could materially and adversely affect our affiliated U.S. import operations and increase our cost of selling into the United States, thus adversely affecting our export sales to the United States, which is one of our growing markets. A number of parties have filed notice of their intent to challenge the rulings of the USDOC and USITC in appeals to the U.S. Court of International Trade. Decisions on those appeals are not expected until next year.

On September 6, 2012, following a complaint lodged by SolarWorld AG and certain supporters, the European Commission initiated an anti-dumping investigation concerning imports into the EU of CSPV modules and key components (i.e., cells and wafers) originating in China. On November 8, 2012, following a complaint lodged by the same parties, the European Commission initiated an anti-subsidy investigation on these products. In each investigation, we were identified as one of a number of Chinese exporting producers of these products to the EU market. We also have affiliate EU operations that import these products from China.

The Company was not chosen as one of the "sampled" companies in these EU investigations, which were required to provide written information to the EU authorities.

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The Company requested "market economy treatment" in the anti-dumping investigation, but this request was denied. A number of other affected Chinese companies have filed an action for annulment of the decision that denied "market economy treatment".

On March 5, 2013, the European Commission published a Regulation making all imports of CSPV modules and key components originating in or consigned from China subject to registration by EU Member State customs authorities. This registration requirement is likely to remain in effect through the pendency of the investigations. The Company filed comments contesting this registration decision and requested a hearing to express its views.

Under the current timeline, we expect that provisional anti-dumping duties, if any, will be announced by June 6, 2013, provisional countervailing duties, if any, will be announced by August 8, 2013 and definitive anti-dumping and countervailing duties, if any, will be announced by December 5 and 7, 2013, respectively.

The EU is the largest market for solar products. Anti-dumping and/or countervailing (i.e., anti-subsidy) duties imposed on imports of our products into the EU could materially and adversely affect our affiliated EU import operations, increase our cost of selling into the EU, and adversely affect our EU export sales.

In late November 2012, India initiated an anti-dumping investigation on imported solar products from China, Taiwan, the United States and Malaysia. The scope of the Indian complaint includes thin-film and CSPV cells and modules, as well as "glass and other suitable substrates". The period of investigation is from January 1, 2011 to June 30, 2012. We completed and submitted a "sampling questionnaire" and were chosen by the Indian authorities to be a sampled company. We are now compiling the data requested of us. As with the U.S. and EU cases, duties on our sales to India could materially and adversely affect the Company, increasing our selling costs and reducing our export sales to India, which we view as a promising market.

It is possible that an anti-subsidy investigation on solar products may also be initiated in India.

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

### ***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 modules, solar system kits and products;
- the rate and cost at which we are able to expand our internal manufacturing capacity;
- the availability and price of solar cells and wafers from our suppliers and toll manufacturers;
- the availability and price 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;
- availability of financing for on-grid and off-grid solar power applications;
- acquisition and investment costs;

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- the timing of completion of construction of our utility-scale solar power projects;
- the timing of successful customer acceptance testing of our utility-scale solar power projects;
- geopolitical turmoil and natural disasters within any of the countries in which we operate or sell products;
- foreign currency fluctuations, particularly in the U.S. dollar, Euro, RMB and Canadian dollar;
- our ability to establish and expand customer relationships;
- changes in our manufacturing costs;
- the timing of new products or technology introduced or announced by our competitors;
- increases or decreases 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 underutilized 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. This may cause us to miss analysts' estimates or any guidance announced by us. If we fail to meet or exceed analysts' estimates, investor expectations or our own future guidance, even by a small amount, our share price could decline, perhaps substantially.

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

The majority of our sales are denominated in Euros and U.S. dollars, with the remainder in other currencies such as the Renminbi, Canadian dollar, Japanese yen and British pound. Our Renminbi costs and expenses are primarily related to domestic sourcing of solar cells, silicon wafers and silicon, other raw materials, toll manufacturing fees, labor costs and local overhead expenses. 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 are denominated in Renminbi. Fluctuations in exchange rates, particularly among the U.S. dollar, Euro, Renminbi and Canadian dollar, may affect our net profit margins and may result in fluctuations in foreign exchange and operating gains or losses. We recorded foreign exchange losses of \$36.3 million, \$40.0 million and \$10.7 million in 2010, 2011 and 2012, respectively.

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. The new policy permitted the Renminbi to fluctuate against a basket of foreign currencies, which caused the Renminbi to appreciate by approximately 21.5% against the U.S. dollar over the following three years. However, since 2008, the Renminbi has fluctuated against other freely traded currencies. 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.



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Between June 30, 2010 and December 31, 2012, the value of the Renminbi appreciated approximately 8.13% 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 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 order to limit our foreign exchange losses.

The collateral requirements to enter into hedging contracts and the expenses associated with purchasing currency options have increased. There are also notional limits on the size of the hedging transactions that we may enter into with any particular counterparty at any given time. However, the effectiveness of our hedging program may be limited with respect to cost effectiveness, cash management, exchange rate visibility and downside protection. We recorded a gain on change in foreign currency derivatives of \$1.7 million in 2010, a loss on change in foreign currency derivatives of \$5.8 million in 2011, and a loss on change in foreign currency derivatives of \$4.4 million in 2012. 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 profits may materially decrease. As a result, fluctuations in currency exchange rates could have a material and adverse effect on our financial condition and 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 tend to decrease during the winter months in our key markets, such as Germany, due to adverse weather conditions that can complicate the installation of solar power systems. Demand from other countries, such as Canada, the U.S., China and South Korea, 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 significantly expand our capacity to manufacture solar components, which exposes us to a number of risks and uncertainties.***

Our future success depends on our ability to significantly increase our capacity to manufacture solar components. If we are unable to do so, we may be unable to expand our business, maintain our competitive position, improve our profitability, and generate the cash flows we have currently forecasted. Our ability to establish additional manufacturing capacity is subject to significant 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 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 establish or successfully operate our internal solar components manufacturing capabilities, we may be unable to expand our business as planned. Moreover, even if we do expand our

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manufacturing capacity, we might not be able to generate sufficient customer demand for our solar power products to support our increased production levels.

***Our future success depends partly on our ability to expand our utility-scale solar power project pipelines in several key markets, which exposes us to a number of risks and uncertainties.***

Our future success depends on our ability to expand our utility-scale solar power project pipelines. Our ability to expand our utility-scale solar project pipelines is subject to significant risks and uncertainties, including:

- the need to raise significant additional funds to develop from scratch 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 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 utility-scale solar power project pipelines, we may be unable to expand our business, maintain our competitive position, improve our profitability, and generate the cash flows we have currently forecasted.

***Due to a variety of factors, including the general economic environment and conditions in financial markets, 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.***

In the future we anticipate that our operating and capital expenditures requirements will increase substantially. To develop new products, support future growth, achieve operating efficiencies and maintain product quality, we must 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 will increase as we expand our manufacturing operations, hire additional personnel, make advance payments or pay more for our raw materials, including polysilicon, 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. Certain of our suppliers require performance bonds issued by a bonding agency or letters of credit issued by financial institutions. Obtaining letters of credit requires adequate collateral. Our letter of credit facility is collateralized by restricted cash, which reduces the amount of cash available for operations.

We incurred moderate capital expenditures in 2012 related to improvements of our solar cell manufacturing capacity, technology and other projects. Going forward, and once market conditions for our solar products improve, we expect that we have to make additional capital expenditures to enhance our solar cell and module manufacturing capacity. Our capital expenditures and use of working capital may be greater than we expect if we invest in additional development and construction of solar power plants or decide to accelerate the increase of our manufacturing capacity, both internally and through investments in selected joint ventures. The financing that we require for the construction of solar power plants may not be available on terms acceptable to us. In addition, we could make additional investments in joint ventures or guarantee certain financial obligations of our joint ventures, which could reduce our cash flows, increase our indebtedness and expose us to the credit risk of our joint ventures. If our capital resources are insufficient to satisfy our liquidity requirements, we may seek to market additional equity or debt securities and/or obtain other debt financing. The economic

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environment and conditions in financial markets may limit our ability to raise equity or debt capital on acceptable terms. Lenders may be unwilling to lend funds that would be required to supplement cash flows to support daily operations. Further, increased debt would result in increased expenses and may give rise to restrictive covenants or collateral requirements. Financing arrangements, including project financing for our solar power plants, may not be available to us, or may not be available in amounts or on terms acceptable to us. We may also seek to sell assets, reduce or delay capital investments, or refinance or restructure our debt.

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 plant 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 plants, develop and expand our manufacturing operations and distribution network, maintain our research and development efforts, provide collateral for our projects 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 may be unable to obtain adequate financing due to market conditions and other factors, many of which are beyond our control, which may adversely influence our ability to grow our business.***

Our operations are capital intensive. We rely on working capital financing from PRC commercial banks for our daily 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. 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 photovoltaic and related 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.

The construction by us of large utility-scale solar power projects may require us to obtain project financing. There can be no assurance that we will be able to obtain such project financing 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 systems business plan. In addition, we generally expect to sell our projects by raising project equity capital from 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 prevented or delayed and our business, financial condition, or results of operations may be adversely affected.

***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. For example, there is a significant time lag between the time that we make payments to our suppliers and the time that we collect payments from our customers. 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

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banks, we are exposed to lending policy changes by the Chinese banks. In 2012, we successfully extended our short-term borrowings and, as of December 31, 2012, we had outstanding short-term borrowings of \$849.8 million with Chinese banks. Between January 1, 2013 and March 31, 2013, we obtained new borrowings of approximately \$240.1 million from Chinese banks, including \$94.9 million with due dates beyond December 31, 2013. Also, between January 1, 2013 and March 31, 2013, we renewed existing bank facilities of approximately \$64 million from Chinese banks with due dates beyond December 31, 2013.

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.

***Our project development and construction activities may not be successful; projects under development may not receive required permits, property rights, power purchase agreements, interconnection and transmission arrangements; or 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 plants 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;
- 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 operating in accordance with the U.S. Foreign Corrupt Practices Act and applicable local laws and customs; and
- force majeure events, including adverse weather conditions and other events out of our control.

If we 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

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obligations to repair, replace or supplement materials for the project. In 2013 and beyond, we still expect to invest a significant amount of capital to develop projects owned by us or third parties, which may limit the availability of capital to use for other purposes, such as contract damages or repurchase payments.

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, 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 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 occur and we are unable to increase the EPC sales price commensurately, we may not achieve our expected margins or we may be required to record a loss in the relevant fiscal period.

***Lack of transmission capacity availability, potential upgrade costs to the transmission grid, and other system constraints could significantly impact our ability to build PV plants and generate solar electricity power sales.***

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

***Developing solar power projects may require significant upfront investment prior to commencing construction, which could adversely affect our business and results from our operations.***

Our solar power plant development cycles can take many months or years to mature. As a result, we may need to make significant upfront payments for, among other things, land rights and permitting in advance of commencing construction, and the receipt of any revenue, much of which is not recognized for several additional months following contract signing. Our inability to enter into sales contracts with customers after making such upfront 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 these system investments through our long project development cycles.

Our liquidity may be adversely affected to the extent the project sale market 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 projects at prices and on terms and timing that are acceptable to us.

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

In the past, we were generally 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 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. The purchase of solar wafers and cells and silicon raw materials through toll manufacturing arrangements has required,

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and will continue to require us to make significant commitments of working capital beyond the cash flows generated from our operations to support our estimated production output. In the event 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 some customers unsecured short-term or medium-term credit based on our relationships with them and market conditions. As a result, our claims for payments and sales credits rank as unsecured claims, which would 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 modules are used, they may be unable to pay for the products for which they have submitted purchase orders 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. For example, we took back solar modules that we had sold and shipped to certain customers that were unable to pay under the terms of our agreements or to provide any security that would have allowed us to extend our payment terms. As a result, we resold the modules to other customers at lower prices, which negatively influenced our revenue and margins. 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.

***Our dependence on a limited number of silicon wafer and cell and silicon suppliers, 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 10.3%, 20.5% and 18.1% of our total raw materials purchases in 2010, 2011 and 2012, respectively.

Our major suppliers of silicon wafers include GCL, ReneSola Ltd., or ReneSola, and Konca Solar Cell., Ltd, or Konca. Our major suppliers of solar cells include Topcell Solar International Co., Ltd, or Topcell, Shunfeng Photovoltaic International Limited, or Shunfeng, and Neo Solar. These suppliers may not always be able to meet our quantity requirements, or to 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 over which we have no control. For example, in the first half of 2010 and the fourth quarter of 2011 and 2012, we experienced delivery issues with suppliers of silicon wafers, cells, connectors and encapsulants that caused us to miss shipment deadlines to some of our customers. Delivery problems may also occur with suppliers of other components, such as silver metallization paste, low-iron glass and solar module back sheet. 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

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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, such as selective emitter and metal wrap-through cells, in order to produce higher-powered modules, which may command better prices. We cannot assure that we will 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 modules made from such cells may also be an important competitive advantage because 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 modules are also one of the considerations in maintaining a price premium over thin-film products. However, while we are making the necessary capital equipment and other investments to develop higher conversion efficiency 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.

***Since we cannot test our products for the duration of our standard warranty periods, we may be subject to unexpected warranty expense.***

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 ten years and we guarantee that, for a period of 25 years, our 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% 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 modules and 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 operating results. 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.

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In addition to the solar module warranty above, for utility-scale solar power projects built by us, we provide a limited warranty against defects in workmanship under normal use, operation and service conditions for a period of five years following the energizing of the solar power plant. In resolving claims under the workmanship warranty, we have the option of remedying through repair, refurbishment or replacement of equipment.

In April 2010, we began entering into agreements with insurance companies to reduce some of this risk. Under 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 policy. The warranty insurance is renewable annually. See "Item 4. Information on the Company—B. Business Overview—Insurance." However, we cannot assure that potential warranty claims will not 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 core solar module manufacturing business. We expanded our annual solar cell production capacity from 800 MW as of December 31, 2010 to 1.5 GW as of December 31, 2011 and 1.6 GW as of December 31, 2012. To remain competitive going forward, we intend to further expand our total annual solar cell production capacity. 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. The technologies, designs and customer preferences for solar cells can change rapidly, and solar cell product life cycles are shorter than those for solar modules. We also face increased costs to comply with environmental laws and regulations. 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.

### ***It may be difficult to develop our internal production capabilities for silicon ingots and wafers or to achieve acceptable yields and product performance as a result of manufacturing problems.***

We have been increasing our internal production capabilities for the manufacture of silicon ingots and wafers. We completed the initial phase of our silicon ingot and wafer plant in the third quarter of 2008 and reached a nameplate capacity of approximately 216 MW as of December 31, 2012. We have limited prior operational experience in ingot and silicon wafer production and will face significant challenges in further increasing our internal production capabilities. The technology is complex and will

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require costly equipment and hiring of highly skilled personnel. In addition, we may experience delays in further developing these capabilities and in obtaining the governmental permits required to carry on these operations.

If we are able to develop these production capabilities successfully, we will need to continuously enhance and modify these 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, construction delays, 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.

***Our future growth depends in part on our ability to make strategic acquisitions and investments 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 may acquire other businesses, make strategic investments or establish strategic relationships with third parties to improve our market position or expand our products and services. We cannot assure you that we will be able to successfully make strategic acquisitions and investments 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.

Investments, strategic acquisitions and relationships with third parties could subject us to a number of risks, including risks associated with sharing proprietary information and loss of control of operations that are material to our business. Moreover, strategic acquisitions, investments and relationships may be expensive to implement and subject us to the risk of non-performance by a counterparty, which may in turn lead to monetary losses that materially and adversely affect our business.

***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.

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***Our dependence on a limited number of customers and our lack of long-term customer contracts 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 who either integrate our products into their own products or sell them as part of their product portfolio. Our top five customers by revenues collectively accounted for approximately 26.0%, 29.2% and 21.6% of our net revenues in 2010, 2011 and 2012, respectively. We typically enter into one-year framework sales agreements with our customers, with quarterly firm orders stipulating prices and quantities. 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 problems 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.

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

We, along with other solar module product manufacturers, are exposed to risks associated with product liability claims if the use of our solar module 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. We shipped our first products in March 2002 and, because of our limited operating history, we cannot predict whether product liability claims will be brought against us in the future, or the effect of any resulting negative publicity on our business. 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, 2013, Dr. Shawn Qu, our founder, chairman, president and chief executive officer, beneficially owned 13,270,500 common shares, or 30.5% of our outstanding share capital. As a result, Dr. Qu has substantial influence over our business, including decisions regarding mergers, 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 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 use and develop our technology and know-how and sell our solar module products without infringing the intellectual property or other rights of third parties. The

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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 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. As we expanded our silicon reclamation program and research and development activities and moved into ingot, wafer and cell manufacturing, we began to generate material levels of noise, wastewater, gaseous wastes and other industrial waste in our business operations. Additionally, as we expanded our internal solar components production capacity, our risk of facility incidents with a potential environmental impact also increased. We believe that we comply with all environmental laws and regulations and have all necessary environmental permits to conduct our business as it is presently conducted. However, if more stringent 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. 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.

Our solar modules and 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. For example, we increased our expenditures to 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 in our solar module products. Furthermore, we may need to comply with the EU's Waste Electrical and Electronic Equipment Directive if solar modules and products are re-classified as consumer electronics under the directive or if our customers located in other markets demand that they comply with this directive. This would require us to implement manufacturing process changes, such as changing the soldering materials used in module manufacturing, in order to continue to sell our products in these markets. If compliance is unduly expensive or unduly difficult, we may lose market share and our financial results may be adversely affected.

***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 vendors, and there can be no assurance that the "CSI" or "Canadian Solar" brand name or any of our possible future

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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 cannot assure that we will not directly or indirectly compete with our OEM customers, which could negatively affect our relationship with them.

***Failure to protect our intellectual property rights in connection with new specialty solar modules and products may undermine our competitive position.***

As we develop and bring to market new specialty solar modules and 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. We currently have 151 patents and 133 patent applications pending in the PRC for products that contribute a relatively small percentage of our net revenues. We have two United States patents, issued in November 2009 and February 2010. We also have three patent applications pending in Europe. We applied for registration of the "Canadian Solar" trademark in the United States in March 2009 and subsequently in a number of other jurisdictions, including Australia, Canada, Europe, India, South Korea, Japan, the United Arab Emirates, Bosnia and Herzegovina, Switzerland, Ghana, Croatia, Israel, Kenya, Liechtenstein, Singapore, Morocco, Egypt, Vietnam, Turkey, South Africa, Argentina, Peru, Brazil, Bangladesh and Indonesia. Among these applications, the "Canadian Solar" trademark has been registered in the United States, Australia, Canada, Europe, South Korea, Japan, the United Arab Emirates and Hong Kong. We also have 56 registered trademarks and 11 trademark applications pending in the PRC, and 25 registered trademarks and 41 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 specialty solar modules and 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.

***If our internal control over financial reporting or disclosure controls and procedures are not effective, there may be errors in our financial statements that could require a restatement or our filing may not be timely and investors may lose confidence in our reported financial information, which could lead to a decline in our stock price.***

We are subject to the reporting obligations under U.S. securities laws. The Securities and Exchange Commission, or SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, 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 the company's internal controls over financial reporting. As of December 31, 2012, our management concluded that our internal control over financial reporting was effective as well. However, we cannot assure 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 our share price.

***We face risks related to an SEC subpoena and private securities litigation.***

We received a subpoena from the SEC requesting documents relating to, among other things, certain sales transactions in 2009. We cannot predict when the SEC will complete its investigation or what its outcome will be. In addition, our company and certain of our directors and executive officers

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have been named as defendants in class action lawsuits in the United States and Canada. The lawsuits in the United States were consolidated into one class action, which was recently dismissed with prejudice. 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. The plaintiff is now pursuing his motion for class certification and for court approval to assert the statutory cause of action under the Ontario Securities Act. The plaintiff's motions will be heard by the court in June 2013. There is no guarantee that we will not become party to additional lawsuits or appeals to lawsuits that have been dismissed. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings." We are generally obligated, to the extent permitted by law, to indemnify our directors and officers who are named defendants in these lawsuits. 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.

**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 the Implementation Rules thereunder were promulgated and became effective on September 18, 2008. The Labor Contract Law and the Implementation Rules imposed stringent requirements on employers with regard to executing written employment contracts, hiring temporary employees, and dismissing employees. 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 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. 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.

***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 estimated 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 from 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%. There is a transition period for enterprises that were established prior to March 16, 2007 (the promulgation date of the EIT Law) and were given preferential tax treatment under the previous tax law. Enterprises that were subject to an enterprise income tax rate lower than 25% will have the new uniform enterprise income tax rate of 25% phased

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in over a five-year period from the effective date of the EIT Law. Enterprises that were entitled to exemptions or reductions from the standard enterprise income tax rate for a fixed term may continue to enjoy such treatment until the fixed term expires, subject to certain limitations. 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 classified 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.

Our subsidiary, CSI Solartronics (Changshu) Co., Ltd., or CSI Solartronics, has been recognized as an HNTE. However, because it does not satisfy certain requirements for the reduced 15% enterprise income tax rate, CSI Solartronics is still subject to a 25% enterprise income tax rate. CSI Solar Manufacture Inc., or CSI Manufacturing, was subject to a reduced enterprise income tax rate of 12.5% to the end of 2009, when its tax holiday expired. CSI Cells Co. Ltd., or CSI Cells and Canadian Solar Manufacturing (Luoyang) Inc., or CSI Luoyang Manufacturing, were subject to a reduced enterprise income tax rate of 12.5% until the end of 2011, when their tax holidays expired. Currently, CSI Cells is subject to a preferential enterprise income tax rate of 15% for the three years from 2012 to 2014, resulting from its HNTE status recognized in 2009 and renewed in 2012. Canadian Solar Manufacturing (Changshu) Inc. (formerly known as Changshu CSI Advanced Solar Inc.), or CSI Changshu Manufacturing, was exempt from enterprise income tax for 2009 and was subject to a reduced enterprise income tax rate of 12.5% for 2010, 2011 and 2012, at which time its tax holiday expired as well. As the preferential tax benefits enjoyed by our PRC subsidiaries expired, their effective tax rates increased significantly.

### ***There are significant uncertainties in our tax liabilities regarding our income under the EIT Law.***

We are a Canadian company with substantially all 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 "effective management" 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 "effective management" is defined as substantial and overall management and control over aspects such as the production and business, personnel, accounts and properties of an enterprise. Currently there are no detailed rules or precedents governing the procedures and specific criteria for determining a company's effective management, which are applicable to us. 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. 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 payable by us to our non-Chinese shareholders and gains on the sale of our common shares may become subject to PRC enterprise income tax liabilities.***

The implementation regulations of the EIT Law provide that (i) if the enterprise that distributes dividends is domiciled in the PRC or (ii) if gains are realized from transferring equity interests of enterprises domiciled in the PRC, then such dividends or capital gains will be treated as China-sourced income. Also, income sourced within China is determined based on the following principles for equity interest transfers and dividends: (x) for income from transfers of equity interests, source is determined in accordance with the place where the invested enterprise is located; and (y) for income from equity interests such as dividends and profit distributions, source is determined in accordance with the place of the enterprise which makes the distribution.

Currently there are no detailed rules or precedents governing the procedures and specific criteria for determining what it means to be domiciled in the PRC. As a result, it is not clear how the concept

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of "China domicile" will be interpreted under the EIT Law. The concept of domicile may be interpreted simply as the jurisdiction where the enterprise is a tax resident. Therefore, if we are considered a PRC tax resident enterprise for tax purposes, any dividends we pay to our overseas shareholders as well as any gains realized by such shareholders from the transfer of our common shares may be regarded as China-sourced income and, consequently, be subject to PRC withholding tax at a rate of up to 10%. The investment returns of our overseas investors, and the value of their investments in us, may be materially and adversely affected if any dividends we pay to them, or any gains realized by them on the transfer of our common shares are subject to PRC withholding tax.

### ***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, including, among others, payment of dividends, if any, in respect of our common shares. 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 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 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 substantially all 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. 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**

### ***The market price for our common stocks 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, 2012, the market price of our common shares ranged from \$1.95 to \$51.80 per share. The closing market price of our common shares on December 31, 2012 was \$3.40 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;

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- 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;
- SEC investigations or private securities litigation;
- 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 market 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, 2012, we had 43,242,426 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. To the extent these shares are sold into the market, the market price of our common shares could decline.

***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.

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***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 is 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. A substantial portion of the assets of these persons is 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 in U.S. court 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 U.S. federal income tax consequences to U.S. Holders of our common shares.***

Based on the market price of our common shares, the 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 U.S. federal income tax purposes for our taxable year ended December 31, 2012. However, the application of the PFIC rules is subject to uncertainty in several respects, and we cannot assure you the U.S. Internal Revenue Service will not take a contrary position. A non-U.S. corporation will be a PFIC for any taxable year if either (i) at least 75% of its gross income for such year is passive income or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce passive income or are held for the production of passive income. A separate determination must be made after the close of each taxable year as to whether we were a PFIC for that year. Because the value of our assets for purposes of the PFIC test will generally be determined by reference to the market price of our common shares, fluctuations in the market price of the common shares may cause us to become a PFIC. In addition, changes in the composition of our income or assets may cause us to become a PFIC. If we are a PFIC for any taxable year during which a U.S. Holder (as defined in "Item 10. Additional Information—E. Taxation—

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U.S. Federal Income Taxation") holds a common share, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder. See "Item 10. Additional Information—E. Taxation—U.S. Federal Income Taxation—Passive Foreign Investment Company."

***The audit report included in this 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 United States and a firm registered with the Public Company Accounting Oversight Board (United States), or the "PCAOB", is required by the laws of the United States to undergo regular inspections by the PCAOB to assess its compliance with the laws of the United States and professional standards. Because our auditors are located in 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. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

Recently, the SEC commenced administrative proceedings under Rule 102(e) of its Rules of Practice and under the Sarbanes-Oxley Act against the Chinese affiliates of five global accounting firms, including our independent registered public accounting firm. The Rule 102(e) proceedings initiated by the SEC relate to these firms' failure to produce documents, including audit work papers, at the request of the SEC pursuant to Section 106 of the Sarbanes-Oxley Act, as the auditors located in the PRC are not in a position lawfully to produce documents directly to the SEC because of restrictions under PRC law and specific directives issued by the China Securities Regulatory Commission, or CSRC. As the administrative proceedings are ongoing, it is impossible to determine their outcome or their consequences to us. The issues raised by the proceedings are not specific to our independent registered public accounting firm or to us, but affect equally all audit firms based in China and all China-based businesses with securities listed in the United States. However, if the administrative judge were to find in favor of the SEC under the proceedings then, depending upon the remedies sought by the SEC, these audit firms could be barred from practicing before the SEC. As a result, listed companies in the United States with major PRC operations would find it difficult or impossible to retain auditors in respect of their operations in the PRC, which may result in their delisting. Moreover, any negative news about the proceedings against these audit firms may erode investor confidence in China-based, United States-listed companies and the market price of our common shares may be adversely affected.

#### **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.

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We have formed the following significant subsidiaries, all of which are incorporated in China and wholly owned except as otherwise noted:

- CSI Solartronics (Changshu) Co., Ltd., or CSI Solartronics, incorporated in November 2001, which has operations located in Changshu, China, where we develop solar power projects;
- CSI Solar Technologies Inc., or CSI Technologies, incorporated in August 2003, which has operations located in Changshu, China, where we develop solar module products;
- CSI Solar Manufacture Inc., or CSI Manufacturing, incorporated in January 2005, which has operations located in Suzhou, China, where we manufacture primarily standard solar modules;
- Canadian Solar Manufacturing (Luoyang) Inc. (formerly known as CSI Central Power Co. Ltd.), or CSI Luoyang Manufacturing, incorporated in February 2006, which has operations located in Luoyang, China, where we manufacture solar modules, solar ingots and solar wafers;
- Canadian Solar Manufacturing (Changshu) Inc. (formerly known as Changshu CSI Advanced Solar Inc.), or CSI Changshu Manufacturing, incorporated in August 2006, which has operations located in Changshu, China, where we manufacture solar modules;
- CSI Cells Co., Ltd., or CSI Cells, incorporated in August 2006, which has operations located in Suzhou, China, where we manufacture solar cells;
- Canadian Solar (USA) Inc., incorporated in Delaware, USA in June 2007, through which we carry out marketing and sales activities in the United States;
- CSI Project Consulting GmbH, or CSI Germany Projects, incorporated in Germany in May 2009, a 70% owned subsidiary through which we invested in CVB Solar GmbH, a German solar power project. In January 2011, CSI Germany Projects sold all of its interest in CVB Solar GmbH to its joint venture partner;
- Canadian Solar Japan K.K., or CSI Japan, incorporated in Japan as a wholly owned subsidiary in June 2009, through which we conduct marketing and sales activities in Japan. Between December 2009 and May 2010, we sold an aggregate of 28% of the outstanding capital stock of CSI Japan to two Japanese companies; in August 2010, we increased our capital contribution in CSI Japan. We currently hold 90.67% of CSI Japan;
- Canadian Solar Solutions Inc., or CSSI, incorporated in Ontario, Canada in June 2009, through which we conduct marketing and sales activities in Canada. CSSI itself has a number of wholly-owned and non-wholly-owned subsidiaries, all of which were incorporated in Ontario, Canada in November 2009, through which we conduct project development activities in Canada;
- CSI Solar Power (China) Inc. incorporated in July 2009, which is located in Suzhou, China and serves as a holding company for our subsidiaries in China;
- Canadian Solar EMEA GmbH, (formerly known as Canadian Solar (Deutschland) GmbH), incorporated in Germany in August 2009, through which we conduct marketing and sales activities in Europe;
- Canadian Solar Manufacturing (Ontario) Inc., or CSI Ontario Manufacturing, incorporated in Ontario, Canada in June 2010, where we manufacture solar modules;
- Canadian Solar (Australia) Pty., Ltd., incorporated in New South Wales, Australia in February 2011, through which we conduct marketing and sales activities in Australia;
- Canadian Solar International Limited, incorporated in Hong Kong in March 2011, through which we carry out sales and marketing activities;



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- Canadian Solar O&M (Ontario) Inc., incorporated in Ontario, Canada in May 2011, through which we operate and maintain solar farms;
- CSI-Cenergy Holdings, LLC, incorporated in California, USA, in July 2011, through which we develop solar power projects;
- Suzhou Sanysolar Materials Technology Co., Ltd., incorporated in August 2011 in Suzhou, China where we produce solar module materials;
- Canadian Solar South East Asia Pte., Ltd., incorporated in Singapore in September 2011, through which we carry out sales and marketing activities in Southeast Asia;
- CSI Project Holdco LLC, incorporated in Delaware, USA in November 2011, through which we develop solar power projects;
- Canadian Solar Manufacturing (Suzhou) Inc., or CSI Suzhou Manufacturing, incorporated in Suzhou, China in February 2012. CSI Suzhou Manufacturing is a joint venture formed by us and two Suzhou-based companies, Suzhou Science & Technology Town Co., and Suzhou New District Economic Development Group Corporation for the purpose of building and operating a 600 MW cell production facility and a 600 MW module production facility, located in Suzhou, China;
- Canadian Solar South Africa Pty., Ltd, incorporated in Bryanston, South Africa, in June 2012, which carries out sales and marketing activities in South Africa;
- Canadian Solar Brasil Servicos De Consultoria EM Energia Solar Ltda., incorporated in Sao Paulo, Brazil in November 14, 2012, through which we carry out energy consultancy, certification and importation activities in Brazil;
- Canadian Solar Middle East Ltd., incorporated in Abu Dhabi, United Arab Emirates in December 10, 2012, through which we carry out marketing, energy generation and consultancy activities in Middle East;
- Canadian Solar International Project Holding Limited, incorporated in Hong Kong in January 2013, through which we intend to carry out financing activities for our project business; and
- Canadian Solartronics (Suzhou) Co., Ltd., incorporated in Suzhou, China in March 2013, through which we intend to carry out solar power project development and consulting services in China.

See "Item 4. Information on the Company—C. Organizational Structure" for additional information on our corporate structure.

Our principal executive office 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.

Our principal place of business is located at No. 199 Lushan Road, Suzhou New District, Suzhou, Jiangsu 215129, People's Republic of China.

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

## **B. Business Overview**

### *Overview*

We design, develop, and manufacture solar wafers, cells and solar module products that convert sunlight into electricity for a variety of uses. 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. We also design and produce specialty solar modules and products based on our customers' requirements. Specialty solar modules and products consist of customized solar modules that our customers incorporate into their own products, such as building integrated photovoltaic modules, or BIPV modules, and complete specialty products, such as portable solar home systems and solar-powered car battery chargers. We sell our products under our "Canadian Solar" brand name and to OEM customers under their brand names. In addition, we also sell total solar power system kits for residential applications, and build-to-order solar systems for commercial and solar power plants for utility-scale applications.

We believe we offer one of the broadest crystalline silicon solar module 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 Germany, Spain, Italy, France, the Czech Republic, the U.S., Canada, China, Japan and India, among others. We sell our standard solar modules to distributors and system integrators, as well as to solar project developers. We sell our solar power system kits to distributors and installers, and we sell our commercial system and utility-scale power plants to independent power producers and investors.

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

Over the past several quarters we have taken steps to become more vertically integrated at the cell to module production steps of the manufacturing value chain. As of December 31, 2012, we had:

- 2.4 GW of total annual solar module manufacturing capacity, 330 MW of which is located in Ontario, Canada with the balance located in China;
- 1.6 GW of total annual solar cell manufacturing capacity in China; and
- 216 MW of total annual ingot and wafer manufacturing capacity in China.

We intend to use substantially all of the silicon wafers that we manufacture to supply our own solar cell plant and to use substantially all of the solar cells that we manufacture to produce our own solar module products.

We are focused on reducing our production 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 and expect to increase the sales volumes of these products during 2013.

In the fourth quarter of 2009, we began the conversion of our first cell line to Enhanced Selective Emitter, or ESE, production, and we started to ship ESE-based module products in March 2010. By December 31, 2012, our total ESE capacity was 60 MW.

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In the third quarter of 2011, we began the conversion of some of our cell lines to Efficient Long-Term Photovoltaic Solution, or ELPS, production. We began shipping ELPS-based modules in November 2011 and expect to build our capacity for ELPS-based cells and modules to 180 MW by the end of 2013.

### *Our Products and Services*

We design, develop, manufacture and sell solar cell and solar module products, primarily standard solar modules. We are also engaged in the total solution business, which includes solar power project development and sales, EPC services, O&M services and sales of solar system kits.

#### *Standard Solar Modules*

Our standard solar modules are arrays of interconnected solar cells encapsulated in weatherproof frames. We produce a wide variety of standard solar modules, ranging from 0.2 W to in excess of 300 W in power and using multi-crystalline or mono-crystalline cells in several different formats, including general purpose 60 pieces 6" cell and 72 pieces 5" cell formats, small modules for specialty products (see below) and larger formats for ground-mounted projects. Larger formats include a 72 pieces 6" cell format and a 96 pieces 5" cell format. In 2009, most of the modules that we shipped were assembled with 6" multi-crystalline cells. In 2010, we started shipping a higher percentage of modules assembled with 6" monocrystalline cells.

We have applied for and received quality and safety certifications for modules with improved frames for rail-less mounting systems, an AC module and higher-powered modules in standard formats, such as a 60 pieces 6" cell, 260 W module. We expect such modules to be substantially cheaper to install because they require less labor and materials, especially in rooftop applications. In the third quarter of 2011, we began assembling modules using ELPS, a wrap-through cell architecture, on a commercial basis. These modules can achieve module conversion efficiencies in excess of 19%. In 2012, our research and development team continued to improve the cell efficiency of ELPS, bringing the efficiency under laboratory conditions to 21.1%.

We successfully launched high powered ELPS modules in Japan at the beginning of 2012. ELPS modules in 48 cells with 215 W power output are used in residential solar power systems in Japan, and ELPS modules in 60 cells with 270 W power output are mainly used in commercial PV systems of up to 2 MW in Japan. We also began developing Quartech modules using 4 bus bar solar cell technology, which improves module reliability and efficiency. Quartech modules in 6 × 10 cell arrays have module power wattages of between 250 W and 255 W. With this cell technology improvement, we will be able to offer customers higher module wattages. We expect to launch new Quartech modules in March 2013. During 2012, we also developed and are offering to customers a Residential AC module that addresses some of the limitations of the first generation micro inverters. Our Residential AC module is designed to save installers time and materials during installation and provide homeowners with a cost effective and reliable solution. These products are built to general specifications for a wide range of residential, commercial and industrial solar power generation systems.

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 under our brand name and to OEM customers under their brand names. Since we began selling our solar module products in March 2002, we have increased our annual module production capacity from 2.0 MW to 2.4 GW as of December 31, 2012.

#### *Specialty Solar Modules and Products*

As part of our strategy to broaden our products portfolio and address a wider cross section of the solar power market, we have been actively developing our building integrated photovoltaic, or BIPV,

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product line. Our BIPV products have various advantages over standard solar modules, including improved aesthetics, direct integration into building structures and the ability to be used in a wider range of applications, including residential and commercial roofing and architectural glazing. We used our BIPV products and systems in our BIPV solar glass roofing system project in Luoyang and we supplied BIPV products and systems for facilities at the Beijing Olympic Games. We believe that the demand for BIPV solutions will grow in our key markets, including China, Europe and North America. We plan to work closely with our customers to design and develop specialty solar modules and products that meet their individual requirements.

### *Solar Cells*

We completed construction of four solar cell production lines in 2007, and we have gradually expanded our total annual solar cell nameplate production capacity to 1.6 GW as of December 31, 2012. Going forward, we expect to continue to increase our cell capacity in line with the growth in demand for our solar module products. We intend to use substantially all of our solar cells to manufacture our own solar module products.

We make our solar cells from both mono-crystalline and multi-crystalline silicon wafers through multiple manufacturing steps, including surface texturization, diffusion, plasma-enhanced chemical vapor deposition and surface metallization. A functional solar cell generates a flow of electricity when exposed to light. The metal on the cell surface collects and carries away the current to the external circuitry.

### *Solar System Kits*

We began selling solar system kits in 2010, and today we sell them primarily to the Canadian and Japanese markets. 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. A typical residential rooftop solar system generates approximately 3.0 KW AC output. A commercial rooftop solar system generates between 30 KW to 500 KW AC output. Both are mounted on the rooftop of buildings.

### *Solar Power Development Projects*

We also develop, build and sell solar power projects. Prior to 2008, we completed projects in Western China and conducted solar power forums in Beijing, Xining, Suzhou and Luoyang.

In early 2010, we began to ship CE certified 11 to 14 kW two-axis trackers for ground-mounted applications. We are also developing single-axis trackers and smaller trackers intended for smaller ground-mounted installations.

In the second half of 2009, we began developing utility-scale solar energy farm projects, also referred to as solar power plant projects, and partnering with solar energy farm project developers. Once completed, the solar power plants are sold to end-buyers such as independent power producers or infrastructure fund investors. In December 2009, we completed a solar power plant project in Germany and we started to construct similar projects in Canada in 2011.

In December 2011, we entered into a sales agreement with TransCanada Energy Ltd., an affiliate of TransCanada Corporation, a North American energy infrastructure company. Under this agreement, TransCanada Energy Ltd. will acquire from us nine solar power plants totaling 86 MW for approximately C\$470 million (\$472 million). We completed construction of two plants in the fourth quarter of 2012. These plants are now in the testing phase before completion of their sale to TransCanada Energy Ltd. We expect to complete construction of six additional plants in 2013 and one in the first quarter of 2015.

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In June 2012, we completed the acquisition of a majority interest in 16 solar power plant projects in Ontario, Canada, representing approximately 190 MW DC to 200 MW DC, from SkyPower Limited, or SkyPower, for a total consideration of approximately C\$185 million (\$186 million).

In August 2012, we completed the sale of our first utility-scale solar power plant in Canada, representing approximately 11 MW DC, to Stonepeak Infrastructure Partners for approximately C\$48.0 million (\$48.2 million).

In December 2012, we entered into an agreement with SunEdison Power Canada Inc., or SunEdison, to acquire four solar power plant projects, representing approximately 46.5 MW DC, for an aggregate transaction price of approximately C\$37.0 million (\$37.2 million).

### *Solar System EPC Contracting and Subcontracting*

In late 2010, we began entering into a number of EPC contracting arrangements with solar project development partners in Canada. Under these arrangements, the solar farm project developer owns the project and we are contracted to perform the engineering design, procurement and construction work for the project.

In 2012, we entered into EPC contract and O&M service agreement with Penn Energy Renewables Ltd. for the construction and operation of three solar farm projects, totaling 28.7 MW AC, in Ontario, Canada.

### *Operating and Maintenance Services*

In the second half of 2012, we started to provide O&M services, for solar power plants in commercial operations. Depending on the terms of our O&M service contracts, our O&M services include inspections, repair and replacement of plant equipment, site management and administrative support services.

### *Supply Chain Management*

Our business depends on our ability to obtain a stable and cost-effective supply of polysilicon, silicon wafers and solar cells. Our principal wafer suppliers include GCL, ReneSola and Konca. Our principal solar cell suppliers include Topcell, Shunfeng and Neo Solar. Although this strategy may reduce our gross margin, it has allowed us to commit less capital in the form of pre-payments to polysilicon manufacturers compared to other solar module producers of our size and to reduce our capital expenditures for ingot and wafer capacity.

In the third quarter of 2010, silicon wafer and polysilicon supply tightened compared to previous years. However, these raw materials began to decrease in price during the fourth quarter of 2010 and moved back into an oversupply environment in 2011. The oversupply environment continued into 2012 across the entire photovoltaic supply chain, particularly at the polysilicon production stage. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Company and Our Industry—We have, from time to time, entered into long-term supply agreements with polysilicon and wafer suppliers. Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we chose to prematurely 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."

Through the third quarter of 2010, polysilicon remained relatively inexpensive at \$45 to \$55 per kilogram. In late 2010, polysilicon increased to approximately \$80 to \$90 per kilogram but decreased to approximately \$27 per kilogram by December 31, 2011 and to \$24.66 per kilogram by December 31, 2012 due to oversupply. In 2013, we expect that there will continue to be a modest oversupply of polysilicon materials and that polysilicon prices will remain low. We plan to continue to purchase most

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of our silicon wafers and all of our polysilicon requirement externally. We are currently diversifying our wafer and polysilicon suppliers, particularly with 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 PV module supply chain. Our current principal suppliers of silicon wafers are GCL, ReneSola and Konca.

Our silicon wafer agreements set forth price and quantity information, delivery terms and technical specifications. Generally, payment is required after delivery has been made and the product has been inspected and approved by us. While the contracts set forth specific price terms, most of them also include mechanisms to change the price, either upwards or downwards, based on market conditions. We require the seller to bear the costs and risks of transporting solar wafers to our facilities. We currently do not have any long-term supply contracts for silicon wafers with fixed price or quantity terms.

In 2007 and 2008, due to shortages of polysilicon and silicon wafers, we entered into a number of long-term supply agreements with several silicon and wafer suppliers in an effort to secure raw materials to meet our production requirements. These suppliers included GCL, Neo Solar, Deutsche Solar, LDK and a UMG-Si supplier.

In response to a decline in the price of polysilicon, beginning in 2009, we began discussing adjustments in the unit price and volume terms under our supply agreements with these suppliers. 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 made advance payments prior to scheduled delivery dates. The advance payments were made without collateral and were to be credited against the purchase prices payable by us. As of December 31, 2012, the balance of advance payments made to suppliers totaled \$45.4 million.

See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Company and Our Industry—We have, from time to time, entered into long-term supply agreements with polysilicon and wafer suppliers. Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we chose to prematurely 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 toll manufacturing arrangements with our solar cell suppliers, we purchase solar cells from a number of international and local suppliers, including Topcell, Shunfeng and Neo Solar.

Our solar cell agreements set forth price and quantity information, delivery terms and technical specifications. Generally, payment is required within a certain number of days after delivery. These contracts 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 contract. We currently do not have any long-term supply contracts for solar cells with fixed price or quantity terms.

Although we have established relationships with cell suppliers, we experienced a shortage of solar cell supplies in late 2009 and 2010. 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.

### ***Solar Module Manufacturing***

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. We purchase our manufacturing equipment primarily from Chinese suppliers. Our proximity to these Chinese manufacturers is an advantage because they typically sell manufacturing equipment at more competitive prices than similar international equipment manufacturers. We source critical testing equipment from international manufacturers.

### ***Quality Control and Certifications***

We have registered our quality control system according to the requirements of ISO 9001:2000 and ISO/TS 16949 standards. The latter quality control standard originated from the QS 9000 and VDA quality systems and is now the world-wide quality system standard for the automotive industry. 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. We have obtained IEC and UL certifications for higher-powered modules of 280 W and above, a solar laminate for BIPV applications in France with TUV certification. In 2011, we completed IEC61215/61730 and UL1703 certification for modules designed to be assembled from metalwrap-through cells, and extended laminate certification in North American market. Our certified portfolio was also increased with the addition of model CS5P-P and several small models. Power outputs for our product portfolio were further increased through the qualification of quasi-mono wafers. In 2011, we also completed DLG ammonia resistance testing and obtained the salt mist certification for our leading module CS6P-P. In 2012, we achieved the highest ratings possible in the two most significant standard tests for ammonia resistance of solar modules, which were the IEC62716 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 PV modules at VDE. 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 certification (North America), allowing significant cost reduction for our EPC partners; and again raised the ranking of CEC PTC ratings.

We successfully assisted Suzhou Gaochuangte New Energy Co., Ltd. (an EPC company in which we have invested) to receive the first PV plant certificate from TUV SUD in China under the IEC 62446 standard. The new half-cell module designed by our R&D team was fully certified by CSA and VDE, two worldwide recognized certification bodies, in 2012. We also started providing our customers with third-party-approved PAN files (testing per IEC61853-1) for all our key module series, allowing more accurate energy yield simulation and better return-on-investment analysis for their projects. In 2013, we intend to obtain certifications for double glasses and DC-to-AC/DC-to-DC module designs. We will continue our efforts for general improvements in module and component designs and

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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.

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. The PV test laboratory allows us to conduct some product certification testing in-house, which should decrease time-to-market and certification costs.

**Markets and Customers**

We sell our standard solar modules primarily to distributors, system integrators and OEM customers. Our distributor customers include companies that are exclusive solar component and system distributors and engineering and design firms that include our standard solar modules in their system installations. Our system integrator customers typically design and sell complete, integrated systems that include our standard solar modules along with other system components. We sell our solar modules and products to various manufacturers who either integrate these products into their own products or sell and market them as part of their product portfolio. Our standard solar module customers include leading solar distributors and system integrators. Our specialty solar module and products customers include manufacturers who incorporate our customized solar modules in their bus stop, road lighting and marine lighting products.

A small number of customers have historically accounted for a major portion of our net revenues. In 2010, 2011 and 2012, our top five customers by net revenues collectively accounted for approximately 26.0%, 29.2% and 25.5%, respectively, of our total net revenues. Sales to our largest customer in those years accounted for 11.0%, 6.6% and 8.4%, respectively, of our total net revenues.

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 location for the periods indicated:

Region	Years Ended December 31,					
	2010		2011		2012	
	Total Net Revenues	%	Total Net Revenues	%	Total Net Revenues	%
	(In thousands of \$, except for percentages)					
Europe	1,193,449	79.8	1,233,201	65.0	656,460	50.7
Asia and others	186,366	12.5	330,803	17.4	296,117	22.9
America	115,694	7.7	334,918	17.6	342,252	26.4
Total	1,495,509	100.0	1,898,922	100.0	1,294,829	100.0

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 2012, we significantly increased our total number of customers, gained market share in Europe, the U.S. and Japan and achieved a leading market share in India, Canada, and Chile. We strive to achieve or maintain a leading market share in Thailand, Japan, India, Canada and Chile in 2013, while exploring other emerging solar markets, including Southeast Asia, Africa, the Middle East, Central Asia and South America. These markets have been significantly influenced by past and current government subsidies and incentives. While we expect to expand our markets, we expect that the European markets will remain our major markets in the near future.

- *Germany.* The renewable energy laws in Germany require electricity transmission grid operators to connect various renewable energy sources to their electricity transmission grids and to purchase all electricity generated by such sources at guaranteed feed-in tariffs. Additional

regulatory support measures include investment cost subsidies, low-interest loans and tax relief to end users of renewable energy.

Germany's renewable energy policy has had a strong solar power focus, which contributed to Germany's surpassing Japan in 2004 as the leading solar power market in terms of annual installation growth. According to Solarbuzz, the German market remained the largest single-country market in the world, growing slightly year-over-year, from 7.45 GW at the end of 2011 to 7.50 GW at the end of 2012. Our products are used in large, ground-mounted solar power fields, commercial rooftops and residential rooftops. After the unprecedented expansion in December 2011, the German government decided on another amendment of the Renewable Energy Act, which became effective on April 1, 2012. This new law implemented a considerable reduction of the feed-in tariff initially, and set monthly decline of 1% of feed-in tariff until October 1, 2012. Since October 1, 2012, the monthly decline of feed-in tariff was modified every three months based on market conditions. The reduction rates of feed-in tariff for November 1, December 1, 2012, and January 1, 2013 were 2.5%. The new Renewable Energy Act excludes new PV systems above 10 MW from being eligible for the feed-in tariff. A "Market Integration Model" was also introduced, which allows for systems above 10 kW and up to 1 MW to be paid a feed-in tariff for only 90% of electricity produced with the remaining electricity being either self-consumed or sold on the free market.

- *Spain.* According to Solarbuzz, the Spanish market shrunk by 46.6% from 483 MW in 2011 to 258 MW in 2012. In Spain, the feed-in tariff for solar power energy is fully guaranteed for the first 25 years of system operation and 80% thereafter. The Spanish feed-in tariff for applications of less than 100 kWh was initially €0.4404 per kWh for the first 25 years of system operation and €0.3523 per kWh thereafter for systems installed until September 2008. Funding for the national PV program during 2010 was regulated by Royal Decree RD1578/2008. The quarterly quota calls allocate awards and modify feed-in tariff rates according to fulfillment of quota. In February 2013, the annual feed-in tariff revision to the consumer price index was modified, resulting in negative feed-in tariff movement. The National Renewable Energy Action Plan (2012-2020) of Spain reduced significantly the renewable energy content planned for 2020 from previous plans. Current plan contemplates further reducing the 2020 PV target from 8.5 GW as set forth in the National Renewable Energy Action Plan to 7 GW.
- *Czech Republic.* According to Solarbuzz, the Czech Republic market increased approximately 58% from 51 MW in 2011 to 121 MW in 2012. The country's initial legal basis for establishing feed-in tariff rates for electricity from renewable energy sources was set by the Renewable Energy Law on August 1, 2005. The respective remuneration rates became effective on January 1, 2006. The PV funding scheme in the Czech Republic is based on two alternative funding mechanisms, a feed-in tariff system and a green bonus scheme. The feed-in tariffs (and green premium rates) for the next calendar year are determined by the Energy Regulatory Office in November each year. The feed-in tariff rate for existing installations increases each year typically between 2% and 4%, depending on the consumer price index. There is no fixed annual reduction of tariffs for newly installed systems. As with the feed-in tariffs, the green bonus rates are also paid over 20-year duration, and the tariffs for already existing systems are adjusted annually. The green bonus remuneration has also depended on the system size from 2009. In March 2010, the government enacted a law that allowed a reduction of the incentive tariffs for newly installed systems to exceed 5% per year. In addition, it implemented a third system size category. In February 2013, the government indicated it might further decrease funding for PV with the focus shifting towards "more efficient renewable energy".
- *Italy.* According to Solarbuzz, the Italian market shrunk by 46% from 6.21 GW in 2011 to 3.35 GW in 2012. At the end of 2011, the Italian feed-in tariff for systems ranged from €0.172 per kWh, for large ground-mounted systems, to €0.298 per kWh for smaller BIPV

systems, a relatively modest decline from the previous year's rates. System owners may also benefit from self-consumption with a reduced electrical bill. The Italian market saw an enormous boost in large installations in 2009, 2010 and 2011, and the Italian government is expected to implement much lower feed-in tariffs in order to control the market growth. In August 2012, the funding scheme Conto Energia V became effective. The new scheme put a strong focus on roof systems and self-consumption.

- *North America.* According to Solarbuzz, the North America territory installed 3.49 GW in 2012, becoming third in the world in terms of solar capacity installed in 2012. The North American market is comprised of two countries, the United States and Canada.

In the United States, over 10 states offer significant incentives, with California offering the most preferential incentives. In January 2006, the California Public Utilities Commission enacted the California Solar Initiative, a \$2.9 billion program that subsidizes solar power systems by \$2.80 per watt. Due to excessive demand, this subsidy was reduced to \$2.50 per watt. Combined with federal tax credits for solar power usage, the subsidy may account for as much as 50% of the cost of a solar power system. The program will last until 2016 and is expected to dramatically increase the use of solar power for on-grid applications in California. Incentives in other U.S. states include state renewable energy credits, capital subsidies and in some states, such as Vermont, feed-in tariff. Many states and various federal departments are also subject to renewable energy portfolio standards that mandate minimum percentages of renewable energy production by utilities. These provisions were further expanded in 2010 to include a cash grant in lieu of the investment tax credit and were uncapped with respect to system size (the previous maximum rebate was \$2,000) to allow larger organizations such as utilities to take advantage of the tax credit or cash in-lieu of the grant for large scale projects. The constrained appetite for tax equity may limit the effectiveness of some of these provisions, such as accelerated depreciation. This federal cash grant program was closed to new applications at the end of 2011, and during 2012, over \$2 billion project funds were awarded to renewable energy projects. Despite the decline in PV incentives during the year, separate renewable energy portfolio standards of various states kept demand strong for PV systems in the U.S. market.

The Canadian market was driven almost entirely by Ontario in 2012, which stimulated market demand via its feed-in tariff program. The Ontario market was once driven by RESOP, a program that offered renewable energy projects up to 10 MW a guaranteed tariff of C\$0.42/kWh for 20 years. The program closed in May 2008 due to overwhelming uptake and projects in the pipeline were frozen until May 2009 when Ontario passed the Green Energy Act and with it a new feed-in tariff program. Both programs were administered by the Ontario Power Authority, or OPA, which is responsible for setting rates, regulations, and monitoring all feed-in tariff activity.

- *China.* According to Solarbuzz, China's Renewable Energy Law, which went into effect on January 1, 2006, authorizes the relevant authorities to set favorable prices for the purchase of on-grid electricity generated by solar power and provides other financial incentives for the development of renewable energy projects. China's top-level controlling agency on energy policy has been the government's central planning agency, National Development and Reform Commission of PRC, or the NDRC, with the ancillary National Energy Administration specifically focusing on energy supply and production. The National Energy Commission, a new ministerial level regulatory organization headed by Premier Wen, was established in January 2010 to oversee all energy related sectors in China.

On March 23, 2009, China's Ministry of Finance promulgated the Interim Measures for Administration of Government Subsidy Funds for Application of Solar Photovoltaic Technology in Building Construction, or Interim Measures, to support the development of solar PV technology in China. Local governments are encouraged to issue and implement supporting

policies. Under the Interim Measures, a subsidy, which is set at RMB20 per watt, peaked in 2009, which covers solar PV technology integrated into building construction.

China finances its off-grid solar installations through the now-completed township program and the current village program. The five-year plan from 2006 to 2010 was targeted to provide electricity to 29,000 villages, mainly in western China. The Ministry of Housing and Urban-Rural Development (formerly, the Ministry of Construction) has promulgated directives encouraging the development and use of solar power in urban and rural areas. Various local authorities have also introduced initiatives to encourage the adoption of renewable energy, including solar power.

Beginning in March 2009, several policy initiatives were announced, including open bidding for a 20-year operating license for a 10 MW solar power plant project in Gansu Province of China and the "Golden Sun" program, which subsidizes the capital expenses of solar projects by approximately \$2.00 per watt. A number of provincial incentives were announced as well. However, the central government has not approved a definitive implementation scheme or any of the provincial schemes.

The 2010 "Golden Sun" project list was released in November 2010 with 120 new projects totaling 272 MW. The subsidies provided by the government will cover 50% of the total PV project cost.

The release of the feed-in tariff in 2011 greatly stimulated the Chinese market. During 2012, the national feed-in tariff was revised from RMB1.15 per kWh to RMB1 per kWh, with provincial feed-in tariff revised to levels ranging from RMB1.2 per kWh to RMB1.3 per kWh across different provinces. The rebate level of the "Golden Sun" project was decreased to RMB8 per watt and then to RMB5.5 per watt during 2012, while the rebate level of the Solar Rooftop project was decreased to RMB7 per watt and RMB5.5 per watt for BIPV and BAPV projects respectively during the year.

- *Japan.* According to Solarbuzz, the Japanese market showed strong growth in 2012, increasing from 1.24 GW in 2011 to 1.84 GW in 2012, or a 48% year-over-year growth. The residential segment was the primary driver of PV market uptake in Japan in 2012, as strong federal and local incentives made installing PV attractive. There has also been a push for solar uptake in Japan as a response to the decommissioning of nuclear power plants in the wake of the natural/industrial disasters of the past few years. The Japanese government has announced a long-term goal of increasing installed solar power capacity by between 20 and 55 times, which would require 28 GW or more of solar power capacity by 2020. Japan is a signatory to the Kyoto Protocol, which requires it to reduce greenhouse gas emissions by 6% from the 1990 baseline level by 2012 and by 20% by 2020. Japan currently funds a number of programs supporting domestic solar power installations and has announced a plan to begin installing solar power systems on federal buildings through 2012. As Japan will not likely reach its renewable energy (including solar) targets, Japan is increasing its incentives for solar power installations. To refuel the declining domestic market, the federal government brought back the nationwide residential subsidy in 2009. The residential program was re-launched in January 2009 under a fiscal year 2008 supplemental budget of Japanese Yen 9.0 billion. Besides the upfront cash incentives, the federal government crafted a net feed-in tariff policy, requiring electric power utilities to buy excess electricity generated by PV systems at a premium rate. In 2012, residential systems continue to be eligible for a 10-year net feed-in tariff, with electricity exported by the system compensated at Japanese Yen 42 per kWh for systems less than 10 kW in total capacity. A feed-in tariff program was also launched in July 2012 for non-residential systems, which served as one of the key factors driving demand in Japan during the year. This program was launched as a gross feed-in tariff, whereby all electricity produced receives Japanese Yen 42 per kWh for 20 years.

- *Australia.* According to Solarbuzz, the Australian market slightly grew by 4% from 0.75 GW in 2011 to 0.78 GW in 2012. The Australian market has been dominated by the residential segment since 2008, as a result of incentive policies that favored small-scale rooftop systems. Despite the policy revisions during 2012, residential installations were steady, reflecting the resiliency of the sector and improved economics created by PV price declines. The on-grid residential segment continued to dominate the market as the largest customer group. The main federal incentive active during 2010 was the Solar Credits program, which provided a renewable energy credit multiplier for the first 1.5 kW of small-scale renewable energy systems. The result of the program was an upfront rebate of between 4,000 Australian dollars and 6,200 Australian dollars for 1.5 kW systems depending on location. The Solar Credits program was the successor of the Solar Homes and Communities Program, or SHCP, which offered an Australian dollar 8 per watt rebate on the first 1,000 W of a solar PV system. The SHCP was cancelled in June 2009 but continued to impact 2010 market size due to the significant backlog of installations. The Solar Credits Program is part of the Renewable Energy Target, which is set to ensure that Australia will generate 45,000 GWh (20%) of its energy from renewable sources by 2020. Due to the uncertain nature of federal incentive programs, the states/territories have launched their own programs to drive PV demand. The programs that drive the vast majority of systems are feed-in tariffs. These feed-in tariffs mainly affected the residential segment as each program has different eligibility requirements that work to minimize system sizes or specify directly that the rates are only accessible by residential customers. Along with changes to programs affecting small-scale residential systems, the past year also brought news of funding changes for utility-scale projects. The biggest news came in January 2011 and concerned the Solar Flagships program. The Australia government revised its Solar Flagships program, which was originally scheduled to install 150 MW of utility-scale solar PV and 250 MW of CSP plants by 2016. As well, every region intends to have a PV specific feed-in tariff or net-metering policy in 2010. During 2012, a number of state-level policies were revised downwards or expired. The Queensland Government reduced the state's feed-in tariff from Australian Dollar 0.44 per kWh to Australian Dollar 0.08 per kWh for all applications after July 9, 2012. The state of Victoria reduced the state's feed-in tariff from Australian Dollar 0.25 per kWh to just Australian Dollar 0.08 per kWh for all systems installed after September 30, 2012, despite that the rate will be re-adjusted annually based on the wholesale electricity price.

### ***Sales and Marketing***

#### *Standard Solar Modules*

We market and sell our standard solar modules worldwide, primarily through a direct sales force and market-focused sales agents. Our direct sales personnel and sales agent representatives cover our markets in Europe, North America and Asia. Our marketing activities include trade shows, conferences, sales training, product launch events, advertising and public relations campaigns. Working closely with our sales and product development teams, our marketing team is also responsible for collecting market intelligence and supporting our sales team's lead generation efforts. We have marketing staff in the U.S., China, Europe, Canada, Japan and South Korea.

We sell our products primarily under three types of arrangements: (i) sales contracts to distributors, (ii) sales to systems integrators, EPCs and project developers ("project" customers) and (iii) OEM/tolling manufacturing arrangements.

- *Sales contracts to distributors and project customers.* We enter into annual sales and/or distribution agreements with most of our key customers. We typically use either letters of credit or wire money transfers prior to shipping to secure payment. We also provide short-term credit sales ranging from 30 to 60 days. For some customers, we provide medium-term credit sales from 60 to 120 days. We use credit insurance coverage for credit sales. In 2012, we sold

approximately 1,467.0 MW of modules under sales contracts to distributors and project customers.

- *OEM/tolling manufacturing arrangements.* Under these arrangements, we purchase silicon wafers and solar cells from customers, and then sell solar module products back to the same customers, who then sell those products under their own brands. In addition, we have been using our own solar cells or cells that we purchase to make modules for a limited number of strategic customers who brand the finished solar module products with their own labels. Since 2009, this has been the primary OEM arrangement. In 2012, we sold approximately 23.1 MW of modules under the OEM arrangement.

#### *Specialty Solar Modules and Products*

We target our sales and marketing efforts for our specialty solar modules and 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 will expand our sales and marketing focus on our specialty solar modules and products and capabilities. Our sales and marketing team works with our specialty solar modules and 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 modules and products market expands.

#### *Solar System Kits*

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 2012, we sold approximately 38.7 MW of system kits primarily in Canada and Japan.

#### *Solar Power Development Projects*

In the second half of 2009, we began partnering with solar farm project developers to develop and construct solar farm projects. In April 2010, the OPA in Ontario, Canada, awarded us and our partners contract offers for 176 MW AC of open-field solar power generation projects. The projects were developed in partnership with several leading renewable energy developers in the Ontario market. In December 2011, we entered into a sales agreement with TransCanada Energy Ltd. whereby TransCanada Energy Ltd. will acquire from us nine solar power plants totaling 86 MW AC for approximately C\$470 million (\$472 million). We completed construction of two plants in the fourth quarter of 2012. These plants are now in the testing phase before completion of their sale to TransCanada Energy Ltd. We expect to complete construction of six additional plants in 2013 and one in the first quarter of 2015.

In April 2012, we entered into a purchase and international joint venture agreement, with SkyPower, Canada's largest owner and developer of solar projects, to build and deploy solar energy solutions in Ontario, and to jointly develop solar projects internationally in selected emerging markets. We completed the acquisition of a majority interest in 16 solar projects representing approximately 190 MW to 200 MW DC from SkyPower in June 2012 for a total consideration of approximately C\$185 million (\$186 million). Each of these projects was awarded a 20-year power purchase contract by the OPA. Fifteen of these contracts were issued under Ontario's Feed-In-Tariff Program, and one was issued as part of Ontario's Renewable Energy Standard Offer Program. We have filed REA applications for all sixteen of the projects and expect to receive Notices to Proceed (NTP) with, and

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expect to start construction on, these projects prior to the end of the third quarter of 2013. These projects are expected to generate over C\$800 million (\$803 million) in revenue for us in the next two years. In June 2012, we also launched a 50/50 international joint venture with SkyPower to focus on developing solar power plants in selected emerging markets.

In August 2012, we completed the sale of our first utility-scale solar power plant in Canada, representing approximately 11 MW DC, to Stonepeak Infrastructure Partners for approximately C\$48.0 million (\$48.2 million). As the project developer, EPC and construction financier, we built the solar power plant to provide clean, renewable energy to power more than 1,200 homes in eastern Ontario near the town of Napanee.

In December 2012, we entered into an agreement with SunEdison to acquire four solar power plant projects, representing approximately 46.5 MW DC, for an aggregate transaction price of approximately C\$37.0 million (\$37.2 million). Under this agreement, we acquired 100% equity interest in two utility-scale solar power projects in Ontario, Canada. Subsequently we completed the purchase of one additional utility-scale solar power project in Ontario, Canada from SunEdison and are conducting due diligence on another project. When all of the above mentioned transactions are completed we expect to acquire the majority interest in a total of four utility-scale solar power projects in Canada with an option to purchase a fifth solar project at a later date from SunEdison.

During 2012, we have expanded our utility-scale project pipeline in the United States to approximately 255 MW. We expect to complete construction of solar power projects totaling approximately 100 MW in the United States in 2013.

In addition to Canada and the U.S., we have developed a robust pipeline in Japan and China and see potential for solar power projects in countries such as India and South America.

### *Solar System EPC contracting and subcontracting*

Beginning in late 2010, we have entered into a number of EPC contracting arrangements with solar project development partners in Canada. Under these arrangements, the solar farm project developer owns the projects and we are contracted to perform the EPC work.

In August 2012, we entered into an 18.7 MW AC EPC contract and O&M service agreement with Penn Energy Renewables Ltd. for the construction and operation of two new solar farm projects in Ontario, Canada. In October 2012, this arrangement was expanded to include an additional 10 MW AC EPC contract and O&M service agreement for the construction and operation of a third solar farm project in Ontario, Canada, totaling 28.7 MW AC for the three projects. We expect to complete these projects in the second half of 2013.

In 2011, we completed approximately 23 MW of solar system EPC contracts in China, and approximately 31MW of solar system EPC contracts in Ontario, Canada. The EPC contracts in China were completed through our affiliated company, Suzhou Gaochuangte New Energy Co., Ltd., or Gaochuangte, in which we own a 40% equity interest. During 2012, we completed approximately 0.3 MW of solar system EPC contracts in Ontario, Canada. We expect to complete more EPC contracts in 2013.

### *Operating and Maintenance Services*

In the second half of 2012, we started to provide O&M services for solar power plants in commercial operations. Depending on the terms of our O&M service contracts, our O&M services include inspections, repair and replacement of plant equipment, site management and administrative support services.

### *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 that the actual power output of our modules will be no less than 97% of the labeled power output during the first year and will decline by no more than 0.7% annually so that, by the end of year 25, the actual power output will be no less than 80% of the labeled power output.

For utility-scale solar power projects built by us, we also provide a limited warranty against defects in workmanship under normal use, operation and service conditions for a period of five years following the energizing of the solar power plant. In resolving claims under the workmanship warranty, we have the option of remedying through repair, refurbishment or replacement of equipment.

Our customer support and service function grew in 2012. We expanded our customer resources four fold, and established two functional support groups to address technical inquiries and warranty related issues. Our current structure enhances our ability to handle our customer's questions and concerns in a timely and professional manner. There has been an increase in claims, but this increase has been in line with our higher sales volumes, and due to the resolution of legacy issues through the warranty process.

For 2013, we have 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. With our entry in the Ontario market for solar systems and the introduction of our Smart Module product in the North America market, a new segment in the support and service function will be created to address technical inquiries and product related issues for these two new business lines.

### *Competition*

The market for solar module products is competitive and evolving. We compete with international companies such as SunPower, First Solar and Sharp Solar, and China-based companies such as Suntech, Yingli and Trina. 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, are generally less efficient, with module conversion efficiencies ranging from approximately 5% to 11% according to company filings, but require significantly less silicon to produce than crystalline silicon solar modules, such as our products, and are less susceptible to increases in silicon costs. 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 and conventional power generation.

We believe that the key competitive factors in the market for solar module 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;

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- brand equity and any good reputation resulting from the above items, including the willingness of banks to finance projects using a particular module supplier;
- customer relationships and distribution channels; and
- the aesthetic appearance of solar module products.

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. It 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 projects. Consolidation of the solar industry is already occurring and is expected to continue in the near future. We believe that such 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.

### ***Insurance***

We maintain property risk insurance policies with reputable insurance companies to cover our equipment, facilities and buildings, including improvements, office furniture and inventory. These insurance policies cover losses due to fire, floods and other natural disasters. Our manufacturing facilities in China are also covered by business interruption insurance. However, significant damage to any of our manufacturing facilities, whether as a result of fire or other causes, could still have a material and adverse effect on our results of operations. We have maintained general commercial and product liability coverage at the same levels since 2009. We have also been actively working with China Export & Credit Insurance Corporation, or Sinosure, since early 2008. Credit insurance is designed to offset the collection risk of our account receivables for customers within the credit limits approved by Sinosure. 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. We consider our overall insurance coverage to be adequate. We currently take a 1% warranty provision against our revenue on solar modules and 0.8% warranty provision against our revenue on sales of solar system kits and solar power projects.

Since April 2010, we have purchased product warranty insurance policies underwritten by A-rated insurance companies on an annual basis to back up our product warranties. These insurance policies apply to our warranty against defects in workmanship and material and our warranty relating to power output. The costs of these policies are charged to cost of revenues as part of warranty cost in the period the covered modules, solar system kits and solar power projects were sold. 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 for 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 conducted environmental studies in conjunction with our solar power development projects to assess and reduce the environmental impact of our facilities.

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

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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 a 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.

#### *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 photovoltaic 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 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, and the Twelfth Five-Year Plan for Renewable Energy Development which was promulgated by the National Energy Administration in August 2012 also demonstrates a commitment to promote the development of renewable energy to enhance the competitiveness of the renewable 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

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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.

In March 2009, China's Ministry of Finance promulgated the Interim Measures for Administration of Government Subsidy Funds for Application of Solar Photovoltaic Technology in Building Construction, or the Interim Measures, to support the development of solar photovoltaic technology in China. Local governments are encouraged to issue and implement supporting policies. Under the Interim Measures, a subsidy, which is set at RMB20 per Watt-peak for 2009, will cover solar PV technology integrated into building construction. The Interim Measures do not apply to projects completed before the promulgation date of the Interim Measures. Also in March 2009, China's Ministry of Finance and Ministry of Housing and Urban-Rural Development jointly promulgated the Implementation Opinion on Acceleration in the Application of Solar Photovoltaic Technology in Building Construction. 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 July 2009, China's Ministry of Finance and Ministry of Science and Technology and the National Energy Administration jointly published an announcement containing the guidelines for the "Golden Sun" demonstration program. Under the program, the PRC government will provide a 50%-70% subsidy for the capital costs of PV systems and the relevant power transmission and distribution systems for up to 20 MW of PV system projects in each province, with the aim to industrialize and expand the scale of China's solar power industry. The program requires that each PV project must have a minimum capacity of 300 kW, be completed within one year and have an operational term of not less than 20 years. On September 21, 2010 and November 19, 2010, China's Ministry of Finance, Ministry of Science and Technology, Ministry of Housing and Urban-Rural Development and the National Energy Administration published two announcements regarding the "Golden Sun" demonstration program to specify the terms for bid solicitation for key equipment and the standards for subsidies and supervision and management of projects.

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.

In July 2011, the NDRC issued the Circular on Improving the On-Grid Price Policy for Photovoltaic Power, which aims to stimulate the photovoltaic power industry by regulating the price of

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photovoltaic power. 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.

### *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 1982, as amended and promulgated in 2008, the PRC Law on the Prevention and Control of Noise Pollution, which became effective in 1996, the PRC Law on the Prevention and Control of Air Pollution, which became effective in 1987, as amended and promulgated in 1995 and 2000, 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 1995, as amended and promulgated in 2004, the PRC Law on Evaluation of Environmental Affects, the PRC Law on Promotion of Clean Production, which became effective in 2012, and the Regulations on the Administration of Construction Project Environmental Protection, which became effective in 1998.

Further, 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 Regulation of Jiangsu Province on Preventing Water Pollution in Taihu Lake, which became effective in June 2008 and was further revised and promulgated on September 29, 2010 and January 12, 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 two new 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 2011 and became effective on January 30, 2012, 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 and input value added taxes, or VAT, 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 current 2011 catalogue also covers the manufacture of solar battery, solar light collector glass and etc.

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### *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. 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 and 2005. The Company Law is applicable to our PRC subsidiaries unless PRC laws on foreign investment stipulate otherwise.

### *Income and VAT Taxes*

PRC enterprise income tax is calculated based on taxable income determined under PRC accounting principles. Our major operating subsidiaries, CSI Solartronics, CSI Manufacturing, CSI Cells, 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%. There is a transition period for enterprises that were given preferential tax treatment under the previous tax law. Enterprises that were subject to an enterprise income tax rate lower than 25% will have the new uniform enterprise income tax rate of 25% phased in over a five-year period from the effective date of the EIT Law. Enterprises that were entitled to exemptions or reductions from the standard income tax rate for a fixed term may continue to enjoy such treatment until the fixed term expires, subject to certain limitations.

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 classified as HNTEs are entitled to a 15% enterprise income tax rate, provided that such HNTEs satisfy other applicable statutory requirements.

Our subsidiary CSI Solartronics has been recognized as an HNTE. However, because CSI Solartronics does not meet certain requirements for the reduced 15% enterprise income tax rate, it is still subject to a 25% enterprise income tax rate. CSI Manufacturing was subject to a reduced enterprise income tax rate of 12.5% until the end of 2009, when its tax holiday expired. CSI Cells and CSI Luoyang Manufacturing were subject to a reduced enterprise income tax rate of 12.5% until the end of 2011, when their tax holidays expired. Currently, CSI Cells is subject to a preferential enterprise income tax rate of 15% for the three years from 2012 to 2014, resulting from its HNTE status recognized in 2009 and renewed in 2012. CSI Changshu Manufacturing and CSI Technologies were exempt from EIT for 2009 and were subject to a reduced enterprise income tax rate of 12.5% from 2010 through to and including 2012, at which time their tax holidays expired as well. As 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 "effective management" 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 "effective management" is defined as substantial and overall management and control over such aspects as the production and business, personnel, accounts and properties of an enterprise. Currently there are no other detailed rules or precedents governing the procedures and specific criteria for determining an enterprise's effective management, which are applicable to us. As a substantial number of the members of our management team are located in China, we may be considered a PRC tax resident under the EIT Law and, therefore, subject to the uniform 25% enterprise income tax rate on our global income.

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Under the EIT Law and implementing regulations issued by the State Council, PRC withholding tax at the rate of 10% is 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 effective management, 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.

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 goods, the exporter is entitled to a refund of a portion or all of the VAT that it has already paid or borne.

In December 2008, the Ministry of Finance and the State Administration of Taxation jointly issued implementation rules for the VAT effective from January 1, 2009. Under the new rules, 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.

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 (1996), as amended in 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 direct investment, security investment and repatriation of investment, however, is still subject to the approval of SAFE.

Under the Settlement Rules, foreign-invested enterprises may buy, sell and/or remit foreign currencies only at those banks authorized to conduct foreign exchange business after providing valid commercial documents and, in the case of most capital account item transactions, obtaining approval from SAFE. Capital investments by foreign-invested enterprises outside of China are also subject to

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limitations, which include approvals by the Ministry of Commerce, SAFE and the State Reform and Development Commission.

### *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, the Company Law effective in 1994 and amended in 1999, 2004 and 2005 and the New 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 its Implementing Regulation, which became effective on September 18, 2008, 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.

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,

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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.

### C. Organizational Structure

The following table sets forth our company's organizational structure, including the place of formation, our ownership interest in each of our significant subsidiaries as of the date of this annual report.

<u>Name of entity</u>	<u>Place of incorporation</u>	<u>Ownership interest</u>
CSI Solartronics (Changshu) Co., Ltd.	PRC	100%
CSI Solar Technologies Inc.	PRC	100%
CSI Solar Manufacture Inc.	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	90.67%
Canadian Solar Solutions Inc.	Canada	100%
CSI Solar Power (China) Inc.	PRC	100%
Canadian Solar EMEA GmbH	Germany	100%
Canadian Solar Manufacturing (Ontario) Inc.	Canada	100%
Canadian Solar (Australia) Pty., Ltd.	Australia	100%
Canadian Solar International Ltd.	Hong Kong	100%
Canadian Solar O&M (Ontario) Inc.	Canada	100%
CSI-Cenergy Holdings LLC	USA	62.50%
Suzhou SanySolar Materials Technology Co., Ltd.	PRC	80%
Canadian Solar South East Asia Pte., Ltd.	Singapore	100%
CSI Project Holdco LLC	USA	100%
Canadian Solar Manufacturing (Suzhou) Inc.	PRC	61%
Canadian Solar South Africa Pty., Ltd.	South Africa	100%
Canadian Solar Brasil Servicos De Consultoria EM Energia Solar Ltda.	Brazil	100%
Canadian Solar Middle East Ltd.	United Arab Emirates	100%
Canadian Solar International Project Holding Limited	Hong Kong	100%
Canadian Solartronics (Suzhou) Co., Ltd.	PRC	100%

See "Item 4. Information on the Company—A. History and Development of the Company" for additional information on our corporate structure.

**D. Property, Plant and Equipment**

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

- CSI Changshu Manufacturing rents approximately 31,119 square meters of floor area in Changshu, including 13,889 square meters for manufacturing facilities under a lease effective from June 1, 2012 to May 31, 2013, 8,852 square meters for manufacturing facilities under a lease effective from October 1, 2012 to September 30, 2013, and 8,378 square meters for manufacturing facilities under a lease effective from April 1, 2010 to March 31, 2013, which we will renew for a period from April 1, 2013 to March 31, 2014.
- 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 a manufacturing facility for module manufacturing and an office building. The floor area of all workshops and office buildings in Phase I is approximately 6,761 square meters. The property ownership certificate was 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 wafer manufacturing facilities. The floor area of Phase II is 30,071 square meters. We expect to receive the property ownership certificate upon passing the required inspection.
- CSI Cells holds a land use rights certificate for approximately 75,661 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 facility has a 14,077 square meter workshop and office building, 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, was 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. In addition, CSI Cells merged with CSI Solar New Energy (Suzhou) Co., Ltd. in 2012, which has a land use rights certificate for approximately 10,000 square meters of land in Suzhou.
- CSI Changshu Manufacturing holds a land use rights certificate for approximately 40,000 square meters of land in Changshu, on which we have built a module manufacturing facility of approximately 23,671 square meters. Production in this facility began in April 2008. We also constructed a canteen and a dormitory for employees in September 2010 with a total floor area of 11,283 square meters. The property ownership certificate was granted in March 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, three warehouses and other buildings with a total floor area of approximately 62,093 square meters (Phase I). Production in this facility began in August 2008 and construction of the central warehouses was completed in April 2010. Phase I occupies 78,320 square meters of land. We completed the construction of Phase II manufacturing facilities with an additional warehouse and four other buildings, which has approximately 46,507 square meters of floor area and occupies 22,442 square meters of land, in the first half of 2011. Phase III manufacturing facilities on the remaining land are still in the design and planning stage. We have passed the required inspection and are in the process of obtaining property ownership certificate from the competent government authority.
- CSI Suzhou Manufacturing bought a piece of land for approximately 96,249 square meters in May 31, 2012.

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- CSI Ontario Manufacturing has leased approximately 14,851 square meters of manufacturing facilities in Guelph, Ontario, Canada for a term of 10 years commencing August 1, 2010. It also leases a warehouse of 7,912 square meters and an office building of 1,146 square meters on the same premises for the same term.

**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 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**

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

- government subsidies and the availability of financing for solar projects;
- industry and seasonal demand;
- product pricing;
- the cost of solar cells and wafers and silicon raw materials relative to the selling prices of modules and the impact of certain of our long-term purchase commitments; and
- foreign exchange.

***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 financing for solar projects. For a detailed discussion 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, reduce or eliminate subsidies and economic incentives for solar power, which could cause demand for our products to decline." and "Item 4. Information on the Company—Business Overview—Markets and Customers."

Additionally, the continuing weak global economy and uncertain global economic outlook, especially in Europe, could limit the availability of debt or equity for solar power projects, or increase the cost thereof, and adversely impact our customers' ability to finance the purchase of our products or to construct solar power projects. See "Item 3. Key Information—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 products, hamper our expansion and materially affect our results of operations."

### ***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 4. Information on the Company—B. Business Overview" for a more detailed discussion of the factors driving the growth of the solar power industry and the challenges that it faces. In addition, industry demand is affected by seasonality. Demand tends to be lower in winter, primarily because adverse weather conditions complicate the installation of solar power systems, particularly in Germany, one of our key markets. For example, our sales to Germany slowed significantly in the fourth quarter of 2008 and the first quarter of 2009 due to changes in seasonal demand, together with inventory clearing efforts by some solar module producers and a significant reduction of subsidies in Spain, coupled with the global financial crisis. However, the demand from other key markets may offset seasonal fluctuations from time to time. In anticipation of strong demand for systems in 2010, distributors continued to purchase modules late in the fourth quarter of 2009 and early in the first quarter of 2010, even though this is traditionally the slowest season for solar installations. Weakened global economic conditions continued to affect the availability of financing in the European markets in 2011, which in turn slowed the demand for solar power projects. If governments around the world continue to approve subsidies that encourage the use of solar energy, we expect to be able to take advantage of the diversity of global markets to mitigate some of the effects of seasonality on our business results in the future.

See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Company and Our Industry—If sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our revenues may not continue to increase or may even decline, and we may be unable to sustain our profitability."

### ***Product Pricing***

Prior to 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 2010 and 2011, we generated net revenues of 94.8% and 89.1%, respectively from our solar module business, which comprises primarily sales of standard solar modules and specialty solar modules, with the remainder coming from our total solution business, which comprises solar power project development and sales, EPC services, O&M services and sales of solar system kits. In 2012, we generated 88.5% of our net revenues from our solar module business with 11.5% coming from our total solution business.

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 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 has declined sharply, as market demand has 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 and, in the fourth quarter of 2012, the average selling price was \$0.67 per watt.

### ***Price of Solar Cells and Wafers and Silicon Raw Materials***

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. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Company and Our Industry—We have from time to time, entered into long-term supply agreements with polysilicon and wafer suppliers. Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we chose to prematurely 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." Currently, we acquire a large percentage of our requirements of solar wafers through purchasing arrangements and limited tolling arrangements. We also acquire a large portion of our requirements of solar cells through purchase arrangements.

### ***Foreign Exchange***

The majority of our sales are denominated in Euros and U.S. dollars, with the remainder in other currencies such as the Renminbi, Canadian dollar, Japanese yen and British pound. Our Renminbi costs and expenses are primarily related to domestic sourcing of solar cells, silicon wafers and silicon, other raw materials, toll manufacturing fees, labor costs and local overhead expenses. From time to time, we enter into loan arrangements with Chinese commercial banks that are denominated primarily in U.S. dollars or Renminbi. The greater part of our cash and cash equivalents are denominated in Renminbi. Fluctuations in exchange rates, particularly among the U.S. dollar, Euro, Renminbi and Canadian dollar, may affect our net profit margins and may result in fluctuations in foreign exchange and operating gains or losses. Since 2008, we hedge part of our foreign currency exposures against the U.S. dollar using foreign currency forward or option contracts in order to limit our foreign exchange losses. However, the effectiveness of our hedging program may be limited with respect to cost effectiveness, cash management, exchange rate visibility and downside protection. We incurred a foreign exchange loss of \$36.3 million, \$40.0 million and \$10.7 million in 2010, 2011 and 2012, respectively. For our hedging program, we recorded a gain on change in foreign currency derivatives of \$1.7 million in 2010, incurred a loss on change in foreign currency derivatives of \$5.8 million in 2011 and incurred a loss on change in foreign currency derivatives of \$4.4 million in 2012.

### ***Overview of Financial Results***

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

#### ***Net Revenues***

Revenues generated from our solar module business, which comprises primarily sales of standard solar modules and specialty solar modules, accounted for 94.8%, 89.1% and 88.5% of our net revenues in 2010, 2011 and 2012, respectively. Revenues generated from our total solution business which comprises primarily solar power project development and sales, EPC services, O&M services and sales of solar system kits, represented 5.2%, 10.9% and 11.5% of our net revenues in 2010, 2011 and 2012, respectively. As we continue to expand our business into the downstream segment of the industry, we expect that around 50% of our net revenues will be generated from our total solution business in 2013, primarily from our utility-scale solar power project pipelines in Canada and the U.S., as well as our residential system kits business in Japan. We believe this strategy of focusing on the downstream

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segment of the business will help to put us in a good competitive position and possibly increase our margins and overall profitability.

The main factors affecting our net revenues include average selling prices per watt and unit volume shipped, both of which depend on product supply and demand.

Our net revenues are net of business tax, VAT, returns and exchanges.

### *Cost of Revenues*

Our cost of revenues 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;
- installation components in solar system kits, such as inverters and racking systems;
- 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;
- depreciation charges relating to underutilized assets;
- acquisition costs of solar power plants;
- development costs (including interconnection fees and permitting costs) of solar power plants;
- project management and engineering costs;
- EPC costs (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 costs capitalized for solar power plants during construction period; and
- site-specific costs

Solar wafers and cells and silicon raw materials make up the major portion of our cost of revenues. Where we manufacture solar wafers in our

own manufacturing facilities, the cost of the solar wafers consists of:

- the costs of purchasing high purity and solar grade silicon raw materials;
- labor costs incurred in manufacturing solar wafers;

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- the costs of other materials and utilities we use for manufacturing solar wafers; and
- depreciation charges incurred for our solar wafer manufacturing facility, equipment and building.

Where we manufacture solar cells in our own manufacturing facilities, the cost of the solar cells consists of:

- the costs of purchasing solar wafers;
- labor costs incurred in manufacturing solar cells;
- the costs of other materials and utilities we use for manufacturing the solar cells; and
- depreciation charges incurred for our solar cell manufacturing facility, equipment and building.

In 2010, 2011 and 2012, we obtained some of our solar wafers and cells through toll manufacturing arrangements, under which we source and provide silicon feedstock to suppliers of ingots, wafers and cells. These suppliers convert these silicon raw materials into the solar wafers and cells that we use for our production of solar modules. The costs of solar wafers and cells that we obtain through these toll manufacturing arrangements consist of:

- costs of purchasing the silicon feedstock;
- labor costs incurred in inventory management;
- labor costs incurred in blending the silicon feedstock as part of our silicon feedstock blending program; and
- tolling fees charged by our suppliers under the tolling arrangements.

The payments we make to our suppliers for the solar wafers and cells and the payments our suppliers make to us for the silicon feedstock that we source and provide are generally settled separately under these tolling arrangements. We do not include payments we receive for providing silicon feedstock as part of these toll manufacturing arrangements in our net revenues.

In 2010, we began selling solar system kits. Solar modules make up a substantial portion of the cost of revenue on solar system kits. The cost of revenue on these solar modules is the cost of revenue on solar modules manufactured by us. The other components that make up the cost of solar system kits comprise the costs of purchased inverters, racking systems and other installation components.

Our cost of revenues also includes warranty costs. We accrue 1.0% of our net revenues on solar modules and 0.8% on solar system kits and solar power projects as warranty costs at the time revenues are recognized. Before June 2009, we typically sold our standard solar modules with a two-year warranty against 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 ten years and we guarantee that, for a period of 25 years, our 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.

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We have the right to repair or replace solar modules, at our option, under the terms of the warranty policy. We maintain warranty reserves to cover potential liabilities that could arise under these guarantees and warranties. Since April 2010, we have entered into agreements with a group of insurance companies to back up these warranties. Under these 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 policy. We record the insurance premiums initially as prepaid expenses and amortize them over the respective policy period, normally one year. If we determine that the product warranty costs to be reimbursed from the insurance companies are probable and determinable, an asset is recognized on our balance sheet. The warranty insurance is renewable annually. See "Item 4. Information on the Company—B. Business Overview—Insurance."

Our cost of revenues has historically decreased due to the decrease of our net revenues. Write-downs of inventory included in our cost of revenue were \$2.1 million, \$8.5 million and \$3.1 million in 2010, 2011 and 2012, respectively. We recorded a loss on firm purchase commitments of \$1.6 million, \$10.6 million and nil for the years ended December 31, 2010, 2011 and 2012, respectively. The losses were computed using the lower of cost or market method.

In December 2011, Deutsche Solar gave notice to us to terminate the 12-year wafer supply 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 damage of €148.6 million (\$196.0 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 our 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 damage of €148.6 million (\$196.0 million) on the notice. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Company and Our Industry—We have, from time to time, entered into long-term supply agreements with polysilicon and wafer suppliers. Long-term supply agreements may make it difficult for us to adjust our raw material costs should prices decrease. Also, if we chose to prematurely 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."

### *Gross Profit/Gross Margin*

Our gross profit is affected by a number of factors, including the average selling price of our 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 have increased in recent years as our business has grown rapidly. We expect this trend to continue as our net revenues grow in the future. On a percentage basis, however, we expect our operating expenses to decline or 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. As we expand our business, we will increase our sales and marketing efforts and target companies in selected industry

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sectors in response to evolving industry trends. We expect as we increase our sales volume 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. We expect our general and administrative expenses to increase to support the anticipated growth of our business. Non-recurring general and administrative expenses increased significantly in 2010 because of increased legal, accounting and other professional fees related to our audit committee investigation and the shareholder class action lawsuits. In 2010, the expenses for legal and professional services were \$16.2 million. In 2011 and 2012, we recovered \$4.4 million and \$3.5 million, respectively, of the costs incurred in 2010 under our director and officer liability insurance policy. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings."

*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. We continue to increase our expenses on research and development. These expenses are primarily related to our ongoing efforts to improve our ingot and wafer, solar cell and module manufacturing processes.

We expect to devote more efforts to research and development in the future. We also expect that our research and development expenses will increase as we hire additional research and development personnel, expand and promote innovation in our products portfolio, and devote more resources towards using new technologies and alternative materials to grow ingots, cut wafers and manufacture solar cells and solar system accessories such as inverters.

*Share-based Compensation Expenses*

Under our share incentive plan, as of December 31, 2012, we had outstanding:

- 2,617,477 stock options;
- 1,670,531 restricted share units; and
- 352,780 restricted shares.

For a description of the stock options, restricted shares, and restricted share units 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 service 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.

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For the year ended December 31, 2012, we recorded share-based compensation expenses of approximately \$5.2 million, compared to approximately \$4.1 million for the year ended December 31, 2011. 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,					
	2010		2011		2012	
	(In thousands of \$, except for percentages)					
Share-based compensation expenses included in:						
Cost of revenues	231	6.0%	686	16.9%	870	16.8%
Selling expenses	509	13.1	683	16.8	964	18.6
General and administrative expenses	2,873	74.1	2,442	60.1	3,037	58.5
Research and development expenses	264	6.8	250	6.2	315	6.1
Total share-based compensation expenses	<u>3,877</u>	<u>100.0%</u>	<u>4,061</u>	<u>100.0%</u>	<u>5,186</u>	<u>100.0%</u>

We expect to incur additional share-based compensation expenses as we expand our operations. For example, we anticipate that selling expenses will increase as we hire additional sales personnel to further expand our worldwide marketing activities in line with the expected growth of our operations.

*Interest Expenses*

Interest expenses consist primarily of interest incurred with respect to our short and long-term loans from Chinese commercial banks and the 6% convertible notes we issued privately to qualified institutional investors. We repaid the outstanding convertible notes in full in 2012.

*Gain (Loss) on Change in Fair Value of Derivatives*

The gain on change in fair value of derivatives in our 2010 financial statements and the loss on change in fair value of derivatives in our 2011 and 2012 financial statements were associated with hedging part of our expected cash flows and balances denominated in foreign currencies, mainly in Euros and Canadian dollars.

*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.

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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 31.0%, 28.25% and 26.5% for the years ended 2010, 2011 and 2012, respectively.

PRC enterprise income tax is calculated based on taxable income determined under PRC accounting principles. Our major operating subsidiaries, CSI Solartronics, CSI Manufacturing, CSI Cells, CSI Luoyang Manufacturing, CSI Technologies and CSI Changshu Manufacturing, are subject to taxation in China. CSI Solartronics has been recognized as an HNTE. However, because CSI Solartronics does not meet certain requirements for the reduced 15% enterprise income tax rate, CSI Solartronics is still subject to a 25% enterprise income tax rate. CSI Cells and CSI Luoyang Manufacturing were subject to a reduced enterprise income tax rate of 12.5% until the end of 2011, when their tax holidays expired. Currently, CSI Cells is subject to a preferential enterprise income tax rate of 15% for the three years from 2012 to 2014, resulting from its HNTE status recognized in 2009 and renewed in 2012. CSI Technologies and CSI Changshu Manufacturing were subject to a reduced enterprise income tax rate of 12.5% until the end of 2012, when their tax holidays expired. CSI Manufacturing is subject to a standard 25% enterprise income tax rate. When 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 "effective management" 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 "effective management" is defined as substantial and overall management and control over such aspects as the production and business, personnel, accounts and properties of an enterprise. Currently there are no detailed rules or precedents governing the procedures and specific criteria for determining an enterprise's effective management. As a substantial number of the members of our management team are located in China, we may be considered a PRC tax resident under the EIT Law and, therefore, subject to the uniform 25% enterprise income tax rate as it relates to 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 \$116.3 million at December 31, 2012) 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 (i) the reported amounts of our assets and liabilities, (ii) the disclosure of our contingent assets and liabilities at the end of each fiscal period and (iii) 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: (i) our selection of critical accounting policies, (ii) the judgment and other uncertainties affecting the application of such policies and (iii) the sensitivity of reported results to changes in conditions and assumptions. We believe

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the following accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements.

### *Revenue Recognition*

Sales of modules, solar system kits and silicon materials are recorded when products are delivered and title and risk of loss or damage has passed to the customers. A solar system kit is a ready-to-install package consisting of solar modules produced by us and components, such as inverters, racking system, tracker and other accessories, supplied by third parties. We only recognize revenues when prices to the seller are fixed or determinable and collectability is reasonably assured. If collectability is not reasonably assured, we recognize revenue only upon collection of cash. Revenues also include reimbursements of shipping and handling costs of products sold to customers. Sales agreements typically contain customary product warranties but do not contain any post-shipment obligations or 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. 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.

We use the percentage of completion method to recognize revenue from systems integration projects for which we provide EPC services under an EPC contract when the contract price is fixed or determinable. We use the cost-to-cost method to measure the percentage of completion and recognize revenue based on the estimated progress to completion. We periodically revise our profit estimates based on changes in facts, and immediately recognize any losses that are identified on contracts. Incurred costs include all direct material, labor, subcontractor cost, and other associated costs. We recognize job material costs as incurred costs when the job materials have been permanently attached or fitted to the solar power systems as required by the engineering design. The construction periods normally extend beyond six months and less than one year.

We recognize revenue from the sale of project assets in accordance with ASC 360-20, Real Estate Sales. For these transactions, we determined that the project assets, which represent the costs of constructing solar power projects, represent "integral" equipment and as such, the entire transaction is in substance the sale of real estate and subject to the revenue recognition guidance under ASC 360-20 Real Estate Sales. We recognize revenue and profit using the full accrual method once the sale is consummated, the buyer's initial and continuing investments are adequate to demonstrate its commitment to pay, the receivable is not subject to any future subordination, and we have transferred the usual risk and rewards of ownership to the buyer. If these criteria are met and we execute a sales agreement prior to the delivery of the solar power project which has an original construction period of three months or longer, we recognize revenue and profit under the percentage of completion method of accounting applicable to real estate sales when we can reasonably estimate progress towards completion. If the criteria for recognition under the full accrual method are met except that the buyer's initial and continuing investment is less than the level determined to be adequate, we recognize revenue using the installment method. Under the installment method, we record revenue up to costs incurred and apportion each cash receipt from the buyer between cost recovered and profit in the same ratio as total cost and total profit bear to the sales value. During 2012, we recognized \$48.9 million of revenue using the full accrual method.

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We allocate revenue for transactions involving multiple-element arrangements to each unit of accounting on a relative fair value basis. We estimate fair value on each unit of accounting on the following basis (i) vendor-specific objective evidence of selling price, if it exists, otherwise, (ii) third-party evidence of selling price. If neither (i) nor (ii) exists, management's best estimate of the selling price for that unit of accounting is used. We recognize revenue for each unit of accounting when the revenue recognition criteria have been met.

Sales to customers are recorded net of estimated returns.

We enter into toll manufacturing arrangements in which we receive wafers and return finished modules. In those cases, the title of the wafers received and risk of loss remains with the seller. As a result, we do not recognize inventory on the balance sheet. We recognize a service fee as revenue when the processed modules are delivered. During the years ended December 31, 2010, 2011 and 2012, we recognized revenue of nil, \$24.7 million, and \$7.9 million, respectively, under the toll manufacturing arrangements.

We enter into buy/sell arrangements with certain raw material vendors pursuant to which we sell finished goods, comprising either solar cells or solar modules, in exchange for raw materials, typically silicon wafers. These arrangements are made with counterparties in the same line of business as us and are executed as a means of securing a consistent supply of raw materials. The transactions are recorded in revenues and cost of revenues at fair value on a gross basis. During the years ended December 31, 2010, 2011, and 2012, we purchased nil, \$21.5 million, and nil of raw materials, respectively, and sold nil, \$43.9 million, nil of finished goods under these buy-and-sell arrangements respectively.

As of December 31, 2010, 2011 and 2012, we had inventories of \$18.8 million, \$23.2 million and \$18.6 million, respectively, relating to sales to customers where revenues were not recognized given that payment collection was not reasonably assured. The delivered product remains as inventories on our consolidated balance sheets, regardless of whether title has been transferred. In such cases, we recognize revenues, relieve inventories and recognize the cost of revenue when payment is collected from customers.

### *Warranty Cost*

Before June 2009, we typically sold our standard solar modules and products with up to 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 ten years and we guarantee that for a period of 25 years, our 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.

In addition to the solar module warranty above, for utility-scale solar power projects built by us, we also provide a limited warranty against defects in workmanship under normal use, operation and service conditions for a period of five years following the energizing of the solar power plant. In resolving claims under the workmanship warranty, we have the option of remedying through repair, refurbishment or replacement of equipment.

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We have the right to repair or replace solar modules, at our option, under the terms of the warranty policy. We maintain warranty reserves to cover potential liabilities that could arise under these guarantees and warranties. Due to limited warranty claims to date, we accrue the estimated costs of warranties based on an assessment of our competitors' accrual history, industry-standard accelerated testing, estimates of failure rates from our quality review, and other assumptions that we believe to be reasonable under the circumstances. Actual warranty costs are accumulated and charged against the accrued warranty liability. To the extent that accrual warranty costs differ from the estimates, we will prospectively revise our accrual rate. There was no prospective reversion for each period presented. We currently take a 1% warranty provision against our revenue for sales of solar modules and 0.8% for solar system kits and solar power projects.

Since April 2010, we have entered into agreements with a group of insurance companies to back up our warranties. Under 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 policy. We record the insurance premiums initially as prepaid expenses and amortize them over the respective policy period, normally one year. If we determine that the product warranty costs to be reimbursed from the insurance companies are probable and determinable, an asset is recognized on our balance sheet.

### *Impairment of Long-lived Assets*

We evaluate our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When these events occur, we measure impairment by comparing the carrying amount of the assets to future undiscounted net cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, we will recognize an impairment loss based on the fair value of the assets. There was no impairment charge recognized during the years ended December 31, 2010, 2011 and 2012.

### *Allowance for Doubtful Accounts*

We conduct credit evaluations of our customers and generally do not require collateral or other security from them. We establish allowances for doubtful accounts primarily based upon the age of our receivables and factors surrounding the credit risk of specific customers. As of December 31, 2010, 2011 and 2012, an allowance for doubtful accounts receivable of \$8.0 million, \$9.5 million and \$47.6 million, respectively, was established for certain customers for whom management sees a credit risk on the collection of accounts receivable balances. The allowance for doubtful accounts receivable as of December 31, 2012 included \$18.6 million relating to one customer in China with severe liquidity issues. An allowance of \$10 million for doubtful accounts receivable was made in 2009 in connection with a particular customer due to the fact that the customer's account was more than 90 days overdue and the customer had communicated to us that it was unable to pay. We recovered the full overdue amount in 2010 after having taken legal proceedings against the customer. From mid-2009, we started to purchase insurance from Sinasure for accounts receivable to mitigate collection risks from some customers. We establish allowances for all doubtful accounts according to our allowance policy regardless of whether such accounts are covered by Sinasure insurance. For the amounts recoverable from Sinasure, we recorded \$4.2 million, \$5.3 million and \$9.5 million in prepaid expenses and other current assets as of December 31, 2010, 2011 and 2012, respectively.

With respect to advances to suppliers, primarily suppliers of solar cells, solar wafers and silicon raw materials, we perform ongoing credit evaluations of their financial condition. We generally do not require collateral or security against advances to suppliers, as they tend to be recurring supply partners. However, we maintained a reserve for potential credit losses for advances to suppliers as of December 31, 2010, 2011 and 2012 of \$19.4 million, \$38.1 million and \$38.5 million, respectively. The

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reserves as of December 31, 2012 include allowances on advances to LDK of \$9.5 million, allowances on advances to a UMG-Si supplier of \$10.2 million and allowances on advances to Deutsche Solar of \$17.7 million.

### *Inventories*

Inventories are stated at the lower of cost or market. Cost is determined by the weighted average method. Cost of inventories consists of costs of direct materials and, where applicable, direct labor costs, tolling costs and any overhead that we incur in bringing the inventories to their present location and condition.

Adjustments are recorded to write down the cost of obsolete and excess inventories to the estimated market value based on historical and forecast demand. The write-down of inventories for the years ended December 31, 2010, 2011 and 2012 were \$2.1 million, \$8.5 million and \$3.1 million, respectively.

In the past, we entered 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, such as 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 that is used to value inventory. The computation of the loss on firm purchase commitments is subject to several estimates, including primarily the ultimate selling price of the finished goods of which these raw materials comprise a part, and is therefore inherently uncertain. Further, we only record the expected loss as it relates to the following fiscal period, as we are unable to reasonably estimate future market prices beyond one year. 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 purchased the minimum contracted volume for year 2009 under our 12-year supply agreement with Deutsche Solar. We did not, however, purchase the minimum contracted volumes for years 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 it is more likely than not that the take-or-pay provisions of the agreement are void under German law. In December 2011, Deutsche Solar gave notice to us to terminate the 12-year wafer supply 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 (\$196.0 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 our 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 damage of €148.6 million (\$196.0 million) in the notice. Finally, we believe that the supply agreement was terminated in 2011 and, as a result, we are no longer obligated to purchase (and pay for) wafers for year 2012 and after.

We outsource portions of our manufacturing process, including converting silicon into ingots, cutting ingots into wafers, and converting wafers into solar cells, to various third-party manufacturers. These outsourcing arrangements may or may not include the transfer of title of the raw material inventory (silicon, ingots or wafers) to third-party manufacturers. Such raw materials are recorded as raw materials inventory when purchased from suppliers. For those outsourcing arrangements in which the title is not transferred, we maintain such inventory on our balance sheet as raw materials inventory while it is in the physical possession of the third-party manufacturer. Upon receipt of the processed

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inventory, it is reclassified as work-in-process inventory and a processing fee is paid to the third-party manufacturer.

For those outsourcing arrangements, characterized as sales, where title (including risk of loss) is transferred to the third-party manufacturer, through raw materials sales contracts and processed inventory purchase contracts that were entered into simultaneously, we are constructively obligated to repurchase the inventory once it has been processed. In this case, the raw material inventory is classified as raw material inventory while in physical possession of the third-party manufacturer. The cash received is classified as advances from customers on the balance sheet and not as revenue or deferred revenue. Outsourcing arrangements, which require prepayment for repurchase of the processed inventory, are classified as advances to suppliers on the balance sheet. There is no right of offset for these advances from customers and advances to suppliers; they remain on the balance sheet until the processed inventory is repurchased.

*Project Assets*

Project assets consist primarily of costs relating to solar power projects in various stages of development that are capitalized prior to the sale of the solar power project. These costs include modules, installation and other development costs, such as legal, consulting and permitting, interconnect and other similar costs. Where the project assets are not constructed for any specific customer, we intend to sell the project assets upon their completion.

We review project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In determining whether or not the project assets are recoverable, we consider a number of factors, including changes in environmental, ecological, permitting, or regulatory conditions that affect the project. Such changes may cause the cost of the project to increase or the selling price of the project to decrease.

*Fair Value of Derivative and Financial Instruments*

The carrying value of cash and cash equivalents, trade receivables, advances to suppliers, accounts payable and short-term borrowings approximate their fair values due to the short-term maturity of these instruments. Long-term bank borrowings approximate their fair value since the contracts were entered into with floating market interest rates.

We monitor our investments for other-than-temporary impairment by considering factors such as current economic and market conditions and the operating performance of the entities and records reductions in carrying values when necessary.

The book value of our investment in a UMG-Si supplier was \$3.0 million as of December 31, 2010. Due to the supplier's financial position and default on scheduled material delivery in 2010, we made an investment impairment of \$3.0 million. The impairment reduced the carrying value of the investment in our balance sheet to nil as at December 31, 2010. The book value of our investment in Nernst New Energy (Suzhou) Co., Ltd., or Nernst, was \$1.1 million as of December 31, 2012. Nernst is a company which focuses on Li-ion batteries and super-capacitors and in which we own a 50% interest. Due to Nernst's continued losses, deteriorating financial position and unpromising business outlook, we recognized impairment in the investment. The impairment reduced the carrying value of the investment in our balance sheet to nil as at December 31, 2012.

Our primary objective for holding derivative and financial instruments is to manage foreign currency risk. We record derivative and financial instruments as assets or liabilities, measured at fair value. The recognition of gains or losses resulting from changes in fair value of those derivatives and financial instruments is based on the use of each derivative and financial instrument and whether or not they qualify for hedge accounting. We entered into certain foreign currency derivative contracts to

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hedge part of our foreign currency exposures against the U.S. dollar using foreign exchange forward or option contracts. The foreign currency derivative contracts did not qualify for hedge accounting and, as a result, changes in their fair value are recognized in the statement of operations. We recorded a gain on foreign currency derivative contracts of \$1.7 million and a loss of \$5.8 million and \$4.4 million for the years ended December 31, 2010, 2011 and 2012, respectively.

Changes to any of the assumptions used in the valuation model could materially impact the valuation results. Our foreign currency derivative instruments relate to foreign exchange forward or option contracts involving major currencies such as the Euro and the U.S. dollar. Since our derivative and financial instruments are not traded on an exchange, they are valued using valuation models. Interest rate yield curves and foreign exchange rates are the significant inputs for these valuation models. These inputs are observable in active markets over the terms of the instruments we hold, and accordingly, the fair value measurements are classified as Level 2 in the fair value hierarchy. We consider the effect of our own credit standing and that of our counterparties in the valuation of our derivative and financial instruments. A more detailed discussion on fair value measurement is reflected in Note 7 to our consolidated financial statements included elsewhere in this annual report.

### *Income Taxes*

Deferred income taxes are recognized for temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, net tax loss carry forward and credits by applying enacted statutory tax rates applicable to future years. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. In 2012, we established a valuation allowance in the amount of \$54.1 million against deferred tax assets which were primarily attributable to the portion of the accumulated operating losses generated by certain of our subsidiaries in China for which no tax benefit could be recorded.

Current income taxes are provided for in accordance with the laws of the relevant taxing jurisdictions. The components of the deferred tax assets and liabilities are individually classified as current and non-current based on the characteristics of the underlying assets and liabilities, or the expected timing of their use when they do not relate to a specific asset or liability.

### *Share-based Compensation*

We have granted share-based compensation in the forms of restricted shares, stock options and restricted share units to our directors, officers and employees. The value of share-based payment compensation is based on grant date fair value and is recognized in our consolidated financial statements over the requisite service period, which is generally the vesting period. We grant our restricted shares and restricted share units at their fair value, which generally represents the fair value of an unrestricted share less a discount calculated based on the length of time the share is restricted. For stock options, we use the binominal model. Determining the value of our share-based compensation expense in future periods requires the input of highly subjective assumptions, including the expected life of the options, the price volatility of our underlying shares, the risk free interest rate, the expected dividend rate, and the estimated forfeitures of the options. We estimate our forfeitures based on past employee retention rates, our expectations of future retention rates, and we will prospectively revise our forfeiture rates based on actual history. Our compensation charges may change based on changes to our actual forfeitures.

### *Recently Issued Accounting Pronouncements*

In February 2013, the FASB issued ASU 2013-02, an authoritative pronouncement related to reporting of amounts reclassified out of accumulated other comprehensive income. Under the guidance,

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an entity is required to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required under U.S. GAAP to be reclassified in its entirety to net income. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures required under U.S. GAAP that provide additional detail about those amounts. The amendments are effective prospectively for reporting periods beginning after December 15, 2012. Early adoption is permitted. We are in the process of evaluating the effect of adoption of this pronouncement.

In March 2013, the FASB issued ASU 2013-05, an authoritative pronouncement related to parent's accounting for the cumulative translation adjustment upon de-recognition of certain subsidiaries or groups of assets within a foreign entity or of an investment in a foreign entity. Under the guidance, the cumulative translation adjustment should be released into net income when a reporting entity (parent) ceases to have a controlling financial interest in a subsidiary or group of assets that is a nonprofit activity or a business within a foreign entity. A pro rata portion of the cumulative translation adjustment should be released into net income upon a partial sale of an equity method investment which is a foreign entity. The amendments are effective prospectively for reporting periods beginning after December 15, 2013. Early adoption is permitted. We are in the process of evaluating the effect of adoption of this pronouncement.

In July 2012, the FASB issued ASU 2012-02, Impairment of Indefinite-Lived Intangible Assets, an authoritative pronouncement related to testing indefinite-lived intangible assets, other than goodwill, for impairment. Under the guidance, an entity testing an indefinite-lived intangible asset for impairment has the option of performing a qualitative assessment before calculating the fair value of the asset. If the entity determines, on the basis of qualitative factors, that the fair value of the indefinite-lived intangible asset is not more likely than not (i.e., a likelihood of more than 50 percent) impaired, the entity would not need to calculate the fair value of the asset. The guidance does not revise the requirement to test indefinite-lived intangible assets annually for impairment. In addition, the guidance does not amend the requirement to test these assets for impairment between annual tests if there is a change in events or circumstances; however, it does revise the examples of events and circumstances that an entity should consider in interim periods. The guidance was effective for annual and interim impairment tests performed for fiscal years beginning after September 15, 2012. Early adoption is permitted. The adoption of this guidance did not have a significant effect on our consolidated financial statements.

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**Results of Operations**

The following table sets forth a summary, for the periods indicated, of our consolidated results of operations and each item expressed as a percentage of our total net revenues. Our historical results presented below are not necessarily indicative of the results that may be expected for any future period.

	For the years ended December 31,					
	2010		2011		2012	
	(in thousands of \$, except percentages)					
Net revenues	\$ 1,495,509	100.0%	\$ 1,898,922	100.0%	\$ 1,294,829	100.0%
Cost of revenues	1,266,737	84.7%	1,716,640	90.4%	1,204,468	93.0%
Gross profit	228,772	15.3%	182,282	9.6%	90,361	7.0%
Operating expenses:						
Selling expenses	47,109	3.2%	69,341	3.7%	91,053	7.0%
General and administrative expenses	54,520	3.6%	86,269	4.5%	128,826	9.9%
Research and development expenses	6,843	0.5%	19,839	1.0%	12,998	1.0%
Total operating expenses	108,472	7.3%	175,449	9.2%	232,877	18.0%
Income from continuing operations	120,300	8.0%	6,833	0.4%	(142,516)	(11.0)%
Other income (expenses)						
Interest expenses	(22,164)	(1.5)%	(43,844)	(2.3)%	(53,304)	(4.1)%
Interest income	6,936	0.5%	8,447	0.4%	13,360	1.0%
Gain(loss) on change in fair value of derivatives	1,657	0.1%	(5,751)	(0.3)%	(4,369)	(0.34)%
Investment loss	(3,000)	(0.2)%	—	(0.0)%	(1,082)	(0.08)%
Foreign exchange gain (loss)	(36,293)	(2.4)%	(40,007)	(2.1)%	(10,708)	(0.83)%
Income(loss) before income taxes	67,436	4.5%	(74,322)	(3.9)%	(198,619)	(15.3)%
Income tax (expense) benefit	(16,754)	(1.1)%	(16,540)	(0.9)%	5,433	4.2%
Equity in earnings (loss) of unconsolidated investees	146	(0.0)%	(41)	(0.0)%	(1,969)	(0.2)%
Net income (loss)	50,828	3.4%	(90,903)	(4.8)%	(195,155)	(15.1)%
Less: Net income attributable to non-controlling interest	259	(0.0)%	(99)	(0.0)%	314	0.0%

Net income (loss)						
attributable to						
Canadian						
Solar Inc.	50,569	3.4%	(90,804)	(4.8)%	(195,469)	(15.1)%

***Year Ended December 31, 2012 Compared to Year Ended December 31, 2011***

*Net Revenues.* Our total net revenues decreased by \$604.1 million, or 31.8%, from \$1,898.9 million in 2011 to \$1,294.8 million in 2012. The decrease in our net revenues was primarily due to a decrease in the average selling price of our standard solar modules from \$1.34 per watt in 2011 to \$0.77 per watt in 2012, partially offset by increased shipments from 1,323 MW in 2011 to 1,543 MW in 2012. The decrease in the average selling price of our standard solar modules in 2012 was primarily due to changes in government subsidies and economic incentives in many markets, and continued oversupply across the entire photovoltaic supply chain.

Total solar module shipments were 1,543 MW in 2012, an increase of 16.6%, from 1,323 MW in 2011. Our shipments to non-European markets increased by 203.3 MW from 440.3 MW in 2011 to 643.6 MW in 2012. The increase in shipments to non-European markets primarily came from the U.S. and Japan among others. Our shipments to European markets increased by 17.2 MW from 882.3 MW in 2011 to 899.5 MW in 2012.

We periodically make estimates of our sales returns based on historical experience and record those estimates as a reduction of revenues. As of December 31, 2011 and 2012, we had a sales return reserve of \$6.2 million and \$1.0 million, respectively. Actual returns could differ from these estimates.

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*Cost of Revenues.* Our cost of revenues decreased by \$512.2 million, or 29.8%, from \$1,716.6 million in 2011 to \$1,204.5 million in 2012. The decrease in our cost of revenues was due to a decrease in raw material costs for the year resulting from market competition among suppliers of solar wafers and cells, partially offset by higher shipments as well as depreciation charges of \$11.8 million relating to underutilized assets. The decrease in our cost of revenues was in line with the decrease in our net revenues for the year. Cost of revenues as a percentage of total net revenues increased from 90.4% in 2011 to 93.0% in 2012.

Our inventory write-downs for 2011 and 2012 were \$8.5 million and \$3.1 million, respectively. The decrease in inventory write-downs was primarily due to continued decrease in our manufacturing costs. In 2012, our manufacturing costs decreased (approximately 43.0%) more rapidly than market prices (approximately 31.8%).

*Gross Profit.* As a result of the foregoing, our gross profit decreased by \$91.9 million, or 50.4%, from \$182.3 million in 2011 to \$90.4 million in 2012. Our gross profit margin decreased from 9.6% in 2011 to 7.0% in 2012, primarily due to a decrease in average selling price, partially offset by increased shipments and lower manufacturing costs.

*Operating Expenses.* Our operating expenses increased by \$57.4 million, or 32.7%, from \$175.4 million in 2011 to \$232.9 million in 2012. Operating expenses as a percentage of our total net revenues increased from 9.2% in 2011 to 18.0% in 2012.

*Selling Expenses.* Our selling expenses increased by \$21.7 million, or 31.3%, from \$69.3 million in 2011 to \$91.1 million in 2012. The increase in our selling expenses was primarily due to an increase of \$9.8 million in our shipping and handling costs resulting from increased shipment volume accompanied by higher unit costs for shipping and handling, an increase of \$5.2 million in our sales commissions and payroll costs due to increased personnel requirements for our project business as well as an increase of \$2.3 million in our marketing costs. Selling expenses as a percentage of our net total revenues increased from 3.7% in 2011 to 7.0% in 2012.

*General and Administrative Expenses.* Our general and administrative expenses increased by \$42.6 million, or 49.3%, from \$86.3 million in 2011 to \$128.8 million in 2012. The increase in our general and administrative expenses was primarily due to the provision for an arbitration decision and the increase in the bad debt allowance for doubtful accounts. We made a non-cash provision totaling \$30.3 million for the arbitration decision against us by the CIETAC Shanghai Branch in favor of LDK. In addition, allowance for doubtful accounts receivable and advances to suppliers increased by 74.4% from \$23.2 million in 2011 to \$40.4 million in 2012, including \$18.6 million relating to one customer in China with severe liquidity issues.

*Research and Development Expenses.* Our research and development expenses decreased by \$6.8 million, or 34.5%, from \$19.8 million in 2011 to \$13.0 million in 2012. The decrease in research and development expenses was primarily due to the successful completion of several key research and development projects at the end of 2011. Research and development expenses as a percentage of our total net revenues were approximately 1.0% in each of 2011 and 2012.

*Interest Expenses, Net.* Our interest expenses, net increased by \$4.5 million, or 12.8%, from \$35.4 million in 2011 to \$39.9 million in 2012. Interest expenses increased from \$43.8 million in 2011 to \$53.3 million in 2012, or 21.6%, primarily due to a significant increase in bank borrowings in 2012, partially offset by the interest costs capitalized to project assets relating to construction of our solar power projects. Interest income increased from \$8.4 million in 2011 to \$13.4 million in 2012, or 58.2%, mainly due to an increased restricted cash balance.

*Gain/(Loss) On Change in Fair Value of Derivatives.* In 2012, we recorded a loss on change in fair value of derivatives of \$4.4 million, compared to a loss on change in fair value of derivatives of

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\$5.8 million in 2011. The loss on change in fair value of derivatives represents a loss on the foreign currency hedges that we established on part of our expected cash flows and balances denominated in foreign currencies, mainly in Euros and Canadian dollars, by means of foreign currency forward or option contracts.

*Investment Loss.* We recorded an investment loss of \$1.1 million in 2012, compared to an investment loss of nil in 2011. In 2012, we concluded that our \$1.1 million investment in Nernst, a joint venture in which we own a 50% interest, was fully impaired.

*Foreign Exchange Loss.* We recorded a foreign exchange loss of \$10.7 million in 2012, compared to a foreign exchange loss of \$40.0 million in 2011. These foreign exchange losses were mainly due to the depreciation of the Euro and Japanese Yen and the appreciation of the Renminbi against the U.S. dollar.

*Income Tax Benefit (Expenses).* Our income tax benefit was \$5.4 million in 2012, compared to tax expense of \$16.5 million in 2011. The income tax benefit in 2012 was primarily due to recognition of deferred tax assets associated with the net operating losses recorded by certain of our subsidiaries in China.

*Equity in Earnings (Loss) of Unconsolidated Investees.* Our equity in earnings of unconsolidated investees was a net loss of \$2.0 million in 2012, compared to a net loss of \$0.4 million in 2011.

*Net Income Attributable To Non-Controlling Interest.* The net income attributable to non-controlling interest was related to the share of net income by the non-controlling shareholders in certain of our subsidiaries in China, Germany, Japan and the U.S.

*Net Income (Loss) Attributable To Canadian Solar Inc.* As a result of the foregoing, the net loss attributable to Canadian Solar Inc. increased by \$104.7 million, or 115.3%, from negative \$90.8 million in 2011 to negative \$195.5 million in 2012.

***Year Ended December 31, 2011 Compared to Year Ended December 31, 2010***

*Net Revenues.* Our total net revenues increased by \$403.4 million, or 27.0%, from \$1,495.5 million in 2010 to \$1,898.9 million in 2011. Increase in net revenues from non-European markets contributed \$365.9 million to increase in our total net revenues in 2011. Our net revenues increased primarily due to increased shipments from 803.5 MW in 2010 to 1,322.5 MW in 2011, an increase of 64.6%, offset by decreased average selling prices of our standard solar modules from \$1.80 per watt in 2010 to \$1.34 per watt in 2011.

Our shipments to European markets increased by 216.4 MW from 665.9 MW in 2010 to 882.3 MW in 2011. And our shipments to non-European markets increased by 302.7 MW from 137.6 MW in 2010 to 440.3 MW in 2011. The increase in shipments in non-European markets primarily came from China, the U.S. and India among others as we increased our marketing efforts and expanded our customer base in these markets.

We periodically make estimates of our sales returns based on historical experience and record such estimates as a reduction of revenues. As of December 31, 2010 and 2011, we had a sales return reserve of \$8.9 million and \$6.2 million, respectively. Actual returns could differ from these estimates.

*Cost of Revenues.* Our cost of revenues increased by \$449.9 million, or 35.5%, from \$1,266.7 million in 2010 to \$1,716.6 million in 2011. The increase in our cost of revenues was in line with the increase in our net revenues for the year, offset by a decrease in raw materials costs for the year due to market supply competition on wafers and solar cells. Cost of revenues as a percentage of our total net revenues increased from 84.7% in 2010 to 90.4% in 2011.

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We recorded a loss on firm purchase commitments of \$1.6 million and \$10.6 million for the years ended December 31, 2010 and 2011, respectively. The 12-year supply agreement with Deutsche Solar was terminated by the end of 2011. As a result, we reclassified the accrued loss on firm purchase commitments of \$27.9 million as of December 31, 2011 to loss contingency accruals.

Our inventory write-downs for year 2010 and year 2011 were \$2.1 million and \$8.5 million, respectively.

*Gross Profit.* As a result of the foregoing, our gross profit decreased by \$46.5 million, or 20.3%, from \$228.8 million in 2010 to \$182.3 million in 2011. Our gross profit margin decreased from 15.3% in 2010 to 9.6% in 2011.

*Operating Expenses.* Our operating expenses increased by \$67.0 million, or 61.7%, from \$108.5 million in 2010 to \$175.4 million in 2011. Operating expenses as a percentage of our total net revenues increased from 7.3% in 2010 to 9.2% in 2011.

*Selling Expenses.* Our selling expenses increased by \$22.2 million, or 47.2%, from \$47.1 million in 2010 to \$69.3 million in 2011. The increase in our selling expenses was due to increases in shipping and handling costs by \$8.1 million, sales commissions and payroll costs by \$5.4 million, and advertising and promotion costs by \$5.3 million, all in line with the increased shipments and personnel. Selling expenses as a percentage of our net total revenues increased from 3.2% in 2010 to 3.7% in 2011.

*General and Administrative Expenses.* Our general and administrative expenses increased by \$31.7 million, or 58.2%, from \$54.5 million in 2010 to \$86.3 million in 2011. The increase in our general and administrative expenses was primarily due to an increase in allowance for doubtful accounts by \$20.2 million, or 673.3%, from \$3.0 million in 2010 to \$23.2 million in 2011, including a \$17.4 million allowance related to advances to Deutsche Solar, and an increase in salary and benefits expenses by \$8.0 million, or 46.8%, from \$16.9 million in 2010 to \$24.9 million in 2011.

*Research and Development Expenses.* Our research and development expenses increased by \$13.0 million, or 190.0%, from \$6.8 million in 2010 to \$19.8 million in 2011. The increase in research and development expenses was primarily due to the development of our next-generation, high-efficiency cells, expanded and other innovative product development initiatives and the expansion of our research and development team. We expect our research and development expenses will continue to increase in 2012 as we continue to undertake technology development related to future product offerings. Research and development expenses as a percentage of our total net revenues were approximately 0.5% and 1.0% in 2010 and 2011, respectively.

*Interest Expenses, Net.* Our interest expenses, net increased by \$20.2 million, or 132.4%, from \$15.2 million in 2010 to \$35.4 million in 2011. The increase in our interest expenses from \$22.2 million in 2010 to \$43.8 million in 2011, or 97.8% was due to a significant increase in bank borrowings to finance our increased working capital requirements and our daily operations during 2011. Interest expense is expected to increase in the near future in line with increased bank borrowings. Interest income increased from \$6.9 million in 2010 to \$8.4 million in 2011, or 21.8%, mainly due to increased restricted cash and higher rates.

*Gain/(Loss) On Change in Fair Value of Derivatives.* In 2011, we recorded a loss on change in fair value of derivatives of \$5.8 million, compared to a gain of \$1.7 million in 2010. The gain or loss on change in fair value of derivatives represents a gain or loss on the foreign currency hedges that we established on part of our expected cash flows and balances denominated in foreign currencies, mainly in the Euro, by means of foreign currency forward or option contracts.

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*Investment Income/(Loss).* We recorded an investment loss of \$41,163 in 2011 compared to investment loss of \$2.8 million in 2010. The investment loss in 2010 was mainly due to the impairment of an investment in a UMG-Si supplier amounting to \$3.0 million.

*Foreign Exchange Loss.* We recorded a foreign exchange loss of \$40.0 million in 2011, compared to a foreign exchange loss of \$36.3 million in 2010. These foreign exchange losses were mainly due to the depreciation of the Euro and appreciation of the Renminbi against the U.S. dollar.

*Income Tax Benefit (Expenses).* Our income tax expense was \$16.5 million in 2011, compared to \$16.8 million in 2010. Although we experienced loss in 2011, the income tax expenses remained stable mainly due to our tax structure where revenues for certain Chinese subsidiaries from overseas trading companies are on a cost plus basis, and can result in taxes being owed in some jurisdictions even when we incurred an overall loss.

*Net Income Attributable To Non-Controlling Interest.* The net income attributable to non-controlling interest represented the share of net income by the non-controlling shareholders in certain of our subsidiaries in China, Germany, Japan and the U.S.

*Net Income (Loss) Attributable To Canadian Solar Inc.* As a result of the foregoing, the net income attributable to Canadian Solar Inc. decreased by \$141.4 million, or 279.6%, from \$50.6 million in 2010, to negative \$90.8 million in 2011.

## **B. Liquidity and Capital Resources**

### *Cash Flows and Working Capital*

We are generally required to make prepayments to suppliers of silicon wafers and cells and silicon raw materials. Even though we require some customers to make partial prepayments, there is typically a lag between the time we make our prepayments for silicon wafers and cells and silicon raw materials and the time our customers make their prepayments. The purchase of solar wafers and cells and silicon raw materials through toll manufacturing arrangements has required, and will continue to require, us to make significant commitments of working capital beyond that generated from our cash flows from operations to support our estimated production output.

In addition, our total solution business required increased liquidity in 2012 and is expected to continue to require significant liquidity in the future. The time cycles of our solar power development projects can vary substantially and can take up to many years to mature. As a result, we may need to make significant up-front investments of resources before the collection of any cash from the sale of these projects. These investments include payment of interconnection and other deposits, posting of letters of credit, and incurring engineering, permitting, legal, and other expenses. In addition, we may have to use our working capital or our existing bank facilities to finance the construction of these solar power development projects. Depending on the size and number of solar power projects that we are developing and self-financing, our liquidity requirements could be significant. Delays in constructing or completing the sale of any of projects which we are self-financing could also impact our liquidity.

In 2012, we made a loss provision totaling RMB188.9 million (\$30.3 million) following an arbitration award in favor of LDK by CIETAC Shanghai Branch. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal and Administrative Proceedings." We dispute the merits of the arbitration award and will pursue all legal means to overturn or resist the implementation of the award. However, if we do not succeed, payment of the award to LDK could have an adverse effect on our liquidity.

In 2012, we financed our operations primarily through cash flows from operations and short-term and long-term borrowings. As of December 31, 2012, we had \$142.0 million in cash and cash equivalents. Our cash and cash equivalents consist primarily of cash on hand, bank balances and

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demand deposits with original maturities of three months or less that are outstanding and placed with banks. As of March 31, 2013, we had contractual bank lines with an aggregate limit of approximately \$1,128 million, of which \$432 million is due beyond December 31, 2013. Out of these bank lines totaling \$432 million, we have drawn down \$234 million by March 31, 2013. In addition, we had non-contractual bank lines with an aggregate limit of approximately \$314 million, of which \$32 million is due beyond December 31, 2013. Out of these bank lines totaling \$32 million, we have drawn down \$28.5 million by March 31, 2013. Non-contractual bank lines represent non-legally binding facility limits granted by banks, which can be changed unilaterally by the banks. As of March 31, 2013, on all our contractual and non-contractual bank lines, we had drawn down approximately \$241 million of long-term borrowings, of which \$72 million was secured by charges on land use rights and property, plant and equipment, and approximately \$911 million of short-term borrowings, of which \$155 million was secured by charges on inventory, land use rights, and property, plant and equipment. The long-term borrowings mature at various times during the period 2014 to 2017 and bear interest at rates of between 0.90% and 7.05% per annum. The short-term borrowings mature at various times during 2013 and the first quarter of 2014 and bear interest at rates of between 0.66% and 12.5% per annum. Our bank lines contain no specific extension terms but, historically, we have been able to obtain new short-term loans on terms similar to those of the maturing short-term loans shortly before they mature.

During 2012, the solar industry was negatively impacted by a number of factors, including excess capacity, reduction of government incentives in key solar markets, higher import tariffs and the European debt crisis. These factors contributed to declining average selling prices throughout the industry, including our products.

In addition, during 2012, we made a strategic decision to further expand into the downstream total solution business and acquired a significant number of project assets, which are not expected to be accretive, in terms of cash flows or revenues, until late 2013.

All these factors have had a significant impact on our liquidity as of and for the year ended December 31, 2012, including the following:

- we incurred a net loss of \$195.5 million for the year ended December 31, 2012;
- our cash used in operations for the year ended December 31, 2012, was \$147.8 million, including cash paid to purchase project assets of \$162.3 million; and
- as of December 31, 2012, we had cash and cash equivalents of \$142.0 million, restricted cash of \$422.4 million, bank borrowings due within one year of \$858.9 million and current liabilities in excess of current assets of \$98.0 million.

In response to the foregoing, we have carried out a review of our cash flow forecast for the twelve months ending December 31, 2013 and note the following:

- we believe that our operating cash flow will improve in 2013 and will be positive. We believe that our forecast is based on reasonable assumptions, including the following: (1) average selling prices will remain relatively stable through the year; (2) cost of raw materials will also remain relatively stable through the year; and (3) our liquidity position will benefit from the cash flows expected to be received from the sale of solar project assets beginning in the second half of 2013;
- after the end of 2012, we drew down construction financing from the Bank of China and Deutsche Bank AG, Canada of \$58.3 million (out of a credit facility totaling \$120.4 million, granted in April 2012) and \$27.3 million (out of a credit facility totaling \$139.4 million, granted in November 2012), respectively, to fund construction costs of our solar power projects in Canada;

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- we successfully obtained a new credit facility totaling \$40 million from Credit Suisse AG, Singapore in January 2013 and drew down this facility during the first quarter of 2013;
- we are working on additional financing arrangements with a number of international banks and Chinese banks; and
- while there can be no assurance that we will be able to refinance our short-term bank borrowings as they become due, historically, we have renewed or rolled over most of our short-term bank loans upon the maturity dates of these loans and we believe we will continue to be able to do so. Between January 1, 2013 and March 31, 2013, we renewed and drew down short-term bank borrowings of \$304.6 million, of which \$159.4 million is due beyond December 31, 2013.

Based on the above, we believe that adequate sources of liquidity will exist to fund our working capital and capital expenditures requirements and to meet our short term debt obligations and other liabilities and commitments as they become due.

We expect that our accounts receivable, inventories and project assets, three of the principal components of our current assets, will increase in line with increases in our net revenues. Due to market competition, in many cases, we offer credit terms to our customers ranging from 30 days up to 120 days with small advance payments ranging from 5% to 20% of the sale prices. The prepayments are recorded as current liabilities under advances from customers, and amounted to \$65.2 million as of December 31, 2011 and \$18.7 million as of December 31, 2012. As the market demand for our products has changed and as we have diversified our geographical markets, we have increased and may continue to increase credit term sales to creditworthy customers after careful review of their credit standings and accept export credit insurance by Sinasure.

Our inventories have increased due to the rapid growth of our operations and business. Our inventory turnover days increased from 65 days in 2011 to 94 days in 2012.

The following table sets forth a summary of our cash flows for the periods indicated:

	As of December 31,		
	2010	2011	2012
	(in thousands of \$)		
Net cash provided by (used in) operating activities	(58,487)	60,124	(147,759)
Net cash used in investing activities	(133,989)	(193,577)	(306,491)
Net cash provided by financing activities	312,629	177,748	249,576
Net increase (decrease) in cash and cash equivalents	128,541	55,343	(202,027)
Cash and cash equivalents at the beginning of the year	160,111	288,652	343,995
Cash and cash equivalents at the end of the year	288,652	343,995	141,968

### *Operating Activities*

Net cash used in operating activities was \$147.8 million in 2012 compared to net cash provided by operating activities of \$60.1 million in 2011. The year-over-year decrease in operating cash flow was primarily due to the increased use of cash to expand our total solution business. The net cash used in operating activities in 2012 included payments of \$162.3 million relating to the acquisition of solar power projects. The decrease in operating cash flow in 2012 was partially offset by the effect of continued improvement in our working capital management.

Net cash used in operating activities of \$58.5 million in 2010 increased to net cash provided by operating activities of \$60.1 million in 2011. The increase from 2010 to 2011 was primarily due to

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strengthened working capital management which led to increases in accounts payable, short-term notes payable and advances from customers, partially offset by increases in accounts receivable.

***Investing Activities***

Net cash used in investing activities increased from \$193.6 million in 2011 to \$306.5 million in 2012. The increase in net cash used in investing activities in 2012 was due to increase in restricted cash as collateral to secure our bank acceptances and bank borrowings, partially offset by decreased payments to acquire property, plant and equipment.

Net cash used in investing activities increased from \$134.0 million in 2010 to \$193.6 million in 2011. The increase was primarily due to an increase in property, plant and equipment as a result of improvements of our solar cell manufacturing capacity, technology and other projects offset in part by a decrease in restricted cash in 2011.

***Financing Activities***

Net cash provided by financing activities increased from \$177.7 million in 2011 to \$249.6 million in 2012. The increase in net cash provided by financing activities in 2012 was primarily due to a net increase in bank borrowings.

Net cash provided by financing activities decreased from \$312.6 million in 2010 to \$177.7 million in 2011, primarily as a result of reduced net proceeds from short-term borrowings in 2011.

We believe that our current cash and cash equivalents, anticipated cash flow from operations and existing banking facilities will be sufficient to meet our anticipated cash needs, including our cash needs for working capital and capital expenditures, for the 12 months ending December 31, 2013, under our current market guidance. We may, however, require additional cash due to changing business conditions or other future developments, including any investments or acquisitions we may decide to pursue. The availability of commercial loans from Chinese commercial banks may be affected by administrative policies of the PRC government, which in turn may affect our plans for business expansion. If our existing cash or the availability of commercial bank borrowings is insufficient to meet our requirements, we may seek to sell additional equity securities or debt securities or borrow from other sources. We cannot assure that financing will be available in the amounts we need or on terms acceptable to us, if at all. The issuance of additional equity securities, including convertible debt securities, would dilute the holdings our shareholders. The incurrence of debt would divert cash for working capital and capital expenditures to service debt obligations and could result in operating and financial covenants that restrict our operations and our ability to pay dividends to our shareholders. If we are unable to obtain additional equity or debt financing as required, our business operations and prospects may suffer.

***Capital Expenditures***

We made capital expenditures of \$134.3 million, \$205.4 million and \$60.5 million in 2010, 2011 and 2012, respectively. Our capital expenditures were used primarily to expand our manufacturing capacity for ingot, wafer, solar cells and solar modules. As of December 31, 2012, our short-term commitments for the purchase of property, plant and equipment were \$3.2 million.

***Restricted Net Assets***

Our PRC subsidiaries are required under PRC laws and regulations to make appropriations from net income as determined under accounting principles generally accepted in the PRC, or PRC GAAP, to non-distributable reserves, which include a general reserve, staff welfare and bonus reserve. The general reserve is required to be made at not less than 10% of the profit after tax as determined under PRC GAAP. Our board of directors determines the staff welfare and bonus reserve. The general

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reserve is used to offset future extraordinary losses. Our PRC subsidiaries may, upon a resolution of the board of directors, convert the general reserve into capital. The staff welfare and bonus reserve is used for the collective welfare of the employees of the PRC subsidiaries. These reserves represent appropriations of the retained earnings determined under PRC law. In addition to the general reserve, our PRC subsidiaries are required to obtain approval from the local government authorities prior to decreasing and distributing any registered share capital to their shareholders. Accordingly, both the appropriations to general reserve and the registered share capital of our PRC subsidiaries are considered as restricted net assets. These restricted net assets amounted to \$491.2 million, \$354.0 million and \$360.0 million as of December 31, 2010, 2011 and 2012, respectively.

Our operations in China are subject to certain restrictions on the transfer and use of cash within the Company. Transfers of cash between our PRC subsidiaries and the Canadian parent company are restricted to normal trade business payments and any further capital contribution from the Canadian parent company only under China's existing foreign currency regulations. 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 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 Chinese subsidiaries to obtain foreign exchange through equity financing.

As of December 31, 2012, \$116.3 million of undistributed earnings in our PRC subsidiaries are considered to be indefinitely reinvested so that no provision of withholding taxes has been provided in our consolidated financial statements. Our PRC subsidiaries are required to make appropriations of at least 10% of net income, as determined under accounting principles generally accepted in the PRC, to a non-distributable general reserve. After making this appropriation, the balance of the \$116.3 million of undistributed earnings is distributable. Should our PRC subsidiaries subsequently distribute the distributable earnings, they are subject to applicable withholding taxes to the PRC State Administration of Tax.

### **C. Research and Development**

We have significantly expanded our research and development activities since 2009. We have two new research and development centers with state-of-the-art equipment—the Center for Solar Cell Research and the Center for Photovoltaic Testing and Reliability Analysis. The Center for Solar Cell Research is focused on developing new high efficiency solar cells and advanced solar cell processing technologies. The Center for Photovoltaic Testing and Reliability Analysis is focused on photovoltaic module testing, photovoltaic module components testing and qualifications, and photovoltaic module performance and reliability testing and analysis. As of December 31, 2012, we had approximately 187 employees in research, product development and engineering.

Our research and development activities have generally focused on the following areas:

- improving the conversion efficiency of solar cells and developing new cell structures and technologies for high conversion efficiency;
- developing modules with improved design and assembly methods employing back contact technology, such as metal wrap-through cells. Such modules will employ new structures and produce higher power output;
- improving manufacturing yield and reliability of solar modules and reducing manufacturing costs;
- developing modules with improved power conversion devices integrated into the construction of the module including a variety of micro-inverters and DC-to-DC power converters;

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- testing, data tracing and analysis for module performance and reliability;
- designing and developing more efficient specialty solar modules and products to meet customer requirements;
- developing new methods and equipment for analysis and quality control of incoming materials (such as polysilicon, wafers and cells);
- developing new technologies in ingot growth and characterization, wafering, cell processing and module manufacturing that make use of low-cost alternative silicon materials such as solar grade silicon; and
- improving the wafer quality and production yield for both conventional wafer and e-wafer processing.

Our research and development team works closely with our manufacturing teams and our suppliers, partners and customers. We have also established collaborative research and development relationships with a number of companies, universities and research institutes, including DuPont, Shanghai Jiaotong University and the University of Toronto.

Going forward, we will focus on the following research and development initiatives that we believe will enhance our competitiveness:

- *High efficiency cells.* We have developed ESE and metal wrap-through cells, which we have begun commercializing. We are focusing our current research and development on N-type, heterojunction intrinsic thin-layer and other high efficiency cell designs. On a test basis, we have produced an N-type bi-facial cell; however, we do not plan to commercially produce this product until a later date. Such cell structures are believed to lower the overall cost of manufacturing solar modules, making the resulting modules cheaper to install. Higher-powered modules might also command a modest premium.
- *Solar grade silicon materials technologies and high efficiency cell technologies.* We began the mass production of solar grade silicon crystalline modules, namely e-Modules, in April 2008, and have been working on improving new technologies in ingot, wafer, cell and module manufacturing using solar grade silicon. With our continuous efforts to optimize solar grade silicon material preparation, ingot growth, wafering and cell processing, we anticipate additional increases in our solar grade silicon cell efficiency, and expect that with our new solar grade silicon cell design, our solar grade silicon cell could reach conversion efficiency close to that of conventional multi-crystalline cells.
- *Solar module manufacturing technologies.* With the opening of our Center for Photovoltaic Testing and Reliability Analysis in 2006, we intend to focus on developing state-of-the-art testing and diagnostic techniques that improve solar module production yield, efficiency, performance and durability.
- *Product development of specialty solar modules and products.* We are expanding our product development capabilities for specialty solar modules and products to position ourselves for the expected growth in this area of the solar power market. For example, we are collaborating with a research institute in China to develop a concentrator module technology and a glass curtain wall company based in China to develop BIPV technology. In 2008, we completed a BIPV project in our Luoyang plant. We also supplied BIPV modules and other BIPV related design elements for a project for the Beijing Olympic Games.
- *Power system integration and solar application products.* We recently began to explore power system integration products and expanded our research and development efforts in solar application products.

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- *Solar power system development, energy storage system, off-grid power system, micro grid system and smart grid system.* As we continue our business into downstream total solution business, we plan to hire additional engineering staff and increase investment in these areas.

**D. Trend Information**

Other than as disclosed elsewhere in this annual report on Form 20-F, we are not aware of any trends, uncertainties, demands, commitments or events that are reasonably likely to have a material adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

**E. Off Balance Sheet Arrangements**

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholder's equity, or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or that engages in leasing, hedging or research and development services with us.

**F. Tabular Disclosure of Contractual Obligations**

*Contractual Obligations and Commercial Commitments*

The following table sets forth our contractual obligations and commercial commitments as of December 31, 2012:

	Payment Due by Period				
	Total	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
	(In thousands of US\$)				
Short-term debt obligations	858,927	858,927	—	—	—
Interest related to short-term debt obligations <sup>(1)</sup>	14,010	14,010	—	—	—
Operating lease obligations	15,564	4,691	4,605	2,676	3,592
Purchase obligations <sup>(2)</sup>	857,202	268,464	588,738	—	—
Other long-term borrowing <sup>(3)</sup>	214,563	—	85,144	129,419	—
Interest related to long-term debt <sup>(4)</sup>	48,812	14,214	21,836	12,762	—
<b>Total</b>	<b>2,009,078</b>	<b>1,160,306</b>	<b>700,323</b>	<b>144,857</b>	<b>3,592</b>

(1) Interest rates range from 0.66% to 7.26% per annum for short-term debt.

(2) Includes commitments to purchase production equipment of \$3.2 million, commitments to purchase equity interest of two solar projects of \$17.6 million and commitments to purchase solar cells, wafers and silicon raw materials of \$836.4 million.

(3) The other long-term borrowings mainly consist of the following items: unsecured commercial loans with Agricultural Bank of China of \$40 million and China Development Bank of \$70 million; secured commercial loans with Agricultural Bank of China of \$38 million and Bank of Communication of \$34 million.

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- (4) Interest rates range from 0.90% to 7.05% per annum for long-term borrowings.

The table above excludes uncertain tax liabilities of \$14.8 million, as we are unable to reasonably estimate the timing of future payments due to uncertainties in the timing of the effective settlement of these tax positions. For additional information, see the notes to our consolidated financial statements, included herein.

In April 2012, we entered into a purchase agreement with SkyPower to acquire a majority interest in 16 solar projects for a total consideration of approximately C\$185 million (\$186 million), of which \$69.8 million were paid upon the closing conditions, \$69.8 million were paid on May 31, 2012 and the balance will be paid as the solar projects reach certain milestones.

Other than the contractual obligations and commercial commitments set forth above, we did not have any long-term debt obligations, operating lease obligations, purchase obligations or other long-term liabilities as of December 31, 2012.

### **G. Safe Harbor**

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 statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. You can identify these forward-looking 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 supply and demand for solar power products and the market demand for our products;
- our beliefs regarding the importance of environmentally friendly power generation;
- our expectations regarding governmental support for solar power;
- our beliefs regarding the fluctuation in availability of silicon, solar wafers and solar cells;
- our beliefs regarding our ability to resolve our disputes with suppliers with respect to our long-term supply agreements;
- our beliefs regarding the continued growth of the solar power industry;
- our beliefs regarding the competitiveness of our solar module products;
- 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 beliefs and expectations regarding the use of UMG-Si and solar power products made of this material;
- 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 silicon and solar cells to support our solar module production;
- our beliefs regarding the effects of environmental regulation;

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- our beliefs regarding the changing competitive landscape in the solar power industry;
- our future business development, results of operations and financial condition; and
- competition from other manufacturers of solar power products and conventional energy suppliers.

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 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 these factors on our business or the extent to which any factor, or combination of factors, may cause actual result 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.

**ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES**

**A. Directors and Senior Management**

The following table sets forth information regarding our directors and executive officers as of the date of this annual report on Form 20-F.

<u>Name</u>	<u>Age</u>	<u>Position/Title</u>
Shawn (Xiaohua) Qu	49	Chairman of the Board, President and Chief Executive Officer
Robert McDermott	71	Lead Independent Director
Lars-Eric Johansson	66	Independent Director
Harry E. Ruda	54	Independent Director
Michael G. Potter	46	Senior Vice President, Chief Financial Officer and Director
Guangchun Zhang	55	Chief Operation Officer
Charlotte Xi Klein	57	Senior Vice President, Global Operations
Yan Zhuang	49	Senior Vice President and Chief Commercial Officer

**Directors**

*Dr. Shawn (Xiaohua) Qu* has served as our chairman, president and chief executive officer since founding our company in October 2001. Through his leadership, we became a public listed company on NASDAQ in 2006 and have since firmly established ourselves among the top ranked manufacturers of solar photovoltaic products globally. Prior to founding Canadian Solar, Dr. Qu held various positions in product engineering, business development and strategic planning at ATS Automation Tooling Systems, Inc., or ATS, and its solar subsidiary Photowatt International S.A. Prior to ATS, Dr. Qu was a research scientist at Ontario Power Generation where he worked as a process leader in its solar product commercialization team. In 2011, Dr. Qu became a visiting professor at Tsinghua University, one of the most prestigious universities in China. Dr. Qu has published research articles in academic journals including IEEE Quantum Electronics, Applied Physics Letter and Physical Review. He received a Ph.D. in material sciences in 1995 from the University of Toronto, focusing on semiconductor super lattice and optical effects. He also holds a Master of Science in physics from University of Manitoba and a Bachelor of Science in applied physics from Tsinghua University in Beijing.

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*Mr. Robert McDermott* has served as lead independent director of our Company since August 2006. Mr. McDermott is a corporate director and consultant. Before July 2011, he was a partner with McMillan LLP, a business law firm based in Canada, where he practiced business law, with an emphasis on mergers and acquisitions, securities and corporate finance, and advised boards and special committees of public companies on corporate governance matters. He is now a counsel to the firm. Mr. McDermott was admitted to the Ontario Bar in Canada in 1968. He has a Juris Doctor degree from the University of Toronto in 1966 and a Bachelor of Arts degree from the University of Western Ontario in 1963.

*Mr. Lars-Eric Johansson* has served as an independent director of our Company since August 2006. Mr. Johansson has worked in finance and controls positions for more than thirty years in Sweden and Canada. He has been the president and chief executive officer of Ivanplats Limited (formerly known as Ivanhoe Nickel & Platinum Ltd.), a Canadian public mining company since May 1, 2007. From 2004 to 2007, Mr. Johansson was a director and chairperson of the audit committee of Harry Winston Diamond Corporation, a specialist diamond company with assets in the mining and retail segments of the diamond industry. From May 2004 to April 2006, he was an executive vice president and the chief financial officer of Kinross Gold Corporation, a gold mining company dually listed on the Toronto Stock Exchange and the New York Stock Exchange. Between June 2002 and November 2003, Mr. Johansson was an executive vice president and chief financial officer of Noranda Inc., a Canadian mining company dually listed on the Toronto Stock Exchange and the New York Stock Exchange. Until May 2004, Mr. Johansson served as a special advisor at Noranda Inc. From 1989 to May 2002, he was the chief financial officer of Falconbridge Limited, a mining and metals company in Canada listed on the Toronto Stock Exchange. He has chaired the audit committee of Golden Star Resources Ltd., a gold mining company dually listed on the Toronto Stock Exchange and American Stock Exchange, from 2006 to 2010. From 2002 to 2003, he was also a director of Novicor Inc., a company listed on the Toronto Stock Exchange. Mr. Johansson holds an MBA, with a major in finance and accounting, from Gothenburg School of Economics in Sweden.

*Dr. Harry E. Ruda* has served as an independent director since July 2011. He is the Director of the Centre for Advanced Nanotechnology, the Stanley Meek Chair in Nanotechnology and Professor of Applied Science and Engineering at the University of Toronto, Canada. From 1982 to 1984, he developed one of the first theories for electron transport in selectively doped two dimensional electron gas heterostructures, while working as an IBM post-doctoral fellow. From 1984 to 1989, he was a senior scientist at 3M Corporation, developing some of the first models for electronic transport and optical properties of wide bandgap II-VI semiconductors. Dr. Ruda joined the faculty of the University of Toronto in 1989 in the Material Science and Engineering and Electrical and Computer Engineering Departments. His research interests focus on the fabrication and modeling of semiconductor nanostructures with applications in the fields of optoelectronics and sensing. Dr. Ruda is one of the founders of a Canadian National Centre of Excellence in Photonics. He has served on the National Science and Engineering Council of Canada and on other government panels, including those of the DOE, EPA and NSF in the United States and the RAE and EPSRC in the UK. Dr. Ruda is a Fellow of the Royal Society of Canada. He obtained his PhD in semiconductor physics from the Massachusetts Institute of Technology in 1982.

*Mr. Michael G. Potter* served as an independent director of our Company from September 2007 until he was appointed our senior vice president and chief financial officer in July 2011. He continued as a director. Mr. Potter has worked in finance, controlling and audit positions with a variety of multinational companies for over 20 years. From February 2009 to April 2011, he served as the corporate vice president and chief financial officer of Lattice Semiconductor Corporation, a Nasdaq-listed semiconductor device company. Prior to that, he was senior vice president and chief financial officer of NYSE-listed NeoPhotonics Corporation, a leading provider of photonic integrated circuit-based modules, components and subsystems for use in optical communications networks with extensive

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operations in Shenzhen, China. Before joining NeoPhotonics Corporation in May 2007, he was the senior vice president and chief financial officer of STATS ChipPAC, a semiconductor assembly and test services company based in Singapore and listed on the Singapore Stock Exchange. Before that, he held a variety of executive positions at NYSE-listed Honeywell Inc. Mr. Potter is a Chartered Accountant and holds a Bachelor of Commerce degree from Concordia University, Canada and a Diploma of Accountancy from McGill University, Canada.

### ***Executive Officers***

*Mr. Guangchun Zhang* has served as our chief operation officer since December 2012 and has over 18 years of experience in the photovoltaic industry. Prior to joining us, Mr. Zhang worked for Suntech Power Holdings Co., Ltd, most recently as senior vice president for research and development and industrialization of manufacturing technology since December 2005. Prior to joining Suntech, Mr. Zhang previously worked at the Centre for Photovoltaic Engineering at the University of New South Wales in Australia and Pacific Solar Pty. Limited from June 1994 to November 2005. Mr. Zhang was an associate professor in Shandong Technology University in China from February 1982 to May 1994. Mr. Zhang received his bachelor degree in 1982 from the School of Electronic Engineering at Shandong Industrial Institute.

*Ms. Charlotte Xi Klein* has served as our senior vice president of global operations since July 2011. Prior to that, she has served as our vice president of global operations from November 2009 to July 2011, vice president of finance from August 2008 to November 2009 and our compliance officer from September 2007 to November 2009. She also served as our corporate controller from February 2007 to July 2008. Prior to joining us, between 2004 and 2007, Ms. Xi Klein was director of accounting and compliance at ARAMARK Corporation, a Fortune 500 company, and TV Guide Magazine in the United States, responsible for financial reporting and successfully implementing Sarbanes-Oxley compliance during the first year of its applicability. In addition to her corporate reporting experience, Ms. Xi Klein spent eight years in manufacturing facilities with progressive job responsibilities from cost accountant to plant controller for Saint-Gobain Corporation and Armstrong World Industries. Ms. Xi Klein holds a bachelor's degree from the Shanghai Teachers University and MA and MBA degrees from the Midwestern State University in Texas. She is also a member of the AICPA and has been a Texas-licensed CPA since 1996.

*Mr. Yan Zhuang* has served as our chief commercial officer since May 2012. He has also served as our senior vice president of global sales and marketing since July 2011, and prior to that as our vice president of global sales and marketing since June 2009. He was an independent director of our Company from September 2007 to June 2009. Mr. Zhuang has worked in corporate branding, sales and marketing positions with, or provided consulting services to, a variety of multinational companies for over 15 years. In 2008, he founded and became a director of INS Research and Consulting. Mr. Zhuang was the head of Asia for Hands-on Mobile, Inc., a global media and entertainment company with operations in China, South Korea and India, from 2006 to 2007. He previously served as our senior vice president of business operations and marketing in Asia. Before joining Hands-on Mobile, Inc., he held various marketing and business operation positions with Motorola Inc., including as its Asia Pacific regional director of marketing planning and consumer insight. Prior to that, he was a marketing consultant in Canada and China. Mr. Zhuang holds a bachelor's degree in electrical engineering from Northern Jiaotong University, China, a Master of Science degree in applied statistics from the University of Alberta, Canada and a Master of Science degree in marketing management from the University of Guelph, Canada.

### ***Duties of Directors***

Under our governing statute, our directors have a duty of loyalty to act honestly and in good faith with a view to our best interests. They also have a duty to exercise the care, diligence and skill that a

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reasonably prudent person would exercise in comparable circumstances. A shareholder has the right to seek damages if a duty owed by our directors is breached. The functions and powers of our board of directors include, among others:

- convening shareholder meetings and reporting to shareholders at such meetings;
- declaring dividends and authorizing other distributions to shareholders;
- appointing officers and determining the term of office of officers;
- exercising the borrowing powers of our company and mortgaging the property of our company; and
- approving the issuance of shares.

**B. Compensation of Directors and Executive Officers**

*Cash Compensation*

We paid our directors and executive officers aggregate cash remuneration, including salaries, bonuses and benefits in kind, of approximately \$1.8 million for 2012. Of this amount, we paid \$166,500 to our three independent directors and approximately \$1.7 million to our executive officers.

*Share-based Compensation*

*Share Incentive Plan*

In March 2006, we adopted a share incentive plan, or the Plan.

The purpose of the Plan is to promote the success and enhance the value of the Company by linking the personal interests of the directors, officers and employees to those of the shareholders and providing the directors, officers and employees with an incentive for outstanding performance to generate superior returns to the shareholders. The Plan is also intended to motivate, attract and retain the services of the directors, officers and employees upon whose judgment, interest and effort the successful conduct of the Company's operations is largely dependent.

In September 2010, the shareholders approved an amendment to the Plan to increase the maximum number of common shares which may be issued pursuant to all awards of restricted shares, options and restricted share units under the Plan to the sum of (i) 2,330,000 plus (ii) the sum of (a) 1% of the number of our outstanding common shares on the first day of each of 2007, 2008 and 2009 plus (b) 2.5% of our outstanding common shares on the first day of each calendar year after 2009. As at March 31, 2013, the maximum number of common shares which may be issued pursuant to all awards of restricted shares, options and restricted share units under the Plan was 7,530,000 common shares, of which 566,190 restricted shares, 3,473,046 options, and 2,834,213 restricted share units (in each case net of forfeitures) have been awarded, leaving 656,551 common shares available to be issued.

The following describes the principal terms of the Plan.

*Types of Awards.* We may make the following types of awards under the Plan:

- restricted shares, which are common shares that are subject to certain restrictions and may be subject to risk of forfeiture or repurchase;
- options, which entitle the holder to purchase our common shares; and
- restricted share units, which entitle the holder to receive our common shares

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**Plan Administration.** The Compensation Committee of our board of directors administers the Plan, except with respect to awards made to our non-employee directors, where the entire board of directors administers the Plan. The Compensation Committee or the full board of directors, as appropriate, determines the provisions, terms, and conditions of each award.

**Award Agreement.** Awards are evidenced by an award agreement that sets forth the terms, conditions and limitations for each award.

**Eligibility.** We may grant awards to employees, directors and consultants of our Company or any of our related entities, which include our subsidiaries and any entities in which we hold a substantial ownership interest. We may, however, grant options that are intended to qualify as incentive share options only to our employees.

**Acceleration of Awards upon Corporate Transactions.** Outstanding awards will accelerate upon a change-of-control where the successor entity does not assume our outstanding awards. In such event, each outstanding award will become fully vested and immediately exercisable, the transfer restrictions on the awards will be released and the repurchase or forfeiture rights will terminate immediately before the date of the change-of-control transaction.

**Exercise Price and Term of Options.** In general, the Compensation Committee determines the exercise price of an option and sets out the price in the award agreement. The exercise price may be a fixed or variable price related to the fair market value of our common shares. If we grant an incentive share option to an employee who, at the time of that grant, owns shares representing more than 10% of the voting power of all classes of our share capital, the exercise price cannot be less than 110% of the fair market value of our common shares on the date of that grant and the share option is exercisable for no more than five years from the date of that grant.

The term of an award may not exceed ten years from the date of the grant.

**Vesting Schedule.** In general, the Compensation Committee determines the vesting schedule.

### **Restricted Shares**

The following table summarizes, as of March 31, 2013, the restricted shares granted under the Plan to our executive officers and to other individuals, individually and each as a group. We have not granted any restricted shares to our directors. The restricted shares granted in May 2006 vested over a two-year period beginning in March 2006. The vesting periods for all other restricted shares are indicated in the notes below.

Name	Restricted Shares Granted	Restricted Shares Vested	Restricted Shares Forfeited	Date of Grant	Expiration
<b>Employees</b>					
Twelve individuals as a group	330,860	330,860	—	May 30, 2006	May 29, 2016
Hanbing Zhang <sup>(3)</sup>	116,500 <sup>(4)</sup>	116,500	—	July 28, 2006	July 27, 2016
<b>Employees as a group</b>	<b>447,360</b>	<b>447,360</b>	—		
<b>Other Individuals</b>					
One individual	2,330 <sup>(1)</sup>	2,330	—	May 30, 2006	May 29, 2016
One individual	116,500 <sup>(2)</sup>	116,500	—	June 30, 2006	June 29, 2016
<b>Other Individuals as a group</b>	<b>118,830</b>	<b>118,830</b>	—		
<b>Total Restricted Shares</b>	<b>566,190</b>	<b>566,190</b>	—		

(1) Vest on accelerated termination.

(2) Vest over a two-year period from the date of grant.

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- (3) The wife of Dr. Qu, our founder, president, chairman and chief executive officer.
- (4) Vest over a four-year period from the date of grant.

**Options**

The following table summarizes, as of March 31, 2013, the options granted under the Plan to our directors and executive officers and to other individuals, individually and as a group. The options granted in May 2006 vest over a four-year period beginning in March 2006. Unless otherwise noted, all other options granted vest over a four-year period (one-quarter on each anniversary date) from the date of grant, and exercise prices are equal to the average of the trading prices of the common shares for the five trading days preceding the date of grant.

<b>Name</b>	<b>Common Shares Underlying Options Granted</b>	<b>Common Shares Underlying Options Exercised</b>	<b>Common Shares Underlying Options Forfeited</b>	<b>Common Shares Underlying Options Outstanding</b>	<b>Exercise Price (\$ per Share)</b>	<b>Date of Grant</b>	<b>Date of Expiration</b>
<b>Directors:</b>							
Shawn							
(Xiaohua) Qu	20,000	—	—	20,000	3.18	March 12, 2009	March 11, 2019
	25,000	—	—	25,000	11.33	August 27, 2010	August 26, 2020
	18,779	—	—	18,779	9.33	May 20, 2011	May 19, 2021
Robert							
McDermott	46,600 <sup>(1)</sup>	—	—	46,600	15.00 <sup>(3)</sup>	August 8, 2006	August 7, 2016
	23,300 <sup>(2)</sup>	23,300	—	—	9.88	July 1, 2007	June 30, 2017
	23,300 <sup>(2)</sup>	—	—	23,300	41.75 <sup>(4)</sup>	June 26, 2008	June 25, 2018
	23,300 <sup>(2)</sup>	—	—	23,300	13.75 <sup>(4)</sup>	June 29, 2009	June 28, 2019
	23,300 <sup>(2)</sup>	—	—	23,300	12.09 <sup>(4)</sup>	September 20, 2010	September 19, 2020
	23,300 <sup>(2)</sup>	—	—	23,300	9.81 <sup>(4)</sup>	June 27, 2011	June 26, 2021
	23,300 <sup>(2)</sup>	—	—	23,300	3.03 <sup>(4)</sup>	June 11, 2012	June 10, 2022
Lars-Eric							
Johansson	46,600 <sup>(2)</sup>	25,000	—	21,600	15.00 <sup>(3)</sup>	August 8, 2006	August 7, 2016
	23,300 <sup>(2)</sup>	—	—	23,300	9.88 <sup>(4)</sup>	July 1, 2007	June 30, 2017
	23,300 <sup>(2)</sup>	—	—	23,300	41.75 <sup>(4)</sup>	June 26, 2008	June 25, 2018
	23,300 <sup>(2)</sup>	—	—	23,300	13.75 <sup>(4)</sup>	June 29, 2009	June 28, 2019
	23,300 <sup>(2)</sup>	—	—	23,300	12.09 <sup>(4)</sup>	September 20, 2010	September 19, 2020
	23,300 <sup>(2)</sup>	—	—	23,300	9.81 <sup>(4)</sup>	June 27, 2011	June 26, 2021
	23,300 <sup>(2)</sup>	—	—	23,300	3.03 <sup>(4)</sup>	June 11, 2012	June 10, 2022
Harry E.							
Ruda	23,300 <sup>(2)</sup>	—	—	23,300	8.31 <sup>(4)</sup>	August 14, 2011	August 13, 2021
	23,300 <sup>(2)</sup>	—	—	23,300	3.03 <sup>(4)</sup>	June 11, 2012	June 10, 2022
Michael G.							
Potter	23,300 <sup>(2)</sup>	—	—	23,300	7.36 <sup>(4)</sup>	September 24, 2007	September 23, 2017
	23,300 <sup>(2)</sup>	—	—	23,300	41.75 <sup>(4)</sup>	June 26, 2008	June 25, 2018
	23,300 <sup>(2)</sup>	—	—	23,300	13.75 <sup>(4)</sup>	June 29, 2009	June 28, 2019
	23,300 <sup>(2)</sup>	—	—	23,300	12.09 <sup>(4)</sup>	September 20, 2010	September 19, 2020
	23,300 <sup>(2)</sup>	—	—	23,300	9.81 <sup>(4)</sup>	June 27, 2011	June 26, 2021
	60,688	—	—	60,688	9.52	July 20, 2011	July 19, 2021
<b>Directors as a Group</b>	<b>660,367</b>	<b>48,300</b>	<b>—</b>	<b>612,067</b>			
<b>Executive Officers:</b>							
Charlotte Xi							
Klein	46,600	34,950	—	11,650	12.10	March 1, 2007	February 28, 2017
	11,652 <sup>(5)</sup>	11,652	—	—	7.36	September 24, 2007	September 23, 2017
	12,000	3,000	—	9,000	3.18	March 12, 2009	March 11, 2019
	40,000	—	—	40,000	16.10	November 8, 2009	November 7, 2019

	15,000	—	—	15,000	11.33	August 27, 2010	August 26, 2020
	11,268	—	—	11,268	9.33	May 20, 2011	May 19, 2021
Yan Zhuang	23,300 <sup>(2)</sup>	23,300	—	—	7.36	September 24, 2007	September 23, 2017
	23,300 <sup>(2)</sup>	—	—	23,300	41.75	June 26, 2008	June 25, 2018
	80,000	—	—	80,000	9.37	May 23, 2009	May 22, 2019
	15,000	—	—	15,000	11.33	August 27, 2010	August 26, 2010
	11,268	—	—	11,268	9.33	May 20, 2011	May 19, 2021
<b>Executive Officers as a Group</b>	<b>289,388</b>	<b>72,902</b>	<b>—</b>	<b>216,486</b>			

**Employees:**

Ten employees as a group	791,035	398,626	121,160	271,249	2.12	May 30, 2006	May 29, 2016
Twenty-eight employees as a group	126,170	48,380	33,202	44,588	4.29	May 30, 2006	May 29, 2016
One employee	2,330 <sup>(6)</sup>	2,330	—	—	4.29	May 30, 2006	May 29, 2016
Two employees as a group	51,260	47,765	—	3,495	4.29	June 30, 2006	June 29, 2016
One employee	64,075	64,075	—	—	4.29	July 17, 2006	July 16, 2016
Hanbing Zhang <sup>(7)</sup>	46,600	—	—	46,600	4.29	July 28, 2006	July 27, 2016
One employee	46,600 <sup>(1)</sup>	46,600	—	—	4.29	August 8, 2006	August 7, 2016

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<b>Name</b>	<b>Common Shares Underlying Options Granted</b>	<b>Common Shares Underlying Options Exercised</b>	<b>Common Shares Underlying Options Forfeited</b>	<b>Common Shares Underlying Options Outstanding</b>	<b>Common Shares Underlying Exercise Price (\$ per Share)</b>	<b>Date of Grant</b>	<b>Date of Expiration</b>
One employee	58,250	14,563	—	43,687	12.00 <sup>(8)</sup>	August 8, 2006	August 7, 2016
Three employees as a group	11,650	5,079	1,747	4,824	12.00 <sup>(8)</sup>	August 31, 2006	August 30, 2016
Two employees as a group	33,300	11,650	21,650	—	12.10	March 1, 2007	February 28, 2017
One employee	6,990	1,748	5,242	—	12.10	March 1, 2007	February 28, 2017
One employee	23,300 <sup>(2)</sup>	23,300	—	—	9.88 <sup>(4)</sup>	July 1, 2007	June 30, 2017
Five employees as a group	52,280	5,413	41,867	5,000	8.21	August 17, 2007	August 16, 2017
Seven employees as a group	27,556	22,724	4,832	—	7.36	September 24, 2007	September 23, 2017
Thirteen employees as a group	216,745	111,443	64,982	40,320	7.36	September 24, 2007	September 23, 2017
Six employees as a group	36,136	—	11,136	25,000	19.55	February 28, 2008	February 27, 2018
One employee	10,000	—	10,000	—	19.40	March 3, 2008	March 2, 2018
Two employees as a group	18,000	—	18,000	—	20.67	March 31, 2008	March 30, 2018
One employee	30,000	—	30,000	—	46.28	June 26, 2008	June 25, 2018
Four employees as a group	30,000	—	15,000	15,000	27.88	August 7, 2008	August 6, 2018
Seventy-eight employees as a group	408,200	91,340	147,110	169,750	3.18	March 12, 2009	March 11, 2019
Hanbing Zhang <sup>(7)</sup>	6,000	—	—	6,000	3.18	March 12, 2009	March 11, 2019
One employee	20,000	2,500	—	17,500	5.26	March 30, 2009	March 29, 2019
Eighteen employees as a group	59,400	750	7,050	51,600	9.37	May 23, 2009	May 22, 2019
One employee	10,000	—	10,000	—	11.58	May 31, 2009	May 30, 2019
Seven employees as a group	30,800	—	17,600	14,400	15.18	August 6, 2009	August 5, 2019
Thirteen employees as a group	42,600	—	16,750	33,500	16.10	November 8, 2009	November 7, 2019
One hundred and thirty-one employees as a group	483,600	—	222,950	260,650	11.33	August 27, 2010	August 26, 2020
Hanbing Zhang <sup>(7)</sup>	12,000	—	—	12,000	11.33	August 27, 2010	August 26, 2020
One employee	100,000	—	100,000	—	15	October 8, 2010	October 7, 2020
One hundred and fifty-three employees as a group	236,000	—	62,200	173,800	15.24	November 14, 2010	November 13, 2020
Five employees as a group	32,900	—	4,200	28,700	13.99	March 5, 2011	March 4, 2021
Seventy-two employees							

as a group	341,796	—	88,266	253,530	9.33	May 20, 2011	May 19, 2021
Hanbing Zhang <sup>(7)</sup>	7,512	—	—	7,512	9.33	May 20, 2011	May 19, 2021
Five employees as a group	150,000	—	105,000	45,000	8.94	June 1, 2011	May 31, 2021
Twenty employees as a group	74,000	500	25,500	48,000	3.03	November 14, 2011	November 13, 2021
<b>Employees as a group</b>	<b>3,697,085</b>	<b>898,786</b>	<b>1,185,444</b>	<b>1,621,705</b>			
Two individuals as a group	11,650	—	—	11,650	15.00 <sup>(3)</sup>	April 13, 2007	April 12, 2017
<b>Individuals as a group</b>	<b>11,650</b>	<b>—</b>	<b>—</b>	<b>11,650</b>			
<b>Total Options</b>	<b>4,658,490</b>	<b>1,019,988</b>	<b>1,185,444</b>	<b>2,453,058</b>			

- (1) Vest in two equal installments, the first upon the date of grant and the second upon the first year anniversary of the date of grant as long as the director remains in service.
- (2) Vest immediately upon the date of grant.
- (3) The initial public offering price of the common shares.
- (4) Exercise price equal to the average of the trading prices of the common shares for the 20 trading days preceding the date of grant.
- (5) Vest one year after the date of grant.
- (6) Vesting accelerated on termination.
- (7) The wife of Dr. Qu, our founder, chairman, president and chief executive officer.
- (8) 80% of the initial public offering price of the common shares.

We have agreed to grant each of our independent directors, Robert McDermott, Lars-Eric Johansson and Harry E. Ruda, options to purchase 23,300 of our common shares immediately after each annual shareholder meeting at an exercise price equal to the average of the trading price of our common shares for the 20 trading days ending on such date. These options vest immediately.

### ***Restricted Share Units***

The following table summarizes, as of March 31, 2013, the restricted share units granted under the Plan to our executive officers and to other individuals, individually and each as a group. We have not granted any restricted share units to our independent directors. The restricted share units granted on

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May 8, 2011 vested on the anniversary of the date of grant. The other restricted share units granted vest over a four-year period (one-quarter on each anniversary date) from the date of grant.

Name	Restricted Share Units Granted	Restricted Share Units Vested	Restricted Share Units Forfeited	Date of Grant	Expiration
<b>Directors:</b>					
Shawn					
(Xiaohua)					
Qu	6,154 <sup>(1)</sup>	6,154	—	May 8, 2011	May 7, 2021
				May 20, 2011	May 19, 2021
	13,706 <sup>(2)</sup>	3,426	—	March 16, 2012	March 15, 2022
	75,075 <sup>(2)</sup>	18,768	—	March 9, 2013	March 8, 2023
	67,024 <sup>(2)</sup>	—	—		
Michael G.					
Potter	42,868 <sup>(2)</sup>	10,717	—	July 20, 2011	July 19, 2021
				March 16, 2012	March 15, 2022
	45,045 <sup>(2)</sup>	11,261	—	March 9, 2013	March 8, 2023
	40,214 <sup>(2)</sup>	—	—		
<b>Directors as a group</b>					
	<b>290,086</b>	<b>50,326</b>	<b>—</b>		
<b>Executive Officers</b>					
Guangchun					
Zhang	80,000 <sup>(2)</sup>	—	—	March 9, 2013	March 8, 2023
Charlotte Xi					
Klein	2,564 <sup>(1)</sup>	2,564	—	May 8, 2011	May 7, 2021
				May 20, 2011	May 19, 2021
	8,224 <sup>(2)</sup>	2,056	—	March 16, 2012	March 15, 2022
	45,045 <sup>(2)</sup>	11,261	—		
Yan Zhuang					
	2,564 <sup>(1)</sup>	2,564	—	May 8, 2011	May 7, 2021
				May 20, 2011	May 19, 2021
	8,224 <sup>(2)</sup>	2,056	—	March 16, 2012	March 15, 2022
	45,045 <sup>(2)</sup>	11,261	—	March 9, 2013	March 8, 2023
	40,214 <sup>(2)</sup>	—	—		
<b>Executive Officers as a group</b>					
	<b>231,880</b>	<b>31,763</b>	<b>—</b>		
<b>Employees</b>					
Eight employees as a group					
	11,280 <sup>(1)</sup>	8,204	3,076	May 8, 2011	May 7, 2021
One hundred					

and seventy- three employees as a group	415,577 <sup>(2)</sup>	90,009	91,152	May 20, 2011	May 19, 2021
One hundred and forty- six employees as a group	1,079,999 <sup>(2)</sup>	250,479	100,601	March 16, 2012	March 15, 2022
Four employees as a group	43,000 <sup>(2)</sup>	—	25,000	May 6, 2012	May 5, 2022
Three employees as a group	30,000 <sup>(2)</sup>	—	—	Aug 16, 2012	Aug 15, 2022
Two employees as a group	16,006 <sup>(2)</sup>	—	—	Aug 17, 2012	Aug 16, 2022
One hundred and thirty- eight employees as a group	889,406 <sup>(2)</sup>	—	—	March 9, 2013	March 8, 2023
Hanbing Zhang <sup>(3)</sup>	1,538 <sup>(1)</sup>	1,538	—	May 8, 2011	May 7, 2021
	5,482 <sup>(2)</sup>	1,371	—	May 20, 2011	May 19, 2021
	21,021 <sup>(2)</sup>	5,255	—	March 16, 2012	March 15, 2022
	18,767 <sup>(2)</sup>	—	—	March 9, 2013	March 8, 2023
<b>Employees as a group</b>	<b>2,532,076</b>	<b>356,856</b>	<b>219,829</b>		
<b>Total Restricted Share Units</b>	<b>3,054,042</b>	<b>438,944</b>	<b>219,829</b>		

- (1) Vest over a one-year period from the date of grant.
- (2) Vest over a four-year period from the date of grant.
- (3) The wife of Dr. Qu, our founder, president, chairman and chief executive officer.

**C. Board Practices**

In 2012, our board of directors held six meetings and passed nine resolutions by unanimous written consent.

*Terms of Directors and Executive Officers*

Our officers are appointed by and serve at the discretion of our board of directors. Our current directors have not been elected to serve for a specific term and, unless re-elected, hold office until the close of our next annual meeting of shareholders or until such time as their successors are elected or appointed.

*Committees of the Board of Directors*

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee.

*Audit Committee*

Our audit committee comprises Messrs. Lars-Eric Johansson, Robert McDermott and Harry E. Ruda, and is chaired by Mr. Johansson. Mr. Johansson qualifies as an "audit committee financial expert" as required by the SEC. Each of Messrs. Johansson, McDermott and Ruda satisfies the "independence" requirements of the NASDAQ corporate governance rules and is "financially literate" as required by the NASDAQ rules. The audit committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company.

The audit committee is responsible for, among other things:

- selecting our independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by our independent auditors;
- reviewing with our independent auditors any audit problems or difficulties and management's responses;
- reviewing and approving all proposed related-party transactions, as defined in Item 404 of Regulation S-K under the Securities Act;
- discussing the annual audited financial statements with management and our independent auditors;
- reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of material control deficiencies;
- annually reviewing and reassessing the adequacy of our audit committee charter;
- such other matters that are specifically delegated to our audit committee by our board of directors from time to time;
- meeting separately and periodically with management and our internal and independent auditors; and
- reporting regularly to the full board of directors.

In 2012, our audit committee held six meetings, and passed no resolution by unanimous written consent.

*Compensation Committee*

Our compensation committee consists of Messrs. Lars-Eric Johansson, Robert McDermott and Harry E. Ruda and is chaired by Mr. McDermott. Each of Messrs. Johansson, McDermott and Ruda satisfies the "independence" requirements of the NASDAQ corporate governance rules. The compensation committee assists the board in reviewing and approving the compensation structure for our directors and executive officers, including all forms of compensation to be provided to our directors and executive officers. Members of the compensation committee are not prohibited from direct involvement in determining their own compensation. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer, evaluating the performance of our chief executive officer in light of those goals and objectives, and setting the compensation level of our chief executive officer based on this evaluation;
- reviewing and approving the compensation arrangements for our other executive officers and our directors; and
- overseeing and periodically reviewing the operation of our employee benefits plans, including bonus, incentive compensation, stock option, pension and welfare plans.

In 2012, our compensation committee held four meetings and passed two resolutions by unanimous written consent.

*Nominating and Corporate Governance Committee*

Our nominating and corporate governance committee consists of Messrs. Lars-Eric Johansson, Robert McDermott and Harry E. Ruda and is chaired by Mr. McDermott. Each of Messrs. Johansson, McDermott and Ruda satisfies the "independence" requirements of the NASDAQ corporate governance rules. The nominating and corporate governance committee assists the board of directors in identifying individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating and corporate governance committee is responsible for, among other things:

- identifying and recommending to the board nominees for election or re-election to the board, or for appointment to fill any vacancy;
- reviewing annually with the board the current composition of the board in light of the characteristics of independence, age, skills, experience and availability of service to us;
- identifying and recommending to the board the directors to serve as members of the board's committees;
- advising the board periodically with respect to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any corrective action to be taken; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

In 2012, our nominating and corporate governance committee held four meetings and passed no resolution by unanimous written consent.

### ***Interested Transactions***

A director of a corporation who is a party to a material contract or transaction or proposed material contract or transaction with the corporation, or is a director or officer of, or has a material interest in, any person who is party to such a contract or transaction, is required to disclose in writing or request to have entered into the minutes of meetings of directors the nature and extent of his or her interest. A director may vote in respect of such contract or transaction only if the contract or transaction is: (i) one relating primarily to remuneration as our director, officer, employee or agent; (ii) one for indemnity or insurance in favor of directors and officers; or (iii) one with an affiliate. In 2012, we did not enter into any interested transactions other than those described in this "Item 6. Directors, Senior Management and Employees" and "Item 7. Major Shareholders and Related Party Transactions —B. Related Party Transactions."

### ***Remuneration and Borrowing***

Our directors may determine the remuneration to be paid to them. The compensation committee will assist the directors in reviewing and approving the compensation structure for our directors. Our directors may exercise all the powers of the Company to borrow money and to mortgage or charge its undertaking, property and uncalled capital, and to issue debentures or other securities whether outright or as security for any debt obligations of our company or of any third party.

### ***Qualification***

There is no shareholding qualification for directors.

### ***Employment Agreements***

We have entered into employment agreements with each of our executive officers.

All of the employment agreements with our executive officers are for an indefinite term. Under the employment agreements, we may terminate an executive officer's employment at any time for cause without notice and for any other reason by giving written notice of termination to the executive officer. An executive officer may terminate his employment at any time by giving 60 days' notice of termination to us. If we terminate an executive officer's employment for any reason other than cause, or the executive officer terminates his employment for good reason, the executive officer is entitled to continue to receive his salary for a period of six months following the termination of his employment provided that he continues to comply with his confidentiality, inventions and non-competition obligations described below.

Each executive officer has agreed not to disclose or use, directly or indirectly, any of our confidential information, including trade secrets and information concerning our finances, employees, technology, processes, facilities, products, suppliers, customers and markets, except in the performance of his duties and responsibilities or as required pursuant to applicable law. Each executive officer has also agreed to disclose in confidence to us all inventions, designs and trade secrets which he may conceive, develop or reduce to practice during his employment and to assign all right, title and interest in them to us. Finally, each executive officer has agreed that he will not, directly or indirectly, during and within one year after the termination of his employment:

- communicate or have any dealings with our customers or suppliers that would be likely to harm the our business relationship with them;
- provide services, whether as a director, officer, employee, independent contractor or otherwise, to a competitor or acquire or hold any interest in, whether as a shareholder, partner or otherwise, in a competitor provided that the executive officer may hold up to 5% of the

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outstanding shares or other securities of a competitor that is listed on a securities exchange or recognized securities market; and

- approach solicit, whether by offer of employment or otherwise, the services of any of our employees.

Our compensation committee is required to approve all employment agreements entered into by us with any officer whose base salary is equal to or greater than \$150,000.

***Director Agreements***

We have entered into director agreements with our independent directors, pursuant to which we make payments in the form of an annual retainer and meeting fees and option grants to our independent directors for their services. See "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers."

***Indemnification of Directors and Officers***

Under the CBCA, we may indemnify a present or former director or officer or a person who acts or has acted at our request as a director or officer or an individual acting in a similar capacity, of another corporation or entity, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by him or her in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of that association with the corporation or other entity, provided that the director or officer acted honestly and in good faith with a view to the best interests of the corporation or other entity and, in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, had reasonable grounds for believing that his or her conduct was lawful. Such indemnification may be made in connection with a derivative action only with court approval. A director or officer is entitled to indemnification from us as a matter of right if the court or other competent authority has judged that he or she has not committed any fault or omitted to do anything that the individual ought to have done and fulfilled the conditions set forth above.

We have entered into indemnity agreements with each of our directors agreeing to indemnify them, to the fullest extent permitted by law, against all liability, loss, harm damage cost or expense, reasonably incurred by the director in respect of any threatened, pending, ongoing or completed claim or civil, criminal, administrative, investigative or other action or proceeding made or commenced against him or in which he is or was involved by reason of the fact that he is or was a director of the Company.

Our directors and officers are covered by directors and officers' insurance policies.

**D. Employees**

As of December 31, 2010, 2011 and 2012, we had 8,733, 9,087 and 7,020 full-time employees, respectively. The following table sets forth the number of our employees categorized by our areas of operations and as a percentage of our workforce as of December 31, 2012.

	As of December 31, 2012	
	Number of Employees	Percentage of Total
Manufacturing	5,383	76.7%
General and administrative	1,179	16.7%
Research and development	187	2.7%
Sales and marketing	271	3.9%
Total	7,020	100%

As of December 31, 2012, we had 2,693 employees at our facilities in Suzhou, 2,818 employees at our facilities in Changshu, 993 employees at our facilities in Luoyang, and 516 employees based in our facilities and offices in Canada, South Korea, Japan, Australia, Singapore, India, Philippines, the U.S. and the EU (which includes Germany, Italy and France). Our employees are not covered by any collective bargaining agreement. We consider our relations with our employees to be good. From time to time, we also employ part-time employees and independent contractors to support our manufacturing, research and development and sales and marketing activities. We plan to hire additional employees as we expand.

**E. Share Ownership**

The following table sets forth information with respect to the beneficial ownership of our common shares as of March 31, 2013, the latest practicable date, by:

- each of our directors and executive officers; and
- each person known to us to own beneficially more than 5% of our common shares.

The calculations in the table below are based on the 43,553,586 common shares outstanding, as of March 31, 2013.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days from March 31, 2013, including through the exercise of any option, warrant or other right or the conversion of any

other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Shares Beneficially Owned <sup>(1)</sup>	
	Number	%
<b>Directors and Executive Officers:<sup>(2)</sup></b>		
Shawn (Xiaohua) Qu <sup>(3)</sup>	13,532,225	31.0%
Robert McDermott <sup>(4)</sup>	167,100	*
Lars-Eric Johansson <sup>(5)</sup>	166,400	*
Harry E. Ruda <sup>(6)</sup>	46,600	*
Michael G. Potter <sup>(7)</sup>	196,368	*
Charlotte Xi Klein <sup>(8)</sup>	77,101	*
Yan Zhuang <sup>(9)</sup>	133,665	*
All Directors and Executive Officers as a Group	14,319,459	32.3%

\* The person beneficially owns less than 1% of our outstanding shares.

- (1) Beneficial ownership is determined in accordance with Rule 13d-3 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended, or Exchange Act, and includes voting or investment power with respect to the securities.
- (2) The business address of our directors and executive officers is 199 Lushan Road, Suzhou New District, Suzhou, Jiangsu 215129, People's Republic of China.
- (3) Includes 13,270,500 common shares directly held by Mr. Qu, 41,890 common shares issuable upon the exercise of options held by Mr. Qu within 60 days from March 31, 2013, 31,775 share issuable upon vesting of restricted share units held by Mr. Qu within 60 days from March 31, 2013, 124,334 common shares directly held by Hanbing Zhang, the wife of Mr. Qu, 62,356 common shares issuable upon the exercise of options held by Ms. Zhang within 60 days from March 31, 2013 and 1,370 share issuable upon vesting of restricted share units held by Ms. Zhang within 60 days from March 31, 2013.
- (4) Includes 4,000 common shares directly held by Mr. McDermott and 163,100 common shares issuable upon exercise of options held by Mr. McDermott within 60 days from March 31, 2013.
- (5) Includes 5,000 common shares directly held by Mr. Johansson and 161,400 common shares issuable upon exercise of options held by Mr. Johansson within 60 days from March 31, 2013.
- (6) Includes 46,600 common shares issuable upon exercise of options held by Mr. Ruda within 60 days from March 31, 2013.
- (7) Includes 64,696 common shares directly held by Mr. Potter and 131,672 common shares issuable upon exercise of options held by Mr. Potter within 60 days from March 31, 2013.
- (8) Includes 11,261 common shares directly held by Ms. Xi Klein, 63,784 common shares issuable upon exercise of options held by Ms. Xi Klein within 60 days from March 31, 2013 and 2,056 shares issuable upon vesting of restricted share units within 60 days from March 31, 2013.
- (9) Includes 15,175 common shares directly held by Mr. Zhuang, 116,434 common shares issuable upon exercise of options held by Mr. Zhuang within 60 days from March 31,



2013 and 2,056 shares issuable upon vesting of restricted share units within 60 days from March 31, 2013.

None of our shareholders have different voting rights from other shareholders as of the date of this annual report on Form 20-F. We are currently not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

**ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS**

**A. Major Shareholders**

Please refer to "Item 6. Directors, Senior Management and Employees—E. Share Ownership."

**B. Related Party Transactions**

***Guarantees and Share Pledges***

Dr. Qu fully guaranteed a one-year RMB250 million, RMB1,520 million and RMB1,001 million loan facilities from Chinese commercial banks in 2010, 2011 and 2012, respectively. Amounts drawn down from the facilities as at December 31, 2011 and 2012 were \$33,328,470 and \$66,349,563, respectively.

***Sales and purchase contracts with affiliates***

In 2012, we sold solar modules to Gaochuangte in the amount of RMB66,520,343 (\$10,513,212).

In 2012, we paid RMB12,987,653 (\$2,066,288) to Gaochuangte for solar project construction services. Since the solar project is for our internal use, these amounts were recorded in construction in progress.

In 2011, we sold solar modules to Gaochuangte in the amount of RMB125,948,865 (\$19,674,164).

In 2011, we paid RMB16,444,130 (\$2,609,798) to Gaochuangte for solar project construction services. Since the solar project is for our internal use, these amounts were recorded in construction in progress.

***Employment Agreements***

See "Item 6. Directors, Senior Management and Employees—C. Board Practices—Employment Agreements."

***Share Incentive Plan***

See "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Share-based Compensation—Share Incentive Plan."

**C. Interests of Experts and Counsel**

Not applicable.

**ITEM 8. FINANCIAL INFORMATION**

**A. Consolidated Statements and Other Financial Information**

We have appended audited consolidated financial statements filed as part of this annual report.

***Legal and Administrative Proceedings***

***Class Action Lawsuits***

On June 1, 2010, we announced that we would postpone the release of our financial results for the first quarter ended March 31, 2010 and our quarterly earnings call pending the outcome of an investigation by the Audit Committee of our Board of Directors that had been launched after we received a subpoena from the SEC requesting documents relating to, among other things, certain sales transactions in 2009. Thereafter six class action lawsuits were filed in the United States District Court for the Southern District of New York, or the New York cases, and another class action lawsuit was filed in the United States District Court for the Northern District of California, or the California case. The New York cases were consolidated into a single action in December 2010. On January 5, 2011, the California case was dismissed by the plaintiff, who became a member of the lead plaintiff group in the New York action. On March 11, 2011, a Consolidated Complaint was filed with respect to the New York action. The Consolidated Complaint alleges generally that our financial disclosures during 2009 and early 2010 were false or misleading; asserts claims under Sections 10(b) and 20(a) of the Exchange Act and Rule 10b-5 thereunder; and names us, our chief executive officer and our former chief financial officer as defendants. We filed our motion to dismiss in May 2011, which was taken under submission by the Court in July 2011. On March 30, 2012, the Court dismissed the Consolidated Complaint with leave to amend, and the plaintiffs filed an Amended Consolidated Complaint against the same defendants on April 19, 2012. On March 28, 2013, the Court entered an order granting our motion to dismiss and dismissing the Amended Consolidated Complaint with prejudice. On March 29, 2013, the Court entered judgment in the matter.

In addition, a similar class action lawsuit was filed against us and certain of our executive officers in the Ontario Superior Court of Justice on August 10, 2010. The lawsuit alleges generally that our financial disclosures during 2009 and 2010 were false or misleading and brings claims under the shareholders' relief provisions of the Canada Business Corporations Act, Part XXIII.1 of the Ontario Securities Act as well as claims based on negligent misrepresentation. In December 2010, we filed a motion to dismiss the Ontario action on the basis that the Ontario Court has no jurisdiction over the claims and potential claims advanced by the plaintiff. The court dismissed our motion on August 29, 2011. On March 30, 2012, the Ontario Court of Appeal denied our appeal with regard to our jurisdictional motion. On November 29, 2012, the Supreme Court of Canada denied our application for leave to appeal the order of the Ontario Court of Appeal. Our jurisdiction motion is therefore at an end. To proceed with the case, the plaintiff must now bring his own motions for class certification and for leave to assert the statutory cause of action under the Ontario Securities Act. These motions are scheduled for argument in the Ontario Superior Court of Justice in June 2013. We believe the Ontario action is without merit and we are defending it vigorously.

***LDK***

In July 2010, CSI Cells filed a request for arbitration against LDK with the CIETAC Shanghai Branch. In its arbitration request, CSI Cells asked that LDK refund (1) an advance payment of RMB10.0 million (\$1.6 million) that it had made to LDK pursuant to a three-year wafer supply agreement between CSI Cells and LDK entered into in October 2007 and (2) two advance payments totaling RMB50.0 million (\$8.0 million) that CSI Cells had made to LDK pursuant to two ten-year supply agreements between CSI Cells and LDK entered into in June 2008. The first hearing was held in October 2010, during which CSI Cells and LDK exchanged and reviewed the evidence. After the

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first hearing, LDK counterclaimed against CSI Cells, seeking (1) forfeiture of the three advance payments totaling RMB60.0 million (\$9.6 million) that CSI Cells had made to LDK pursuant to the October 2007 and June 2008 agreements; (2) compensation of approximately RMB377.0 million (\$60.5 million) for the loss due to the alleged breach of the June 2008 agreements by CSI Cells; (3) a penalty of approximately RMB15.2 million (\$2.4 million) due to the alleged breach of the June 2008 agreements by CSI Cells; and (4) arbitration expenses up to RMB4.7 million (\$0.8 million). The second hearing was held on March 9, 2011, during which the parties presented arguments to the arbitration commission. The arbitration commission hosted a settlement discussion between the parties on May 13, 2011. In December of 2012, CIETAC Shanghai Branch awarded RMB248.9 million (\$40.0 million) plus RMB2.2 million (\$0.4 million) in arbitration expenses in favor of LDK in relation to the wafer supply contracts we entered into with LDK. The total amount of the award includes RMB60.0 million (\$9.6 million) that relates to the initial deposit. CIETAC Shanghai Branch determined that we had no legal grounds to cancel the long-term supply agreements. In February 2013, LDK filed for enforcement proceedings against us with the Suzhou Intermediate People's Court.

We dispute the merits of the arbitration award and will pursue all legal means to overturn or resist the implementation of the award.

### *U.S. Anti-dumping and Countervailing Duty Investigation*

In October 2011, a trade action was filed with the USDOC and USITC by the U.S. unit of SolarWorld AG and six other U.S. firms, accusing Chinese producers of CSPV cells, whether or not incorporated into modules, of selling their products into the United States at less than fair value, or dumping, and of receiving countervailable subsidies from the Chinese authorities. These firms asked the U.S. government to impose anti-dumping and countervailing duties on CSPV cells imported from China. The USDOC and the USITC investigated the validity of these claims. We were identified as one of a number of Chinese exporting producers of subject goods to the U.S. market. We also have affiliate U.S. operations that import subject goods from China.

On October 9, 2012, the USDOC issued final affirmative determinations in the anti-dumping and countervailing duty investigations. On November 7, 2012, the USITC ruled that imports of these CSPV products had caused material injury to the U.S. CSPV industry. As a result of these rulings, the Company is required to pay cash deposits on subject CSPV imports from China. Cash deposit rates for subject Chinese-origin products of Canadian Solar were announced as being 13.94% (anti-dumping duty) and 15.24% (countervailing duty). The rate at which duties will be assessed and payable may be subject to administrative review next year and may differ from these announced deposit rates. These duties could materially and adversely affect our affiliated U.S. import operations and increase our cost of selling into the United States, thus adversely affecting our export sales to the United States, which is one of our growing markets. A number of parties have filed notice of their intent to challenge the rulings of the USDOC and USITC in appeals to the U.S. Court of International Trade. Decisions on those appeals are not expected until next year.

### *European Anti-dumping and Anti-Subsidy Investigations*

On September 6, 2012, following a complaint lodged by SolarWorld AG and certain supporters, the European Commission initiated an anti-dumping investigation concerning imports into the EU of CSPV modules and key components (i.e., cells and wafers) originating in China. On November 8, 2012, following a complaint lodged by the same parties, the European Commission initiated an anti-subsidy investigation on these products. In each investigation, we were identified as one of a number of Chinese exporting producers of subject goods to the EU market. We also have affiliate EU operations that import subject goods from China.

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The Company was not chosen as one of the "sampled" companies in these EU investigations, which were required to provide written information to the EU authorities.

The Company requested "market economy treatment" in the anti-dumping investigation, but this request was denied. A number of other affected Chinese companies have filed an action for annulment of the decision that denied "market economy treatment."

On March 5, 2013, the European Commission published a Regulation making all imports of CSPV modules and key components originating in or consigned from China subject to registration by EU Member State customs authorities. This registration requirement is likely to remain in effect through the pendency of the investigations. The Company filed comments contesting this registration decision and requested a hearing to express its views.

Under the current timeline, we expect that provisional anti-dumping duties, if any, will be announced by June 6, 2013, provisional countervailing duties will be announced by August 8, 2013, and definitive duties, if any, will be announced respectively by December 5 and 7, 2013.

### *Indian Anti-dumping Investigation*

In late November, India initiated an anti-dumping investigation on imported solar products from China, Taiwan, the United States, and Malaysia. The scope of the Indian complaint includes thin-film and CSPV cells and modules, as well as "glass and other suitable substrates." The period of investigation is from January 1, 2011 to June 30, 2012. We completed and submitted a "sampling questionnaire" and were chosen by the Indian authorities to be a sampled company. We are now compiling the data requested of us.

### *Dividend Policy*

We have never declared or paid any dividends on our common shares, nor do we have any present plan to declare or pay any dividends on our common shares in the foreseeable future. We currently intend to retain our available funds and any future earnings to operate and expand our business.

Our board of directors has complete discretion on whether to pay dividends. Even if our board of directors decides to pay dividends, the form, frequency and amount will depend upon our future operations, earnings, capital requirements, surplus, general financial condition, contractual restrictions, and other factors that our board of directors may deem relevant.

## **B. Significant Changes**

Between January 1, 2013 and March 31, 2013, an additional 49,008 options and 308,286 restricted share units granted under the Plan vested.

Except as described above, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

**ITEM 9. THE OFFER AND LISTING**

**A. Offering and Listing Details**

Our common shares have been listed on the Nasdaq Global Market under the symbol "CSIQ" since November 9, 2006. The following table sets forth the high and low trading prices for our common shares on the NASDAQ for the periods indicated.

	Trading Price	
	High	Low
	\$	\$
<b>Annual Highs and Lows</b>		
2008	51.80	3.11
2009	30.51	3.00
2010	33.68	8.99
2011	16.79	2.07
2012	4.74	1.95
<b>Quarterly Highs and Lows</b>		
First Quarter 2011	16.79	10.20
Second Quarter 2011	12.01	8.25
Third Quarter 2011	11.65	3.66
Fourth Quarter 2011	4.14	2.07
First Quarter 2012	4.74	2.68
Second Quarter 2012	3.84	2.61
Third Quarter 2012	4.05	2.47
Fourth Quarter 2012	3.59	1.95
First Quarter 2013	5.15	3.12
<b>Monthly Highs and Lows</b>		
<b>2012</b>		
October	2.93	2.52
November	2.85	1.95
December	3.59	2.52
<b>2013</b>		
January	4.74	3.40
February	5.15	3.76
March	4.02	3.12
April (through April 25)	4.85	3.16

**B. Plan of Distribution**

Not applicable.

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**C. Markets**

Our common shares have been listed on the Nasdaq Global Market since November 9, 2006 under the symbol "CSIQ."

**D. Selling Shareholders**

Not applicable.

**E. Dilution**

Not applicable.

**F. Expenses of the Issue**

Not applicable.

**ITEM 10. *ADDITIONAL INFORMATION***

**A. Share Capital**

Not applicable.

**B. Memorandum and Articles of Association**

We incorporate by reference into this annual report the description of our Amended Articles of Continuance, as amended, contained in our F-1 registration statement (File No. 333-138144), as amended, initially filed with the SEC on October 23, 2006.

**C. Material Contracts**

We have not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company" or elsewhere in this annual report on Form 20-F.

**D. Exchange Controls**

See "Item 4. Information on the Company—B. Business Overview—Government Regulation—Foreign Currency Exchange" and "Item 4. Information on the Company—B. Business Overview—Government Regulation—Dividend Distribution."

**E. Taxation**

***Material Canadian Federal Tax Considerations***

*General*

The following summary is of the material Canadian federal tax implications applicable to a holder, or a U.S. Holder, who holds our common shares, or Common Shares and who, at all relevant times, for purposes of the Income Tax Act (Canada), or the Canadian Tax Act (i) has not been, is not and will not be resident (or deemed resident) in Canada at any time while such U.S. Holder has held or holds the Common Shares; (ii) holds the Common Shares as capital property and as beneficial owner; (iii) deals at arm's length with and is not affiliated with us; (iv) does not use or hold, and is not deemed to use or hold, the Common Shares in the course of carrying on a business in Canada; (v) did not acquire the Common Shares in respect of, in the course of or by virtue of employment with our company; (vi) is not a financial institution, specified financial institution, partnership or trust as defined in the Canadian Tax Act; (vii) is a resident of the United States for purposes of the Canada-

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United States Income Tax Convention (1980), as amended, or the Convention, who is fully entitled to the benefits of the Convention; and (viii) has not, does not and will not have a fixed base or permanent establishment in Canada within the meaning of the Convention at any time while such U.S. Holder has held or holds the Common Shares. Special rules, which are not addressed in this summary, may apply to a U.S. Holder that is a "registered non-resident insurer" or "authorized foreign bank," as defined in the Canadian Tax Act, carrying on business in Canada and elsewhere.

This summary is based on the current provisions of the Canadian Tax Act, and the regulations thereunder, the Convention, and counsel's understanding of the published administrative practices and policies of the CRA, all in effect as of the date of this annual report on Form 20-F. This summary is not exhaustive of all potential Canadian federal tax consequences to a U.S. Holder and does not take into account or anticipate any changes in law or administrative practices, whether by judicial, governmental or legislative action or decision, nor does it take into account provincial, territorial or foreign tax legislation or considerations, which may differ from the Canadian federal tax considerations described herein.

**TAX MATTERS ARE VERY COMPLICATED AND THE CANADIAN FEDERAL TAX CONSEQUENCES OF PURCHASING, OWNING AND DISPOSING OF COMMON SHARES WILL DEPEND ON THE SHAREHOLDER'S PARTICULAR SITUATION. THIS SUMMARY IS NOT INTENDED TO BE A COMPLETE ANALYSIS OF OR DESCRIPTION OF ALL POTENTIAL CANADIAN FEDERAL TAX CONSEQUENCES, AND SHOULD NOT BE CONSTRUED TO BE, LEGAL, BUSINESS OR TAX ADVICE DIRECTED AT ANY PARTICULAR HOLDER OR PROSPECTIVE PURCHASER OF COMMON SHARES. ACCORDINGLY, HOLDERS OR PROSPECTIVE PURCHASERS OF COMMON SHARES SHOULD CONSULT THEIR OWN TAX ADVISORS FOR ADVICE WITH RESPECT TO THE CANADIAN FEDERAL TAX CONSEQUENCES OF AN INVESTMENT IN COMMON SHARES BASED ON THEIR PARTICULAR CIRCUMSTANCES.**

*Dividends*

Amounts paid or credited, or deemed under the Canadian Tax Act to be paid or credited, on account or in lieu of payment, or in satisfaction of, dividends to a U.S. Holder will be subject to Canadian non-resident withholding tax at the reduced rate of 15% under the Convention. This rate is further reduced to 5% in the case of a U.S. Holder that is a company for purposes of the Convention that owns at least 10% of our voting shares at the time the dividend is paid or deemed to be paid. Under the Convention, dividends paid or credited to certain religious, scientific, literary, educational or charitable organizations and certain pension organizations that are resident in the United States and that have complied with certain administrative procedures may be exempt from Canadian withholding tax.

*Disposition of Our Common Shares*

A U.S. Holder will not be liable to income tax under the Canadian Tax Act in respect of any capital gain realized on the disposition or deemed disposition of the Common Shares unless, at the time of disposition, the Common Shares constitute "taxable Canadian property" of the U.S. Holder for the purposes of the Canadian Tax Act and the U.S. Holder is not otherwise entitled to an exemption under the Convention.

Under the Canadian Tax Act, if the Common Shares are not otherwise deemed under the Canadian Tax Act to be "taxable Canadian property", the Common Shares will constitute "taxable Canadian property" to a U.S. Holder at the time of a disposition only if (i) the Common Shares derive within the previous 60 months more than 50% of their value from Canadian real or immovable property (including options or interests therein), or the real property threshold. Where the Common

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Shares meet the real property threshold and are also listed on a designated stock exchange for purposes of the Canadian Tax Act (which currently includes Nasdaq), then the Common Shares will be taxable Canadian property only if an additional ownership test is met, i.e. within the previous 60 month period immediately preceding the disposition of the Common Shares the U.S. Holder, persons with whom the U.S. Holder did not deal at arm's length, or the U.S. Holder together with such persons, own 25% or more of the issued shares of any class or series of our capital stock (the "ownership threshold"). Where the Common Shares constitute "taxable Canadian property" under the Canadian Tax Act, capital gains on their disposition may still be exempt from Canadian income tax by virtue of the Convention unless, at the time of the disposition, the Common Shares derive their value principally from real property situated in Canada within the meaning of the Convention.

***U.S. Federal Income Taxation***

*IRS Circular 230 disclosure*

**ANY TAX STATEMENT HEREIN REGARDING ANY UNITED STATES FEDERAL TAX IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED, BY ANY TAXPAYER FOR THE PURPOSE OF AVOIDING ANY PENALTIES. ANY SUCH STATEMENT HEREIN WAS WRITTEN IN CONNECTION WITH THE MARKETING OR PROMOTION OF THE TRANSACTIONS OR MATTERS TO WHICH THE STATEMENT RELATES. EACH TAXPAYER SHOULD SEEK ADVICE BASED ON THE TAXPAYER'S PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.**

The following discussion describes material U.S. federal income tax consequences to U.S. Holders (as defined below) under present law of an investment in our common shares. This discussion applies only to U.S. Holders that hold our common shares as capital assets (generally, property held for investment) and that have the U.S. dollar as their functional currency. This discussion is based on the tax laws of the United States as of the date of this annual report and on U.S. Treasury regulations in effect or, in some cases, proposed, as of the date of this annual report, as well as judicial and administrative interpretations thereof available on or before such date. All of the foregoing authorities are subject to change, which change could apply retroactively and could affect the tax consequences described below.

The following discussion neither deals with the tax consequences to any particular investor nor describes all of the tax consequences applicable to persons in special tax situations such as:

- banks;
- certain financial institutions;
- insurance companies;
- regulated investment companies;
- real estate investment trusts;
- broker-dealers;
- traders that elect to mark to market;
- U.S. expatriates or entities covered by the U.S. anti-inversion rules;
- tax-exempt entities;
- persons liable for alternative minimum tax;
- persons who are not U.S. Holders;

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- persons holding a common share through a bank, financial institution or other entity, or a branch thereof, located, organized or resident outside the United States;
- persons holding a common share as part of a straddle, hedging, conversion or integrated transaction;
- persons that actually or constructively own 10% or more of the total combined voting power of all classes of our voting stock;
- persons who acquired common shares pursuant to the exercise of any employee share option or otherwise as compensation; or
- partnerships or other pass-through entities, or persons holding common shares through such entities.

In addition, the discussion below does not describe any tax consequences arising out of the Medicare tax on certain "net investment income."

**INVESTORS ARE URGED TO CONSULT THEIR TAX ADVISORS ABOUT THE APPLICATION OF THE U.S. FEDERAL TAX RULES TO THEIR PARTICULAR CIRCUMSTANCES AS WELL AS THE STATE, LOCAL, NON-U.S. AND OTHER TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF COMMON SHARES.**

The discussion below of the U.S. federal income tax consequences to "U.S. Holders" will apply to you if you are the beneficial owner of common shares and you are, for U.S. federal income tax purposes,

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in the United States or under the laws of the United States, any State thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If you are a partner in partnership or other entity taxable as a partnership that holds common shares, your tax treatment generally will depend on your status and the partner and the activities of the partnership. If you are a partner in such a partnership holding common shares, or a partner in such partnership, you should consult your tax advisor.

*Taxation of Dividends and Other Distributions on the Common Shares*

Subject to the PFIC rules discussed below, the gross amount of any distributions we make to you with respect to the common shares (including the amount of any taxes withheld therefrom) generally will be includible in your gross income as dividend income on the date of receipt by you, but only to the extent the distribution is paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Any such dividends will not be eligible for the dividends received deduction allowed to corporations in respect of dividends received from other U.S. corporations. To the extent the amount of the distribution exceeds our current and accumulated earnings and profits (as determined under U.S. federal income tax principles), such excess amount will be treated first as a tax-free return of your tax basis in your common shares, and then, to the extent such excess amount exceeds your tax basis in your common shares, capital gain. We currently do not,

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and we do not intend to, calculate our earnings and profits under U.S. federal income tax principles. Therefore, a U.S. Holder should expect that a distribution generally will be reported as a dividend even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above.

With respect to certain non-corporate U.S. Holders, including individual U.S. Holders, any dividends may be taxed at the lower capital gains rate applicable to "qualified dividend income," provided (1) either (a) the common shares are readily tradable on an established securities market in the United States or (b) we are eligible for the benefits of a qualifying income tax treaty with the United States that includes an exchange of information program, (2) we are neither a PFIC nor treated as such with respect to you (as discussed below) for the taxable year in which the dividend was paid and the preceding taxable year, and (3) certain holding period and other requirements are met. Under U.S. Internal Revenue Service authority, common shares will be considered for purposes of clause (1) above to be readily tradable on an established securities market in the United States if they are listed on the Nasdaq Global Market, as are our common shares. You should consult your tax advisors regarding the availability of the lower capital gains rate applicable to qualified dividend income for any dividends paid with respect to our common shares.

Any dividends generally will constitute foreign source income for foreign tax credit limitation purposes. If the dividends are taxed as qualified dividend income (as discussed above), the amount of the dividend taken into account for purposes of calculating the foreign tax credit limitation will in general be limited to the gross amount of the dividend, multiplied by the reduced tax rate applicable to qualified dividend income and divided by the highest tax rate normally applicable to dividends. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends distributed by us with respect to the common shares generally will constitute "passive category income" but could, in the case of certain U.S. Holders, constitute "general category income."

If Canadian or PRC withholding taxes apply to any dividends paid to you with respect to our common shares, the amount of the dividend would include withheld Canadian and PRC taxes and, subject to certain conditions and limitations, such Canadian and PRC withholdings taxes may be treated as foreign taxes eligible for credit against your U.S. federal income tax liability. The rules relating to the determination of the foreign tax credit are complex, and you should consult your tax advisors regarding the availability of a foreign tax credit in your particular circumstances, including the effects of any applicable income tax treaties.

### *Taxation of Disposition of Common Shares*

Subject to the PFIC rules discussed below, you will recognize taxable gain or loss on any sale, exchange or other taxable disposition of a common share equal to the difference between the amount realized for the common share and your tax basis in the common share, and such gain or loss generally will be capital gain or loss. If you are a non-corporate U.S. Holder, including an individual U.S. Holder, that has held the common shares for more than one year, you may be eligible for reduced tax rates on any such gain, subject to the PFIC rules discussed below. The deductibility of capital losses is subject to limitations. Any gain or loss you recognize on a disposition of common shares generally will be treated as U.S. source income or loss for foreign tax credit limitation purposes. However, if we are treated as a "resident enterprise" for PRC tax purposes, we may be eligible for the benefits of the income tax treaty between the United States and the PRC. In such event, if PRC tax were to be imposed on any gain from the disposition of the common shares, a U.S. Holder that is eligible for the benefits of the income tax treaty between the United States and the PRC may elect to treat the gain as PRC source income for foreign tax credit purposes. You should consult your tax advisors regarding the proper treatment of gain or loss in your particular circumstances, including the effects of any applicable income tax treaties.

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*Passive Foreign Investment Company*

Based on the market price of our common shares, the value of our assets, and the composition of our income and assets, we do not believe we were a PFIC for U.S. federal income tax purposes for our taxable year ended December 31, 2012. However, the application of the PFIC rules is subject to uncertainty in several respects, and we cannot assure you that the U.S. Internal Revenue Service will not take a contrary position. A non-U.S. corporation will be a PFIC for U.S. federal income tax purposes for any taxable year if either:

- at least 75% of its gross income for such year is passive income; or
- at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce passive income or are held for the production of passive income.

For this purpose, we will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

A separate determination must be made after the close of each taxable year as to whether we were a PFIC for that year. Accordingly, we cannot assure you that we will not be a PFIC for our current taxable year ending December 31, 2013 or any future taxable year. Because the value of our assets for purposes of the PFIC test generally will be determined by reference to the market price of our common shares, fluctuations in the market price of the common shares may cause us to become a PFIC. In addition, changes in the composition of our income or assets may cause us to become a PFIC.

If we are a PFIC for any taxable year during which you hold common shares, we generally will continue to be treated as a PFIC with respect to you for all succeeding years during which you hold common shares, unless we cease to be a PFIC and you make a "deemed sale" election with respect to the common shares. If such election is made, you will be deemed to have sold common shares you hold at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain from such deemed sale would be subject to the consequences described in the following two paragraphs. After the deemed sale election, your common shares with respect to which the deemed sale election was made will not be treated as shares in a PFIC unless we subsequently become a PFIC.

For each taxable year we are treated as a PFIC with respect to you, you will be subject to special tax rules with respect to any "excess distribution" you receive and any gain you recognize from a sale or other disposition (including a pledge) of the common shares, unless you make a "mark-to-market" election as discussed below. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for the common shares will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or recognized gain will be allocated ratably over your holding period for the common shares;
- the amount allocated to the current taxable year, and any taxable years in your holding period prior to the first taxable year in which we were a PFIC, will be treated as ordinary income; and
- the amount allocated to each other taxable year will be subject to the highest tax rate in effect for individuals or corporations, as applicable, for each such year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

The tax liability for amounts allocated to taxable years prior to the year of disposition or excess distribution cannot be offset by any net operating losses for such years, and gains (but not losses)

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realized on the sale or other disposition of the common shares cannot be treated as capital, even if you hold the common shares as capital assets.

If we are treated as a PFIC with respect to you for any taxable year, to the extent any of our subsidiaries are also PFICs or we make direct or indirect equity investments in other entities that are PFICs, you may be deemed to own shares in such lower-tier PFICs that are directly or indirectly owned by us in that proportion which the value of the common shares you own bears to the value of all of our common shares, and you may be subject to the adverse tax consequences described in the preceding two paragraphs with respect to the shares of such lower-tier PFICs that you would be deemed to own. You should consult your tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

A U.S. Holder of "marketable stock" (as defined below) in a PFIC may make a mark-to-market election for such stock to elect out of the PFIC rules described above regarding excess distributions and recognized gains. If you make a mark-to-market election for the common shares, you will include in income for each year we are a PFIC an amount equal to the excess, if any, of the fair market value of the common shares as of the close of your taxable year over your adjusted basis in such common shares. You will be allowed a deduction for the excess, if any, of the adjusted basis of the common shares over their fair market value as of the close of the taxable year. However, deductions will be allowable only to the extent of any net mark-to-market gains on the common shares included in your income for prior taxable years. Amounts included in your income under a mark-to-market election, as well as gain on the actual sale or other disposition of the common shares will be treated as ordinary income. Ordinary loss treatment will also apply to the deductible portion of any mark-to-market loss on the common shares, as well as to any loss realized on the actual sale or other disposition of the common shares, to the extent the amount of such loss does not exceed the net mark-to-market gains previously included for such common shares. Your basis in the common shares will be adjusted to reflect any such income or loss amounts. If you make a mark-to-market election, any distributions we make generally would be subject to the rules discussed above under "—Taxation of Dividends and Other Distributions on the Common Shares," except the lower rate applicable to qualified dividend income would not apply.

The mark-to-market election is available only for "marketable stock," which is stock that is regularly traded on a qualified exchange or other market, as defined in applicable U.S. Treasury regulations. Our common shares are listed on the Nasdaq Global Market, which is a qualified exchange or other market for these purposes. Consequently, if the common shares continue to be listed on the Nasdaq Global Market and are regularly traded, and you are a holder of common shares, we expect the mark-to-market election would be available to you if we were to become a PFIC. Because a mark-to-market election cannot be made for equity interests in any lower-tier PFICs that we own, a U.S. Holder may continue to be subject to the PFIC rules with respect to its indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes. You should consult your tax advisors as to the availability and desirability of a mark-to-market election, as well as the impact of such election on interests in any lower-tier PFICs.

Alternatively, if a non-U.S. corporation is a PFIC, a holder of shares in that corporation may avoid taxation under the PFIC rules described above regarding excess distributions and recognized gains by making a "qualified electing fund" election to include in income its share of the corporation's income on a current basis. However, you may make a qualified electing fund election with respect to your common shares only if we agree to furnish you annually with certain tax information, and we currently do not intend to prepare or provide such information.

Unless otherwise provided by the U.S. Treasury, each U.S. Holder of a PFIC is required to file an annual report containing such information as the U.S. Treasury may require. If we are or become a PFIC, you should consult your tax advisor regarding any reporting requirements that may apply to you.

**You are strongly urged to consult your tax advisor regarding the application of the PFIC rules to your investment in common shares.**

*Information Reporting and Backup Withholding*

Any dividend payments with respect to common shares and proceeds from the sale, exchange or redemption of common shares may be subject to information reporting to the U.S. Internal Revenue Service and possible U.S. backup withholding. Backup withholding will not apply, however, to a U.S. Holder that furnishes a correct taxpayer identification number and makes any other required certification or that is otherwise exempt from backup withholding. U.S. Holders that are required to establish their exempt status generally must provide such certification on U.S. Internal Revenue Service Form W-9. U.S. Holders should consult their tax advisors regarding the application of the U.S. information reporting and backup withholding rules.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against your U.S. federal income tax liability, and you may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the U.S. Internal Revenue Service and furnishing any required information in a timely manner.

*Additional Reporting Requirements*

Certain U.S. Holders who are individuals are required to report information relating to an interest in our common shares, subject to certain exceptions (including an exception for common shares held in accounts maintained by certain financial institutions). U.S. Holders should consult their tax advisors regarding the effect, if any, of these rules on their ownership and disposition of the common shares.

**F. Dividends and Paying Agents**

Not applicable.

**G. Statement by Experts**

Not applicable.

**H. Documents on Display**

We previously filed with the SEC our registration statements on Form F-1 (File Number 333-138144), initially filed on October 23, 2006, registration statements on Form F-3 (File Number 333-149497), initially filed on March 3, 2008, and registration statements on Form F-3 (File Number 333-152325), initially filed on July 14, 2008.

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year for fiscal years ending on or after December 15, 2011. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the Securities and Exchange Commission at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the Commission at 1-800-SEC-0330. The SEC also maintains a web site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal

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shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

Our financial statements have been prepared in accordance with U.S. GAAP.

We will furnish our shareholders with annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP.

**I. Subsidiary Information**

For a listing of our subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

**ITEM 11. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK***

***Foreign Exchange Risk***

The majority of our sales are denominated in Euros and U.S. dollars, with the remainder in other currencies such as the Renminbi, Canadian dollar, Japanese yen, and British pound, while a substantial portion of our costs and expenses is denominated in U.S. dollars and Renminbi. From time to time, we enter into loan arrangements with Chinese commercial banks that are denominated primarily in either U.S. dollars or Renminbi. The greater part of our cash and cash equivalents are denominated in Renminbi. Therefore, fluctuations in currency exchange rates could have a significant impact on our financial stability. Fluctuations in exchange rates, particularly among the U.S. dollar, Euro, Renminbi and Canadian dollar, may affect our net profit margins and may result in fluctuations in foreign exchange and operating gains or losses. Our exposure to foreign exchange risk primarily relates to currency gains or losses resulting from timing differences between signing of sales contracts and settling of these contracts. As of December 31, 2012, we held \$254.9 million in accounts receivable, of which \$74.5 million were denominated in Euro. Had we converted all Euro denominated accounts receivable into Euros at €1.3185 for \$1.00, the exchange rates of December 31, 2012, our Euro denominated accounts receivable would have been €56.5 million as of December 31, 2012. Assuming the Euro depreciates by a rate of 10.0% to an exchange rate of €1.1867 for \$1.00, we would record loss in fair value of accounts receivable of \$7.4 million.

Since 2008, we hedge part of our foreign currency exposures against the U.S. dollar using foreign exchange forward or option contracts in order to limit our foreign exchange losses. We recorded a gain on change in foreign currency derivatives of \$1.7 million in 2010 while we incurred a loss on change in foreign currency derivatives of \$5.8 million and \$4.4 million in 2011 and 2012, respectively. The gains or losses on change in foreign currency derivatives are related to our hedging program. We incurred a foreign exchange loss of \$36.3 million, \$40.0 million and \$10.7 million in 2010, 2011 and 2012, respectively. We cannot predict the impact of future exchange rate fluctuations on our results of operations and may incur net foreign currency losses in the future. We will continue to hedge our foreign currency exposures against the U.S. dollar in order to minimize our foreign exchange exposures.

As of December 31, 2012, we had forward contracts of the Euro against the U.S. dollar with notional amount of €29.0 million outstanding. Assuming a 10.0% appreciation of the Euro against the U.S. dollar, the mark-to-market gain of our outstanding call forward contracts of the Euro against the U.S. dollar would have decreased by approximately \$4.0 million as of December 31, 2012.

Our financial statements are expressed in U.S. dollars, while some of our subsidiaries use different functional currencies, such as the Renminbi, Euro, and Canadian dollar. The value of your investment in our common shares will be affected by the foreign exchange rate between the U.S. dollar and other currencies used by our subsidiaries. To the extent we hold assets denominated in currencies other than U.S. dollars, any appreciation of such currencies against the U.S. dollars will likely result in an exchange gain while any depreciation will likely result in an exchange loss when we convert the value of

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these assets into U.S. dollar equivalent amounts. On the other hand, to the extent we have liabilities denominated in currencies other than U.S. dollars, any appreciation of such currencies against the U.S. dollar will likely result in an exchange loss while any depreciation will likely result in an exchange gain when we convert the value of these liabilities into U.S. dollar equivalent amounts. These and other effects on our financial conditions resulting from the unfavorable changes in foreign currency exchange rates could have a material adverse effect on the market price of our common shares, the dividends we may pay in the future, and your investment.

***Interest Rate Risk***

Our exposure to interest rate risk primarily relates to interest expenses under our short-term and long-term bank borrowings, as well as interest income generated by excess cash invested in demand deposits and liquid investments with original maturities of three months or less. Such interest-earning instruments carry a degree of interest rate risk. We have not used any derivative financial instruments to manage our interest risk exposure. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. However, our future interest expense may increase due to changes in market interest rates.

**ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not applicable.

## PART II

### ITEM 13. *DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES*

None of these events occurred in any of the years ended December 31, 2009, 2010 and 2011.

### ITEM 14. *MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS*

Not Applicable.

### ITEM 15. *CONTROLS AND PROCEDURES*

#### *Disclosure Controls and Procedures*

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we conducted an evaluation of our disclosure controls and procedures; as such, term is defined in Rule 13a-15(e) under the Exchange Act. Based on that evaluation, our chief executive officer and chief financial officer have concluded that as of the end of the period covered by this annual report, our disclosure controls and procedures over financial reporting were effective.

#### *Management's Annual Report on Internal Control over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended, for our company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules promulgated by the Securities and Exchange Commission, management assessed the effectiveness of our internal control over financial reporting as of December 31, 2012 using criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2012.

Deloitte Touche Tohmatsu Certified Public Accountants LLP, an independent registered public accounting firm, who audited our consolidated financial statements for the year ended December 31, 2012, has also audited the effectiveness of internal control over financial reporting as of December 31, 2012.

## **Report of the Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Canadian Solar Inc.

We have audited the internal control over financial reporting of Canadian Solar Inc. and subsidiaries (the "Company") as of December 31, 2012, based on the criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2012 of the Company and our report dated April 26, 2013 expressed an unqualified opinion on those financial statements and financial statement schedule.

/s/ Deloitte Touche Tohmatsu Certified Public Accountants LLP

Shanghai China  
April 26, 2013

### ***Changes in Internal Controls***

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### **ITEM 16A AUDIT COMMITTEE FINANCIAL EXPERT**

Our board of directors has determined that Lars-Eric Johansson qualifies as an "audit committee financial expert" as defined in Item 16A of Form 20-F. Each of the members of the audit committee is an "independent director" as defined in the Nasdaq Marketplace Rules.

### **ITEM 16B CODE OF ETHICS**

Our board of directors has adopted a code of ethics that applies to our directors, officers, employees and agents, including certain provisions that specifically apply to our chief executive officer, chief financial officer, chief operation officer, chief technology officer, vice presidents and any other persons who perform similar functions for us. We have posted our code of business conduct on our website [www.canadiansolar.com](http://www.canadiansolar.com). We hereby undertake to provide to any person without charge, a copy of our code of business conduct and ethics within ten working days after we receive such person's written request.

### **ITEM 16C PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Deloitte Touche Tohmatsu Certified Public Accountants LLP, our principal external auditors, for the periods indicated. We did not pay any other fees to our auditors during the periods indicated below.

	For the Years Ended December 31,		
	2010	2011	2012
Audit fees <sup>(1)</sup>	2,384,000	1,516,000	1,483,000
All other fees <sup>(2)</sup>	69,344	95,640	65,450

(1) "Audit fees" means the aggregate fees billed for professional services rendered by our principal auditors for the annual audit of our consolidated financial statements, assurance and related services. In 2010, 2011 and 2012, these were mainly for the review and audit of our consolidated financial statements.

(2) "All other fees" represents aggregate fees billed for professional services rendered by our principal auditors for the statutory audit of our subsidiary's financial statements, consultations and related services.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by Deloitte Touche Tohmatsu Certified Public Accountants LLP, including audit services, audit-related services, tax services and other services as described above, other than those for *de minimis* services which are approved by the Audit Committee prior to the completion of the audit. We have a written policy on the engagement of an external auditor.

At the discretion of the government of the PRC in accordance with the Scheme for the Localization Restructuring of Chinese-Foreign Cooperative Accounting firms, Deloitte Touche Tohmatsu CPA Ltd. has restructured to a new partnership and changed its name to Deloitte Touche Tohmatsu Certified Public Accountants LLP, effective from January 1, 2013. Deloitte Touche Tohmatsu Certified Public Accountants LLP has succeeded Deloitte Touche Tohmatsu CPA Ltd. for all purposes

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and assumed all of the obligations and rights of Deloitte Touche Tohmatsu CPA Ltd. with effect from January 1, 2013. Our board of directors and audit committee have approved this change in entity of the external auditors.

**ITEM 16D EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

Not applicable.

**ITEM 16E PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

None.

**ITEM 16F CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT**

Not applicable.

**ITEM 16G CORPORATE GOVERNANCE**

None.

**PART III**

**ITEM 17. FINANCIAL STATEMENTS**

We have elected to provide financial statements pursuant to Item 18.

**ITEM 18. FINANCIAL STATEMENTS**

The consolidated financial statements of Canadian Solar Inc. are included at the end of this annual report.

**ITEM 19. EXHIBITS**

<u>Exhibit Number</u>	<u>Description of Document</u>
1.1	Amended Articles of Continuance (incorporated by reference to Exhibit 3.2 of our registration statement on Form F-1 (File No. 333-138144), as amended, initially filed with the SEC on October 23, 2006)
2.1	Registrant's Specimen Certificate for Common Shares (incorporated by reference to Exhibit 4.11 from our F-1 registration statement (File No. 333-138144), as amended, initially filed with the Commission on October 23, 2006)
4.1	Amended and Restated Share Incentive Plan of the Registrant, dated September 20, 2010 (incorporated by reference to Exhibit 4.5 of our annual report on Form 20-F for the year ended December 31, 2010 (File No. 001-33107), as amended, initially filed with the SEC on May 17, 2011)
4.2	Form of Director Indemnity Agreement (incorporated by reference to Exhibit 4.1 of our annual report on Form 20-F for the year ended December 31, 2008 (File No. 001-33107), as amended, initially filed with the SEC on June 8, 2009)
4.3	Employment Agreement between Canadian Solar Inc. and the Dr. Shawn Qu (incorporated by reference to Exhibit 10.2 of our registration statement on Form F-1 (File No. 333-138144), as amended, initially filed with the SEC on October 23, 2006)

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<u>Exhibit Number</u>	<u>Description of Document</u>
<b>4.4</b>	Form of Employment Agreement between Canadian Solar Inc. and its executive officers (incorporated by reference to Exhibit 4.7 of our annual report on Form 20-F for the year ended December 31, 2010 (File No. 001-33107), as amended, initially filed with the SEC on May 17, 2011)
<b>8.1*</b>	List of Subsidiaries
<b>12.1*</b>	CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
<b>12.2*</b>	CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
<b>13.1**</b>	CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
<b>13.2**</b>	CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
<b>15.1*</b>	Consent of Deloitte Touche Tohmatsu Certified Public Accountants LLP
<b>101***</b>	Financial information from registrant for the year ended December 31, 2012 formatted in eXtensible Business Reporting Language (XBRL):  (i) Consolidated Balance Sheets as of December 31, 2011 and 2012; (ii) Consolidated Statements of Operations for the Years Ended December 31, 2010, 2011 and 2012; (iii) Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2010, 2011 and 2012; (iv) Consolidated Statements of Changes in Equity for the Years Ended December 31, 2010, 2011 and 2012; (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2010, 2011 and 2012; (vi) Notes to Consolidated Financial Statements; and (vii) Additional Information—Financial Statements Schedule I

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\* Filed herewith.

\*\* Furnished herewith.

\*\*\* Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

CANADIAN SOLAR INC.

By: /s/ SHAWN (XIAOHUA) QU

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Name: Shawn (Xiaohua) Qu  
Title: Chairman, President and Chief Executive  
Officer

By: /s/ MICHAEL G. POTTER

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Name: Michael G. Potter  
Title: Senior Vice President and Chief Financial  
Officer

Date: April 26, 2013

**CANADIAN SOLAR INC.**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Canadian Solar Inc.

We have audited the accompanying consolidated balance sheets of Canadian Solar Inc. and subsidiaries (the "Company") as of December 31, 2011 and 2012, and the related consolidated statements of operations, comprehensive income (loss), changes in equity, and cash flows for each of the three years in the period ended December 31, 2012, and the related financial statement schedule included in Schedule I. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Canadian Solar Inc. and subsidiaries as of December 31, 2011 and 2012 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 26, 2013 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte Touche Tohmatsu Certified Public Accountants LLP

Shanghai China  
April 26, 2013

## CANADIAN SOLAR INC.

## CONSOLIDATED BALANCE SHEETS

	<u>December 31,</u> <u>2011</u>	<u>December 31,</u> <u>2012</u>
	(In U.S. dollars, except share and per share data)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	343,994,679	141,968,182
Restricted cash	178,270,427	422,356,794
Accounts receivable trade, net of allowance of \$9,505,481 and \$47,582,216 as of December 31, 2011 and 2012, respectively	292,176,439	254,906,498
Accounts receivable, unbilled	51,370,820	5,229,760
Amount due from a related party	19,835,942	9,977,177
Inventories	296,568,127	274,455,798
Value added tax recoverable	16,974,452	14,483,487
Advances to suppliers, net of allowance of \$9,458,683 and \$9,639,629 as of December 31, 2011 and 2012, respectively	11,309,132	28,997,522
Foreign currency derivative assets	2,726,538	1,350,657
Project assets	37,133,068	180,436,619
Prepaid expenses and other current assets	45,217,918	108,041,633
Total current assets	<u>1,295,577,542</u>	<u>1,442,204,127</u>
Property, plant and equipment, net	510,069,436	469,642,822
Deferred tax assets	23,226,772	39,082,498
Advances to suppliers, net of allowance of \$28,665,038 and \$28,905,858 as of December 31, 2011 and 2012, respectively	257,821	478,359
Prepaid land use right	13,805,283	18,628,710
Investments in affiliates	11,007,725	26,727,589
Intangible assets, net	8,516,234	4,327,604
Goodwill	2,264,847	—
Project assets	—	218,710,405
Other non-current assets	15,083,077	39,510,967
TOTAL ASSETS	<u>1,879,808,737</u>	<u>2,259,313,081</u>

See notes to consolidated financial statements.

**CANADIAN SOLAR INC.**

**CONSOLIDATED BALANCE SHEETS (Continued)**

	<b>December 31, 2011</b>	<b>December 31, 2012</b>
	<b>(In U.S. dollars, except share and per share data)</b>	
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term borrowings	743,687,062	858,926,732
Accounts payable	174,429,071	230,495,398
Short-term notes payable	131,568,540	231,135,928
Amounts due to related parties	3,007,809	5,036,642
Other payables	84,675,532	104,782,551
Advances from customers	65,216,074	18,659,296
Foreign currency derivative liabilities	—	365,226
Other current liabilities	33,863,320	90,847,957
<b>Total current liabilities</b>	<b>1,236,447,408</b>	<b>1,540,249,730</b>
Accrued warranty costs	47,021,352	58,334,424
Convertible notes	950,301	—
Long-term borrowings	88,249,027	214,562,973
Liability for uncertain tax positions	12,300,940	14,803,732
Deferred tax liabilities	—	56,151,575
Loss contingency accruals	27,862,017	28,461,085
<b>TOTAL LIABILITIES</b>	<b>1,412,831,045</b>	<b>1,912,563,519</b>
Commitments and contingencies (Note 18)		
Redeemable non-controlling interest	—	45,166,131
Equity:		
Common shares—no par value: unlimited authorized shares, 43,155,767 and 43,242,426 shares issued and outstanding at December 31, 2011 and 2012, respectively	502,402,939	502,561,705
Additional paid-in capital	(53,331,445)	(38,296,275)
Accumulated deficit	(28,693,433)	(224,162,124)
Accumulated other comprehensive income	45,555,710	50,795,529
Total Canadian Solar Inc. shareholders' equity	465,933,771	290,898,835
Non-controlling interest	1,043,921	10,684,596
Total equity	466,977,692	301,583,431
<b>TOTAL LIABILITIES, REDEEMABLE NON-CONTROLLING INTEREST AND SHAREHOLDERS' EQUITY</b>	<b>1,879,808,737</b>	<b>2,259,313,081</b>

See notes to consolidated financial statements.

**CANADIAN SOLAR INC.**
**CONSOLIDATED STATEMENTS OF OPERATIONS**

	Years Ended December 31,		
	2010	2011	2012
(In U.S. dollars, except share and per share data)			
Net revenues:			
—Non-related parties	1,495,509,056	1,879,247,942	1,284,316,201
—Related parties	—	19,674,164	10,513,212
Total net revenues	1,495,509,056	1,898,922,106	1,294,829,413
Cost of Revenue			
—Non-related parties	1,266,737,444	1,696,421,523	1,193,507,964
—Related parties	—	20,218,969	10,960,019
Total cost of revenues	1,266,737,444	1,716,640,492	1,204,467,983
Gross profit	228,771,612	182,281,614	90,361,430
Operating expenses:			
Selling expenses	47,109,261	69,341,229	91,052,729
General and administrative expenses	54,519,646	86,268,786	128,826,340
Research and development expenses	6,843,216	19,838,547	12,998,122
Total operating expenses	108,472,123	175,448,562	232,877,191
Income (loss) from operations	120,299,489	6,833,052	(142,515,761)
Other income (expenses):			
Interest expense	(22,164,363)	(43,843,586)	(53,304,640)
Interest income	6,935,560	8,446,647	13,359,962
Gain (loss) on change in foreign currency derivatives	1,656,928	(5,750,981)	(4,369,173)
Foreign exchange loss	(36,291,898)	(40,007,403)	(10,707,889)
Investment loss	(3,000,000)	—	(1,081,700)
Income (loss) before income taxes	67,435,716	(74,322,271)	(198,619,201)
Income tax (expense) benefit	(16,753,917)	(16,539,940)	5,433,410
Equity in earnings (loss) of unconsolidated investees	146,597	(41,163)	(1,969,306)
Net income (loss)	50,828,396	(90,903,374)	(195,155,097)
Less: net income (loss) attributable to non-controlling interest	259,477	(99,174)	313,594
Net income (loss) attributable to Canadian Solar Inc.	50,568,919	(90,804,200)	(195,468,691)
Earnings (loss) per share—basic	\$ 1.18	\$ (2.11)	\$ (4.53)
Shares used in computation—basic	42,839,356	43,076,489	43,190,778
Earnings (loss) per share—diluted	\$ 1.16	\$ (2.11)	\$ (4.53)
Shares used in computation—diluted	43,678,208	43,076,489	43,190,778

See notes to consolidated financial statements.

CANADIAN SOLAR INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year ended December 31,		
	2010	2011	2012
	(Amounts expressed in U.S. dollars)		
Net income (loss)	50,828,396	(90,903,374)	(195,155,097)
Other comprehensive income:			
Foreign currency translation adjustment	13,309,318	17,111,083	5,505,067
Comprehensive income (loss)	64,137,714	(73,792,291)	(189,650,030)
Less: comprehensive income (loss) attributable to non-controlling interest	228,150	(81,857)	578,842
Comprehensive income (loss) attributable to Canadian Solar Inc.	63,909,564	(73,710,434)	(190,228,872)

See notes to consolidated financial statements.

**CANADIAN SOLAR INC.**

**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**

	Common	Additional	Retained	Accumulated	Equity	Non-	Total	
	Shares	Paid-in	Earnings	Other	(Deficits)	Controlling	Equity	
	Number	Capital	(Accumulated	Comprehensive	Attribute to	Interest		
	\$	\$	Deficit)	Income	Canadian	\$	\$	
			\$	\$	Solar Inc.			
(In U.S. dollars, except share and per share data)								
Balance at								
January 1,								
2010	42,774,485	500,322,431	(61,268,954)	11,541,848	15,121,299	465,716,624	284,780	466,001,404
Net income	—	—	—	50,568,919	—	50,568,919	259,477	50,828,396
Foreign								
currency								
translation								
adjustment	—	—	—	—	13,340,645	13,340,645	(31,327)	13,309,318
Share-based								
compensation	—	—	3,876,671	—	—	3,876,671	—	3,876,671
Exercise of								
share options	118,559	823,560	—	—	—	823,560	—	823,560
Sales of								
subsidiary								
shares to non-								
controlling								
interest	—	—	—	—	—	—	145,128	145,128
Balance at								
December 31,								
2010	42,893,044	501,145,991	(57,392,283)	62,110,767	28,461,944	534,326,419	658,058	534,984,477
Net loss	—	—	—	(90,804,200)	—	(90,804,200)	(99,174)	(90,903,374)
Foreign								
currency								
translation								
adjustment	—	—	—	—	17,093,766	17,093,766	17,317	17,111,083
Share-based								
compensation	—	—	4,060,838	—	—	4,060,838	—	4,060,838
Exercise of								
share options	262,723	1,256,948	—	—	—	1,256,948	—	1,256,948
Paid-in capital								
from non-								
controlling								
interest	—	—	—	—	—	—	467,720	467,720
Balance at								
December 31,								
2011	43,155,767	502,402,939	(53,331,445)	(28,693,433)	45,555,710	465,933,771	1,043,921	466,977,692
Net loss	—	—	—	(195,468,691)	—	(195,468,691)	313,594	(195,155,097)
Foreign								
currency								
translation								
adjustment	—	—	—	—	5,239,819	5,239,819	265,248	5,505,067
Acquisition of								
subsidiaries	—	—	—	—	—	—	4,635,298	4,635,298
Issuance of								
warrant	—	—	9,849,928	—	—	9,849,928	—	9,849,928
Share-based								
compensation	—	—	5,185,242	—	—	5,185,242	—	5,185,242
Exercise of								
share options	86,659	158,766	—	—	—	158,766	—	158,766
Paid-in capital								
from non-								
controlling								
interest	—	—	—	—	—	—	4,426,535	4,426,535
Balance at								
December 31,								
2012	43,242,426	502,561,705	(38,296,275)	(224,162,124)	50,795,529	290,898,835	10,684,596	301,583,431

See notes to consolidated financial statements.



**CANADIAN SOLAR INC.**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Years Ended December 31,		
	2010	2011	2012
	(In U.S. dollars)		
<b>Operating activities:</b>			
Net income (loss)	50,828,396	(90,903,374)	(195,155,097)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	31,266,181	56,117,280	81,398,470
Loss on disposal of property, plant and equipment	194,243	1,223,163	1,991,098
(Gain) loss on change in fair value of derivatives	(1,656,928)	5,750,981	4,369,173
Investment loss	3,000,000	—	1,081,700
Equity in (loss) earnings of unconsolidated investees	(146,597)	41,163	1,969,306
Allowance for doubtful debts	3,046,100	23,156,857	43,611,217
Write-down of inventories	2,101,124	8,456,260	3,085,529
Provision for firm purchase commitment	1,562,002	10,610,410	—
Amortization of discount on debt	39,816	44,485	49,699
Share-based compensation	3,876,671	4,060,838	5,185,242
<b>Changes in operating assets and liabilities:</b>			
Inventories	(103,637,355)	(28,798,943)	3,960,749
Accounts receivable	(5,704,039)	(103,748,565)	(6,983,739)
Amount due from related parties	(1,347,828)	(18,135,684)	9,904,520
Value added tax recoverable	(1,828,277)	28,508,062	2,303,949
Advances to suppliers	2,227,991	13,458,006	(17,898,461)
Other non-current assets	(5,826,029)	(9,257,048)	(24,406,669)
Accounts receivable, unbilled	—	(51,370,820)	46,425,858
Project assets	—	(37,133,068)	(300,679,763)
Prepaid expenses and other current assets	(6,424,395)	(2,969,210)	(70,614,891)
Accounts payable	18,096,208	52,435,834	56,238,301
Short-term notes payable	(96,011,517)	118,154,508	99,114,001
Other payables	10,979,862	20,699,554	36,910,195
Advances from customers	5,120,313	56,706,824	(46,127,125)
Amounts due to related parties	2,163,515	484,649	2,015,133
Accrued warranty costs	14,259,880	15,737,987	11,334,395
Provision for firm purchase commitment	—	(27,862,017)	—
Loss contingency accruals	—	27,862,017	—
Other current liabilities	18,875,491	(744,073)	59,188,516
Prepaid land use right	(454,803)	229,241	(4,760,904)
Liability for uncertain tax positions	755,414	840,611	2,502,791
Deferred taxes	(5,179,877)	(4,632,976)	48,851,188
Settlement of foreign currency derivatives	1,337,319	(8,898,838)	(2,623,318)
Net cash provided by (used in) operating activities	<u>(58,487,119)</u>	<u>60,124,114</u>	<u>(147,758,937)</u>

**CANADIAN SOLAR INC.**
**CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**

	Years Ended December 31,		
	2010	2011	2012
	(In U.S. dollars)		
<b>Investing activities:</b>			
Decrease (increase) in restricted cash	(987,019)	23,614,897	(243,137,142)
Payment to acquire subsidiaries	—	(6,104,823)	—
Investment in affiliates	(1,503,531)	(5,667,627)	(3,428,751)
Proceeds from disposal of investment	2,524,541	—	555,475
Purchase of property, plant and equipment	(134,314,791)	(205,419,189)	(60,481,021)
Proceeds from disposal of property, plant and equipment	291,846	—	—
Net cash used in investing activities	(133,988,954)	(193,576,742)	(306,491,439)
<b>Financing activities:</b>			
Proceeds from short-term borrowings	917,514,400	1,808,463,199	791,596,176
Repayment of short-term borrowings	(695,513,690)	(1,721,463,494)	(692,071,052)
Proceeds from long-term borrowings	89,659,607	89,023,852	143,965,319
Sales of subsidiary shares to non-controlling interest	145,128	—	—
Capital contribution from non-controlling interest	—	467,720	4,426,535
Payment for repurchase of convertible notes	—	—	(1,000,000)
Proceeds from issuance of warrant	—	—	2,500,000
Proceeds from exercise of stock options	823,560	1,256,948	158,766
Net cash provided by financing activities	312,629,005	177,748,225	249,575,744
Effect of exchange rate changes	8,387,882	11,047,381	2,648,135
Net increase (decrease) in cash and cash equivalents	128,540,814	55,342,978	(202,026,497)
Cash and cash equivalents at the beginning of the year	160,110,887	288,651,701	343,994,679
Cash and cash equivalents at the end of the year	288,651,701	343,994,679	141,968,182
<b>Supplemental disclosure of cash flow information:</b>			
Interest paid, net of amounts capitalized	21,211,228	46,345,299	57,914,890
Income taxes paid	13,635,216	30,929,617	9,698,512
<b>Supplemental schedule of non-cash activities:</b>			
Amounts due from disposal of subsidiaries or affiliates included in prepaid expenses and other current assets	—	714,182	715,934
Property, plant and equipment cost included in other payables	22,199,024	36,495,522	16,814,481
Module contribution in exchange for minority investment in associates	—	—	15,874,847

See notes to consolidated financial statements.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**1. ORGANIZATION AND PRINCIPAL ACTIVITIES**

Canadian Solar Inc. ("CSI") was incorporated pursuant to the laws of the Province of Ontario in October 2001, and changed its jurisdiction by continuing under the Canadian federal corporate statute, the Canada Business Corporations Act, or CBCA, effective June 1, 2006.

CSI and its subsidiaries (collectively, the "Company") are principally engaged in the design, development, manufacturing and marketing of solar power products, and the total solution business in global markets. As of December 31, 2012, major subsidiaries of CSI are included in Appendix 1.

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES**

**(a) Basis of presentation**

The consolidated financial statements of the Company have been prepared in accordance with U.S. GAAP.

The accompanying consolidated financial statements contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. The realization of assets and the satisfaction of liabilities in the normal course of business are dependent on, among other things, the Company's ability to operate profitably, to generate cash flows from operations and to arrange adequate financing to support its working capital requirements. During the year ended December 31, 2012, the solar industry was negatively impacted by a number of factors, including excess capacity, reduction of government incentives in key solar markets, higher import tariffs and the European debt crisis. These factors contributed to declining average selling prices ("ASP") throughout the industry, including the Company's products. The Company suffered a net loss of \$195,468,691 and used cash of \$147,758,937 in operating activities for the year ended December 31, 2012. As of December 31, 2012, the Company had cash and cash equivalents of \$141,968,182, restricted cash of \$422,356,794 and bank borrowings due within one year of \$858,926,732. The Company's current liabilities exceed its current assets by \$98,045,603. The Company has carried out a review of its cash flow forecast for the twelve months ending December 31, 2013. Although no assurance can be given, management believes that the Company will be able to execute its current total solution business, realize forecasted module sales prices and shipments, and renew its bank borrowings in 2013. The Company also considered the steps it might take should it encounter difficulties in fully executing its total solution business and sales plans. Management believes that, in those circumstances, the Company would be able to renew substantially all its existing bank borrowings as they become due. Between January 1, 2013 and March 31, 2013, the Company renewed and drew down short-term bank borrowings of \$304,583,061, of which \$159,438,369 is due beyond December 31, 2013. Based on the above factors, management believes that adequate sources of liquidity will exist to fund the Company's working capital and capital expenditures requirements and to meet its short term debt obligations and other liabilities and commitments as they become due.

**(b) Basis of consolidation**

The consolidated financial statements include the financial statements of CSI and its subsidiaries.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

The consolidated financial statements include the financial statements of CSI and its subsidiaries in which it has a controlling financial interest. A controlling financial interest is typically determined when a company holds a majority of the voting equity interest in an entity. The Company evaluates each of its interest in private companies to determine whether or not the investee is a variable interest entity ("VIE"). If the Company demonstrates it both has (i) the power to direct the activities of a VIE that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE, then the entity is consolidated. The Company has not consolidated any VIEs as of or during any of the periods presented. All significant intercompany balances and transactions between CSI and its subsidiaries have been eliminated in consolidation.

*(c) Use of estimates*

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant accounting estimates reflected in the Company's financial statements include revenue recognition for solar power projects accounted for under the percentage of completion method, estimated sales returns, allowance for doubtful accounts receivable and advances to suppliers, valuation of inventories and provision for firm purchase commitments, provision for contingent liability, impairment of project assets, useful lives and impairment of long lived assets, accrual for warranty and the recognition of the benefit from the purchased warranty insurance, fair value of foreign exchange derivatives, provision for uncertain tax positions and tax valuation allowances and assumptions used in the computation of share-based compensation, including the associated forfeiture rates.

*(d) Cash and cash equivalents and restricted cash*

Cash and cash equivalents are stated at cost, which approximates fair value. Cash and cash equivalents consist of cash on hand and demand deposits, which are unrestricted as to withdrawal and use, and have original maturities of three months or less when acquired.

Restricted cash represents amounts held by banks, which are not available for the Company's general use, as security for issuance of letters of credit, short term notes payable, and bank borrowings. Upon maturity of the letters of credit and repayment of short term notes payable, and bank borrowings which generally occur within one year, the deposits are released by the bank and become available for general use by the Company.

*(e) Accounts receivable, unbilled*

Accounts receivable, unbilled represents revenue that has been recognized in advance of billing. The Company uses the percentage of completion method to recognize revenue from system integration projects for which the Company provides engineering, procurement and construction services ("EPC"). Under this accounting method, revenue may be recognized in advance of billing the customer, which

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

results in the recording of accounts receivable, unbilled. Once the Company meets the billing criteria under such contract, it bills the customer and reclassifies the unbilled balance to accounts receivable, trade. Billing requirements vary by contract, but are generally structured around completion of certain construction milestones.

*(f) Allowance for doubtful receivables*

The Company began purchasing insurance from China Export & Credit Insurance Corporation ("Sinasure") since 2009 for certain of its accounts receivable, trade in order to reduce its exposure to bad debt loss. The Company provides an allowance for accounts receivable, trade using primarily a specific identification methodology. An allowance is recorded based on the likelihood of collection from the specific customer regardless whether such account is covered by Sinasure. At the time the claim is made to Sinasure, the Company records a receivable from Sinasure equal to the expected recovery up to the amount of the specific allowance. The Company had recorded a receivable from Sinasure in prepaid expenses and other current assets of \$ 4,212,532, \$5,337,282 and \$9,515,899 as of December 31, 2010, 2011 and 2012, respectively, and a corresponding reduction in bad debt expense.

*(g) Advances to suppliers*

In order to secure a stable supply of silicon materials, the Company makes prepayments to certain suppliers based on written purchase orders detailing product, quantity and price. Such amounts are recorded in advances to suppliers in the consolidated balance sheets. Advances to suppliers expected to be utilized within twelve months as of each balance sheet date are recorded as current assets and the portion expected to be utilized after twelve months are classified as non-current assets in the consolidated balance sheets.

*(h) Inventories*

Inventories are stated at the lower of cost or market. Cost is determined by the weighted-average method. Cost is comprised of direct materials and, where applicable, direct labor costs, tolling costs and those overhead costs that have been incurred in bringing the inventories to their present location and condition.

Adjustments are recorded to write down the cost of obsolete and excess inventory to the estimated market value based on historical and forecast demand.

The Company outsources portions of its manufacturing process, including converting silicon into ingots, cutting ingots into wafers, and converting wafers into solar cells, to various third-party manufacturers. These outsourcing arrangements may or may not include transfer of title of the raw material inventory (silicon, ingots or wafers) to the third-party manufacturers. Such raw materials are recorded as raw materials inventory when purchased from suppliers. For those outsourcing arrangements in which title is not transferred, the Company maintains such inventory on the Company's balance sheet as raw materials inventory while it is in physical possession of the third-party manufacturer. Upon receipt, processed inventory is reclassified to work-in-process inventory and a processing fee is paid to the third-party manufacturer. For those outsourcing arrangements, which are

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

characterized as sales, in which title (including risk of loss) does transfer to the third-party manufacturer, the Company is constructively obligated, through raw materials sales agreements and processed inventory purchase agreements, which have been entered into simultaneously with the third-party manufacturer, to repurchase the inventory once processed. In this case, the raw material inventory remains classified as raw material inventory while in the physical possession of the third-party manufacturer and cash is received, which is classified as "advances from customers" on the balance sheet and not as revenue or deferred revenue. Cash payments for outsourcing arrangements, which require prepayment for repurchase of the processed inventory, are classified as "advances to suppliers" on the balance sheet. There is no right of offset for these arrangements and accordingly, "advances from customers" and "advances to suppliers" remain on the balance sheet until the processed inventory is repurchased.

On occasion, the Company enters into firm purchase commitments to acquire materials from its 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 the Company to pay for committed volumes regardless of whether the Company actually acquires the materials. The Company evaluates these agreements and records a loss, if any, on firm purchase commitments using the same lower of cost or market approach as that used to value inventory. The Company records the expected loss only as it relates to the following fiscal period, as it is unable to reasonably estimate future market prices beyond one year, in cost of revenues in the consolidated statements of operations.

*(i) Project assets*

Project assets consist primarily of direct costs relating to solar power projects in various stages of development that are capitalized prior to the sale of the solar power projects. A project asset is initially recorded at the actual cost. For a self-developed project asset that is initially obtained by application of feed-in-tariff ("FIT") contract and other required permits and consents, the actual cost capitalized is the amount of the expenditure incurred for the application of those contracts, permits, consents and other similar direct costs. For a project asset acquired from external parties, the initial cost is the acquisition cost which includes the consideration transferred and certain direct acquisition costs. Modules, construction expenditure and other development costs incurred in the project development process will build up the cost of project assets.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

## 2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)

Project assets consisted of the following at December 31, 2012:

	<u>At December 31,</u> <u>2012</u>
	\$
Project assets—Acquisition cost	275,423,447
Project assets—Modules cost	30,721,957
Project assets—Development cost	67,037,602
Project assets—Others	25,964,018
<b>Total Project assets</b>	<b>399,147,024</b>
Current portion	180,436,619
Non-current portion	218,710,405

The Company reviews project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In determining whether or not the project assets are recoverable, the Company considers a number of factors, including changes in environmental, ecological, permitting, marketing price or regulatory conditions that affect the project. Such changes may cause the cost of the project to increase or the selling price of the project to decrease. Any impairment of the project assets will be recorded as cost of sales in the consolidated financial statements.

Project assets expected to be sold within twelve months as of each balance sheet date are recorded as current assets and project assets expected to be sold after twelve months are recorded as non-current assets in the consolidated balance sheets. The cash flows associated with the acquisition, construction, and sale of projects assets are classified as from operating activities in the consolidated statements of cash flows.

The Company does not depreciate the project assets. If the Company has to operate the project assets by itself, the project assets will be reclassified to property, plant and equipment.

(j) **Business combination**

Business combinations are recorded using the purchase method of accounting and, accordingly, the acquired assets and liabilities are recorded at their fair market value at the date of acquisition. Any excess of acquisition cost over the fair value of the acquired assets and liabilities, including identifiable intangible assets, is recorded as goodwill.

(k) **Assets acquisition**

When the Company acquires other entities, if the assets acquired and liabilities assumed do not constitute a business, the transaction is accounted for as an asset acquisition. Assets are recognized based on the cost, which generally includes the transaction costs of the asset acquisition, and no gain or loss is recognized unless the fair value of noncash assets given as consideration differs from the assets' carrying amounts on the Company's books. If the consideration given is not in the form of cash (that is, in the form of noncash assets, liabilities incurred, or equity interests issued), measurement is based on

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

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**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

the fair value of the assets (or net assets) acquired. The cost of a group of assets acquired in an asset acquisition is allocated to the individual assets acquired or liabilities assumed based on their relative fair values and does not give rise to goodwill.

**(l) Property, plant and equipment**

Property, plant and equipment is recorded at cost less accumulated depreciation. The cost of property, plant and equipment comprises its purchase price and any directly attributable costs, including interest cost capitalized during the period the asset is brought to its working condition and location for its intended use. The Company expenses repair and maintenance costs as incurred.

Depreciation is computed on a straight-line basis over the following estimated useful lives:

Buildings	20 years
Leasehold improvements	Over the shorter of the lease term or their estimated useful lives
Machinery	5-10 years
Furniture, fixtures and equipment	5 years
Motor vehicles	5 years

Costs incurred in constructing new facilities, including progress payment, capitalized interest and other costs relating to the construction, are capitalized and transferred to property, plant and equipment on completion and depreciation commences from that time.

For property, plant and equipment that has been placed into service, but is subsequently idled temporarily, the Company continues to record depreciation expense during the idle period. The Company adjusts the estimated useful life of the idled assets if the estimated useful life has changed.

**(m) Intangible assets**

Intangible assets primarily represent the power purchase agreement, technical know-how, and computer software purchased from third parties. Intangible assets are recorded at fair value at the time of acquisition less accumulated amortization, if applicable. Amortization is recorded according to the following table on a straight-line basis for all intangible assets:

Power purchase agreement	20 years
Technical know-how	10 years
Computer software	1-10 years

**(n) Prepaid land use right**

Prepaid land use right represents amounts paid for the Company's lease for the use right of lands located in Changshu City, Suzhou City, and Luoyang City of People's Republic of China ("PRC"). Amounts are charged to earnings ratably over the term of the lease of 50 years.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

*(o) Investments in affiliates*

The Company holds equity investments in affiliates, which include minority interests in project assets that are being constructed, for which it does not have a controlling financial interest, but has the ability to exercise significant influence over the operating and financial policies of the investee. These investments are accounted for under equity method of accounting wherein the Company records its' proportionate share of the investees' income or loss in its consolidated financial statements.

Investments are evaluated for impairment when facts or circumstances indicate that the fair value of the investment is less than its carrying value. An impairment is recognized when a decline in fair value is determined to be other-than-temporary. The Company reviews several factors to determine whether a loss is other-than-temporary. These factors include, but are not limited to, the: (1) nature of the investment; (2) cause and duration of the impairment; (3) extent to which fair value is less than cost; (4) financial conditions and near term prospects of the issuers; and (5) ability to hold the security for a period of time sufficient to allow for any anticipated recovery in fair value. During the years ended December 31, 2010, 2011 and 2012, the Company recorded impairment charges on its investments of \$3.0 million, nil and \$1.1 million, respectively.

*(p) Impairment of long-lived assets*

The Company assesses the recoverability of the carrying value of long-lived assets when an indicator of impairment has been identified. The Company reviews the long-lived assets each reporting period to assess whether impairment indicators are present. For purposes of recognition and measurement of an impairment loss, a long-lived asset or assets is grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. For long-lived assets, when impairment indicators are present, the Company compares undiscounted future cash flows, including the eventual disposition of the asset group at market value, to the asset group's carrying value to determine if the asset group is recoverable. Assessments also consider changes in asset group utilization, including the temporary idling of capacity and the expected timing of placing this capacity back into production. If the sum of the expected undiscounted cash flows is less than the carrying amount of the assets, the Company would recognize an impairment loss based on the fair value of the assets. There was no impairment charge recognized for the years ended December 31, 2010, 2011 and 2012, respectively.

*(q) Interest Capitalization*

The Company capitalizes interest cost as part of the historical cost of acquiring or constructing certain assets during the period of time required to place the asset into service or sell the asset to a customer. These assets include property, plant and equipment and solar power system development and construction costs that the Company has capitalized as project assets. Interest capitalized for property, plant and equipment is depreciated over the estimated useful life of the related asset, as the qualifying asset is placed into service. The Company capitalizes interest in connection with the construction of project assets, and the interest capitalized forms part of the cost of sales when such project assets are sold and the Company has met all revenue recognition criteria. The Company capitalizes interest to the

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

extent that expenditures to acquire, construct, or develop an asset have occurred and interest cost has been incurred. The Company ceases capitalization of interest for project assets if the Company has sold such solar power systems.

**(r) Contingencies**

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. If a potential material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, is disclosed. Legal costs incurred in connection with loss contingencies are expensed as incurred.

**(s) Income taxes**

Deferred income taxes are recognized for temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, net tax loss carry-forwards and credits using the enacted tax rates expected to apply to taxable income in the periods in which the deferred tax liability or asset is expected to be settled or realized. Deferred tax assets are reduced by a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized. Current income taxes are provided for in accordance with the laws of the relevant taxing authorities. The components of the deferred tax assets and liabilities are individually classified as current and non-current based on the characteristics of the underlying assets and liabilities, or the expected timing of their use when they do not relate to a specific asset or liability.

Income tax expense includes (i) deferred tax expense, which generally represents the net change in the deferred tax asset or liability balance during the year plus any change in valuation allowances; (ii) current tax expense, which represents the amount of tax currently payable to or receivable from a taxing authority; and (iii) noncurrent tax expense, which represents the increases and decreases in amounts related to uncertain tax positions from prior period and not settled with cash or other tax attributes. The Company only recognizes tax benefits related to uncertain tax positions when such positions are more likely than not of being sustained upon examination. For such positions, the amount of tax benefit that the Company recognizes is the largest amount of tax benefit that is more than fifty percent likely of being sustained upon the ultimate settlement of such uncertain tax position. The Company records penalties and interest associated with the uncertain tax positions as a component of income tax expense.

**(t) Revenue recognition**

Sales of modules, solar system kits and silicon materials are recorded when products are delivered and title and risk of loss or damage has passed to the customers. A Solar system kit is a ready-to-install package consisting of solar modules produced by the Company and components, such as inverters, racking system, tracker and other accessories, supplied by third parties. The Company only recognizes revenues when prices to the seller are fixed or determinable and collectability is reasonably assured. If

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

collectability is not reasonably assured, the Company recognizes revenue only upon collection of cash. Revenues also include reimbursements of shipping and handling costs of products sold to customers. 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 the Company's contracts provide that products are shipped under the term of free on board ("FOB"), ex-works, or cost, insurance and freight ("CIF"). Under FOB, the Company fulfills its 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, the Company fulfills its obligation to deliver when it has made the goods available at its premises to the customer. The customer bears all costs and risks involved in taking the goods from the Company's premises to the desired destination. Under CIF, the Company 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.

The Company uses the percentage of completion method to recognize revenue from systems integration projects for which the Company provides EPC services under an EPC contract when the contract price is fixed or determinable. The Company uses the cost-to-cost method to measure the percentage of completion and recognize revenue based on the estimated progress to completion. The Company periodically revises its profit estimates based on changes in facts, and immediately recognizes any losses that are identified on contracts. Incurred costs include all direct material, labor, subcontractor cost, and other associated costs. The Company recognizes job material costs as incurred costs when the job materials have been permanently attached or fitted to the solar power systems as required by the engineering design. The construction periods normally extend beyond six months and less than one year.

The Company recognizes revenue from the sale of project assets in accordance with ASC 360-20, *Real Estate Sales*. For these transactions, the Company has determined that the project assets, which represent the costs of constructing solar power projects, represent "integral" equipment and as such, the entire transaction is in substance the sale of real estate and subject to the revenue recognition guidance under ASC 360-20 *Real Estate Sales*. The Company recognizes revenue and profit using the full accrual method once the sale is consummated, the buyer's initial and continuing investments are adequate to demonstrate its commitment to pay, the receivable is not subject to any future subordination, and the Company has transferred the usual risk and rewards of ownership to the buyer. If these criteria are met and the Company executes a sales agreement prior to the delivery of the solar power project and has an original construction period of three months or longer, the Company recognizes revenue and profit under the percentage of completion method of accounting applicable to real estate sales when the Company can reasonably estimate progress towards completion. If the criteria for recognition under the full accrual method are met except that the buyer's initial and continuing investment is less than the level determined to be adequate, the Company recognizes revenue using the installment method. Under the installment method, the Company records revenue up to costs incurred and apportions each cash receipt from the buyer between cost recovered and profit in

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

the same ratio as total cost and total profit bear to the sales value. During 2012, the Company recognized \$48,900,758 of revenue using the full accrual method.

The Company allocates revenue for transactions involving multiple-element arrangements to each unit of accounting on a relative fair value basis. The Company estimates fair value on each unit of accounting on the following basis (i) vendor-specific objective evidence of selling price, if it exists, otherwise, (ii) third-party evidence of selling price. If neither (i) nor (ii) exists, management's best estimate of the selling price for that unit of accounting is used. The Company recognizes revenue for each unit of accounting when the revenue recognition criteria have been met.

Sales to customers are recorded net of estimated returns.

The Company enters into toll manufacturing arrangements in which the Company receives wafers and returns finished modules. In those cases, the title of the wafers received and risk of loss remains with the seller. As a result, the Company does not recognize inventory on the balance sheet. The Company recognizes a service fee as revenue when the processed modules are delivered. During the years ended December 31, 2010, 2011 and 2012, the Company recognized nil, \$24,709,792, and \$7,911,733 of revenue, respectively, under toll manufacturing arrangements.

The Company enters into buy/sell arrangements with certain raw material vendors pursuant to which the Company sells finished goods, comprising either solar cells or solar modules, in exchange for raw materials, typically silicon wafers. These arrangements are made with counterparties in the same line of business as the Company and are executed as a means of securing a consistent supply of raw materials. The transactions are recorded in revenues and cost of revenues at fair value on a gross basis. During the years ended December 31, 2010, 2011, and 2012, the Company purchased nil, \$21,463,337, and nil of raw materials and sold nil, \$43,883,871, nil of finished goods under these buy-and-sell arrangements, respectively.

As of December 31, 2010, 2011 and 2012, the Company had inventories of \$18.8 million, \$23.2 million and \$18.4 million, respectively, relating to sales to customers where revenues were not recognized because the collection of payment was not reasonably assured. The delivered product remains in inventories on consolidated balance sheets, regardless of whether title has been transferred. In such cases, the Company recognizes revenue, relieves inventories and recognizes cost of revenue when payment is collected from customers.

**(u) Shipping and handling costs**

Payments received from customers for shipping and handling costs are included in net revenues. Shipping and handling costs relating to solar module sales of \$23,727,467, \$31,785,077 and \$41,902,327, are included in selling expenses for the years ended December 31, 2010, 2011 and 2012, respectively.

**(v) Research and development**

Research and development costs are expensed when incurred and amounted to \$6,843,216, \$19,838,547 and \$12,998,122 for the years ended December 31, 2010, 2011 and 2012, respectively.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

*(w) Advertising expenses*

Advertising expenses are expensed as incurred and amounted to \$5,148,215, \$11,194,027 and \$11,874,452 for the years ended December 31, 2010, 2011 and 2012, respectively.

*(x) Warranty cost*

Before June 2009, the Company typically sold standard solar modules and products with up to 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, the Company increased its warranty against defects in materials and workmanship to six years. Effective August 1, 2011, the Company increased its warranty against defects in materials and workmanship to 10 years and guarantees that, for a period of 25 years the modules will maintain the following performance levels: (i) during the first year, the actual power output of the module will be no less than 97% of the labeled power output; (ii) from year 2 to year 24, the actual annual power output decline will be no more than 0.7%; and (iii) by the end of year 25, the actual power output of the module will be no less than 80% of the labeled power output. The Company has the right to repair or replace solar modules, at its option, under the terms of the warranty policy. The Company maintains warranty reserves to cover potential liabilities that could arise under these guarantees and warranties.

In addition to the solar module warranty described above, for utility-scale solar power projects built by the Company, the Company provides a limited warranty against defects in workmanship under normal use, operation and service conditions for a period of five years following the energizing of the solar power plant. In resolving claims under both the workmanship warranty, the Company has the option of remedying through repair, refurbishment, or replacement of equipment.

When recognizing revenue for modules, solar system kits or solar power projects, the Company accrues a liability for the estimated future costs of meeting the limited warranty obligations. Due to limited warranty claims to date, the Company accrues the estimated costs of warranties based on an assessment of its competitors' accrual history, industry-standard accelerated testing, estimates of failure rates from its quality review, and other assumptions that the Company believes to be reasonable under the circumstances. Actual warranty costs are accumulated and charged against the accrued warranty liability. To the extent that accrual warranty costs differ from the estimates, the Company will prospectively revise the accrual rate. The Company currently records a 1% warranty provision for sales of solar modules and 0.8% for sales of solar system kits and solar power projects. The warranty costs of \$14,259,880, \$18,347,272 and \$12,516,349 are included in cost of revenues for the years ended December 31, 2010, 2011 and 2012 respectively.

The Company began to purchase product warranty insurance from a group of insurance companies to reduce the Company's exposure to the warranty and provide additional assurance to the Company's customers in April 2010. Under the terms of the policies, the insurance companies are obliged to reimburse the Company, subject to certain maximum claim limits and certain deductibles, for the actual product warranty costs that the Company incurs under the terms of the Company's warranty policy. The Company's customers are also beneficiaries of the policy, and would have recourse to the

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

insurance companies in the event that the Company was unable to perform under the terms of the policy. The Company records the insurance premiums initially as prepaid expenses and amortizes them over the respective policy period, normally one year. The unamortized carrying amount is \$14,719,807 and \$3,061,879 as of December 31, 2011 and 2012, respectively and was included as a component of other current assets. If the Company determines that the product warranty costs to be reimbursed from the insurance companies are probable and determinable, an asset is recognized on the balance sheet. The Company reviews the recoverability of warranty insurance receivables at each period end. As of December 31, 2012, the insurance receivable amounts were \$35,441,672, and were included as a component of other non-current assets.

(y) ***Redeemable Non-controlling Interest***

Redeemable non-controlling interests are equity interests in common stock of consolidated subsidiaries that have redemption features that are not solely within our control. These interests are classified as temporary equity because their redemption is considered probable. These interests are measured at the greater of estimated redemption value at the end of each reporting period or the initial carrying amount of the redeemable non-controlling interests adjusted for cumulative earnings allocations.

(z) ***Foreign currency translation***

The United States dollar ("U.S. dollar"), the currency in which a substantial amount of the Company's transactions are denominated, is used as the functional and reporting currency of CSI. Monetary assets and liabilities denominated in currencies other than the U.S. dollar are translated into U.S. dollars at the rates of exchange ruling at the balance sheet date. Transactions in currencies other than the U.S. dollar during the year are converted into the U.S. dollar at the applicable rates of exchange prevailing on the transaction date. Transaction gains and losses are recognized in the consolidated statements of operations. Gains and losses on intra-entity foreign currency transactions that are of a long-term-investment nature (that is, settlement is not planned or anticipated in the foreseeable future) between consolidated entities are not recognized in earnings, but are included as a component of other comprehensive income.

The financial records of certain of the Company's subsidiaries are maintained in local currencies other than the U.S. dollar, such as Renminbi ("RMB"), Euro ("EUR"), Canadian dollar ("CAD") and Japanese Yen ("Yen"), which are their functional currencies. Assets and liabilities are translated at the exchange rates at the balance sheet date, equity accounts are translated at historical exchange rates and revenues, expenses, gains and losses are translated using the average rate for the year. Translation adjustments are reported as foreign currency translation adjustment and are shown as a separate component of other comprehensive income in the statements of comprehensive income.

(aa)

***(aa) Comprehensive income***

Comprehensive income includes all changes in equity except those resulting from investments by owners and distributions to owners. For the years presented, total comprehensive income included

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

(i) net income, (ii) foreign currency translation adjustments and (iii) gains and losses on intra-entity foreign currency transactions that are of a long-term-investment nature (that is, settlement is not planned or anticipated in the foreseeable future) between consolidated entities. The consolidated financial statements have been adjusted for the retrospective application of the authoritative guidance regarding presentation of comprehensive income, which was adopted by the Company on January 1, 2012.

(ab)

***(ab) Foreign currency risk***

The RMB is not a freely convertible currency. The PRC State Administration for Foreign Exchange, under the authority of the People's Bank of China, controls the conversion of RMB into foreign currencies. The value of the RMB is subject to changes in central government policies and to international economic and political developments affecting supply and demand in the China foreign exchange trading system market. The Company's cash and cash equivalents and restricted cash denominated in RMB amounted to \$296,612,028, \$363,647,327 and \$491,288,121 as of December 31, 2010, 2011 and 2012, respectively.

(ac)

***(ac) Concentration of credit risk***

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents, accounts receivable and advances to suppliers. All of the Company's cash and cash equivalents are held with financial institutions that Company management believes to be high credit quality.

The Company conducts credit evaluations of customers and generally does not require collateral or other security from its customers. The Company establishes an allowance for doubtful accounts primarily based upon the age of the receivables and factors surrounding the credit risk of specific customers. With respect to advances to suppliers, such suppliers are primarily suppliers of raw materials and EPC services. The Company performs ongoing credit evaluations of its suppliers' financial conditions. The Company generally does not require collateral or security against advances to suppliers, however, it maintains a reserve for potential credit losses and such losses have historically been within management's expectation.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)**

The Company makes the prepayments without receiving collateral. Such prepayments are unsecured and expose the Company to supplier credit risk. As of December 31, 2011 and 2012, gross prepayments made to individual suppliers in excess of 10% of total advances to suppliers are as follows:

	At December 31, 2011	At December 31, 2012
	\$	\$
Supplier A	—	18,999,361
Supplier B	17,408,593	17,712,192
Supplier C	10,157,248	10,182,165
Supplier D	9,517,110	9,545,172
Supplier E	7,935,350	7,954,817
Supplier F	9,430,646	1,188,507

(ad)

***(ad) Fair value of derivatives and financial instruments***

The Company estimates fair value of financial assets and liabilities as the price that would be received from the sale of an asset or paid to transfer a liability (i.e., an exit price) on the measurement date in an orderly transaction between market participants. The fair value measurement guidance establishes a three-level fair value hierarchy that prioritizes the inputs into the valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority, Level 1, to measurements based on unadjusted quoted prices in active markets for identical assets or liabilities and lowest priority, Level 3, to measurements based on unobservable inputs and classifies assets and liabilities with limited observable inputs or observable inputs for similar assets or liabilities as Level 2 measurement. When available, the Company uses quoted market prices to determine the fair value of an asset or liability. If quoted market prices are not available, the Company measures fair value using valuation techniques that use; when possible, current market-based or independently sourced market parameters, such as interest rates and currency rates.

(ae)

***(ae) Earnings per Share***

Basic income per share is computed by dividing income attributable to holders of common shares by the weighted average number of common shares outstanding during the year. Diluted income per common share reflects the potential dilution that could occur if securities or other contracts to issue common shares were exercised or converted into common shares. Common share equivalents are excluded from the computation in loss periods, as their effects would be anti-dilutive.

(af)

***(af) Share-based compensation***

The Company's share-based compensation with employees and non-employees, such as restricted shares and share options, is measured at the grant date, based on the fair value of the award, and is recognized as expense over the requisite service period. The Company has made an estimate of expected forfeitures and is recognizing compensation cost only for those equity awards expected to vest.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (Continued)

(ag)

*(ag) Recently issued accounting pronouncements*

In February 2013, the FASB issued ASU 2013-02, an authoritative pronouncement related to reporting of amounts reclassified out of accumulated other comprehensive income. Under the guidance, an entity is required to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required under US GAAP to be reclassified in its entirety to net income. For other amounts that are not required under US GAAP to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures required under US GAAP that provide additional detail about those amounts. The amendments are effective prospectively for reporting periods beginning after December 15, 2012. Early adoption is permitted. The Company is in the process of evaluating the effect of adoption of this pronouncement.

In March 2013, the FASB issued ASU 2013-05, an authoritative pronouncement related to parent's accounting for the cumulative translation adjustment upon de-recognition of certain subsidiaries or groups of assets within a foreign entity or of an investment in a foreign entity. Under the guidance, the cumulative translation adjustment should be released into net income when a reporting entity (parent) ceases to have a controlling financial interest in a subsidiary or group of assets that is a nonprofit activity or a business within a foreign entity. A pro rata portion of the cumulative translation adjustment should be released into net income upon a partial sale of an equity method investment which is a foreign entity. The amendments are effective prospectively for reporting periods beginning after December 15, 2013. Early adoption is permitted. The Company is in the process of evaluating the effect of adoption of this pronouncement.

In July 2012, the FASB issued ASU 2012-02, Impairment of Indefinite-Lived Intangible Assets, an authoritative pronouncement related to testing indefinite-lived intangible assets, other than goodwill, for impairment. Under the guidance, an entity testing an indefinite-lived intangible asset for impairment has the option of performing a qualitative assessment before calculating the fair value of the asset. If the entity determines, on the basis of qualitative factors, that the fair value of the indefinite-lived intangible asset is not more likely than not (i.e., a likelihood of more than 50 percent) impaired, the entity would not need to calculate the fair value of the asset. The guidance does not revise the requirement to test indefinite-lived intangible assets annually for impairment. In addition, the guidance does not amend the requirement to test these assets for impairment between annual tests if there is a change in events or circumstances; however, it does revise the examples of events and circumstances that an entity should consider in interim periods. The guidance was effective for annual and interim impairment tests performed for fiscal years beginning after September 15, 2012. Early adoption is permitted. The adoption of this guidance did not have a significant effect on the Company's consolidated financial statements.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**3. ACQUISITION**Acquisition of Project FL3

On January 28, 2011, Canadian Solar Solutions Inc. ("CSSI") entered into a purchase agreement with SkyPower Limited ("SkyPower"), an independent third party, to purchase 50% of the share interest of both SunE Sky GP First Light III Ltd ("FL3 GP") and SunE Sky First Light III LP ("FL3 LP"), collectively "Project FL3" to extend its business scope as a solar farm owner in Canada. FL3 GP and FL3 LP were formed to build, install and operate the Project FL3, which is a proposed solar plant in Ontario Canada. The Company paid \$3,020,109 for the 50% interest in FL3 GP and FL3 LP and accounted for the investment using the equity method.

On May 24, 2011, CSSI entered into another purchase agreement with SkyPower to acquire the remaining 50% equity interests and become the sole shareholder of both FL3 GP and FL3 LP. The Company paid \$3,084,714 for such interests. The fair value of the acquired company as of May 24, 2011 approximated that of the acquired company as of January 28, 2011; therefore, no material gain or loss resulted from the step acquisition. GP's and FL3 LP's results of operations have been consolidated since May 24, 2011 and were immaterial for the year ended December 31, 2012.

Purchase price allocation

Net tangible assets acquired	\$ 845,929
Deferred tax liabilities	(1,345,152)
Power purchase agreement	4,339,201
Goodwill	2,264,845
Total consideration	<u>\$ 6,104,823</u>

Goodwill is not deductible for tax purposes and is not amortized, but is reviewed annually for impairment. The acquired goodwill is not deductible for tax purposes.

The fair value of the power purchase agreement, was calculated using the income approach and has an estimated useful life of 20 years. Amortization expense of \$142,969 was recorded for the year ended December 31, 2011.

On August 27, 2012, CSSI completed the sale of Project FL3 to Stonepeak Infrastructure Partners ("Stonepeak") for \$48.9 million, with a profit of \$6.4 million.

Acquisition of Projects 16

On April 17, 2012, the Company entered into a purchase agreement with a group of sellers ("Seller") under which the Company acquired 97% of the common shares and non-voting tracking shares in 16 solar power projects ("Projects 16") representing approximately 190-200MW from Seller. Each of these projects was awarded a 20-year power purchase contract by the Ontario Power Authority. Fifteen of these contracts were issued under Ontario's FIT program, and one was issued as part of

**CANADIAN SOLAR INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(In U.S. dollars)****3. ACQUISITION (Continued)**

Ontario's Renewable Energy Standard Offer Program (or "RESOP"). The following table summarized the total consideration the Company paid as at the closing date.

Total consideration paid	
Cash consideration	\$ 186,716,547
Fair value of the issuance of warrant, net of cash received	7,774,990
	<u>\$ 194,491,537</u>

The Company has allocated the total consideration between the tangible assets and project assets on the balance sheets.

As a part of the consideration, CSI issued a warrant (the "Warrant") which entitled the Seller to acquire 9.90% of CSI's outstanding common shares. The Warrant will not be exercisable until the expiry of one (1) year from June 15, 2012 (the "Closing Date"), and will expire on the fifth (5th) anniversary of the Closing Date. The exercise price of the warrant is \$5.00. The exercise price is subject to standard anti-dilution adjustments.

The fair market value of warrants was determined on the grant date through the binomial option pricing model using the following assumptions:

	<u>As at June 15, 2012</u>
Risk free rate	1.76%
Volatility ratio	93.50%
Dividend yield	—

As the non-voting tracking shares issued by the solar power projects were still held by the Seller on the Closing Date, and 97% of them would be redeemable by the Company upon satisfaction of certain conditions, the non-voting tracking shares are considered puttable equity instruments with a redemption feature that is not solely within the Company's control, and accordingly presented as redeemable non-controlling interest on the consolidated balance sheets.

**Acquisition of SunEdison Projects**

On December 26, 2012, CSSI acquired 100% interest in two utility-scale solar power projects in Ontario, Canada from SunEdison Power Canada Inc. with the total consideration of \$20.5 million. The Company recorded them as project assets on the consolidated balance sheets.

**4. ALLOWANCE FOR DOUBTFUL ACCOUNTS**

Allowance for doubtful accounts are comprised of allowances for accounts receivable, trade and advances to suppliers.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**4. ALLOWANCE FOR DOUBTFUL ACCOUNTS (Continued)**

An analysis of allowances for accounts receivable, trade for the years ended December 31, 2010, 2011 and 2012 is as follows:

	<u>2010</u>	<u>2011</u>	<u>2012</u>
	\$	\$	\$
Beginning of the year	18,029,440	7,956,036	9,505,481
Allowances made (reversed) during the year	(10,082,718)	6,552,926	43,240,595
Accounts written-off against allowances	—	(5,053,538)	(5,325,908)
Foreign exchange effect	9,314	50,057	162,049
Closing balance	<u>7,956,036</u>	<u>9,505,481</u>	<u>47,582,217</u>

In 2010 an allowance for doubtful accounts receivable was reversed by \$10,082,718; and in 2011 and 2012, allowance for doubtful accounts receivable was accrued by \$6,552,926 and \$43,240,595, respectively. The significant increase in allowance during 2012 was caused by specific provision for specific identified customers, including \$18.7 million allowance for doubtful accounts receivable from a Chinese company, and \$15.3 million allowance for doubtful accounts receivable from other specifically identified customers after reviewing the likelihood of collection from those customers.

An analysis of allowances for advances to suppliers for the years ended December 31, 2010, 2011 and 2012 is as follows:

	<u>2010</u>	<u>2011</u>	<u>2012</u>
	\$	\$	\$
Beginning of the year	10,985,195	19,389,542	38,123,721
Allowances made during the year	10,239,858	17,728,681	370,622
Accounts written-off against allowances	(2,205,848)	—	—
Foreign exchange effect	370,337	1,005,498	51,144
Closing balance	<u>19,389,542</u>	<u>38,123,721</u>	<u>38,545,487</u>

**5. INVENTORIES**

Inventories consist of the following:

	<u>At December 31,</u>	<u>At December 31,</u>
	2011	2012
	\$	\$
Raw materials	50,062,944	40,197,952
Work-in-process	49,157,454	16,739,907
Finished goods	197,347,729	217,517,939
	<u>296,568,127</u>	<u>274,455,798</u>

In 2010, 2011 and 2012, inventory was written down by \$2,101,124, \$8,456,260 and \$3,085,529, respectively, to reflect the lower of cost or market.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

6. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net consist of the following:

	<u>At December 31,</u> <u>2011</u>	<u>At December 31,</u> <u>2012</u>
	\$	\$
Buildings	150,147,460	166,300,361
Leasehold improvements	2,742,305	4,873,232
Machinery	413,079,111	422,895,433
Furniture, fixtures and equipment	26,397,638	34,611,157
Motor vehicles	2,908,260	3,023,309
	<u>595,274,774</u>	<u>631,703,582</u>
Less: Accumulated depreciation	<u>(122,078,346)</u>	<u>(202,390,860)</u>
	473,196,428	429,312,722
Construction in process	<u>36,873,008</u>	<u>40,330,100</u>
Property, plant and equipment, net	<u>510,069,436</u>	<u>469,642,822</u>

Depreciation expense of property, plant and equipment was \$30,946,035, \$55,104,656 and \$80,644,322 for the years ended December 31, 2010, 2011 and 2012, respectively. Construction in process represents production facilities under construction.

7. INTANGIBLE ASSETS, NET

The following summarizes the Company's intangible assets:

<u>As of December 31, 2012</u>	<u>Gross</u> <u>Carrying</u> <u>Amount</u>	<u>Accumulated</u> <u>Amortization</u>	<u>Net</u>
	\$	\$	\$
Technical know-how	1,025,861	(341,954)	683,907
Computer software	5,634,986	(1,991,289)	3,643,697
Total intangible assets, net	<u>6,660,847</u>	<u>(2,333,243)</u>	<u>4,327,604</u>

<u>As of December 31, 2011</u>	<u>Gross</u> <u>Carrying</u> <u>Amount</u>	<u>Accumulated</u> <u>Amortization</u>	<u>Net</u>
	\$	\$	\$
Acquired power purchase agreements	4,111,199	(142,969)	3,968,230
Technical know-how	1,023,354	(213,199)	810,155
Computer software	4,982,833	(1,244,984)	3,727,849
Total intangible assets, net	<u>10,117,386</u>	<u>(1,601,152)</u>	<u>8,516,234</u>

Amortization expense for the years ended December 31, 2010, 2011 and 2012 were \$320,146, \$1,012,624 and \$754,148, respectively.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

7. INTANGIBLE ASSETS, NET (Continued)

Amortization expenses of the above intangible assets is expected to be approximately \$0.9 million, \$0.9 million, \$0.8 million, \$0.6million and \$0.3 million for the years ended December 31, 2013, 2014, 2015, 2016 and 2017, respectively.

8. FAIR VALUE MEASUREMENT

As of December 31, 2011 and 2012, information about inputs into the fair value measurements of the Company's assets or liabilities that are measured at fair value on a recurring basis in periods subsequent to their initial recognition is as follows:

	Fair Value Measurements at Reporting Date Using			
	Total Fair Value and Carrying Value on the Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>As of December 31, 2012</b>				
<b>Assets:</b>				
Foreign exchange option contracts	\$ 100,837	\$ —	\$ 100,837	\$ —
Foreign exchange forward contracts	\$ 1,249,820	\$ —	\$ 1,249,820	\$ —
<b>Total Assets</b>	<b>\$ 1,350,657</b>	<b>\$ —</b>	<b>\$ 1,350,657</b>	<b>\$ —</b>
<b>Liabilities:</b>				
Foreign exchange option contracts	\$ —	\$ —	\$ —	\$ —
Foreign exchange forward contracts	\$ 365,226	\$ —	\$ 365,226	\$ —
<b>Total Liabilities</b>	<b>\$ 365,226</b>	<b>\$ —</b>	<b>\$ 365,226</b>	<b>\$ —</b>

	Fair Value Measurements at Reporting Date Using			
	Total Fair Value and Carrying Value on the Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>As of December 31, 2011</b>				
<b>Assets:</b>				
Foreign exchange option contracts	\$ 479,333	\$ —	\$ 479,333	\$ —
Foreign exchange forward contracts	\$ 2,247,205	\$ —	\$ 2,247,205	\$ —
<b>Total Assets</b>	<b>\$ 2,726,538</b>	<b>\$ —</b>	<b>\$ 2,726,538</b>	<b>\$ —</b>

The Company's foreign currency derivative instruments relate to foreign exchange option or forward contracts involving major currencies such as Euro and USD. Since its derivative instruments are not traded on an exchange, the Company values them using valuation models. Interest rate yield curves and foreign exchange rates are the significant inputs into these valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, the fair value measurements are classified as Level 2 in the hierarchy. The Company considers the

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**8. FAIR VALUE MEASUREMENT (Continued)**

effect of its own credit standing and that of its counterparties in valuations of its derivative financial instruments.

The Company measures certain long term investments at fair value on a non-recurring basis in periods after initial measurement in circumstances when the fair value of such asset is impaired below its recorded cost. As stated in Note 23, investment of \$3 million preferred share in a privately held company was fully impaired in 2010, and investment in Nernst New Energy (Suzhou) Co. of \$1.1 million was fully impaired in 2012, respectively, accordingly to the provisions of ASC 323-10. The fair value of such investments was classified as level 3 measurements as the valuation based on cash flow model involved significant unobservable inputs. The Company did not have any other assets or liabilities that were measured at fair value on a non-recurring basis subsequent to initial recognition for the years ended December 31, 2010, 2011 and 2012.

The Company also holds financial instruments that are not recorded at fair value in the consolidated balance sheets, but whose fair value is required to be disclosed under US GAAP. The carrying value of cash and cash equivalents, trade receivables, billed and unbilled, amount due from related parties, accounts and short-term notes payable, other payables, other current liabilities, amounts due to related parties, and short-term borrowings approximate their fair values due to the short-term maturity of these instruments. Long-term bank borrowings of \$214,562,973 as of December 31, 2012 approximate their fair value since these borrowings contain variable interest rates.

Depending on the terms of the specific derivative instruments and market conditions, some of the Company's derivative instruments may be assets and others liabilities at any particular point in time.

The Company's primary objective for holding derivative financial instruments is to manage currency risk. The recognition of gains or losses resulting from changes in fair values of those derivative instruments is based on the use of each derivative instrument and whether it qualifies for hedge accounting.

The Company entered into certain foreign currency derivative contracts to protect against volatility of future cash flows caused by the changes in foreign exchange rates. The foreign currency derivative contracts do not qualify for hedge accounting and, as a result, the changes in fair value of the foreign currency derivative contracts are recognized in the consolidated statements of operations. The Company recorded a gain (loss) on foreign currency derivative contracts of \$1,656,928, \$(5,750,981) and \$(4,369,173) for the years ended December 31, 2010, 2011 and 2012 respectively.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**8. FAIR VALUE MEASUREMENT (Continued)**

The effect of fair values of derivative instruments on the consolidated balance sheets as of December 31, 2011 and 2012 and the effect of derivative instruments on consolidated statements of operations for the years ended December 31, 2011 and 2012 are as follows:

	<b>Fair Values of Derivatives Asset</b>			
	<b>At December 31, 2011</b>		<b>At December 31, 2012</b>	
	<b>Balance Sheet Location</b>	<b>Fair Value</b>	<b>Balance Sheet Location</b>	<b>Fair Value</b>
Foreign exchange option contracts	Foreign currency derivative assets	\$ 479,333	Foreign currency derivative assets	\$ 100,837
Foreign exchange forward contracts	Foreign currency derivative assets	\$ 2,247,205	Foreign currency derivative assets	\$ 1,249,820
<b>Total derivatives</b>		<b>\$ 2,726,538</b>		<b>\$ 1,350,657</b>

	<b>Fair Values of Derivatives Liability</b>			
	<b>At December 31, 2011</b>		<b>At December 31, 2012</b>	
	<b>Balance Sheet Location</b>	<b>Fair Value</b>	<b>Balance Sheet Location</b>	<b>Fair Value</b>
Foreign exchange option contracts	Foreign currency derivative liabilities	\$ —	Foreign currency derivative liabilities	\$ —
Foreign exchange forward contracts	Foreign currency derivative liabilities	\$ —	Foreign currency derivative liabilities	\$ 365,226
<b>Total derivatives</b>		<b>\$ —</b>		<b>\$ 365,226</b>

	<b>Location of Gain (Loss) Recognized in Income on Derivatives</b>	<b>Amount of Gain (Loss) Recognized in Income on Derivatives</b>		
		<b>Year Ended December 31</b>		
		<b>2010</b>	<b>2011</b>	<b>2012</b>
Foreign exchange option contracts	Gain on foreign currency derivatives	\$ 6,636,821	\$ (6,933)	\$ 428,340
Foreign exchange forward contracts	Gain on foreign currency derivatives	\$(4,979,893)	\$ 1,182	\$(4,797,513)
<b>Total</b>		<b>\$ 1,656,928</b>	<b>\$(5,750,981)</b>	<b>\$(4,369,173)</b>

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

## 9. INVESTMENTS IN AFFILIATES

Investments in affiliates consist of the following:

	At December 31,			
	2011		2012	
	Carrying Value	Ownership Percentage	Carrying Value	Ownership Percentage
	\$	(%)	\$	(%)
Suzhou Gaochuangte New Energy Co., Ltd.	6,489,445	40	6,453,371	40
CSI SkyPower	—	—	2,565,075	50
GCL-CSI (Suzhou) Photovoltaic Technology Co., Ltd.	2,625,743	10	1,834,296	10
Nernst New Energy (Suzhou) Co., Ltd.	1,337,062	50	—	—
Ningxia GD CSI New Energy Co., Ltd.	555,475	35	—	—
Others	—	—	15,874,847	21-30
	<u>11,007,725</u>		<u>26,727,589</u>	

On October 14, 2009, CSI Cells Co., Ltd. (or "SZCC") established a joint venture, Ningxia GD CSI New Energy Co., Ltd., for total cash consideration of \$512,578. SZCC holds a 35% voting interest and one of the three board members is designated by SZCC and, as such, SZCC is considered to have significant influence over the investee. In March 2012, SZCC sold its interest for \$555,475.

On December 17, 2009, SZCC established a joint venture, Suzhou Gaochuangte New Energy Co., Ltd., for total cash consideration of \$2,929,020. SZCC holds a 40% voting interest and one of the three board members is designated by SZCC and, as such, SZCC is considered to have significant influence over the investee. On July 4, 2011, Suzhou Gaochuangte New Energy Co., Ltd. increased its share capital, and SZCC paid \$3,118,800 in proportion to its ownership percentage.

On November 30, 2010, SZCC acquired a 50% interest in a joint venture, Nernst New Energy (Suzhou) Co., Ltd., for cash consideration of \$1,503,531. The chairman of the board, who is designated by the other investor, has veto rights over all the operating and financial proposals from SZCC and, as such SZCC is not considered to have control, but does exercise significant influence, over the investee. In 2012, due to the deterioration of the investee's financial position, the Company concluded that the investment was fully impaired.

On July 4, 2011, CSI Solar Power (China) Inc. ("SZSP") acquired a 10% interest in a joint venture, GCL-CSI (Suzhou) Photovoltaic Technology Co., Ltd, for cash consideration of \$2,548,827. SZSP is able to exercise significant influence over the investee through its representative in the board.

On May 23, 2012, the Company established a joint venture, CSI SkyPower, for cash consideration of \$3,428,751. CSI holds a 50% voting interest and two of four board members are designated by CSI and, as such, CSI is considered to have significant influence over the investee.

On September 25, 2012, CSI Project Holdco, LLC ("USPH") acquired 21% equity interests in 9 separate utility-scale solar power projects from a third party by contribution of solar modules with an aggregate book value of \$2,122,225. These equity interests were recorded at the carrying value of the modules contributed.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**9. INVESTMENTS IN AFFILIATES (Continued)**

On September 27, 2012, USPH acquired equity interests of 30.3% and 28.3% in 2 separate utility-scale solar power projects, respectively, from a third party, by contribution of solar modules with an aggregate book value of \$2,204,008. These equity interests were recorded at the carrying value of the modules contributed.

In September, 2012, USPH also acquired 21% equity interests in 12 separate utility-scale solar power projects and 30% equity interests in 3 separate utility-scale solar power projects from a third party by contribution of solar modules with an aggregate book value of \$11,548,614. These equity interests were recorded at the carrying value of the modules contributed.

Equity in earnings (loss) of unconsolidated investees was \$146,597, \$(41,163) and \$(1,969,306) for the years ended December 31, 2010, 2011 and 2012, respectively.

**10. BORROWINGS**

	At December 31, 2011	At December 31, 2012
	\$	\$
Bank borrowings	831,936,089	1,073,489,705
Analysis as:		
Short-term	629,688,722	800,808,595
Long-term, current portion	113,998,340	17,481,257
Subtotal for short-term	743,687,062	818,289,852
Long-term, non-current portion	88,249,027	214,562,973
Borrowings from non-banking financial institutions	—	40,636,880
Analysis as:		
Short-term	—	40,636,880
Total	831,936,089	1,073,489,705

As of December 31, 2012, the Company had contractual bank credit facilities of \$1,388,843,703, of which \$214,562,973 has been drawn down with the due dates beyond December 31, 2013 and \$706,602,827 has been drawn down with the due dates before December 31, 2013; and \$467,677,902 was available for draw down upon demand. In addition, as of December 31, 2012, the Company also had non-binding bank credit facilities of \$189,324,636, of which \$134,720,502 has been drawn down with the due dates before December 31, 2013 and \$54,604,134 was subject to banks' discretion upon request for additional drawn down.

As of December 31, 2012, short-term borrowings of \$324,748,289 and long-term borrowings of \$71,593,182 were secured by property, plant and equipment with carrying amounts of \$43,279,771, inventory of \$31,819,267 and a prepaid land use right of \$7,864,132.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

10. BORROWINGS (Continued)

a) *Short-term*

The Company's short-term borrowings consisted of the following:

	At December 31, 2011	At December 31, 2012
	\$	\$
<b>Bank borrowings</b>		
Short-term borrowings secured by restricted cash	74,873,390	175,289,355
Short-term borrowings secured by inventory	15,767,880	79,548,166
Short-term borrowings guaranteed by Dr. Shawn Qu	33,328,470	66,349,563
Short-term borrowings secured by land use right and property, plant and equipment	39,295,970	231,676,935
Bank notes	—	21,825,595
Unsecured short-term borrowings	466,423,012	226,118,981
<b>Long-term Loans due within one year</b>		
Secured by property, plant and equipment	15,870,700	13,523,188
Secured by inventory	15,600,000	—
Unsecured	82,527,640	3,958,069
Subtotal	743,687,062	818,289,852
<b>Borrowings from non-banking financial institutions</b>		
Short-term borrowings secured by related parties	—	4,781,410
Bank notes	—	35,855,470
Subtotal	—	40,636,880
<b>Total</b>	<b>743,687,062</b>	<b>858,926,732</b>

The average interest rate on short-term borrowings was 5.16% and 4.60% per annum for the years ended December 31, 2011 and 2012, respectively. The borrowings are repayable within one year.

b) *Long-term*

The Company's long-term bank borrowings consisted of the following:

	At December 31, 2011	At December 31, 2012
	\$	\$
Unsecured	4,761,210	142,969,791
Long-term borrowings secured by land use right and property, plant and equipment	83,487,817	71,593,182
<b>Total</b>	<b>88,249,027</b>	<b>214,562,973</b>

**CANADIAN SOLAR INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(In U.S. dollars)****10. BORROWINGS (Continued)**

The average interest rate on long-term borrowings was 6.70% and 6.68% per annum for the years ended December 31, 2011 and 2012, respectively.

Future principal repayment on the long-term bank loans are as follows:

2013	17,481,257
2014	75,732,288
2015	33,232,774
2016 and after	105,597,911
Total	232,044,230
Less: future principal repayment related to long-term loan, current portion	(17,481,257)
Total long-term portion	<u>\$ 214,562,973</u>

On June 25, 2009, CSI Solar Power Inc. entered into several loan agreements with a local Chinese commercial bank for the construction of solar wafer production lines. The total credit facility under those agreements is \$14,318,677, which requires repayment of \$4,772,880, \$4,772,880, \$3,181,927 and \$1,590,960 in 2011, 2012, 2013 and 2014, respectively. Interest is due quarterly in arrears. The outstanding balance as of December 31, 2012 was \$4,772,887 and was guaranteed by CSI Cells Co., Ltd. The borrowing bears a floating base interest rate published by People's Bank of China for borrowings with the same maturities and does not contain any financial covenants or restrictions. On January 20, 2010, CSI Solar Power Inc. was merged into Canadian Solar Manufacturing (Changshu) Inc., and the loan was transferred to Canadian Solar Manufacturing (Changshu) Inc.

On May 31, 2010, CSI Cells Co., Ltd. entered into a syndicated loan agreement with local Chinese commercial banks for the expansion of solar cell production capacity. The total credit facility under this agreement is \$141,261,201, or an equivalent RMB amounts, with two tranches. The first tranche has a credit limit of \$69,333,970, which requires repayment within one year. The second tranche has a credit limit of \$71,927,231. As of December 31, 2012, CSI Cells Co., Ltd. has drawn \$34,667,091, from the first tranche in RMB, and \$70,169,290 from the second tranche in RMB. Both tranches bear the base interest rate published by People's Bank of China for the same maturity for RMB denominated borrowings. Interest under both tranches is due quarterly in arrears. Outstanding borrowings under this agreement were \$104,836,381 at December 31, 2012, which requires repayment of \$34,667,091, \$53,233,522, and \$16,935,768 in 2013, 2014 and 2015 respectively. The borrowing under the agreement is guaranteed by CSI Cells Co., Ltd, Canadian Solar Manufacturing (Luoyang) Inc., and Canadian Solar Manufacturing (Changshu) Inc. The agreement does not contain any financial covenants or restrictions.

On November 11, 2010, Canadian Solar Manufacturing (Changshu) Inc. entered into a loan agreement with a local Chinese commercial bank for the expansion of solar module production lines. The total credit facility under this agreement is \$47,728,900, which requires repayments of \$15,909,603, \$15,909,603 and \$15,909,604 in 2012, 2013 and 2014, respectively. The outstanding balance as of December 31, 2012 was \$13,523,188 which was secured by the land use right and buildings of Canadian

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**10. BORROWINGS (Continued)**

Solar Manufacturing (Changshu) Inc. and guaranteed by CSI Cells Co., Ltd. and Canadian Solar Manufacturing (Luoyang) Inc. Interest is due quarterly in arrears. The borrowing bears a floating rate equal to 95% of the base interest rate published by People's Bank of China and does not contain any financial covenants or restrictions.

On October 29, 2011, CSI Cells Co., Ltd. entered into a syndicated loan agreement with local Chinese commercial banks. The total credit facility under this agreement is \$130,458,720, or an equivalent RMB amount, with two tranches. The first tranche has a credit limit of \$27,046,320, which requires repayment within one year and for working capital purpose. The second tranche has a credit limit of \$103,412,400 for the expansion of solar cell production capacity of CSI Cell Co., Ltd. As of December 31, 2012, CSI Cells Co., Ltd. has drawn \$13,523,188, from the first tranche in RMB, and \$71,593,182 from the second tranche in RMB. Both tranches bear the base interest rate published by People's Bank of China for the same maturity for RMB denominated borrowings. Interest under both tranches is due quarterly in arrears. Outstanding borrowings under this agreement were \$85,116,370 at December 31, 2012, which requires repayment of \$13,523,188, \$6,118,823, \$6,118,823, \$15,359,128 and \$43,996,408 in 2013, 2014, 2015, 2016 and 2017 respectively. The borrowing under the agreement is secured by the land use right and buildings of CSI Cells Co., Ltd and are guaranteed by CSI Solar Power (China) Inc., Canadian Solar Manufacturing (Luoyang) Inc. and Canadian Solar Manufacturing (Changshu) Inc. The borrowing contains financial covenants which require that the ratio of liabilities to assets of CSI Cells Co., Ltd, shall not exceed 80%, the ratio of liabilities to assets of Canadian Solar Manufacturing (Changshu) Inc. and the Company shall not exceed 90%. As at December 31, 2012, the Company met all the requirements of the financial covenants.

On June 26, 2012, Canadian Solar Japan K.K. entered into a loan agreement with a Japanese bank for working capital. The total credit facility under the agreement is \$1,921,478, which has a maturity of 36 months, which requires the repayment of \$776,142, \$776,142 \$369,194 in 2013, 2014 and 2015 respectively. The borrowing bears a fixed rate of 0.9% and does not contain any financial covenants or restrictions.

On August 13, 2012, CSI entered into a loan agreement with a local Chinese bank for the acquisition of projects 16. The total credit facility under the agreement is \$93,298,555, or an equivalent CAD amount, which has a maturity of 60 months. Interest is due quarterly in arrears. The outstanding balance as of December 31, 2012 was \$70,064,205, which requires repayment of \$14,012,841, \$9,808,989, \$ 21,019,262 and \$ 25,223,113 in 2014, 2015, 2016 and 2017 respectively. The loan was guaranteed by CSI Solar Project 16 Inc., CSI Solar Power(China) Inc. and Canadian Solar Solutions Inc. The borrowing bears a floating interest rate equal to LIBOR+4.9%. The borrowing contains financial covenants which require that for any period ended Jun 30 and December 31 of each year, the ratio of liabilities to assets of the Company shall be no higher than 88%. As at December 31, 2012, the Company met the requirements of the financial covenants.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

## 10. BORROWINGS (Continued)

c) *Interest expense*

The Company capitalized interest costs incurred into the Company's property, plant and equipment or the Company's project assets as follows during the years ended December 31, 2010, 2011 and 2012:

	Years Ended December 31		
	2010	2011	2012
	\$	\$	\$
Interest capitalized—project assets	—	—	4,631,569
Interest capitalized—property, plant and equipment	1,686,262	4,099,815	670,374
Interest expense	22,164,363	43,843,586	53,304,640
Total interest incurred	23,850,625	47,943,401	58,606,583

## 11. SHORT-TERM NOTES PAYABLE

The Company enters into arrangements with banks wherein the banks issue notes to the Company's vendors, which effectively serve to extend the payment date of the associated accounts payable. Vendors may present the notes for payment to a bank, including the bank issuing the note, prior to the stated maturity date, but generally at a discount from the face amount of the note. Although the option is available, the Company's vendors rarely pursue settlement in advance of the note maturity date. Further, the Company is required to deposit restricted cash balances with the issuing bank, which are utilized to immediately repay the bank upon the banks' settlement of the notes. Given the purpose of these arrangements is to extend the payment dates of accounts payable, the Company has recorded such amounts as short-term notes payable. As payments by the bank are immediately repaid by the Company's restricted cash balances and other deposits with that same bank, the notes payable do not represent cash borrowings from the bank and, as such, the associated cash payments have been recorded by the Company as an operating activity in the consolidated statements of cash flows. As of December 31, 2011 and 2012, short-term notes payable was \$131,568,540 and \$231,135,928, respectively.

## 12. ACCRUED WARRANTY COSTS

The Company's warranty activity is summarized below:

	2010	2011	2012
	\$	\$	\$
Beginning balance	16,899,522	31,224,906	47,021,352
Warranty provision	14,707,513	18,347,272	12,516,349
Warranty costs incurred	(382,129)	(2,550,826)	(1,203,277)
Ending balance	31,224,906	47,021,352	58,334,424

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

13. CONVERTIBLE NOTES

2007 Convertible Note Subscription Agreement

On December 11, 2007, the Company signed a subscription agreement for the issuance of convertible notes of \$75,000,000 (the "2007 Notes").

The terms of the 2007 Notes are described as follows:

*Maturity date.* The 2007 Notes mature on December 15, 2017.

*Interest.* The 2007 Note holders are entitled to receive interest at 6% per annum on the principal outstanding, in semi-annually installments, payable in arrears.

*Conversion.* The initial conversion rate is 50.6073 shares per \$1,000 initial principal amount, which represents an initial conversion price of approximately \$19.76 per share. The 2007 Notes are convertible at any time prior to maturity. The conversion rate is subject to change for certain anti-dilution events and upon a change in control. If the holders elect to convert the 2007 Notes upon a change of control, the conversion rate will increase by a number of additional shares as determined by reference to an adjustment schedule based on the date on which the change in control becomes effective and the price paid per common share in the transaction (referred to as the "Fundamental Change Make-Whole Premium"). The Fundamental Make-Whole Premium is intended to compensate holders for the loss of time value upon early exercise.

*Redemption.* The holders may require the Company to repurchase the 2007 Notes for cash on December 24, 2012 and December 15, 2014, at a repurchase price equal to 100% of the principal amount, plus accrued and unpaid interest. The Company may redeem the notes on or after December 24, 2012 at a redemption price equal 100% of the principal amount of the notes, plus accrued and unpaid interest, (i) in whole or in part the closing price for the common shares exceeds 130% of the conversion price for at least 20 trading days within a period of 30 consecutive trading days ending within five trading days of the notice of redemption or (ii) in whole only, if at least 95% of the initial aggregate principal amount of the 2007 Notes originally issued have been redeemed, converted or repurchased and, in each case, cancelled.

The Company recognized both the debt and equity components associated with the 2007 Notes. The debt component was recognized at the fair value of a similar instrument that does not have an associated equity component, which initially amounted to \$62,686,088. The equity component was recognized as the difference between the proceeds and the fair value of the debt component. Offering costs incurred for the issuance of the 2007 Notes amounted to \$3,351,634, which were allocated to the debt and equity components in proportion to the allocation of the proceeds and were accounted for as debt issuance costs and equity issuance costs, respectively. The initial debt issuance costs amounted to \$2,801,344. The debt discount (measured as the difference between the proceeds and the initial debt component plus debt issuance costs) are being amortized through interest expense over the period from December 10, 2007, the date of issuance, to December 24, 2012, the earliest redemption date, using the effective interest rate method, which was 11.4% for the years ended December 31, 2010, 2011 and 2012, respectively. Amortization expense of \$39,816, \$44,485 and \$49,699 was recorded for the years

**CANADIAN SOLAR INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(In U.S. dollars)****13. CONVERTIBLE NOTES (Continued)**

ended December 31, 2010, 2011 and 2012, respectively. In addition, coupon interest of \$60,000 was recorded for the years ended December 31, 2010, 2011 and 2012, respectively.

On May 27, 2008, the Company offered to increase the conversion rate, based on a specified formula, to induce the holders of the 2007 Notes to convert their notes into the Company's common shares (the "Offer") on or before June 24, 2008.

On June 27, 2008, the Company announced an increased conversion rate of 53.6061 in accordance with the terms of the Offer and issued 3,966,841 common shares in exchange for \$74,000,000 in principal amount of the 2007 Notes. The induced conversion resulted in a charge to earnings of \$10,170,118, which was equal to the fair value of all common shares and cash consideration transferred in the transaction in excess of the fair value of the common shares issuable pursuant to the original conversion terms. In addition, the Company recognized \$2,429,524 as a gain on debt extinguishment, equal to the difference between the consideration attributed to the debt component and the sum of (a) the net carrying amount of the debt component and (b) any unamortized debt issuance costs. In addition, upon conversion, \$13,766,173 in unamortized debt discount and debt issuance costs was reclassified to common shares.

In December 2012, notes with the aggregate principal amount of \$1,000,000 were redeemed according to the contractual redemption terms with no gain or loss recognized. As of December 31, 2012, no convertible notes remained outstanding.

Details of convertible notes as of December 31, 2011 and 2012 are as follows:

	<u>At December 31,</u> <u>2011</u>	<u>At December 31,</u> <u>2012</u>
	\$	\$
Carrying amount of the equity component	156,848	—
Principal amount of the debt component	1,000,000	—
Unamortized debt discount	49,699	—
Net carrying amount of the debt component	<u>950,301</u>	<u>—</u>

**14. RESTRICTED NET ASSETS**

As stipulated by the relevant laws and regulations applicable to China's foreign investment enterprise, the Company's PRC subsidiaries are required to make appropriations from net income as determined under accounting principles generally accepted in the PRC ("PRC GAAP") to non-distributable reserves, which include a general reserve, an enterprise expansion reserve and staff welfare and bonus reserve. The wholly-owned PRC subsidiaries are not required to make appropriations to the enterprise expansion reserve but appropriations to the general reserve are required to be made at not less than 10% of the profit after tax as determined under PRC GAAP. The board of directors determines the staff welfare and bonus reserve.

The general reserve is used to offset future losses. The subsidiaries may, upon a resolution passed by the stockholder, convert the general reserve into capital. The staff welfare and bonus reserve is used

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**14. RESTRICTED NET ASSETS (Continued)**

for the collective welfare of the employee of the subsidiaries. The enterprise expansion reserve is for the expansion of the subsidiaries' operations and can be converted to capital subject to approval by the relevant authorities. These reserves represent appropriations of the retained earnings determined in accordance with Chinese law.

In addition to the general reserve, the Company's PRC subsidiaries are required to obtain approval from the local PRC government prior to distributing any registered share capital. Accordingly, both the appropriations to general reserve and the registered share capital of the Company's PRC subsidiaries are considered as restricted net assets amounting to \$359,922,466 as of December 31, 2012.

**15. INCOME TAXES**

The provision for income taxes is comprised of the following:

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
<b>Income (Loss) before Income Tax</b>			
Canada	18,354,204	(23,378,980)	2,616,980
Other	49,228,109	(50,984,454)	(203,205,487)
	<u>67,582,313</u>	<u>(74,363,434)</u>	<u>(200,588,507)</u>
<b>Current Tax</b>			
Canada	9,563,915	8,047,733	2,447,930
Other	13,793,997	13,078,893	13,249,752
	<u>23,357,912</u>	<u>21,126,626</u>	<u>15,697,682</u>
<b>Deferred Tax</b>			
Canada	(848,566)	2,577,854	1,713,862
Other	(5,755,429)	(7,164,540)	(22,844,954)
	<u>(6,603,995)</u>	<u>(4,586,686)</u>	<u>(21,131,092)</u>
<b>Total Income Tax (Benefit) Expense</b>			
Canada	8,715,349	10,625,587	4,161,792
Other	8,038,568	5,914,353	(9,595,202)
	<u>16,753,917</u>	<u>16,539,940</u>	<u>(5,433,410)</u>

The Company mainly operates in Canada, PRC, Japan, Germany and the United States.

**Canada**

The Company was incorporated in Ontario, Canada and is subject to both federal and Ontario provincial corporate income taxes at a rate of 31%, 28.25% and 26.5% for the years ended December 31, 2010, 2011 and 2012, respectively.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**15. INCOME TAXES (Continued)**

Canadian Solar Solutions Inc. was incorporated in Ontario, Canada and is subject to both federal and Ontario provincial corporate income taxes at a rate of 31%, 28.25% and 26.5% for the years ended December 31, 2010, 2011 and 2012, respectively.

Canadian Solar Manufacturing (Ontario) Inc. was a manufacturing entity incorporated in Ontario, Canada, and is subject to both federal and Ontario provincial corporate income taxes at a rate of 26.5% and 25% for the years ended December 31, 2011 and 2012, respectively.

**United States**

Canadian Solar (USA) Inc. was incorporated in Delaware, USA and is subject to federal, California, and states corporate income taxes at a rate of 39.83%, 40.03% and 35.55% for the years ended December 31, 2010, 2011 and 2012, respectively.

**Japan**

Canadian Solar Japan K.K. was incorporated in Japan and is subject to Japanese corporate income taxes at a normal statutory rate of approximately 40.69% for the years ended December 31, 2010, 2011 and 2012, respectively.

**Germany**

Canadian Solar EMEA GmbH was incorporated in Munich, Germany and is subject to German corporate income tax at a rate of approximately 33% for the years ended December 31, 2010, 2011 and 2012, respectively.

**Hong Kong**

Canadian Solar International Ltd. ("HKSI") was incorporated in Hong Kong, China, and is subject to Hong Kong profits tax at a rate of 16.5% for the years ended December 31, 2011 and 2012, respectively.

**PRC**

The other major operating subsidiaries, including CSI Solartronics (Changshu) Co., Ltd., CSI Solar Technologies Inc., CSI Cells Co., Ltd., Canadian Solar Manufacturing (Luoyang) Inc., CSI Solar Power (China) Inc. and Canadian Solar Manufacturing (Changshu) Inc., were governed by the PRC Enterprise Income Tax Law ("new EIT Law"), which replaced the previous Income Tax Law of PRC Concerning Foreign Investment and Foreign Enterprises and various other local income tax regulations, effective from January 1, 2008.

Under the new EIT Law, both foreign-invested enterprises and domestic enterprises are subject to a uniform enterprise income tax rate of 25%. The new EIT Law also provides a five-year transition period for those enterprises established before the promulgation date of the new EIT Law and were entitled to preferential tax treatment under the previous tax law. Enterprises that were subject to an enterprise income tax rate lower than 25% will have the new uniform enterprise income tax rate of

**CANADIAN SOLAR INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(In U.S. dollars)****15. INCOME TAXES (Continued)**

25% phased in over a five-year period from the effective date of the EIT Law. Enterprises that were entitled to exemptions or reductions from the standard income tax rate for a fixed term may continue to enjoy such treatment until the fixed term expires, subject to certain limitations.

SZCC is currently subject to a preferential enterprise income tax rate of 15% for the three years from 2012 to 2014, resulting from its HNTE status recognized in 2009 and renewed in 2012.

Accordingly, the enterprise income tax rates applicable to the Company's major operating subsidiaries in China are summarized as follows:

<u>Company</u>	<u>Applicable enterprise income tax rate under the new EIT Law</u>
CSI Solartronics (Changshu) Co., Ltd.	25%
CSI Solar Technologies Inc.	Exempted for 2008 and 2009, and 12.5% for 2010, 2011 and 2012 (half reduction of 25%)
CSI Cells Co., Ltd.	Exempted for 2008, 12.5% for 2009, 2010 and 2011 (half reduction of 25%), and 15% for 2012, 2013 and 2014 resulting from its HNTE status
Canadian Solar Manufacturing (Luoyang) Inc.	Exempted for 2008, 12.5% for 2009, 2010 and 2011 (half reduction of 25%), and 25% for 2012 onwards
Canadian Solar Manufacturing (Changshu) Inc	Exempted for 2008 and 2009, 12.5% for 2010, 2011 and 2012 (half reduction of 25%), and 25% for 2012 onwards
CSI Solar Power (China) Inc.	25%

The Company makes an assessment of the level of authority for each of its uncertain tax positions (including the potential application of interest and penalties) based on their technical merits, and has measured the unrecognized benefits associated with such tax positions. This liability is recorded as liability for uncertain tax positions in the consolidated balance sheet. In accordance with its policies, the Company accrues and classifies interest and penalties associated with such unrecognized tax benefits as a component of its income tax provision. The amount of interest and penalties accrued as of December 31, 2011 and 2012 was \$2,847,899 and \$3,561,524, respectively. The Company does not anticipate any significant changes to its liability for unrecognized tax positions within the next 12 months.

**CANADIAN SOLAR INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(In U.S. dollars)****15. INCOME TAXES (Continued)**

The following table illustrates the movement and balance of the Company's liability for uncertain tax positions (excluding interest and penalties) for the years ended December 31, 2010, 2011 and 2012, respectively.

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
Beginning balance	8,953,568	9,191,281	9,453,041
Addition for tax positions related to the current year	—	736,707	1,789,167
Addition for tax positions from prior years	342,617	—	—
Reductions for tax positions from prior years/Statute of limitations expirations	(104,904)	(474,947)	—
Ending balance	<u>9,191,281</u>	<u>9,453,041</u>	<u>11,242,208</u>

The Company is subject to taxation in various jurisdictions where it operates, mainly including Canada and China. Generally, the Company's taxation years from 2005 to 2011 are open for reassessment to the Canadian tax authorities. The Company's taxation years from 2002 through 2012 are subject to examination by the Chinese tax authorities due to its permanent establishment in China.

According to the PRC Tax Administration and Collection Law, the statute of limitations is three years if the underpayment of income taxes is resulted from the computational errors of the taxpayer. The statute of limitations could be extended to five years under special circumstances. Though not being clearly defined, a special circumstance would suffice where any underpayment of income taxes exceeds RMB100,000. For income tax adjustments relating to transfer pricing matters, the statute of limitations is ten years. Therefore, the Company's Chinese subsidiaries might be subject to reexamination by the Chinese tax authorities on non-transfer pricing matters for taxation years up to 2007 retrospectively, and on transfer pricing matters for taxation years up to 2002 retrospectively. There is no statute of limitations in case of tax evasion in China.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

15. INCOME TAXES (Continued)

The components of the deferred tax assets and liabilities are presented as follows:

	At December 31, 2011	At December 31, 2012
	\$	\$
<b>Deferred tax assets:</b>		
Accrued warranty costs	11,591,771	9,208,666
Bad debt provision	6,231,452	12,113,049
Issuance costs	1,006,272	339,267
Inventory write-down	4,434,180	6,649,004
Depreciation difference of property, plant and equipment	10,826,169	17,920,711
Contingent liabilities	—	4,508,086
Net operating losses carry-forward	37,960,792	69,189,405
Others	2,694,473	3,158,341
Total deferred tax assets	74,745,109	123,086,529
Valuation allowance	(39,745,271)	(54,140,359)
Total deferred tax assets, net of valuation allowance	34,999,838	68,946,170
<b>Analysis as:</b>		
Current	11,773,066	29,863,674
Non-current	23,226,772	39,082,496
	34,999,838	68,946,170
<b>Deferred tax liabilities:</b>		
Financial derivatives assets	340,817	700,184
Acquisition of subsidiaries	1,230,740	—
Depreciation difference of property, plant and equipment	—	4,644,722
Basis difference relating to SkyPower acquisition	—	62,572,569
Others	591,555	709,052
Total deferred tax liabilities	2,163,112	68,626,527
<b>Analysis as:</b>		
Current	2,163,112	12,474,952
Non-current	—	56,151,575
	2,163,112	68,626,527

As of December 31, 2012, the Company has accumulated net operating losses of \$252,243,949 of which \$16,516,003 will expire between 2015 and 2032, and the remaining can be carried forward indefinitely.

The Company considers positive and negative evidence to determine whether some portion or all of the deferred tax assets will not be realized. This assessment considers, among other matters, the nature, frequency and severity of recent losses, forecasts of future profitability, the duration of statutory

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

15. INCOME TAXES (Continued)

carry-forward periods, the Company's experience with tax attributes expiring unused and tax planning alternatives. The Company has considered the following possible sources of taxable income when assessing the realization of deferred tax assets:

- Tax planning strategies;
- Future reversals of existing taxable temporary differences;
- Further taxable income exclusive of reversing temporary differences and carry-forwards.

The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible for tax purposes. As a result, the Company has recognized a valuation allowance of \$39,745,271 and \$54,140,359 as at December 31, 2011 and 2012, respectively.

Reconciliation between the provision for income tax computed by applying Canadian federal and provincial statutory tax rates to income before income taxes and the actual provision and benefit for income taxes is as follows:

	Years Ended December 31,		
	2010	2011	2012
Combined federal and provincial income tax rate	31%	28%	27%
Expenses not deductible for tax purpose	3%	(19)%	(1)%
Tax exemption and tax relief granted to the Company	(10)%	25%	—
Effect of different tax rate of subsidiary operations in other jurisdiction	(3)%	(3)%	(7)%
Unrecognized tax benefits	1%	(1)%	(1)%
Valuation allowance	2%	(51)%	(14)%
Exchange gain (loss)	1%	(1)%	(1)%
	25%	(22)%	3%

The aggregate amount and per share effect of the tax holiday are as follows:

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
The aggregate dollar effect	6,781,702	18,162,641	—
Per share effect—basic	0.16	0.42	—
Per share effect—diluted	0.16	0.42	—

In accordance with the EIT Law, dividends, which arise from profits of foreign invested enterprises ("FIEs") earned after January 1, 2008, are subject to a 10% withholding income tax. Under applicable accounting principles, a deferred tax liability should be recorded for taxable temporary difference attributable to excess of financial reporting basis over tax basis in the investment in a foreign subsidiary. However, a deferred tax liability is not recognized if the basis difference is not expected to

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

15. INCOME TAXES (Continued)

reverse in the foreseeable future and is expected to be permanent in duration. As of December 31, 2012, all of the undistributed earnings of approximately \$116.33 million attributable to the Company's PRC subsidiaries and affiliates are considered to be permanently reinvested and no provision for PRC withholding income tax on dividend has been made thereon accordingly.

16. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted gain (loss) per share for the periods indicated:

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
Net income (loss) attributable to Canadian Solar Inc.—basic and diluted	\$ 50,568,919	\$ (90,804,200)	\$ (195,468,691)
Weighted average number of common shares—basic	42,839,356	43,076,489	43,190,778
Diluted share number from share options and restricted shares	838,852	—	—
Weighted average number of common shares—diluted	43,678,208	43,076,489	43,190,778
Basic earnings (loss) per share	\$ 1.18	\$ (2.11)	\$ (4.53)
Diluted earnings (loss) per share	\$ 1.16	\$ (2.11)	\$ (4.53)

The following table sets forth anti-dilutive shares excluded from the computation of diluted earnings (loss) per share for the periods indicated.

	Years Ended December 31,		
	2010	2011	2012
Convertible notes	50,607	50,607	—
Share options, restricted shares and restricted share units	426,716	1,871,147	4,288,008
Warrant	—	—	4,273,102
	<u>477,323</u>	<u>1,921,754</u>	<u>8,561,110</u>

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**17. RELATED PARTY BALANCES AND TRANSACTIONS**

*Related party balances:*

The amount due from related party of \$9,977,177 as of December 31, 2012 is a trade receivable from the affiliate Suzhou Gaochuangte New Energy Co. Ltd ("Gaochuangte"), the Company's 40% owned affiliate, for module products sold.

The amount due from related party of \$19,835,942 as of December 31, 2011 is a trade receivable from the affiliate Suzhou Gaochuangte New Energy Co. Ltd ("Gaochuangte"), the Company's 40% owned affiliate, for module products sold.

The amount due to related party of \$5,036,642 as of December 31, 2012 consists of (i) a government award of \$283,191, payable to Dr. Shawn Qu, Chairman, President, Chief Executive Officer, and major stockholder of the Company, which was initially paid to the Company, and (ii) a trade payable of \$4,753,450 to Gaochuangte for the solar project construction service fees.

The amount due to related party of \$3,007,809 as of December 31, 2011 consists of (i) a government award of \$282,498, payable to Dr. Shawn Qu, Chairman, President, Chief Executive Officer, and major stockholder of the Company, which was initially paid to the Company, and (ii) a trade payable of \$2,725,311 to Gaochuangte for the solar project construction service fees.

*Related party transactions:*

**Guarantees and Share Pledges**

Dr. Qu fully guaranteed a one-year RMB1,520 million and RMB1,001 million loan facilities from Chinese Commercial Banks in 2011 and 2012, respectively. Amounts drawn down from the facilities as at December 31, 2011 and 2012 were \$33,328,470 and \$66,349,563 respectively.

**Sales and purchase contracts with affiliates**

In 2012, the Company sold solar modules to Gaochuangte in the amount of RMB66,520,343 (\$10,513,212).

In 2011, the Company sold solar modules to Gaochuangte in the amount of RMB125,948,865 (\$19,674,164).

In 2012, the Company paid RMB 12,987,653 (\$2,066,288) to Gaochuangte for solar project construction services. Since the solar project is for the Company's internal use, these amounts were recorded in construction in progress.

In 2011, the Company paid RMB16,444,130 (\$2,609,798) to Gaochuangte for solar project construction services. Since the solar project is for the Company's internal use, these amounts were recorded in construction in progress.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

## 18. COMMITMENTS AND CONTINGENCIES

a) *Operating lease commitments*

The Company has operating lease agreements principally for its office properties in the PRC, Canada, Japan and USA. Such leases have remaining terms ranging from one to 104 months and are renewable upon negotiation. Rental expenses were \$2,916,591, \$5,444,078, and \$8,618,436 for the years ended December 31, 2010, 2011 and 2012, respectively.

Future minimum lease payments under non-cancelable operating lease agreements at December 31, 2012 were as follows:

<u>Year Ending December 31:</u>	<u>\$</u>
2013	4,691,218
2014	2,875,459
2015	1,729,320
2016	1,356,324
Thereafter	4,912,165
<b>Total</b>	<b>15,564,486</b>

b) *Property, plant and equipment purchase commitments*

As of December 31, 2012, short-term commitments for the purchase of property, plant and equipment were \$3,205,562.

c) *Supply purchase commitments*

In order to secure future solar wafers supply, the Company has entered into long-term supply agreements with suppliers over the past several years. Under such agreements, the suppliers agreed to provide the Company with specified quantities of solar wafers, and the Company has made prepayments to the suppliers in accordance with the supply contracts. The prices of the supply contracts are generally subject to adjustment to reflect the prevailing market price at the transactions date.

Total purchases under the long-term agreements were approximately \$78,567,563, \$190,901,780 and \$143,109,363 during the years ended December 31, 2010, 2011 and 2012, respectively.

The following is a schedule, by year, of future minimum obligation, using market prices as of December 31, 2012, under all supply agreements as of December 31, 2012:

<u>Year Ending December 31:</u>	<u>\$</u>
2013	247,700,752
2014	247,700,752
2015	341,037,267
<b>Total</b>	<b>836,438,771</b>

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

18. COMMITMENTS AND CONTINGENCIES (Continued)

d) *Contingencies*

Deutsche Solar AG

In 2007, the Company entered into a twelve-year wafer supply agreement with Deutsche Solar AG, under which the Company is required to purchase a contracted minimum volume of wafers at pre-determined fixed prices and in accordance with a pre-determined schedule, commencing January 1, 2009. The fixed prices may be adjusted annually at the beginning of each calendar year by Deutsche Solar AG to reflect certain changes in their material costs. The agreement also contains a take-or-pay provision, which requires the Company to pay the contracted amount regardless of whether the Company acquires the contracted annual minimum volumes. In 2009, the Company did not meet the minimum volume requirements under the agreement. Deutsche Solar AG agreed that the Company could fulfill its fiscal 2009 purchase obligation in fiscal 2010. In 2010, the Company fulfilled its 2009 purchase commitment under the agreement but did not meet the minimum purchase obligation for 2010. In 2011, the Company did not meet its purchase commitment for the year. The Company believes that the take-or-pay provisions of the agreement are void under German law and, accordingly, as of December 31, 2010 had not accrued for the full \$21,143,853 that would otherwise be due under the take-or-pay provision of the agreement. Rather, the Company assumed that it would be permitted to purchase its 2010 contracted quantity, in addition to its 2011 contracted quantity, in fiscal 2011 and had included the purchase obligation for both years in its evaluation of the loss on the long-term purchase commitments. The Company recorded a loss on firm purchase commitments of \$1,562,002, \$10,610,419 and nil for the years ended December 31, 2010, 2011 and 2012, respectively.

In December 2011, Deutsche Solar AG gave notice to the Company to terminate the twelve-year wafer supply agreement with immediate effect. Deutsche Solar AG justified the termination with alleged breach of the agreement by the Company. In the notice, Deutsche Solar AG also reserved its right to claim damage of Euro 148.6 million in court. The agreement was terminated in 2011. As a result, the Company reclassified the accrued loss on firm purchase commitments reserve of \$27,862,017 as of December 31, 2011 to loss contingency accruals. In addition, the Company made a full bad debt allowance of \$17,408,593 against the balance of its advance payments to Deutsche Solar as a result of the termination of the long-term supply contract. The accrued amount of \$27,862,017 represents the Company's best estimate for its loss contingency. Deutsche Solar did not specify the basis for its claimed damage of Euro 148.6 million on the notice.

LDK

In June 2008, the Company entered into two long-term supply purchase agreements with Jiangxi LDK Solar Hi-Tech Co., Ltd., or LDK, in which the Company was required to purchase a contracted minimum volume of wafers at pre-determined fixed prices and in accordance with a pre-determined schedule. In April 2010, the Company sent notice to LDK and announced termination of these two contracts. In July 2010, the Company filed a request for arbitration against LDK with the Shanghai Branch of the China Economic & Trade Arbitration Commission. In its arbitration request, the Company asked LDK to refund the advance of \$9,517,110. The first hearing was held in October 2010, during which the Company and LDK exchanged and reviewed the evidence. In October 2010, LDK

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**18. COMMITMENTS AND CONTINGENCIES (Continued)**

counterclaimed against the Company, seeking (1) forfeiture of the \$9,517,110 advance, (2) compensation of approximately RMB377,000,000 (\$59,832,722) for losses due to the alleged breach of the agreements, (3) a penalty of approximately RMB15,200,000(\$2,412,354) and (4) arbitration expenses up to RMB4,700,000 (\$745,925). The second hearing was held on March 9, 2011, during which the parties presented arguments to the arbitration commission. The arbitration commission hosted a settlement discussion between the parties on May 13, 2011. As of December 31, 2011 and 2012, the Company had provided a full allowance against the advance to LDK of \$9,517,110 and \$9,538,172 due to the uncertainty of recovery. In December 2012, the Company made a non-cash provision totaling \$30.3 million following an arbitration award made against the Company by the Shanghai Branch of China International Economic and Trade Arbitration Commission in favor of LDK. The Company disputes the merits of the arbitration award and will take all legal means to overturn or resist the implementation of the award.

Class Action Lawsuits

On June 1, 2010, the Company announced that it would postpone the release of its financial results for the first quarter ended March 31, 2010 and its quarterly earnings call pending the outcome of an investigation by the Audit Committee of its Board of Directors that had been launched after the Company received a subpoena from the SEC requesting documents relating to, among other things, certain sales transactions in 2009. Thereafter six class action lawsuits were filed in the United States District Court for the Southern District of New York, or the New York cases, and another class action lawsuit was filed in the United States District Court for the Northern District of California, or the California case. The New York cases were consolidated into a single action in December 2010. On January 5, 2011, the California case was dismissed by the plaintiff, who became a member of the lead plaintiff group in the New York action. On March 11, 2011, a Consolidated Complaint was filed with respect to the New York action. The Consolidated Complaint alleges generally that its financial disclosures during 2009 and early 2010 were false or misleading; asserts claims under Sections 10(b) and 20(a) of the Exchange Act and Rule 10b-5 thereunder; and names the Company, its chief executive officer and its former chief financial officer as defendants. The Company filed its motion to dismiss in May 2011, which was taken under submission by the Court in July 2011. On March 30, 2012, the Court dismissed the Consolidated Complaint with leave to amend, and the plaintiffs filed an Amended Consolidated Complaint against the same defendants on April 19, 2012. On March 28, 2013, the Court entered an order granting the Company's motion to dismiss and dismissing the Amended Consolidated Complaint with prejudice. On March 29, 2013, the Court entered judgment in the matter.

In addition, a similar class action lawsuit was filed against the Company and certain of its executive officers in the Ontario Superior Court of Justice on August 10, 2010. The lawsuit alleges generally that its financial disclosures during 2009 and 2010 were false or misleading and brings claims under the shareholders' relief provisions of the Canada Business Corporations Act, Part XXIII.1 of the Ontario Securities Act as well as claims based on negligent misrepresentation. In December 2010, the Company filed a motion to dismiss the Ontario action on the basis that the Ontario Court has no jurisdiction over the claims and potential claims advanced by the plaintiff. The court dismissed the Company's motion on August 29, 2011. On March 30, 2012, the Ontario Court of Appeal denied the Company's

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**18. COMMITMENTS AND CONTINGENCIES (Continued)**

appeal with regard to its jurisdictional motion. On November 29, 2012, the Supreme Court of Canada denied the Company's application for leave to appeal the order of the Ontario Court of Appeal. The Company's jurisdiction motion is therefore at an end. To proceed with the case, the plaintiff must now bring his own motions for class certification and for leave to assert the statutory cause of action under the Ontario Securities Act. These motions are scheduled for argument in the Ontario Superior Court of Justice in June 2013. The Company believes the Ontario action is without merit and it is defending it vigorously.

Countervailing and anti-dumping duties

In October 2011, a trade action was filed with the U.S. Department of Commerce, or USDOC, and the U.S. International Trade Commission, or USITC, by the U.S. unit of SolarWorld AG and six other U.S. firms, accusing Chinese producers of crystalline silicon photovoltaic cells, or CSPV cells, whether or not incorporated into modules, of selling their products (i.e., CSPV cells or modules incorporating these cells) into the United States at less than fair value, or dumping, and of receiving countervailable subsidies from the Chinese authorities. These firms asked the U.S. government to impose anti-dumping and countervailing duties on CSPV cells imported from China. The USDOC and the USITC investigated the validity of these claims. The company was identified as one of a number of Chinese exporting producers of the subject goods to the U.S. market. The Company also has affiliate U.S. operations that import the subject goods from China.

On October 9, 2012, the USDOC issued final affirmative determinations in the anti-dumping and countervailing duty investigations. On November 7, 2012, the USITC ruled that imports of CSPV cells had caused material injury to the U.S. CSPV industry. As a result of these rulings, the Company is required to pay cash deposits on CSPV cells imported into the U.S. from China, whether alone or incorporated into modules. The announced cash deposit rates applicable to the Company were 13.94% (anti-dumping duty) and 15.24% (countervailing duty). The actual rates at which duties will be assessed and payable may be subject to administrative review next year and may differ from the announced deposit rates. A number of parties have filed notice of their intent to challenge the rulings of the USDOC and USITC in appeals to the U.S. Court of International Trade. Decisions on those appeals are not expected until next year. During year 2012, the Company's net revenue generated from America is 19.6% of the total net revenue.

On September 6, 2012, following a complaint lodged by SolarWorld AG and certain supporters, the European Commission initiated an anti-dumping investigation concerning imports into the European Union of CSPV modules and key components (i.e., cells and wafers) originating in China. On November 8, 2012, following a complaint lodged by the same parties, the European Commission initiated an anti-subsidy investigation on these products. In each investigation, the Company was identified as one of a number of Chinese exporting producers of these products to the EU market. The Company also has affiliate EU operations that import these products from China. During year 2012 the Company's net revenue generated from Europe is 50.1% of the total net revenue.

The Company was not chosen as one of the "sampled" companies in these EU investigations, which were required to provide written information to the EU authorities.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**18. COMMITMENTS AND CONTINGENCIES (Continued)**

The Company requested "market economy treatment" in the anti-dumping investigation, but this request was denied. A number of other affected Chinese companies have filed an action for annulment of the decision that denied "market economy treatment".

On March 5, 2013, the European Commission published a Regulation making all imports of CSPV modules and key components originating in or consigned from China subject to registration by EU Member State customs authorities. This registration requirement is likely to remain in effect through the pendency of the investigations. The Company filed comments contesting this registration decision and requested a hearing to express its views.

Under the current timeline, it is expected that provisional anti-dumping duties, if any, will be announced by June 6, 2013, provisional countervailing duties, if any, will be announced by August 8, 2013 and definitive anti-dumping and countervailing duties, if any, will be announced by December 5 and 7, 2013, respectively.

In late November 2012, India initiated an anti-dumping investigation on imported solar products from China, Taiwan, the United States and Malaysia. The scope of the Indian complaint includes thin-film and CSPV cells and modules, as well as "glass and other suitable substrates". The period of investigation is from January 1, 2011 to June 30, 2012. The Company has completed and submitted a "sampling questionnaire" and was chosen by the Indian authorities to be a sampled company. The Company is now compiling the data requested of it.

**19. SEGMENT INFORMATION**

The Company primarily operates in a single reportable business segment that includes the design, development and manufacture of solar power products.

CANADIAN SOLAR INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

19. SEGMENT INFORMATION (Continued)

The following table summarizes the Company's net revenues generated from different geographic locations. The information presented below is based on the location of customer's headquarters:

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
Europe:			
—Germany	623,375,655	795,265,303	422,038,906
—Spain	251,777,174	203,266,238	71,982,482
—Czech	102,194,745	8,421,667	8,059,076
—Italy	185,170,195	126,607,507	26,275,635
—Others	30,930,744	99,639,975	128,103,629
Europe Total	1,193,448,513	1,233,200,690	656,459,728
America:			
—United States	92,707,388	192,380,838	254,096,258
—Canada	22,986,724	142,537,868	86,327,618
—Others	—	—	1,828,736
America Total	115,694,112	334,918,706	342,252,612
Asia and other regions:			
—China	45,482,615	128,856,693	89,120,632
—India	—	59,809,538	22,523,243
—Japan	32,667,658	97,550,677	120,248,386
—Others	108,216,158	44,585,802	64,224,812
Asia Total	186,366,431	330,802,710	296,117,073
Total net revenues	1,495,509,056	1,898,922,106	1,294,829,413

Substantially all of the Company's long-lived assets are located in the PRC.

The following table summarizes the Company's revenues generated from each product:

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
Modules	1,400,939,585	1,683,121,020	1,132,767,404
Solar system kits	78,028,704	95,787,118	92,624,999
EPC service	—	110,992,742	658,927
Solar power projects	—	—	55,050,856
Others	16,540,767	9,021,226	13,727,227
Total net revenues	1,495,509,056	1,898,922,106	1,294,829,413

**CANADIAN SOLAR INC.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012****(In U.S. dollars)****20. MAJOR CUSTOMERS**

Details of customers accounting for 10% or more of total net revenues are as follows:

	Years Ended December 31		
	2010	2011	2012
	\$	\$	\$
Company A	164,522,394	95,557,467	45,987,216

The accounts receivable from the three customers with the largest receivable balances represents 10%, 8% and 6% of the balance of the account at December 31, 2011, and 10%, 8% and 8% of the balance of the account at December 31, 2012, respectively.

**21. EMPLOYEE BENEFIT PLANS**

Employees of the Company located in the PRC are covered by the retirement schemes defined by local practice and regulations, which are essentially defined contribution schemes. The calculation of contributions for these eligible employees is based on 20% of the applicable payroll cost in 2012. The expense paid by the Company to these defined contributions schemes was \$2,116,173, \$3,825,278 and \$5,880,203 for the years ended December 31, 2010, 2011 and 2012, respectively.

In addition, in 2012, the Company is required by PRC law to contribute approximately 10%, 8%, 2% and 2% of applicable salaries for medical insurance benefits, housing funds, unemployment and other statutory benefits, respectively. The PRC government is directly responsible for the payment of the benefits to these employees. The amounts contributed for these benefits were \$1,979,476, \$4,067,355 and \$6,012,889 for the years ended December 31, 2010, 2011 and 2012, respectively.

**22. SHARE OPTIONS**

On May 30, 2006, the Board of Directors approved the adoption of a share incentive plan to provide additional incentives to employees, directors or external consultants. The maximum aggregate number of shares which may be issued pursuant to all awards (including options) is 2,330,000 shares, plus for awards other than incentive option shares, an annual increase to be added on the first business day of each calendar year beginning in 2007 equal to the lesser of one percent (1%) of the number of common shares outstanding as of such date, or a lesser number of common shares determined by the Board of Directors or a committee designated by the Board. In September 2010, the shareholders approved an amendment to the Plan to increase the maximum number of common shares which may be issued pursuant to all awards of options and restricted shares under the Plan to the sum of (i) 2,330,000 plus (ii) the sum of 1% of the number of outstanding common shares of the Company on the first day of each of 2007, 2008 and 2009 and 2.5% of the number of outstanding common shares of the Company outstanding on the first day of each calendar year after 2009. The share incentive plan will expire on, and no awards may be granted after, March 15, 2016. Under the terms of the share incentive plan, options are generally granted with an exercise price equal to the fair market value of the Company's ordinary shares and expire ten years from the date of grant.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

## 22. SHARE OPTIONS (Continued)

*Options to Employees*

As of December 31, 2012, there was \$5,349,957 in total unrecognized compensation expense related to share-based compensation awards, which is expected to be recognized over a weighted-average period of 2.1 years. During the years ended December 31, 2010, 2011 and 2012, \$3,641,260, \$3,382,786 and \$3,433,077 was recognized as compensation expense, respectively. There is no income tax benefit recognized in the income statement for the share-based compensation arrangements in 2010, 2011 and 2012.

The Company utilizes the Binomial option-pricing model to estimate the fair value of stock options.

The following assumptions were used to estimate the fair value of stock options granted in 2010, 2011 and 2012:

	2010	2011	2012
Risk free rate	4.25%~4.75%	2.76%~3.46%	3.15%
Volatility ratio	80%~84%	77%~79%	78.79%
Dividend yield	—	—	—
Annual exit rate	2.89%~3.36%	3.07%~4.37%	3.49%
Exercise multiple	5.00	4.40-4.70	4.40

The Company used the market yield of USD dominated Chinese International government bonds with maturity periods that can cover the contractual life of the shares option for the risk-free rates. The Company estimated the expected volatility based on the average of historical daily annualized volatility of its own and comparable companies' stock prices. The Company's dividend policy is to retain earnings for reinvestment purpose and the Company does not intend to distribute dividends, thus the dividend yield is assumed to be zero. The Company estimated the annual exit rates based on the historical general exit rate of staff at different levels. The Company estimated the exercise multiple based on the historical exercise pattern of prior employee stock options granted by the Company.

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

## 22. SHARE OPTIONS (Continued)

A summary of the option activity is as follows:

	Number of Options	Weighted Average Exercise Price \$	Weighted Average Remaining Contract Terms	Aggregate Intrinsic Value \$
Options outstanding at January 1, 2012	2,832,550	10.59		
Granted	69,900	3.03		
Exercised	(64,852)	2.45		
Forfeited	(231,771)	14.33		
Options outstanding at December 31, 2012	<u>2,605,827</u>	10.25	7 years	434,885
Options vested or expected to vest at December 31, 2012	<u>2,471,787</u>	10.26	7 years	432,131
Options exercisable at December 31, 2012	<u>1,734,792</u>	10.43	6 years	410,577

The weighted average grant-date fair value of options granted in 2010, 2011 and 2012 was \$9.62, \$6.50 and \$2.22, respectively. The total intrinsic value of options exercised during the years ended December 31, 2010, 2011 and 2012 was \$1,786,605, \$1,760,500 and \$38,958, respectively.

**Restricted shares to Employees**

The Company granted 333,190 and 116,500 restricted shares to employees in May 2006 and July 2006 respectively. The restricted shares were granted at nominal value and generally vest over periods from one to four years based on the specific terms of the grants. The difference between the exercise price of the restricted shares and the fair market value of the Company's ordinary shares at the date of grant resulted in total compensation cost of approximately \$7.1 million that will be recognized ratably over the vesting period. During the years ended December 31, 2010, 2011 and 2012, the Company recognized \$235,411, nil, and nil in compensation expense associated with these awards, respectively.

As of December 31, 2012, there was no unrecognized share-based compensation related to unvested restricted share awards.

The total fair value of restricted shares vested during the year ended December 31, 2010, 2011 and 2012 was \$382,994, nil and nil, respectively.

**Restricted shares units to Employees**

The Company granted 518,181 and 1,400,237 restricted shares units ("RSU") to employees in 2011 and 2012, respectively. The RSU entitle the holders to receive the Company's common shares upon

## CANADIAN SOLAR INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012

(In U.S. dollars)

**22. SHARE OPTIONS (Continued)**

vesting. The RSU were granted for free and generally vest over periods from one to four years based on the specific terms of the grants. The fair market value of the Company's ordinary shares at the date of grant resulted in total compensation cost of approximately \$4.6 million and \$4.5 million that will be recognized ratably over the vesting period for the RSU granted in 2011 and 2012, respectively. During the year ended December 31, 2012, the Company recognized \$1,752,165 in compensation expense associated with these awards.

As of December 31, 2012, there was \$6,121,559 of total unrecognized share-based compensation related to unvested restricted share units, which is expected to be recognized over a weighted-average period of 3.1 years.

A summary of the RSU activity is as follows:

	Number of Shares	Weighted Average Grant-Date Fair Value \$
Unvested at January 1, 2012	499,540	9.16
Granted	1,400,237	3.32
Vested	(131,069)	9.23
Forfeited	(98,177)	6.84
Unvested at December 31, 2012	<u>1,670,531</u>	<u>4.40</u>

The total fair value of restricted shares units vested during the year ended December 31, 2012 was \$1,007,340.

**23. INVESTMENT LOSS**

The following table summarizes the Company's investment income loss:

	Years Ended December 31,		
	2010	2011	2012
	\$	\$	\$
Impairment of long-term investment	(3,000,000)	—	(1,081,700)

The Company owns a 50% interest in a joint venture, Nernst New Energy (Suzhou) Co., Ltd. and exercise significant influence over the investee. In 2012, due to the deterioration of the investee's financial position, the Company concluded that the \$1,081,700 investment was fully impaired.

The Company owns preferred shares of a privately held entity in an amount that is not sufficient to provide the Company with significant influence over the investee's operations. In 2010, due to the deterioration of the investee's financial position, the Company concluded that the \$3,000,000 preferred share investment was fully impaired.

**CANADIAN SOLAR INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**FOR THE YEARS ENDED DECEMBER 31, 2010, 2011 AND 2012**

**(In U.S. dollars)**

**24. SUBSEQUENT EVENTS**

Between January 1 and March 31, 2013, the Company obtained new borrowings of \$304.6 million, of which \$145.2 million has due dates before December 31, 2013, and \$159.4 million has due dates beyond December 31, 2013.

Between January 1 and March 31, 2013, the Company renewed \$108.6 million bank facilities with due dates beyond December 31, 2013.

**APPENDIX 1**

**Major Subsidiaries of CSI**

The following table sets forth information concerning CSI's major subsidiaries:

<b>Subsidiary</b>	<b>Place and date of Incorporation</b>	<b>Attributable Equity Interest Held</b>	<b>Principal Activity</b>
CSI Solartronics (Changshu) Co., Ltd.	PRC November 23, 2001	100%	Developing solar power project
CSI Solar Technologies Inc.	PRC August 8, 2003	100%	Research and developing solar modules
CSI Solar Manufacture Inc.	PRC January 7, 2005	100%	Production of solar modules
Canadian Solar Manufacturing (Luoyang) Inc.	PRC February 24, 2006	100%	Manufacture of solar modules, ingots and wafers
Canadian Solar Manufacturing (Changshu) Inc.	PRC August 1, 2006	100%	Production of solar modules
CSI Cells Co., Ltd.	PRC August 23, 2006	100%	Manufacture of solar cells
Canadian Solar (USA) Inc.	USA June 8, 2007	100%	Sales and marketing of modules
CSI Project Consulting GmbH	Germany May 26, 2009	70%	Developing solar power project
Canadian Solar Japan K.K.	Japan June 21, 2009	90.67%	Sales and marketing of modules
Canadian Solar Solutions Inc.	Canada June 22, 2009	100%	Developing solar power project
CSI Solar Power (China) Inc.	PRC July 7, 2009	100%	Investment holding
Canadian Solar EMEA GmbH	Germany August 21, 2009	100%	Sales and marketing of modules
Canadian Solar Manufacturing (Ontario) Inc.	Canada June 30, 2010	100%	Production of solar modules
Canadian Solar (Australia) Pty., Ltd.	Australia February 3, 2011	100%	Sales and marketing of modules
Canadian Solar International Ltd.	Hong Kong March 25, 2011	100%	Sales and marketing of modules
Canadian Solar O&M (Ontario) Inc.	Canada May 10, 2011	100%	Developing solar power project
CSI Project Holdco, LLC	USA July 27, 2011	100%	Developing solar power project
CSI-Cenergy Holdings, LLC	USA July 27, 2011	62.5%	Developing solar power project

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<u>Subsidiary</u>	<u>Place and date of Incorporation</u>	<u>Attributable Equity Interest Held</u>	<u>Principal Activity</u>
Suzhou Sanysolar Materials Technology Co., Ltd.	PRC August 17, 2011	80%	Production of solar module materials
Canadian Solar South East Asia Pte., Ltd.	Singapore September 19, 2011	100%	Sales and marketing of modules
CSI Project Holdco, LLC	USA November 23, 2011	100%	Developing solar power project
Canadian Solar Manufacturing (Suzhou) Inc.	PRC February 13, 2012	61%	Manufacture of solar modules, cells
Canadian Solar South Africa Pty., Ltd.	South Africa June 22, 2012	100%	Sales and marketing modules
Canadian Solar Brasil Servicos De Consultoria EM Energia Solar Ltda.	Brazil November 14, 2012	100%	Consulting services in energy solutions, certification and importation of photovoltaic modules
Canadian Solar Middle East Limited	United Arab Emirates December 10, 2012	100%	Energy generation and distribution

**ADDITIONAL INFORMATION — FINANCIAL STATEMENTS SCHEDULE I**

**CANADIAN SOLAR INC.**

Schedule I has been provided pursuant to the requirements of Rule 12-04(a) and 4-08(e)(3) of Regulation S-X, which require condensed financial information as to financial position, changes in financial position and results of operations of a parent company as of the same dates and for the same periods for which audited consolidated financial statements have been presented as the restricted net assets of Canadian Solar Inc.'s consolidated and unconsolidated subsidiaries not available for distribution to Canadian Solar Inc. as of December 31, 2012 of \$359,922,466, exceeded the 25% threshold.

These financial statements have been prepared in conformity with accounting principles generally accepted in the United States except that the equity method has been used to account for investments in subsidiaries.

## FINANCIAL INFORMATION OF PARENT COMPANY

## BALANCE SHEETS

	December 31, 2011	December 31, 2012
(In U.S. dollars, except share and per share data)		
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	7,924,686	11,247,306
Restricted cash	5,731,365	—
Accounts receivable, net of allowance for doubtful accounts of \$871,385 and \$8,946,661 at December 31, 2011 and 2012, respectively	9,325,500	2,567,756
Inventories	12,824,582	2,984,075
Amounts due from related parties	85,731,327	214,254,589
Deferred tax assets	1,279,033	—
Prepaid expenses and other current assets	3,011,995	10,552,409
Total current assets	125,828,488	241,606,135
Investment in subsidiaries	399,437,561	209,194,706
Deferred tax assets	9,708,590	5,269,609
Amount due from related parties	150,000,000	150,000,000
Other non-current assets	14,972,773	35,356,421
<b>TOTAL ASSETS</b>	<b>699,947,412</b>	<b>641,426,871</b>
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term borrowings	—	68,000,000
Accounts payable	4,025	4,104
Amounts due to related parties	177,769,708	159,471,359
Other current liabilities	11,323,481	6,616,028
Total current liabilities	189,097,214	234,091,491
Accrued warranty costs	32,401,893	32,833,031
Convertible notes	950,301	—
Long-term borrowings	—	70,063,488
Liability for uncertain tax positions	11,564,233	13,540,026
<b>TOTAL LIABILITIES</b>	<b>234,013,641</b>	<b>350,528,036</b>
Equity:		
Common shares — no par value: unlimited authorized shares, 43,155,767 and 43,242,426 shares issued and outstanding at December 31, 2011 and 2012, respectively	502,402,939	502,561,705
Additional paid-in capital	(53,331,445)	(38,296,275)
Accumulated deficit	(28,693,433)	(224,162,124)
Accumulated other comprehensive income	45,555,710	50,795,529
Total equity	465,933,771	290,898,835
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>699,947,412</b>	<b>641,426,871</b>

## FINANCIAL INFORMATION OF PARENT COMPANY

## STATEMENTS OF OPERATIONS

	Years Ended December 31		
	2010	2011	2012
	(In U.S. dollars, except share and per share data)		
Net revenues	1,248,400,119	829,016,524	111,414,327
Cost of revenues	1,201,713,356	792,643,306	80,190,744
Gross profit	46,686,763	36,373,218	31,223,583
Operating expenses:			
Selling expenses	10,057,347	10,411,256	3,649,131
General and administrative expenses	13,355,609	13,461,891	11,955,578
Research and development expenses	792,509	1,255,945	764,145
Total operating expenses	24,205,465	25,129,092	16,368,854
Profit from operations	22,481,298	11,244,126	14,854,729
Other income (expenses):			
Interest expense	(296,678)	(267,979)	(255,502)
Interest income	933,372	474,886	1,559,207
Investment loss	(3,000,000)	—	—
Foreign exchange gain (loss)	830,602	3,261,933	(622,816)
Profit before income taxes and equity in earnings of subsidiaries	20,948,594	14,712,966	15,535,618
Income tax expense	(9,956,513)	(6,742,827)	(7,441,590)
Equity in earnings (loss) of subsidiaries	39,576,838	(98,774,339)	(203,562,719)
Net Income (loss)	50,568,919	(90,804,200)	(195,468,691)

**FINANCIAL INFORMATION OF PARENT COMPANY**

**STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**

	Year ended December 31,		
	2010	2011	2012
	(Amounts expressed in U.S. dollars)		
Net income (loss)	50,568,919	(90,804,200)	(195,468,691)
Other comprehensive income:			
Foreign currency translation adjustment	13,340,545	17,093,766	5,239,819
Comprehensive income (loss) attributable to Canadian Solar Inc.	<u>63,909,464</u>	<u>(73,710,434)</u>	<u>(190,228,872)</u>

## FINANCIAL INFORMATION OF PARENT COMPANY

## STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2010	2011	2012
	(In U.S. dollars)		
Operating activities:			
Net Income (loss)	50,568,919	(90,804,200)	(195,468,691)
Depreciation and amortization	5,888	5,864	6,950
Allowance for doubtful debts	(7,327,386)	5,829,275	8,369,187
Investment loss	3,000,000	—	—
Amortization of discount on debt	39,816	44,485	49,699
Equity in earnings (loss) of subsidiaries	(39,576,838)	98,774,339	203,562,719
Share-based compensation	3,876,671	4,060,838	5,185,242
Changes in operating assets and liabilities:			
Inventories	2,140,423	17,598,617	9,840,507
Accounts receivable	37,753,416	99,826,223	(1,317,532)
Amounts due from related parties	(16,299,621)	(126,832,013)	(121,173,334)
Advances to suppliers	2,752,935	11,973,762	(293,911)
Other current assets	(4,195,539)	6,399,566	(7,540,414)
Other non-current assets	(5,786,798)	(9,177,091)	(20,387,009)
Accounts payable	3,937,109	(10,083,933)	79
Advances from customers	130,350	(216,370)	(452,417)
Amounts due to related parties	(23,827,298)	17,530,108	(18,298,349)
Accrued warranty costs	11,874,837	5,416,935	431,138
Other current liabilities	10,848,840	(9,034,605)	(4,255,036)
Liability for uncertain tax positions	755,415	103,902	1,975,793
Deferred taxes	392,598	384,345	5,718,014
Net cash provided by (used in) operating activities	31,063,737	21,800,047	(134,047,365)

**FINANCIAL INFORMATION OF PARENT COMPANY****STATEMENTS OF CASH FLOWS**

	<b>Years Ended December 31,</b>		
	<b>2010</b>	<b>2011</b>	<b>2012</b>
	<b>(In U.S. dollars)</b>		
<b>Investing activities:</b>			
Decrease (increase) in restricted cash	(31,476,334)	25,894,969	5,731,365
Investment in subsidiaries	(45,851,545)	(75,955,691)	(13,319,864)
Purchases of property, plant and equipment	(1,172)	—	(3,589)
Net cash used in investing activities	<u>(77,329,051)</u>	<u>(50,060,722)</u>	<u>(7,592,088)</u>
<b>Financing activities:</b>			
Proceeds from short-term borrowings	—	—	68,000,000
Proceeds from long-term borrowings	—	—	70,063,488
Payment for repurchase of convertible notes	—	—	(1,000,000)
Proceeds from issuance of warrants	—	—	2,500,000
Proceeds from exercise of stock options	823,560	1,256,948	158,766
Net cash provided by financing activities	<u>823,560</u>	<u>1,256,948</u>	<u>139,722,254</u>
Effect of exchange rate changes	<u>13,340,647</u>	<u>17,093,770</u>	<u>5,239,819</u>
Net increase (decrease) in cash and cash equivalents	(32,101,107)	(9,909,957)	3,322,620
Cash and cash equivalents at the beginning of the year	49,935,750	17,834,643	7,924,686
Cash and cash equivalents at the end of the year	<u>17,834,643</u>	<u>7,924,686</u>	<u>11,247,306</u>
<b>Supplemental disclosure of cash flow information:</b>			
Interest paid	296,678	223,495	255,502
Income taxes paid	5,204,641	13,575,821	290,813



## LIST OF SUBSIDIARIES

(As of April 26, 2013)

<u>Name of Significant Subsidiaries</u>	<u>Place of Incorporation</u>	<u>Ownership Interest</u>
CSI Solartronics (Changshu) Co., Ltd.	People's Republic of China	100%
CSI Solar Technologies Inc.	People's Republic of China	100%
CSI Solar Manufacture Inc.	People's Republic of China	100%
Canadian Solar Manufacturing (Luoyang) Inc., formerly known as CSI Central Solar Power Co., Ltd.	People's Republic of China	100%
Canadian Solar Manufacturing (Changshu) Inc., formerly known as Changshu CSI Advanced Solar Inc.	People's Republic of China	100%
CSI Cells Co., Ltd.	People's Republic of China	100%
Canadian Solar (USA) Inc.	United States of America	100%
CSI Project Consulting GmbH	Germany	70%
Canadian Solar Japan K.K.	Japan	90.67%
Canadian Solar Solutions Inc.	Canada	100%
CSI Solar Power (China) Inc.	People's Republic of China	100%
Canadian Solar EMEA GmbH	Germany	100%
Canadian Solar Manufacturing (Ontario) Inc.	Canada	100%
Canadian Solar (Australia) Pty, Ltd.	Australia	100%
Canadian Solar International Ltd.	Hong Kong	100%
Canadian Solar O&M (Ontario) Inc.	Canada	100%
CSI-Cenergy Holdings, LLC	United States of America	62.5%
Suzhou SanySolar Materials Technology Co. Ltd.	People's Republic of China	80%
Canadian Solar South East Asia Pte., Ltd.	Singapore	100%
CSI Project Holdco LLC	United States of America	100%
Canadian Solar Manufacturing (Suzhou) Inc.	People's Republic of China	61%
Canadian Solar South Africa Pty., Ltd.	South Africa	100%
Canadian Solar Brasil Servicos De Consultoria EM Energia Solar Ltda.	Brazil	100%
Canadian Solar Middle East Ltd.	United Arab Emirates	100%
Canadian Solar International Project Holding Limited	Hong Kong	100%
Canadian Solartronics (Suzhou) Co., Ltd.	People's Republic of China	100%

**Certification by the Chief Executive Officer  
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Shawn (Xiaohua) Qu, certify that:

1. I have reviewed this annual report on Form 20-F of Canadian Solar Inc. (the “Company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting; and
5. The Company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal control over financial reporting.

Date: April 26, 2013

By: /s/ Shawn (Xiaohua) Qu

Name: Shawn (Xiaohua) Qu

Title: Chief Executive Officer

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**Certification by the Chief Financial Officer  
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Michael G. Potter, certify that:

1. I have reviewed this annual report on Form 20-F of Canadian Solar Inc. (the “Company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting; and
5. The Company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal control over financial reporting.

Date: April 26, 2013

By:           /s/ Michael G. Potter            
Name: Michael G. Potter  
Title: Chief Financial Officer

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**Certification by the Chief Executive Officer  
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Canadian Solar Inc. (the "Company") on Form 20-F for the year ended December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Shawn (Xiaohua) Qu, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 26, 2013

By: /s/ Shawn (Xiaohua) Qu  
Name: Shawn (Xiaohua) Qu  
Title: Chief Executive Officer

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**Certification by the Chief Financial Officer  
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Canadian Solar Inc. (the "Company") on Form 20-F for the year ended December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael G. Potter, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 26, 2013

By: /s/ Michael G. Potter  
Name: Michael G. Potter  
Title: Chief Financial Officer

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statement No. 333-147042 and 333-178187 on Form S-8 of our reports dated April 26, 2013, relating to the financial statements and financial statement schedule of Canadian Solar Inc. and subsidiaries (the “Company”), and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 20-F of the Company for the year ended December 31, 2012.

/s/ Deloitte Touche Tohmatsu Certified Public Accountants LLP

Shanghai, China  
April 26, 2013

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