

Canadian Solar Inc.  
Form 20-F  
May 17, 2011

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

**Form 20-F**

(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**OR**
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended December 31, 2010.**  
**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.**

*(Exact name of Registrant as specified in its charter)*

**N/A**

*(Translation of Registrant's name into English)*

**Canada**

*(Jurisdiction of incorporation or organization)*

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*(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:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
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.

42,893,044 common shares issued and outstanding which were not subject to restrictions on voting, dividend rights and transferability, as of December 31, 2010.

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\$ are to the legal currency of Canada;

and Euro are to the legal currency of the European Economic and Monetary Union; 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, 2008, 2009 and 2010 and as of December 31, 2009 and 2010.

All translations from Renminbi to U.S. dollars were made by the noon buying rate in The City of New York for cable transfers in Renminbi per U.S. dollar as certified for customs purposes by the Federal Reserve Bank of New York. Unless otherwise stated, the translation of Renminbi into U.S. dollars was made by the noon buying rate in effect on December 31, 2010, which was RMB6.6000 to \$1.00. We make no representation that the Renminbi or dollar amounts referred to in this annual report on Form 20-F could have been or could be converted into dollars or Renminbi, as the case may be, at any particular rate or at all. See Item 3. Key Information D. Risk Factors Risks Related to our Company and our Industry Fluctuations in exchange rates could adversely affect our business, including our financial condition and results of operations.

**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, intent, plan, believe, estimate, is/are likely to or similar expressions. Forward-looking statements involve inherent risks and uncertainties. These forward-looking statements include, among other things, statements relating to:

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

our beliefs regarding the importance of environmentally friendly power generation;

our expectations regarding governmental support for solar power;

our beliefs regarding the 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;

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our beliefs and expectations regarding the use of upgraded metallurgical grade silicon materials, or 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 wafers and cells 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; 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.

**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, 2008, 2009 and 2010 and the balance sheet data as of December 31, 2009 and 2010 have been derived from our audited 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, 2006 and 2007 and our consolidated balance sheet data as of December 31, 2006, 2007 and 2008 were derived from our audited consolidated financial statements that are not included in this annual report.

All of our audited 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.

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	<b>Year Ended December 31,</b>				
	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
	<b>(In thousands of US\$, except share and per share data, and operating data and percentages)</b>				
<b>Statement of operations data:</b>					
Net revenues	\$ 68,212	\$ 302,798	\$ 705,006	\$ 630,961	\$ 1,495,509
Net income (loss)	(9,430)	(175)	(7,534)	22,646	50,569
Earnings (loss) per share, basic	(0.50)	(0.01)	(0.24)	0.61	1.18
Shares used in computation, basic	18,986,498	27,283,305	31,566,503	37,137,004	42,839,356
Earnings (loss) per share, diluted	(0.50)	(0.01)	(0.24)	0.60	1.16
Shares used in computation, diluted	18,986,498	27,283,305	31,566,503	37,727,138	43,678,208
<b>Other financial data:</b>					
Gross margin	18.1%	7.9%	10.1%	12.4%	15.3%
Operating margin	1.6%	(0.6)%	3.4%	1.0%	8.0%
Net margin	(13.8)%	(0.1)%	(1.1)%	3.6%	3.4%
<b>Selected operating data:</b>					
<b>Products sold (in MW)</b>					
Standard solar modules	14.7	83.4	166.5	296.6	779.1
Solar system kits				0.6	24.4
<b>Total</b>	<b>14.7</b>	<b>83.4</b>	<b>166.5</b>	<b>297.2</b>	<b>803.5</b>
<b>Average selling price (in \$ per watt)</b>					
Standard solar modules	3.97	3.75	4.23	2.13	1.80
Solar system kits				3.36	3.21
<b>Balance Sheet Data:</b>					
Total assets	129,634	277,622	570,654	1,038,703	1,423,367
Net assets	112,904	134,501	332,254	466,001	534,984
Long-term debt		17,866	45,357	29,290	69,458
Convertible notes		59,885	830	866	906
Capital stock	97,302	97,454	395,154	500,322	501,146
Number of shares outstanding <sup>(1)</sup>	27,270,000	27,320,389	35,686,313 <sup>(1)</sup>	42,745,360 <sup>(1)</sup>	42,893,044 <sup>(1)</sup>

(1) Excluding 58,250, 29,125 and nil restricted shares, which were subject to restrictions on voting and dividend rights and transferability, as of December 31, 2008, 2009 and 2010, respectively.

***Exchange Rate Information***

Our consolidated financial statements have been prepared in accordance with U.S. GAAP. We conduct our business in an industry that generally uses the U.S. dollar as its currency of reference. Since a substantial portion of our operating activities and substantially all of our financing and investing activities are conducted using U.S. dollars, our management believes that the U.S. dollar is the most appropriate currency to use as our functional currency and as our reporting currency for our consolidated financial statements.

All of our subsidiaries in China use the Renminbi as their functional currency and some of our overseas subsidiaries use the Japanese Yen or the Euro as their functional currency. We record transactions denominated in other currencies at the rates of exchange prevailing when the transactions occur. We translate monetary assets and liabilities denominated in other currencies into U.S. dollars at rates of exchange in effect at the balance sheet dates and record exchange gains and losses in our statements of operations. Accordingly, we translate assets and liabilities using exchange rates in effect at each period end and we use the average exchange rates of the period for the statement of operations. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, the rates stated below, or at all. The PRC government imposes controls over its

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foreign currency reserves in part through direct regulation of the conversion of Renminbi into foreign currencies and through restrictions on foreign trade. On May 13, 2011, the exchange rate, as set forth in the H.10 statistical release of the Federal Reserve Board, was RMB6.4977 to \$1.00.

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

<b>Period</b>	<b>Renminbi per U.S. Dollar Exchange Rate<sup>(1)</sup></b>			
	<b>Period End</b>	<b>Average<sup>(2)</sup> (RMB per \$1.00)</b>	<b>Low</b>	<b>High</b>
2006	7.8041	7.9579	8.0702	7.8041
2007	7.2946	7.6058	7.8127	7.2946
2008	6.8225	6.9477	7.2946	6.7800
2009	6.8259	6.8307	6.8470	6.8176
2010	6.6000	6.7603	6.8330	6.6000
November	6.6670	6.6538	6.6892	6.6330
December	6.6000	6.6497	6.6745	6.6000
2011				
January	6.6017	6.5964	6.6364	6.5809
February	6.5713	6.5761	6.5965	6.5520
March	6.5483	6.5645	6.5743	6.5483
April	6.4900	6.5267	6.5477	6.4900
May (through May 13)	6.4977	6.4939	6.4986	6.4915

(1) For December 2009 and prior periods, the exchange rate refers to the noon buying rate as reported by the Federal Reserve Bank of New York. For January 2010 and later periods, the exchange rate refers to the exchange rate as set forth in the H.10 statistical release of the Federal Reserve Board.

(2) Annual averages are calculated from month-end rates. Monthly averages are calculated using the average of the daily rates during the relevant period.

**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 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 the solar power market and industry conditions. During 2008 and parts of 2009, the global solar power industry experienced an abrupt decline in demand due to limited availability of funding for downstream buyers of solar power products related to the global economic crisis. The decline in demand combined with an increase in manufacturing capacity resulted in a decline in the prices of solar power products. This decline continued during the remainder of 2009 primarily due to decreased prices of polysilicon and reclaimable silicon raw materials. As the effect of the global economic crisis subsided through 2010, the demand for solar power products increased and many manufacturers increased their production capacity to meet the strong demand in 2010. We cannot assure that the demand we experienced in 2010 will continue into

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2011 or future periods. If the demand for solar power products declines or the supply of solar power products grows faster than demand, the average selling price of our products will be materially and adversely affected.

Macroeconomic factors, such as the global economic crisis, influence the demand for solar power products, 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. For example, a reduction in oil and coal prices may potentially reduce the demand for alternative energy. The 2009 global economic crisis significantly affected the ability of financial institutions to offer credit in the global market place. The debt service risk associated with the capability of infrastructure projects and the inability of financial institutions to fund projects lead to bottlenecks in the growth of installation of photovoltaic, or PV, modules during 2009. Steady recovery of global economic conditions, significant declines in module costs and selling prices, and robust government subsidy incentives supporting PV development have led to a noticeable recovery of PV installation activities in 2010. In light of the uncertainty in the global credit and lending environment, we cannot make assurances that the financial institutions will continue to offer funding to PV project developers at reasonable costs. An increase in the interest lending 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. Our business, results of operations, financial conditions and prospect may be materially and adversely affected.

*If the supply of solar wafers and cells increases concurrently 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 since 2008. As a result, 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. According to SolarBuzz, an independent solar energy research and consulting firm, spot prices for polysilicon fell dramatically from a peak of over \$120 per kilogram in the first quarter of 2009 to a low of approximately \$55 per kilogram at the end of 2009. Similarly, solar module prices fell from a high of approximately \$2.74 per watt in the first quarter of 2009 to a low of approximately \$1.85 per watt at the end of 2009. Strong demand in 2010 stabilized and strengthened prices across the value chain, particularly in the second half of 2010, with module pricing increasing from approximately \$1.65 to approximately \$1.90 per watt, cell pricing from approximately \$1.25 to approximately \$1.40 per watt and wafer pricing from approximately \$0.80 to approximately \$1.00 per watt. Polysilicon prices increased in 2010 from approximately \$50 to \$55 per kilogram to approximately \$80 to \$90 per kilogram. However, according to SolarBuzz, it is widely believed that in 2011, the industry could again enter a period of oversupply, with price corrections occurring throughout the value chain. A softening of silicon materials pricing has already occurred in first quarter of 2011 and is expected to continue throughout the year. If we are unable, on an ongoing basis, to procure silicon, solar wafers and solar cells at prices that decline in line with solar module pricing, our revenues and margins could be adversely impacted, either due to higher costs compared to our competitors or due to further write-downs of inventory, or both. In addition, our market share could decline if our competitors are able to price their products more competitively.

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

The general economy and limited availability of credit and liquidity could materially and adversely affect our business and results of operations. We often require project financing for development and construction of our solar power plant projects, which require significant investments before the equity is later sold to investors. General economic conditions, liquidity, availability and cost of capital could materially and adversely affect our business and results of operations. Most solar power projects require financing for development and construction with a mixture of equity and

third party funding, which require significant investments. The cost of capital affects both the demand and price of solar power systems. A high cost of capital may materially

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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 50% to 60% of system equipment costs.

Furthermore, solar projects compete for capital with other forms of investment such as bonds. Some classes of investors compare the returns of solar projects with bond yields and expect a similar or improved 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 projects, which would also 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. Currently, debt capital is reasonably available for solar projects in Europe, expectations for internal rates of return for solar projects are modest, and interest rates are low by historical standards. This could materially change due to high levels of government indebtedness, or market perceptions that higher risks exist in certain countries. For example, concerns about government deficits and debt in the European Union, our major market, have resulted in temporary periods of higher bond spreads in certain solar markets, such as Greece, Spain and Portugal, and may in the future result in higher bond spreads in other solar power markets in Europe, such as Italy. Often, the cash flow of a solar power project is derived from government-funded or government-backed feed-in tariffs. Consequently, the availability and cost of funding solar power projects are 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 European Union could decrease the credit available for solar power projects, increase the expected rate of return compared to the bond yields, and increase the cost of debt for solar projects in countries with a higher perceived sovereign credit risk.

*If governments revise, reduce or eliminate subsidies and economic incentives for solar power, the demand for our products could decline, which could materially and adversely affect our revenues, profits, margins and results of operations.*

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 tariff, depends largely on the availability and size of government mandates and economic incentives. At present, the cost of solar power exceeds retail electricity rates in many locations. Such incentives vary by geographic market. Government bodies in many countries, most notably Germany, Italy, the Czech Republic, the United States, Japan, Canada, 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; or EEG, are scheduled to be reduced and could be altered or eliminated altogether through new government legislation. For example, in 2008, the digression rate of the feed-in tariffs was accelerated in both Germany and Spain. Depending on system size and the number of installations, the digression rate can be more than 10% per year. This means that solar system costs will likely have to fall more quickly than previously anticipated. In addition, an annual project installation cap was introduced in Spain that significantly reduced the market for solar products in Spain in 2009 and thereafter. In addition to regularly scheduled cuts, Germany enacted a one-time reduction to the feed-in tariff for rooftop and green-field systems in July 2010. The reduction takes effect in two stages: a 9-10% reduction from July 1, 2010, depending on system type, and an additional 3% reduction from October 2010. The German Ministry of the Environment held a press conference in January 2011 to announce that they intended to introduce legislation in 2011 that would further accelerate feed-in tariff cuts, possibly as early as mid-year. Late in 2010, Italy and the Czech Republic also reduced their solar feed-in tariffs for 2011. We believe this policy risk is increasing in European nations that are under pressure to reduce government spending, such as Italy, Spain and Greece.





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While solar power projects may continue to offer attractive internal rates of return, it is likely internal rates of return will not be as high as they were in 2009 and 2010. If internal rates of return fall below an acceptable rate for project investors, this will 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 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 may not be able to adjust our raw materials costs because we have entered into long-term supply agreements with several polysilicon and wafer suppliers. If we fail to adjust such costs or fail to recover all or part of our advance payments after we terminate certain long-term supply agreements, our profitability could be materially and adversely affected. In addition, we may be subject to litigation with certain suppliers.*

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 production demand. These suppliers included GCL Silicon Technology Holdings Inc., 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 an UMG-Si supplier. In response to the decline in the price of polysilicon, we have been discussing adjustments in the unit price and volume terms under the agreements with these suppliers.

In 2009, we agreed to amend our agreements with certain of these suppliers, such as GCL, Neo Solar, LDK and an UMG-Si supplier, to adjust the purchase price that we are required to pay 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.

In December 2010, we entered into a further amendment agreement with GCL to further adjust the delivery volumes and pricing for the period from 2011 through 2015.

We have been in discussions to adjust the unit price and volume terms under our twelve-year supply agreement with Deutsche Solar. We purchased the contracted volumes for 2009 under the agreement but did not purchase the contracted volumes for 2010. 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. Our discussions with Deutsche Solar are continuing. As of December 31, 2010, we recorded a liability under this contract of \$15.9 million based on the assumption that Deutsche Solar would, at a minimum, deliver the contracted volumes for 2010 and subsequent year at the unit prices in the existing agreement.

Under our agreements with certain of our multi-year silicon wafer suppliers, and consistent with historical industry practice, we have made advance payments prior to the scheduled delivery dates. The advance payments were made without collateral and are to be credited against the purchase prices that we are required to pay. As of December 31, 2010, the balance of the advance payments that we have made to Deutsche Solar, LDK, an UMG-Si supplier and GCL were totally \$44.3 million. We gave LDK notice to terminate our two ten-year supply agreements and initiated arbitration proceedings against LDK in which we are seeking a refund of certain advance payments that we made to LDK. The arbitration process has not yet been resolved. See Item 8. Financial Information A. Consolidated Statements and other Financial Information Legal and Administrative Proceedings. We recorded an allowance against the advance payments that we made to LDK in the amounts of \$8.8 million and \$9.1 million in 2009 and 2010, respectively. Due to the default of the UMG-Si supplier in delivering its contracted volumes for 2010 and its financial position, we are not likely to purchase UMG-Si from the supplier in the future and have taken a loss provision against the prepayment to the supplier of \$9.7 million.

If we fail to successfully renegotiate our remaining long-term supply agreements, we may not be able to adjust costs or recoup all or part of our advance payments. In addition, we may be subject to litigation, which may be costly, may

divert management's attention and other resources away from our business, and could have material and adverse effect on our reputation, business, financial condition, results of operations and prospects.

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*Existing regulations, 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 is heavily influenced by federal, state and local government regulations and policies concerning the electric utility industry in the United States and abroad, 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 oversight and regulations in accordance with federal, state, local and foreign regulations associated with safety, utility interconnection and metering, construction, environmental protection, and other related matters. It is challenging to monitor the requirements of individual states or local jurisdictions and design equipment to comply with the fluctuating regulations. 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 subject us to a number of risks, including unfavorable political, regulatory, labor and tax conditions in countries where we operate.*

We intend 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 key markets, we could be exposed to risks, including political, regulatory, labor, and tax conditions. New geographical regions where we establish operations may not carry the same political risks compared to our current operating locations. Furthermore, we might need to invest substantially in these overseas operations initially in order to attain longer-term sustainable returns on investment. These incurred investments could influence our financial performance during the initial phases before profitability is recognized.

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

We have a large number of competitors, including international competitors such as SunPower Corporation, or SunPower, First Solar, Inc., or First Solar, Sharp Solar Corporation, or Sharp Solar, and China-based competitors such as Suntech Power Holdings Co. Ltd., or Suntech, Yingli Green Energy Holding Company Limited, or Yingli, and Trina Solar Limited, or Trina. We expect to face increasing competition in the future. Further, 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. Some of our competitors are developing or currently producing products based on thin film PV technology, which require either no silicon or significantly less silicon to produce than crystalline silicon solar modules, such as the ones that we produce, and are less susceptible to increases in silicon costs. Some of our current and potential competitors have longer operating histories, greater name and brand recognition, and access to larger customer bases, greater resources and significantly greater economies of scale than we do. In addition, 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 to 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 the near term. 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 lose or be unable to gain market share.

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Because of the arrival of new manufacturers and the increase in the capacity of existing manufacturers of polysilicon, ingot and wafers, and because customers are becoming more knowledgeable and selective, we believe that the key to competing successfully in the industry has shifted to low cost, technological innovations, quality management and marketing. In 2009, we increased our advertising and marketing activities, focusing primarily on medium to larger sized solar power distributors and integrators in the European, U.S. and Canadian markets. Although we have made significant progress in building a stronger marketing and sales force and achieving name and brand recognition, we cannot assure that we can continue to increase our name and brand recognition or do so in all of the markets in which we compete.

*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 decline, and we may be unable to sustain our profitability.*

The solar power market is 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, Italy, the U.S., Canada, Japan, France, Spain, South Korea, Australia and China, 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 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 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 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.*

Most of our products are sold to customers outside China. In 2010, sales to customers outside China comprised 97.0% of our total net revenues. 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 distributing presence in various countries;

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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 difficulties and costs of complying with the different commercial, legal and regulatory requirements in the overseas market 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 fluctuation, could influence our financial performance.

*The increase in the global supply of solar cells and modules, and increasing competition, may cause substantial downward pressure on the prices of such products and cause us to lose sales or market share, resulting in lower revenues, earnings and cash flow.*

Global solar cell and module production capacity materially increased in 2009 and 2010, and is expected to continue to increase in the future. Many competitors or potential competitors, particularly in China, continue to expand their production, creating a potential oversupply of solar modules and cells in key markets. Increases in solar module production and industry competition will result in substantial downward pressure on the price of solar cells and modules, including Canadian Solar's products. Increasing competition could also result in us losing sales or market share. Such price reductions and loss of sales or market share could continue to have a negative impact on our revenue and earnings, and could materially affect our business, financial condition, and cash flows adversely.

*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;  
geopolitical turmoil and natural disasters within any of the countries in which we operate or sell products;  
foreign currency fluctuations, particularly in the Euro, U.S. dollar and RMB;  
our ability to establish and expand customer relationships;

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changes in our manufacturing costs;

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

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; and

loss on firm purchase commitments under long-term supply agreements.

We base our planned operating expenses in part on our expectations of future revenues, and a significant portion of our expenses will be fixed in the short-term. If the revenue for a particular quarter is lower than we expect, we may not be able to proportionately reduce our operating expenses, which would harm our operating results for that quarter. This may cause us to miss analysts' estimates or any guidance announced by us. If we fail to meet or exceed analyst estimates, investor expectations or our own future guidance, even by a small amount, our share price could decline, perhaps substantially.

*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 our interpretation of transfer pricing standards; changes in available tax credits; changes in stock-based compensation expense; 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.

*We may be responsible to pay an additional Canadian tax on behalf of certain of our pre-IPO investors in connection with the conversion of our convertible notes in 2006.*

In June 2006, prior to our IPO, certain of our pre-IPO investors converted their holdings of our convertible notes into our common shares pursuant to a clearance certificate procedure under which Canadian withholding tax was remitted in respect of the conversion. At the time, the investors paid Canadian tax based on the enterprise value of the Company as of March 31, 2006 as determined under a valuation report prepared by a valuator retained by the investors. Subsequently, the Canada Revenue Agency, or CRA, advised the investors that a higher enterprise value ought to have been used. If the CRA determines to proceed with an assessment based on a higher enterprise value, the pre-IPO investors may become liable to pay additional Canadian tax, plus interest and penalties. Because we were required under Canadian tax law to withhold the amount of tax payable by the investors, the CRA may determine to assess us, rather than the investors, in respect of any additional tax, plus interest and penalties, which may be payable by the investors. If the CRA does so, we will seek to recover any amount paid by us from the investors. We have estimated the amount, if any, that may be payable by us upon an assessment to be between nil and \$22.0 million. If we are assessed and are unable to recover the amount paid by us from the investors, our cash flows and results of operations would be materially adversely affected.

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

Prior to 2007, the majority of our sales were denominated in U.S. dollars. Since the beginning of 2007, the majority of our sales have been denominated in Euros, although in the second half of 2010, we arranged to have more sales denominated in U.S. dollars. We have entered into multi-year supply contracts under which, consistent with industry practice, we have made advance payments in exchange for silicon wafers. The prices payable by us under these contracts are fixed in Euro, US dollars or Renminbi. Our Renminbi costs and

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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 in U.S. dollars or Renminbi. In addition, the greater part of our cash and cash equivalents are denominated in Renminbi.

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 RMB to the U.S. dollar. The new policy permitted the RMB to fluctuate against a basket of foreign currencies, which has caused the RMB to appreciate by approximately 23.1% against the US dollar. However, since 2008, the RMB has fluctuated sharply against other freely traded currencies. In 2010, the PRC announced that it would allow greater flexibility for the RMB to appreciate against the U.S. dollar. We cannot provide any assurances that the new policy will not affect the exchange rate between the RMB and the U.S. dollar. In 2008, we began to hedge our Euro exposure against the U.S. dollar using single put and call collars and forward contracts, and more recently knock-in forward contracts. We continued to hedge our Euro exposure against the U.S. dollar in 2009 and into 2010 with similar instruments in order to increase our foreign exchange visibility and limit our foreign exchange losses. In 2008, we incurred a net foreign exchange loss of \$20.0 million. Our net foreign exchange gain in 2009 was \$7.7 million. In 2010, we incurred a net foreign exchange loss of approximately \$36.3 million, which was mitigated by \$1.7 million of gain through hedging.

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. In the second half of 2009, these notional limits were inadequate to cover our expected cash flows for the first and second quarters of 2010. These notional limits increased in 2010, which allowed us to hedge expected cash flows and cash balances denominated in foreign currencies, mainly the Euro. However, the effectiveness of our hedging program may be compromised with respect to cost effectiveness, cash management, exchange rate visibility and downside protection.

Furthermore, volatility in foreign exchange rates will hamper, to some extent, our ability to plan our pricing strategy. In addition, since our revenues and expenses are distributed differently among the U.S. dollar, Renminbi and Euro, fluctuations in foreign exchange rates will affect our gross and net profit margins and our operating gains and losses. Any future appreciation of the Renminbi against the U.S. dollar or Euro will tend to increase our costs relative to our revenue, and any depreciation of the Euro against the currencies in which we record expenses will tend to reduce our revenues as expressed in U.S. dollars. To the extent that we are unable to pass along increased costs 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.

*We may be unable to obtain adequate capital due to market conditions beyond our control, which may adversely influence our ability to grow our business.*

Our operations are capital intensive. Despite our ability as a publicly traded company to raise capital via public equity and debt issuances in addition to traditional commercial banking credit, weakness in global capital and debt markets

may adversely affect our results of operations if we are unable to access the capital necessary to achieve our performance targets and expansion goals. We rely on working capital financing from

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PRC commercial banks for our daily operations. Although we are currently able to obtain new commercial loans from these PRC commercial banks, we cannot guarantee that we can continue to obtain such loans on commercially reasonable terms or at all. Our ability to obtain external financing in the future 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.

*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, decrease our manufacturing costs, maintain our competitive position and improve our profitability. 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 manufacturing capacity, we might not be able to generate sufficient customer demand for our solar power products to support our increased production levels.

*Due to the general economic environment and other factors, we may be unable to generate sufficient cash flows or acquire access to external financing necessary to fund planned operations and make adequate capital investments.*

We anticipate that our operating and capital expenditures will increase substantially in the foreseeable future. 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 increased costs as we expand our manufacturing operations, hire additional personnel, make advance payments for raw materials or pay more to procure such 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 also 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 anticipate significant capital expenditures in 2011 related to improvements of our solar cell manufacturing technology and other projects. 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

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to accelerate the increase of our manufacturing capacity both internally and through capital contributions, via 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 our 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 securities, debt securities and/or obtain other debt financing. The economic environment may limit our ability to raise capital by issuing new equity or debt securities on acceptable terms. Lenders may be unwilling to lend funds that would be required to supplement cash flows to support daily operations. 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.

*Our dependence on Chinese banks for extension of our existing loans and extension of 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 banks, we are exposed to lending policy changes by the Chinese banks. If the Chinese government changes its macroeconomic policies, which forces the Chinese banks to tighten its lending practices, we may not be able to extend our short term borrowings, which will expire at the end of 2011, or make additional borrowings. 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.

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

We were generally required to make prepayments to certain suppliers of silicon wafers and cells and silicon raw materials in the past. 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 actual time that our customers make 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 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 and/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.

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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 significantly unfunded working capital, inadequate balance sheet 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, or EVA, encapsulant, could prevent us from delivering our products to our customers in the required quantities and on time, which could result in order cancellations and decreased revenues.*

We purchase silicon raw materials, which include solar grade silicon, and silicon wafers and solar cells, from a limited number of third-party suppliers. Our major suppliers of silicon raw materials include GCL and Zhejiang Huayou Electronics Co., Ltd., and our major suppliers of solar cells include Neo Solar and E-Ton Solar Tech Co., Ltd. These suppliers may not be able to meet our quantity requirements, or keep pace with the price reductions or quality improvements, necessary for us to price our products competitively. Supply may also be interrupted by accidents. For example, in the first three quarters of 2008, we experienced serious delays from one of our suppliers of silicon wafers, which in turn caused delays in deliveries and price increases of our solar modules for some of our customers. In the fourth quarter of 2009 and the first half of 2010, we experienced some delivery issues with suppliers of silicon wafers, cells, connectors and encapsulant 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 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 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 a more important cost and brand factor in the solar power industry. Such cells may yield higher power outputs without costing more to produce than 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 investments to develop higher conversion efficiency products, there is no assurance we will be able to commercialize some or any of these

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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, we will be at a competitive disadvantage, which will likely influence our product pricing and therefore 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. From June 2009, we increased our warranty against defects in materials and workmanship to six years. We typically sell our specialty solar modules and products with a one-year warranty against defects in materials and workmanship and may, depending on the characteristics of the product, include a limited warranty of up to ten years against declines of the minimum power generation capacity specified at the time of delivery. 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 only 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. Similarly, our UMG-Si solar products, while silicon based and theoretically durable and reliable, are relatively new to the market and are subject to the same testing limitations as our other solar products. 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 expense and associated harm to our financial results as long as 25 years after the sale of our products.

In April 2010, we entered into agreements with a group of insurance companies to reduce some of this risk. Under the policies, the insurance companies cover the liabilities listed on our warranty statement up to certain maximum claim limits and subject to certain deductibles. The warranty insurance is renewable annually. See Item 4. Information on the Company B. Business Overview Insurance.

*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 to 800 MW by December 31, 2010 from 420 MW in 2009. In 2011, we intend to add a further 500 MW, which will bring our total annual solar cell production capacity to 1.3 GW. However, we only have limited and recent operating experience in this area and we may face significant product development challenges in the solar cell business. 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, in the fourth quarter of 2009 and the first half of 2010, we 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. Because the

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purchases were made in a period of high demand, solar cell prices tend to be higher and their availability reduced.

In addition, although we intend to continue direct purchasing of solar cells and toll manufacturing arrangements through a limited number of strategic partners, our existing relationships with 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 200 MW as of December 31, 2010. 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 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.

*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 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

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industry, are vital to our success. There is substantial competition for qualified technical personnel, and there can be no assurance that we will be able to attract or retain sufficient technical personnel. If we are unable to attract and retain qualified employees, our business may be materially and adversely affected.

*Our dependence on a limited number of customers and our lack of long-term customer contracts 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 and various manufacturers who either integrate our products into their own products or sell them as part of their product portfolio. Our top five customers collectively accounted for approximately 52.6%, 57.5% and 26.0% of our net revenues in 2008, 2009 and 2010, 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, 2011, Dr. Shawn Qu, our founder, chairman, president and chief executive officer, beneficially owned 13,040,000 common shares, or 30.0% 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 validity and

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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 limiting 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 of 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 European Union'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 European Union'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 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. This could negatively affect our relationship with our OEM customers.

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*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 38 patents and 100 patent applications pending in the PRC for products that contribute a relatively small percentage of our net revenues. We also 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 and the United Arab Emirates, among which, the trademark Canadian Solar filed in Australia, Europe and Japan have been registered. We also have 11 registered trademarks and 19 trademark applications pending in the PRC, and 10 registered trademarks and 11 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, or the Sarbanes-Oxley Act, 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. Our management identified material weaknesses in our internal controls over financial reporting in 2009 and concluded that our disclosure controls and procedures were not effective as of December 31, 2009. See Item 15. Controls and Procedures. In 2010, we implemented additional controls and made improvements to existing controls to remediate these material weaknesses. However, we cannot assure that significant deficiencies or material weaknesses in our internal controls over financial reporting will not be identified in the future. Any significant deficiencies or 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. Significant deficiencies or 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 have been named as defendants in six shareholder class action lawsuits filed in the United States District Court for the Southern District of New York and one filed in the United States District court for the Northern District of California. These lawsuits have been consolidated into one class action and the consolidated complaint did not name our directors as defendants. See Item 8. Financial Information A. Consolidated 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. Although we believe the allegations are without merit, we are unable to

estimate what our liability in these matters may be, and we

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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***

*We have not obtained approvals from the PRC National Development and Reform Commission, or NDRC, for some of our operational projects in China, which may materially and adversely affect our business, results of operations and prospects.*

According to the Interim Administrative Measures for the Examination and Approval of Foreign-invested Projects, or Interim Measures, issued by the NDRC on October 9, 2004, the NDRC or its local offices must approve a foreign invested-project. Failing to obtain the NDRC's approval may adversely affect a company's ability to obtain the necessary approvals from, or to complete the registration procedures with other government authorities administering project-related matters, such as land resources, city planning, workplace safety, taxation and foreign exchange, for its foreign-invested projects. In addition, the NDRC has tightened its administration and regulation over foreign-invested projects by issuing the Circular on Further Strengthening and Regulating the Administration on Foreign-invested Project, or Administration Circular, on July 8, 2008. According to the Administration Circular, a company with foreign-invested projects that were not approved by the NDRC may be required to take rectifying measures and those projects that seriously violate applicable PRC regulations may be ordered to cease construction. In addition, a company that fails to obtain necessary NDRC approvals for its projects may not be entitled to certain tax reductions and exemptions for equipment purchases or other preferential policies.

We have not obtained NDRC approvals for some of our operational projects in China. We do not believe our non-compliance with the Interim Measures constitutes serious violations under the Administration Circular for the following reasons: (i) our projects generally fall into an encouraged foreign investment industry category under the Foreign Investment Industrial Guidance Catalogue and, therefore, comply with PRC foreign-invested industrial policies; and (ii) we have duly obtained approvals from other PRC government authorities and completed other regulatory registrations with respect to the construction of these projects. However, the government has not yet provided a detailed explanation as to what constitutes a serious violation under the Administration Circular. In addition, we have completed the construction of substantially all of these projects and the NDRC has not issued any explanatory or implementation rules as to what penalties will be imposed on projects whose construction has been completed without proper NDRC approval. The NDRC may not interpret the current rules in our favor, or it may issue rules that are more stringent or regulations applicable to projects without proper NDRC approval in the future, which could have a material and adverse effect on our business, results of operations and prospects.

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

A new 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 new Labor Contract Law and the Implementation Rules imposed more stringent requirements on employers with regard to executing written employment contracts, hiring temporary employees, and dismissing employees. In addition, under the newly promulgated 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 shall 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.

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*Our subsidiaries will lose certain tax benefits over the next several years 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 new Enterprise Income Tax Law, or the new EIT Law, came into effect in China. Under the new 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 new 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 new 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.

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 Suzhou 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, is subject to a reduced enterprise income tax rate of 12.5% until the end of 2011, when its tax holiday expires. Canadian Solar Manufacturing (Changshu) Inc. (formerly known as Changshu CSI Advanced Solar Inc.), or CSI Changshu Manufacturing, was exempt from tax for 2009 and will be subject to a reduced enterprise tax rate of 12.5% for 2010, 2011 and 2012, at which time its tax holiday will expire as well. As the preferential tax benefits currently enjoyed by our PRC subsidiaries expire, their effective tax rates will increase significantly.

*There are significant uncertainties in our tax liabilities regarding our income under the new Enterprise Income Tax Law.*

We are a Canadian company with substantially all of our manufacturing operations in China. Under the new 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 new 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 new 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 shall 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.

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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 of China domicile will be interpreted under the new 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 portions of our revenue and expenses are denominated in Renminbi. If our revenues denominated in Renminbi increase or 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, both in terms of the legal process and the interpretations of many laws, regulations and rules may be inconsistent and enforcement of these laws, regulations and rules may also 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 31 December 2010, the market price of our common shares ranged from \$3.00 to \$51.80 per share. The closing market price of our common shares on December 31, 2010 was \$12.39 per share. The market price of our common shares may continue to be volatile and subject to wide fluctuations in response to a wide variety of factors, including the following:

announcements of technological or competitive developments;

regulatory developments in our target markets affecting us, our customers or our competitors;

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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, 2010, we had 42,893,044 common shares outstanding. The number of common shares outstanding and available for sale will increase when the remaining holders of our convertible notes receive common shares upon the conversion of their notes, or the holders of options to acquire our common shares upon the exercise of their options, subject to volume, holding period and other restrictions as applicable under Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act. 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 to under the Securities Act or an exemption from the registration requirements is available. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, you may be unable to participate in our rights offerings and may experience dilution in your holdings.

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

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

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

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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, 2010. 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 United States 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 United States Federal Income Taxation Passive Foreign Investment Company.

## **ITEM 4. INFORMATION ON THE COMPANY**

### **A. History and Development of the Company**

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.

We have formed the following 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 conduct sales of solar modules;

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CSI Solar Manufacture Inc., or CSI Suzhou Manufacturing, incorporated in January 2005, which has operations located in Suzhou, China, where we manufacture primarily standard solar modules;

CSI Solar Technologies Inc., or CSI Technologies, incorporated in August 2003, which has operations located in Changshu, China, where we conduct solar module product development;

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 module products, solar ingots and solar wafers;

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 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 Solar Power (China) Inc., or CSI China Holdings, incorporated in July 2009, which has operations in Suzhou, China and serves as our holding company in China;

CSI Solar New Energy (Suzhou) Co. Ltd., or CSI New Energy, incorporated in December 2005, which was acquired by CSI China Holdings in March 2010; through which we will manufacture solar cells in Suzhou;

Canadian Solar Solutions Inc., or CSSI, incorporated in Ontario, Canada in June 2009, through which we conduct marketing and sales activities in Canada. We also have a number of non-wholly owned subsidiaries under CSSI, all of which were incorporated in Ontario, Canada in November 2009, through which we conduct project development activities in Canada;

Canadian Solar (USA) Inc., incorporated in Delaware in June 2007, through which we carry out marketing and sales activities in the United States;

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 91.4% of CSI Japan;

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;

CSI Project Consulting GmbH, or CSI Germany Projects, incorporated in Germany in 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 Manufacturing (Ontario) Inc., or CSI Ontario Manufacturing, incorporated in Ontario, Canada in June 2010, through which we conduct our solar module manufacturing activities in Canada;

Canadian Solar (Australia) Pty Ltd., incorporated in New South Wales, Australia in February 2011, through which we provide sales support services in Australia; and



Canadian Solar International Limited, incorporated in Hong Kong in March 2011, through which we carry out sales and marketing activities.

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

Our principal executive office is located at 650 Riverbend Drive, Suite B, Kitchener, Ontario, Canada N2K 3S2. Our telephone number at this address is (1-905) 530-2334 and our fax number is (1-905) 530-2001.

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Our principal place of business is 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, manufacture and sell solar cell and solar module products that convert sunlight into electricity for a variety of uses. We are incorporated in Canada and conduct substantially all of our manufacturing operations in China. Our products include a range of standard 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 solar-powered bus stop lighting, and complete specialty products, such as portable solar home systems and solar-powered car battery chargers. We sell our products under our CanadianSolar brand name and to OEM customers under their brand names. We also sell solar system kits and implement solar power development projects.

We believe we offer one of the broadest crystalline silicon solar module product lines in the industry. Our product lines range from modules made 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, the U.S., France, the Czech Republic, Italy, South Korea, Japan, Canada and China. We sell our standard solar modules to distributors and system integrators, as well as to solar projects.

We continue to invest in our sales, marketing, and customer support efforts, particularly in North America and China. We established subsidiaries in both Canada and Japan in 2009 and a manufacturing subsidiary in Ontario, Canada in 2010. We established new subsidiaries in Australia and Hong Kong in early 2011.

In the past, we employed a flexible vertically integrated business model that combines internal manufacturing capacity with direct material purchases and outsourced toll-manufacturing relationships for both cells and wafers. We do not outsource module production and we have no internal polysilicon production. Starting in 2010, we have been adjusting to a vertically integrated model. While we continue to purchase cells and wafers, our reliance on externally purchased cells will decrease from approximately 50% of our shipments to less than 25%. Similarly, we intend to increase the proportion of ingots and wafers that we manufacture internally to 50% of our wafer requirements.

We have expanded our in-house manufacturing capacity for ingots, silicon wafers, solar cells and solar modules. Solar modules account for the majority of our sales. As of December 31, 2010, we had 1.3 GW of combined annual solar module manufacturing capacity at our Changshu and Luoyang facilities in China. We are currently building a 218 MW module plant in Ontario, Canada, and further expanding our Changshu plant. The new facilities in Ontario commenced operations in the first quarter of 2011 and are expected to be at full operational capacity by the third quarter of 2011. On a combined basis, our total module capacity is expected to reach to 2.0 GW. As of December 31, 2010, our annual solar cell manufacturing capacity was 800 MW. We intend to increase our cell capacity by an additional 500 MW in 2011, which will bring the total to 1.3 GW by mid-year. As of December 31, 2010, our ingot and wafer manufacturing capacity was approximately 200 MW. 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 plan to ship new products such

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as higher efficiency modules in late 2011 and expect to see these products reach the market in much more meaningful volumes.

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. We installed additional ESE production lines in the third quarter of 2010, bringing this capacity to 80 MW as of December 31, 2010. We plan to install an additional 200 MW by mid-year 2011.

### ***Our Products***

We design, develop, manufacture and sell solar cell and solar module products, which consist of standard solar modules, specialty solar modules, solar system kits and products.

#### *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 × 6 cell and 72 × 5 cell formats, small modules for specialty products (see below) and larger formats for ground-mounted projects. Larger formats include a 72 × 6 cell format and a 96 × 5 cell format. In 2009, most of our products employed 6 multicrystalline 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 × 6 cell, 260 W module. We expect such modules to be substantially cheaper to install because they require less labor and materials, especially in residential rooftop applications. In the third quarter of 2011, we expect to begin assembling modules using wrap-through cells on a commercial basis, which would be entirely soldered on the backside of the cell. We believe these modules can achieve module conversion efficiencies in excess of 17%. We may also benefit from raw materials savings, the use of conductive adhesives instead of solder, and more cost-effective automation. 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 March 2002, when we began selling our solar module products, we have increased our annual module production capacity from 2.0 MW to 1.3 GW as of December 31, 2010.

#### *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, 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 the facilities for 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 requirements.

#### *Solar Cells*

We completed four solar cell production lines in 2007, and our total annual solar cell nameplate production capacity reached 420 MW as of December 2009. Our capacity continued to increase in 2010 and reached 800 MW by December 31, 2010. In 2011, we intend to add an additional 500 MW, which will bring our total solar cell capacity to 1.3 GW. We intend to use substantially all of our solar cells to manufacture our own solar module products.

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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*

During 2010, we started to sell solar system kits in the Canadian and Japanese markets. A solar system kit is a ready-to-install package consisting of solar modules produced by us and third party supplied components such as inverters, racking system and other accessories. 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 implement solar power development projects. Prior to 2008, we completed projects in Western China and conducted solar power forums in Beijing, Xining, Suzhou and Luoyang. In early 2009, we completed the installation of a BIPV solar wall in our new office building in Luoyang. We have received approvals from the Jiangsu provincial government for a number of rooftop projects. We were awarded contracts for these projects in 2010, which are currently under construction. We will conduct financial viability studies on other projects once we receive confirmation of local feed-in-tariffs.

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.

From the second half of 2009, we began implementing solar farm projects, partnering with solar farm project developers. Once completed, these projects are sold to end-buyers. In December 2009, we completed a solar farm project in Germany and we expect to construct similar projects in Canada in 2011 and 2012.

### *Solar System EPC contracting and subcontracting*

From late 2010, we entered into a number of engineering, procurement and construction, or 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. Under the EPC arrangements, we have the discretion to either perform the EPC work ourselves or subcontract the EPC work to other suitable EPC contractors. As of December 31, 2010, revenues generated from EPC contracts have been insignificant. We anticipate that we will enter into more similar arrangements in 2011.

### *Supply Chain Management*

Our business depends on our ability to obtain a stable and cost-effective supply of polysilicon, silicon wafers and solar cells. In early 2005, we began managing our supply chain to secure a reliable and cost-effective supply of solar cells, which allowed us to partially mitigate the effects of the industry-wide shortage of high-purity silicon, while reducing margin pressure. We secured our supply of silicon wafers and solar cells partially by sourcing silicon raw materials and establishing toll-manufacturing arrangements with suppliers of ingots and silicon wafers and partially by directly purchasing silicon wafers and cells, in addition to producing our own solar cells. Our principal suppliers include major wafer suppliers such as GCL and Zhejiang Huayou Electronics Co., Ltd. Similarly, we primarily purchase solar cells from large cell manufacturers in Taiwan. While this strategy reduced our gross margin, it 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 capital expenditures for wafering capacity.

The shortage of high-purity silicon, silicon wafers and solar cells began to ease during the third quarter of 2008, and the industry has experienced a relative oversupply of silicon materials from the fourth quarter of

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2008 to the third quarter of 2009. From the fourth quarter of 2009 through the fourth quarter of 2010, solar cells were in short supply and, in the third quarter of 2010, silicon wafer and polysilicon supply was tighter. However, these raw materials began to decrease in price during the fourth quarter of 2010 and we expect that polysilicon, silicon wafers and solar cells will move back into a relative oversupply environment by mid-2011. We are in the process of re-negotiating most of our long-term supply contracts to obtain more favorable and flexible pricing and other terms. See Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry We may not be able to adjust our raw materials costs because we have entered into long-term supply agreements with several polysilicon and wafer suppliers. If we fail to adjust such costs or fail to recover all or part of our advance payments after we terminate certain long-term supply agreements, our profitability could be materially and adversely affected. In addition, we may be subject to litigation with certain suppliers.

From 2009 through to the third quarter of 2010, polysilicon remained relatively inexpensive at \$45 to \$55 per kilogram. In the late third quarter and early fourth quarter of 2010, polysilicon increased to approximately \$80 to \$90 per kilogram. It has subsequently decreased to approximately \$70 per kilogram by December 31, 2010 and we expect it will decline back to the \$50 per kilogram range by mid-year 2011. We expect that for 2011, there will be a modest oversupply of materials from polysilicon to modules based on the cumulative nameplate capacity throughout the industry. However, we believe that supplies of cost-effective, high quality materials (by which we mean solar modules, cells and silicon wafers) that are available at prices that will allow profitable installation of solar systems and are desirable to the end-customers will be less than the current industry wide nameplate capacity.

Since we expect this situation to continue, we are increasing the percentage of internally produced materials, especially solar cells, which we use to manufacture our module products. We believe this will allow us to maintain, if not increase, our margins. Our current plan is to increase our internal cell production to approximately 75% to 80% of our requirements, and maintain the same percentage or add more in the future when we increase our overall production capacity in 2011 and 2012. We believe that we will continue to externally purchase most of our silicon wafer and all of our polysilicon requirements. We are currently increasing the quantity and diversity of our wafer and polysilicon supplies, particularly with top tier international suppliers.

### *Silicon Raw Materials and Solar Wafers*

Silicon feedstock, which consists of high-purity silicon and UMG-Si, is the starting block of the silicon solar power supply chain.

In 2007, we entered into a twelve-year wafer supply agreement with Deutsche Solar under which we are required to purchase wafers at agreed upon prices and in accordance with the pre-determined schedule, commencing January 1, 2009. 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. Given the market price decline in solar wafers, we have been re-negotiating the terms of the agreement with Deutsche Solar and have not made any purchases in 2010 under the agreement. As of December 31, 2010, the balance of our advance payments to Deutsche Solar was \$18.0 million.

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 are required to purchase specified volumes of wafers at pre-determined prices each year, commencing January 1, 2009. We have given LDK notice to terminate these agreements and initiated arbitration proceedings against LDK in which we are seeking a refund of certain advance payments that we made to LDK. LDK made a number of counter-claims in these proceedings and the arbitration process is ongoing. See Item 8. Financial Information A. Consolidated Statements and other Financial Information Legal and Administrative Proceedings. As of December 31, 2010, the balance of our



advance payments to LDK was \$9.1 million. A corresponding bad debt provision for the same amount has been recorded and therefore the net advance payments to LDK recorded in the consolidated balance sheets as of December 31, 2010 was nil.

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In 2008, we entered into a two-year agreement with GCL pursuant to which we purchase specified quantities of polysilicon from GCL. This agreement expired pursuant to its terms in 2010. We also entered into an agreement with GCL in 2008 for a six-year term commencing in 2010 pursuant to which we are purchasing specified quantities of silicon wafers. In 2009, we amended our six-year agreement with GCL to (i) adjust purchase prices based on prevailing market prices at the time we place each purchase order and (ii) revise terms with respect to the quantity of products we are required to purchase. In December 2010, we further amended the agreement with GCL to confirm purchases for 2011 and indicative purchases for 2012 to 2015. The amendments include purchase prices, volume and other terms. Our advance payments to GCL under the long-term silicon wafer agreement will be credited against purchases commencing in 2012.

In addition, we entered into long-term agreements with suppliers such as Neo Solar and an UMG-Si supplier. We also amended our agreement with Neo Solar in 2009 to adjust the purchase price based on prevailing market prices at the time each purchase order is placed under the agreement.

In July 2008, we entered into a three-year supply agreement with a supplier for the supply of UMG-Si silicon, with a term from 2009 to 2011. In October 2008, the parties amended the term to five years, from 2009 to 2013. We have been testing the supplier's materials as well as re-negotiating the price and volume terms under the agreement, and therefore have not taken any delivery under the agreement in 2010. As of December 31, 2010, the balance of our advance payments to this supplier was \$9.7 million. A corresponding bad debt provision for the same amount has been recorded and therefore the net advance payment to the supplier recorded in the consolidated balance sheets as of December 31, 2010 was nil.

See Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry We may not be able to adjust our raw materials costs because we have entered into long-term supply agreements with several polysilicon and wafer suppliers. If we fail to adjust such costs or fail to recover all or part of our advance payments after we terminate certain long-term supply agreements, our profitability could be materially and adversely affected. In addition, we may be subject to litigation with certain suppliers.

### *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 Neo Solar and E-ton Solar Tech Co., Ltd. Although we have established relationships with some cell suppliers, we have experienced a shortage of solar cell supplies in late 2009 and 2010. As we expand our business, we expect to expand 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.

### *UMG-Si Cells*

We entered into a research partnership and supply contract with a silicon manufacturer to develop a viable and reliable source of UMG-Si in 2007. This was a viable and profitable business in 2008 and for the first half of 2009. However, due to the supplier's financial position and its default on scheduled material deliveries in 2010, we are unlikely to produce UMG-Si cells in the near future.

### *Solar Module Manufacturing*

We assemble our solar modules by interconnecting multiple solar cells by taping 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,

which can 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

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purchase our manufacturing equipment primarily from Chinese suppliers. Our proximity to these Chinese manufacturers is an advantage because they typically sell solar power manufacturing equipment at more competitive prices than similar international solar power equipment manufacturers. We source critical testing equipment from international manufacturers. Manufacturing solar module products remains a labor intensive process, and we leverage China's competitive labor costs by using labor in our manufacturing process when it proves to be more efficient and cost-effective than using automated equipment.

We are currently undertaking a design program to demonstrate the feasibility of automating our module lines and other new assembly processes such as the use of conducted adhesives and backside soldered modules, especially with metal-wrap through cells.

### ***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 also obtained certifications of CAN ORD-UL 1703 and UL 1703 in March 2007, which allow us to sell products in North America. In 2009, we obtained the necessary certifications to sell our modules in Japan, South Korea, 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, modules with a re-designed frame that work with a rail-less mounting system, such as those designed by Zep Solar, Inc., a solar laminate for BIPV applications in France with TUV certification and an AC module product with the Enphase micro-inverter. We have begun certifying modules designed to be assembled from metal wrap-through cells. These modules may also require certification for increased power ratings, and are likely to be certified for production in the second half of 2011. In 2011, there will be further certification and testing work on modules with different types of more advanced DC-to-AC inverters and DC-to-DC converters.

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 and by 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 2008, 2009 and 2010, our top five customers collectively accounted for approximately 52.6%, 57.5% and 26.0%, respectively, of our net revenues. Sales to our largest customer in those years accounted for 14.7%, 24.0% and 11.0%, respectively, of our total sales. One of our largest customers in 2008 continued to be one of our five largest customers in 2009 and 2010.

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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,					
	2008		2009		2010	
	Total Net Revenues	%	Total Net Revenues	%	Total Net Revenues	%
(In thousands of US\$, except for percentages)						
Europe	631,147	89.5	523,087	82.9	1,193,449	79.8
Asia and others	41,571	5.9	70,966	11.3	186,366	12.5
America	32,288	4.6	36,908	5.8	115,694	7.7
Total net revenues	705,006	100	630,961	100	1,495,509	100

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 and dependence. In 2010, we significantly increased our total number of customers, gained market share in both Europe and the U.S. and achieved a leading market share in South Korea, the Czech Republic and Canada. We aim to increase our sales in our existing major markets, including Germany, Italy, the Czech Republic, Spain, the United States, Canada, France, Japan, South Korea and China, while exploring other emerging solar markets. 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, or FIT. 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 megawatt growth. According to SolarBuzz, the German market grew by 100% in 2010, from 3.87 GW at the end of 2009 to 7.74 GW at the end of 2010. This outcome took place, notwithstanding the fact that at the beginning of 2010, the FIT dropped by 9%. Our products are used in large, ground-mounted solar power fields, commercial rooftops and residential rooftops. The FIT in Germany for 2010 was 0.243 per kWh and 0.284 per kWh for ground-mounted systems and between 0.248 and 0.391 per kWh for rooftop systems. The German FIT was reduced by 9-10% at the end of 2010, and will be reduced again by approximately 9-10% at the end of 2011, depending on system size and type. In addition to scheduled reductions, Germany implemented a two-step FIT decline for roof-top and greenfield systems, which were to be enacted in July and October 2010. The two step reduction decreased the FITs for roof-top systems by 13% on July 1, 2010 and an additional 3% reduction from October 2010. Furthermore, the annual FIT will decrease more quickly than the base of 9% per year if annual installations exceed 3.5 GW. This means that solar system tariffs and solar system prices will likely fall more quickly than previously anticipated. In 2011, the German FIT is expected to be between 0.198 per kWh and 0.221 per kWh for ground-mounted systems and between 0.196 and 0.287 per kWh for rooftop systems.

*Spain.* According to SolarBuzz, the Spanish market installed 378 MW in 2010, up from 98 MW in 2009. In Spain, the FIT for solar power energy is fully guaranteed for the first 25 years of system operation and 80%

thereafter. The 2010 market segmentation for power and application surface was 17 MW as roof mounted of £20 kW; 126 MW as roof mounted of >20 kW and £20 MW; and 232 MW ground mounted of £10 MW. The Spanish FIT 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. The current Spanish FIT is between 0.259/kWh and 0.340/kWh, depending on the system size, type and quarterly digressions. Funding for the national PV

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program during 2010 was regulated by Royal Decree RD1578/2008. The quarterly quota calls allocate awards and modify FIT rates according to fulfillment of quota. The Renewable Energy Plan (PER 2012-2020) reduced significantly the renewable energy content planned for 2020 from previous plans. Further cuts in the PV target plan are expected in 2011 to about 7 GW PV capacity by 2020, down from the previously 8.5 GW in the NREAP.

*Czech Republic.* According to SolarBuzz, the Czech Republic market increased approximately 242% from 397 MW in 2009 to 1,420 MW in 2010, which includes about 0.5 MW off-grid installations. The country's initial legal basis for establishing FIT 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 FIT system and a green bonus scheme. The FITs (and green premium rates) for the next calendar year are determined by the Energy Regulatory Office in November each year. The FIT 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. In 2010, PV systems connected to the grid during the year received 12.25 CZK/kWh ( 0.463/kWh) if their nominal power was up to 30 kW and 12.15 CZK/kWh ( 0.459/kWh) if their nominal power was above 30 kW. As with the FITs, the green bonus rates are also paid over a 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 2010, installations of up to 30 kW built in the same year were remunerated at 11.28 CZK/kWh ( 0.427/kWh); systems above 30 kW were paid at 11.18 CZK/kWh ( 0.423/kWh). 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. PV systems of up to 30 kW connected in 2011 are being remunerated at 7.50 CZK/kWh ( 0.298/kWh), installations of above 30 kW and up to 100 kW receive 5.90 CZK ( 0.235/kWh), and PV systems above 100 kW receive a rate of 5.5 CZK/kWh ( 0.219/kWh). Due to the substantial reduction of funding options in 2011, the Czech PV market is now projected to fall well below 0.5 GW. After March 2011, it is expected to be dominated by roof or BIPV installations of up to 30 kW.

*Italy.* According to SolarBuzz, the Italian solar market grew by 386% from 770 MW in 2009 to reach 3,740 MW at the end of 2010. This number comprises 2.5 MW off-grid installations. At the end of 2010, the Italian FIT for systems range from 0.346 per kWh, for larger ground-mounted systems, to 0.440 per kWh for smaller BIPV systems, a relatively modest decline from the previous year's rates. Furthermore, 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 and 2010 and the Italian government is expected to implement much lower FIT in order to control the market growth. In 2011, the Italian FIT is expected to be approximately 0.28 to 0.44 per kWh in the first half of the year, and to decline further in the second half year.

*United States.* According to SolarBuzz, the US market almost doubled to 949 MW in 2010 from 485 MW in 2009, while its share in the global market slightly decreased to 5% in 2010 from 6% in 2009. Over 10 states in the U.S. 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 US states include state renewable energy credits, capital subsidies and in some states, such as Vermont, FIT. Many states and various federal departments are also subject to renewable energy portfolio standards that mandate minimum percentages of renewable energy production by utilities. By the end of 2010, 29 states and Washington DC currently have enacted mandatory RPS policies while seven states had voluntary renewable goals. Finally, the



U.S. federal government passed several renewable energy provisions totaling more than \$70 billion in the American Recovery and Reinvestment Act, including a 30% investment tax credit,

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accelerated five-year system depreciation and an expansion of Department of Energy loan guarantees. 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.

*China.* According to SolarBuzz, the Chinese market witnessed a 155% growth in installations in 2010 to 532 MW, up from 208 MW in 2009. 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, 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. The Interim Measures do not apply to projects completed before March 23, 2009, the promulgation date of the Interim Measures.

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.

We believe that we are well positioned to take advantage of growth opportunities in the Chinese solar power market, which has the potential to become one of the fastest growing markets for solar power. In addition to project approvals of 640 MW under the Golden Sun Program and 91 MW in the Solar Rooftop Program in 2009, programs like Renewable Energy Applications in Buildings and National Green Energy Demonstration County are re-enforcing the project pipeline.

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 Golden Sun program will approve another 320MW of rooftop PV projects in 2011, and the total new installation, including rooftop and ground-mounted projects, in 2011 will be approximately 500-700MW based on the estimates by the China Photovoltaic Society. The subsidies provided by the government will cover 50% of the total PV project cost.

*Canada.* According to SolarBuzz, the Canadian market in 2010 was dominated by installations in the Province of Ontario, emanating from the now defunct Renewable Energy Standard Offer Program (RESOP) and the newer FIT policy inaugurated in 2009. In all, Ontario accounted for more than 90% of the installed PV capacity in the country in 2010 with 170 MW of solar PV installations. Of this, utility-scale RESOP installations represented approximately 150 MW of installed capacity with the remainder coming from small-scale systems driven by Ontario's FIT.

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Ontario market growth in 2010 was a remnant of 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 FIT program. Both programs are administered by the Ontario Power Authority, or OPA, which is responsible for setting rates, regulations, and monitoring all FIT activity. The proposed price for solar power under the Ontario FIT program ranges from C\$0.443 to C\$0.80 per kWh depending on the system size and type. We and our partners have applied for and received 176 MW of contract offers for open field solar power generation projects. We may obtain additional contract offers in 2011. Initial designs of these projects are being completed and the projects are being processed through the permitting stage.

*Japan.* According to SolarBuzz, the Japanese market grew from 477 MW in 2009 to 960 MW in 2010, as a result of the nationwide residential incentive program and the introduction of a Japanese version of a FIT in 2009. 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 FY2008 supplemental budget of ¥9 billion. For FY2010, the residential incentive program had a funding of ¥40.15 billion to cover about 150,000 projects and the application period was open between April and December 2010. The residential program provides a subsidy of ¥70 per watt, and to promote further cost reduction, this subsidy is only applicable to a PV system with a total installed cost of less than ¥650 per watt. Besides the upfront cash incentives, the federal government crafted a Net FIT policy, requiring electric power utilities to buy excess electricity generated by PV systems at a premium rate. Residential PV owners, for example, were paid for 10 years a rate of ¥48/kWh, compared to the average of ¥24/kWh under the previous net billing arrangement. For FY2010, the government kept the net FIT rates at the 2009 level (¥48/kWh for residential and ¥24/kWh for non-residential).

*Australia.* According to SolarBuzz, in 2010, the Australian market grew from 79MW in 2009 to 265MW in 2010, representing a growth rate of more than 360%. The largest state market by far in 2010 was New South Wales, which saw over 150 MW in PV installations, mostly due to its FIT program. Queensland also saw a significant amount of capacity installed during 2010, again due to its FIT program. 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 AUD4,000 and AUD6,200 for 1.5 kW systems depending on location. The Solar Credits program was the successor of the Solar Homes and Communities Program (SHCP), which offered an AUD8 per watt rebate on the first 1,000W 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 FITs. These FITs 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

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utility-scale solar PV and 250 MW of CSP plants by 2016. As well, every region intends to have a PV specific FIT or net-metering policy in 2010.

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

#### ***Standard Solar Modules***

We market and sell our standard solar modules worldwide, primarily through a direct sales force and via market-focused sales agents. Our direct sales personnel or 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.* Since late 2007, we have been entering 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. Since late 2008, we have often provided short-term credit sales ranging from 21 to 45 days. To some customers, we provide medium-term credit sales from 30 to 120 days. We actively use credit insurance coverage for credit sales.

*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.

*Solar System Kits.* In 2010, we commenced sale of solar system kits. Solar systems kits are packaged, pre-specified components required for a third party to construct a system on behalf of the end buyer. A variety of systems kits were sold in Japan and Ontario in 2010. In 2010, the sale of solar systems kits reached 24.4 MW.

#### ***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 Power Development Projects***

In November 2009, we submitted a significant number of feed-in-tariff applications to OPA in Canada. In April 2010, the OPA awarded us and our partners contract offers for 176 MW of open field solar power generation projects. We may obtain additional contract offers in 2011. The projects were developed in partnership with several leading renewable energy developers in the Ontario market. Initial designs of these projects are being completed and the projects are being processed through

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permitting stage. If final approval is obtained from the OPA, we expect that these projects will be completed in 2011 and 2012.

From the second half of 2009, we began implementing solar farm projects, partnering with solar farm project developers. In late 2009, we completed a solar farm project in Germany. We plan to continue to pursue solar power development project opportunities in 2011.

### *Solar System EPC contracting and subcontracting*

From late 2010, we 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. We have the discretion to either perform all of the EPC arrangements or subcontract any part of the EPC arrangements to another suitable EPC contractor. As of December 31, 2010, revenues generated from EPC contracts have been insignificant. We anticipate that we will enter into more similar arrangements in 2011.

### *Customer Support and Service*

We provide customers with after-sales support, including product return and warranty services. We typically sell our standard solar modules with a six-year warranty against defects in materials and workmanship and 10-year and 25-year warranties against declines of more than 10% and 20%, respectively, from the initial minimum power generation capacity at the time of delivery. We typically sell our specialty solar modules and products with a one-year warranty against defects in materials and workmanship and may, depending on the characteristics of the product, include a limited warranty of up to ten years against declines from the minimum power generation capacity specified at the time of delivery.

Our customer support and service function grew in 2010. We expanded our customer resources four fold, and established two functional support groups to address technical inquiries and product related issues. Our current structure enhances our abilities to handle our customer's questions and concerns in a timely and professional manner. There has been an increase in claims, but this was in line with our expectation with both higher volumes in the market place, and to resolve legacy issues through the warranty process.

For 2011, 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 also 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 approximately 11% according to company filings, but require significantly less or no 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. Higher conversion efficiency cells are also becoming an important product. Some international competitors, such as Sanyo Electric Co.,



Ltd. and SunPower, have well-known high-efficiency module product brands. We are developing competing high-efficiency products, as are several other Chinese manufacturers. We may also face increased competition from manufacturers from other sectors such as Samsung Corporation or Hanwha SolarOne, Ltd., several of which have already started production of solar modules or acquired companies that do so. The strong demand for solar modules in 2010

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has provided opportunities for second tier solar manufacturers to mature and increased their competitiveness during that period. They have established customer bases in Europe and the USA, and are taking a portion of the market share. 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;

name-plate power and other performance parameters of the module, such as power tolerances;

value-added services such as system design and installation;

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

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

brand equity and any good reputation resulting from the above items, including the willingness of banks to finance projects using 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 in our industry will depend on our ability to deliver a cost-effective product in a timely manner, develop and maintain a strong brand name based on high quality products and strong relationships with downstream customers. It will also depend 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 keys to competing successfully in the long-term will be to produce innovative, high quality products at competitive prices and developing 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 that 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 continued to maintain general commercial and product liability coverage at the same levels as in 2009. We have also been actively working with China Export Credit Insurance Company, 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 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 solar system kits.

Since April 2010, we have purchased product warranty insurance, which is underwritten by A-rated insurance companies, on an annual basis to back up our product warranties. This insurance applies to our warranty against workmanship and material defects and our warranty against power output. This insurance cost is amortized over the 25 year coverage period provided under the insurance policies. However, our customers

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will enjoy an irrevocable warranty, which may improve the marketability of our products and entice them to pay more for products with warranties backed by insurance.

### ***Environmental Matters***

Except for the circumstances 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 European Union's Restriction of Hazardous Substances Directive, which took effect in July 2006, by reducing the amount of lead and other restricted substances used in our solar module products.

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

### ***Government Regulation***

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.

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, also demonstrates a commitment to promote the development of renewable energy to enhance the competitiveness of the renewable energy industry.

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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 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 Resource Bureau of the NDRC 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 Resource Bureau of the NDRC 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.

### *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

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storage, use and disposal of hazardous materials. The major environmental regulations applicable to us include the PRC Environmental Protection Law, the PRC Law on the Prevention and Control of Noise Pollution, the PRC Law on the Prevention and Control of Air Pollution, the PRC Law on the Prevention and Control of Water Pollution, the PRC Law on the Prevention and Control of Solid Waste Pollution, the PRC Law on Evaluation of Environmental Affects and the Regulations on the Administration of Construction Project Environmental Protection.

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 on September 29, 2010, 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 2007 and became effective in December 2007, the solar power 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, and priority consideration in obtaining land use rights.

While the 2004 catalogue only applied to the construction and operation of solar power stations, the current catalogue 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.

### *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 Suzhou Manufacturing, CSI Cells, CSI Technologies, CSI Changshu Manufacturing and CSI Luoyang Manufacturing, are governed by the new EIT Law, which became 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%. 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 new 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 new 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. 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 Suzhou Manufacturing was subject to a reduced enterprise income tax rate of 12.5% until the end of 2009, when its tax holiday expired, and it is currently subject to an EIT rate of 25%. CSI Cells and CSI Luoyang Manufacturing are subject to a reduced enterprise income tax rate of 12.5% until the end of 2011, when their tax holidays expire. CSI Changshu Manufacturing and CSI Technologies were exempt from EIT

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for 2009 and will be subject to a reduced enterprise tax rate of 12.5% from 2010 through to and including 2012, at which time their tax holidays will expire as well. As the preferential tax benefits currently enjoyed by our PRC subsidiaries expire, their effective tax rates will increase significantly.

The new 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 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 new EIT Law and, therefore, subject to the uniform 25% enterprise income tax rate on our global income.

Under the new 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 new 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, and the Settlement, Sale and Payment of Foreign Exchange Administration Rules (1996), or the Settlement Rules.

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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 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 (1986), as amended, and the Wholly Foreign Owned Enterprise Law Implementation Rules (1990), as amended.

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.

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**C. Organizational Structure**

The following diagram sets forth our company's organizational structure, including the place of formation, our ownership interest in and the operating focus of each of our subsidiaries.

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:

CSI Changshu Manufacturing rents approximately 31,119 square meters in Changshu, including 13,889 square meters for manufacturing facilities under a lease effective from June 1, 2010 to May 31, 2011, 17,230 square meters for manufacturing facilities under a lease effective from April 1, 2010 to March 31, 2013, 8,670 square meters for warehouse under a lease effective from February 2, 2010 to February 1, 2012, and 1765 square meters for warehouse under a lease effective from December 10, 2010 to December 9, 2011.

CSI Luoyang Manufacturing holds the 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

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2008, CSI Luoyang Manufacturing obtained the land use rights for approximately 79,685 square meters of adjacent land (Phase II), on which we are currently constructing 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 after the completion of construction.

CSI Cells holds the land use rights certificate for approximately 65,661 square meters of land in Suzhou. We completed the construction of our first solar cell manufacturing facilities on this site in the first quarter of 2007. The Phase I manufacturing 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 28,917 square meters of workshop space, were completed in 2009. We expect to receive the property ownership certificate upon passing the required inspection. We are currently constructing Phase III cell manufacturing facilities with a total floor area of approximately 21,448 square meters.

CSI Changshu Manufacturing holds the 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 the central warehouses construction was completed in April 2010. Phase I occupies 78,320 square meters of land. We are currently constructing Phase II manufacturing facilities with an additional warehouse and three other buildings. The total floor area of approximates 46,507 square meters. Phase II will be completed in the first half of 2011, occupying 22,442 square meters of land. Phase III manufacturing facilities on the remaining land are still in the design and planning stage.

CSI New Energy holds a land use rights certificate for approximately 10,000 square meters of land in Suzhou.

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. We will also lease an additional warehouse of 7,912 square meters and an office building of 570 square meters on the same premises. Completion of the manufacturing facilities, warehouse and office building space is expected to be completed in July 2011.

**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;

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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 If governments revise, reduce or eliminate subsidies and economic incentives for solar power, the demand for our products could decline, which could materially and adversely affect our revenues, profits, margins and results of operations. and Item 4. Information on the Company B. Business Overview Markets and Customers.

Additionally, the continuing poor global economic performance 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 D. Risk Factors Risks Related to Our Company and Our Industry The execution of our growth strategy depends upon the continued availability of third-party financing arrangements for our customers, which is affected by general economic conditions. Tight credit markets could depress demand or prices for solar 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 grown significantly in the past several 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 of adverse weather conditions, particularly in Germany, one of our key markets, which complicates the installation of solar power systems. 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. 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. By the end of 2006, sales of standard solar modules represented 96.8% of our net revenues, excluding silicon materials sales. In 2008 and 2009, sales of standard solar modules represented 98.2% and 98.7%, respectively, of our net revenues, with the remainder coming

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primarily from the sale of silicon materials. In 2010, sales of standard solar modules represented 93.7% of our net revenue, with the remainder coming primarily from sale of solar system kits.

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 between \$3.62 to \$4.23 during 2004 and 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 declined sharply 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. The average price for our standard solar modules in 2010 was \$1.80 per watt, with prices slightly up in the fourth quarter of 2010 to \$1.84 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. In 2009, there was an oversupply of polysilicon and silicon wafers due to increased production capacity. As a result, we wrote down inventory in the fourth quarter of 2008 and in the first and second quarters of 2009. We have been re-negotiating our supply agreements in line with market pricing for raw materials. However, if we are unable on an ongoing basis, 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 may not be able to adjust our raw materials costs because we have entered into long-term supply agreements with several polysilicon and wafer suppliers. If we fail to adjust such costs or fail to recover all or part of our advance payments after we terminate certain long-term supply agreements, our profitability could be materially and adversely affected. In addition, we may be subject to litigation with certain suppliers. Currently, we secure a large percentage of our supply of solar wafers through purchasing, and through limited tolling arrangements. We also purchase large quantities of solar cells directly from our suppliers.

***Foreign Exchange***

We pay most of our expenses in Renminbi, which since July 2008 has fluctuated in tandem with other currencies such as the U.S. dollar. However, since 2007, most of our sales have been denominated in Euros and U.S. dollars. This creates a foreign exchange risk, which can impact our revenues and margins in the event that the Euro depreciates against the U.S. dollar, as occurred in the second half of 2008. In 2008, we began to hedge our Euro exposure against the U.S. dollar using single put and call collars and forward contracts, and more recently knock-in forward contracts. We were able to mitigate a substantial portion, but not all, of our exchange rate losses for 2008 by hedging. In 2008, we incurred a net foreign exchange loss of \$20.0 million. We continued to hedge our Euro exposure against the U.S. dollar in 2009 with similar instruments in order to increase our foreign exchange visibility and limit our foreign exchange losses. In 2009, we had a net foreign exchange gain of \$7.7 million. In 2010, we hedged our foreign exchange exposure and incurred a net foreign exchange loss of approximately \$36.3 million. We expect that our sales

denominated in currencies other than the Euro will increase. Increasingly, banks are requiring collateral in order to enter into

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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. In the second half of 2009, these limits were inadequate to cover our expected cash flow for the first and second quarters of 2010. These notional limits increased in 2010, which allowed us to hedge expected cash flow and cash balances denominated in foreign currencies, mainly the Euro. However, the effectiveness of our hedging program may be compromised with respect to cost effectiveness, cash management, exchange rate visibility and downside protection.

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

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

#### *Net Revenues*

We generate revenues primarily from the sale of solar module products, consisting of standard solar modules, specialty solar modules, solar system kits and products. Solar module products accounted for 98.2%, 98.7% and 93.7% of our net revenues in 2008, 2009 and 2010, respectively. In 2010, we started a new line of business, the sale of solar system kits, which contributed 5.2% of our net revenues. We continue to explore value-added services to purchasers of solar systems or solar power projects, including project finance, EPC contracting and investment activities. We believe this will help us to improve our solar module market penetration by the addition of a sales channel and possibly increase our margins from the associated value-added services, such as systems integration and sales of packages or kits of solar power project components. The main factors affecting our net revenues include average selling prices per watt and unit volume shipped, 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; and

loss on firm purchase commitments under long-term supply agreements.

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: (i) the costs of purchasing high purity and solar grade silicon raw materials; (ii) labor costs incurred in

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manufacturing solar wafers; (iii) the costs of other materials and utilities we use for manufacturing solar wafers; and (iv) 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: (i) the costs of purchasing solar wafers; (ii) labor costs incurred in manufacturing solar cells; (iii) the costs of other materials and utilities we use for manufacturing the solar cells; and (iv) depreciation charges incurred for our solar cell manufacturing facility, equipment and building.

In 2008, 2009 and 2010, 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 comprise: (i) costs of purchasing the silicon feedstock, (ii) labor costs incurred in inventory management, (iii) labor costs incurred in blending the silicon feedstock as part of our silicon feedstock blending program and (iv) 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 payment 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, due to market demand, we only did a small volume of module tolling business.

In 2010, we started a new business line: the sale of 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 of 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 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 10-year and 25-year warranties against declines of more than 10% and 20%, respectively, of the initial minimum power generation capacity at the time of delivery. From June 2009, we increased our warranty against defects in materials and workmanship to six years. We typically sell our specialty solar modules and products with a two-year warranty against defects in materials and workmanship and may, depending on the characteristics of the product, include a limited warranty of up to 10 years and a further 15 years against declines in power generation capacity of 90% and 80% with these periods. From April 2010, we acquired 25-year, irrevocable, product warranty insurance. This insurance applies to our warranty against workmanship and materials defects and the power output component of our module warranty.

Our cost of revenues has historically increased due to the increase of our net revenues. However, as a result of the global financial crisis, the demand for solar modules and the related cost of silicon materials and solar wafers and cells decreased sharply between late 2008 and the end of second quarter of 2009. Raw materials prices continued to fluctuate in 2010. Write-downs of inventory included in our cost of revenue were \$23.8 million, \$12.5 million, and \$2.1 million in 2008, 2009, and 2010 respectively. We have been re-negotiating the contract terms with Deutsche Solar since 2009 and did not order the full 2010 purchase volume under the agreements. The losses related to our ongoing firm purchase commitment with Deutsche Solar were \$13.8 million and \$1.6 million for the years ended December 31, 2009 and 2010, respectively. The losses were computed using the lower of cost or market method. See

Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry We may not be able to adjust our raw materials costs because we have entered into long-term supply agreements with several polysilicon and wafer suppliers. If we fail to adjust such costs or fail to recover all or part of our advance payments after we terminate certain long-term supply agreements, our profitability could be materially and adversely affected. In addition, we may be subject to litigation with certain suppliers.



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### *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.

Our gross margin increased from 10.1% in 2008 to 12.4% in 2009 to 15.3% in 2010. Our gross margin increased in 2010 primarily because of greater vertical integration, especially from internally produced cells.

### *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 operating expenses to decline or remain constant with the growth of our operations.

### *Selling Expenses*

Selling expenses consist primarily of salaries, 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. Since the second quarter of 2006, selling expenses have included share-based compensation expenses for options and restricted shares granted to our sales and marketing personnel. As we expand our business, we will increase our sales and marketing efforts and target companies in selected industry sectors in response to evolving industry trends. We expect as we increase our sales volume our selling expenses will increase, including 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. Since the second quarter of 2006, our general and administrative expenses have included share-based compensation expenses for options and restricted shares granted to our general and administrative personnel, directors and consultants. We expect our general and administrative expenses to increase to support the anticipated growth of our business, such as hire additional personnel, upgrade our information technology infrastructure, and compliance-related costs. However, assuming our net revenues increase at our anticipated rate, we expect that our general and administrative expenses will remain constant or decrease as a percentage of our net revenues. Non-recurring general and administrative expenses increased significantly in 2010 because of increased legal, accounting and other professional fees in relation to our audit committee investigation and the shareholder class action lawsuits. See Item 8. Financial Information A. Consolidated Statements and other Financial Information Legal and Administrative Proceedings . As of December 31, 2010, these costs were \$16.2 million for legal and professional services. Some of these costs may be recoverable under our director and officer liability insurance policy.

### *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. Since the second quarter of 2006, our research and development activities have included share-based compensation expenses for



options and restricted shares granted to our research and development employees. We continue to increase our expenses on research and development. They are primarily related to our ongoing efforts to improve our solar ingot and wafer, solar cell and module manufacturing processes, and are not separated from our cost of revenues.

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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. However, as a percentage of net revenue, our research and development expenses are expected to remain constant.

*Share-based Compensation Expenses*

Under our share incentive plan, as of December 31, 2010, we had outstanding 2,629,316 options to purchase our common shares. For a description of the options and restricted shares granted, including the exercise prices and vesting periods, see Item 6. Directors, Senior Management and Employees B. Compensation of Directors and Executive Officers Share-based Compensation Share Incentive Plan . We recognize share-based compensation to employees as expenses in our statement of operations based on the fair value of the equity awarded on the date of the grant. The compensation expense is recognized over the period in which the recipient is required to provide 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 option and restricted share compensation expenses may change based on changes to our actual forfeitures.

For the year ended December 31, 2010, we recorded share-based compensation expenses of approximately \$3.9 million, compared to approximately \$5.4 million for the year ended December 31, 2009. We have categorized these share-based compensation expenses in our (i) cost of revenues, (ii) selling expenses, (iii) general and administrative expenses and (iv) research and development expenses, depending on the job functions of the individuals to whom we granted the options or restricted shares. The following table sets forth, for the periods of allocation of our share-based compensation expenses both in absolute amount and as a percentage of total share-based compensation expenses.

	<b>Years Ended December 31,</b>					
	<b>2008</b>		<b>2009</b>		<b>2010</b>	
	<b>(In thousands of US\$, except for percentages)</b>					
Share-based compensation expenses included in:						
Cost of revenues	\$ 350	3.8%	\$ 412	7.6%	\$ 231	6.0%
Selling expenses	1,060	11.7	733	13.5	509	13.1
General and administrative expenses	7,306	80.3	3,772	69.4	2,873	74.1
Research and development expenses	386	4.2	519	9.5	264	6.8
 Total share-based compensation expenses	 \$ 9,102	 100.0%	 \$ 5,436	 100.0%	 \$ 3,877	 100.0%

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 medium-term loans from Chinese commercial banks and the 6% convertible notes we issued privately to qualified institutional investors. Total offering costs incurred for the issuance of the convertible notes were booked as deferred expenses. Amortization of offering expenses of \$35,638 and \$39,816 were recorded for the years ended December 31, 2009 and 2010, respectively. Due to significant use of long-term and short-term loans, interest expense has increased from \$9.5 million in 2009 to \$22.2 million in 2010.

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### *Gain on Change in Fair Value of Derivatives*

The gain on change in fair value of derivatives in our 2009 and 2010 financial statements were associated with hedging of the Euro against the U.S. dollar. Anticipating depreciation of the Euro against the U.S. dollar, we entered into collar transactions with a single put and call option and call forward contracts. During the years ended December 31, 2008, 2009, and 2010, the gain on change in fair value of these foreign currency derivatives amounted to \$14.5 million, \$9.9 million and \$1.7 million, respectively. We recorded a foreign currency derivative liability of \$0.5 million in 2009, while we recorded both a foreign currency derivative asset of \$2.2 million and a foreign currency derivative liability of \$2.5 million in 2010.

### *Foreign Exchange Gain (Loss)*

We recorded a net foreign currency exchange gain of \$7.7 million for the year ended December 31, 2009, due to the appreciation of the Euro against the U.S. dollar during 2009, compared to a net currency exchange loss of \$20.0 million for the year ended December 31, 2008. In 2010, we recorded a net foreign exchange loss of \$36.3 million, mainly due to depreciation of the Euro. Our accounts receivable are mainly denominated in U.S. dollars and Euros, while the U.S. dollar is our functional and reporting currency. In November and December 2009, the Euro exchange rate declined from \$1.51 to 1.00 to slightly over \$1.43 to 1.00, while in 2010 the Euro exchange rate varied between \$1.19 and \$1.42. This impacted the value of our Euro denominated accounts receivable and other Euro denominated assets.

### *Income Tax Expense*

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

We are governed by the CBCA, a federal statute of Canada and are registered to carry on business in Ontario, which subject us to both Canadian federal and Ontario provincial corporate income taxes. Our combined tax rates were 33.5%, 33.0% and 31.0% for the years ended 2008, 2009 and 2010, respectively.

PRC enterprise income tax is calculated based on taxable income determined under PRC accounting principles. Our major operating subsidiaries, CSI Solartronics, CSI Suzhou 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 are subject to a reduced enterprise income tax rate of 12.5% until the end of 2011, when their tax holidays expire. CSI Technologies and CSI Changshu Manufacturing are subject to a reduced enterprise income tax rate of 12.5% until the end of 2012, when their tax holidays will expire. CSI Suzhou Manufacturing is subject to a standard 25% enterprise income tax rate. As the preferential tax benefits currently enjoyed by our PRC subsidiaries expire, their effective tax rates will increase significantly.

The new 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 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 new EIT Law and,

therefore, subject to the uniform 25% enterprise income tax rate as it relates to our global income.

Under the new 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

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enterprises in the PRC, to the extent such interest or dividends have their sources within the PRC. We consider undistributed earnings of our PRC subsidiaries of approximately \$146.0 million at December 31, 2010 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 the following accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements.

#### ***Revenue Recognition***

Sales of solar modules, solar system kits and silicon materials are recorded when products are delivered and title has passed to 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 and other accessories supplied by third parties. We recognize revenue 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 free on board, or FOB, ex-works or cost, insurance and freight, or CIF. Under FOB terms, we fulfill our obligation to deliver when the goods have passed over the ship's rail at the named port of shipment. The customer bears all costs and risks of loss or damage to the goods from that point. Under ex-works terms, 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 terms, we must pay the costs, marine insurance and freight necessary to bring the goods to the named port of destination. The risk of loss of or damage to the goods, and 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.

Sales are recorded when the risk of loss or damage is transferred from us to the customers. Sales to customers are recorded net of estimated returns.

We enter into toll manufacturing arrangements in which we receive solar wafers and return finished modules. We recognize a service fee as revenue when the processed modules are delivered.

On occasion, we have permitted certain customers to return products for reasons that were not covered by our warranty. We periodically make estimates of our sales returns based on historical experience, and record such estimate as a reduction of revenue. As of December 31, 2009 and 2010, we had sales return reserve of \$8.5 million and \$8.9 million, respectively. Actual returns could differ from these estimates.

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Sometimes we grant extended credit terms to customers with whom we had positive historical collection experience and who have overall creditworthiness. In addition, some of our customers pay us through drawn upon acceptances, open accounts and letter of credit terms, which typically take 30 to 120 days to process in order for us to be paid. To assess the creditworthiness of our customers, we generally obtain credit information from reputable third-party sources, including Dunn & Bradstreet and insurance companies that ultimately insure us against customer credit default. Using the information collected, we further evaluate the potential effect of a delay in financing on the customers' liquidity and financial position, their ability to draw down financing as well as their ability and intention to pay should they not obtain the related financing. Based on this analysis, we determine what credit terms, if any, to offer to each customer individually. If our assessment indicates a likelihood of collection risk, we do not recognize the revenue until cash payment is received from the customer. Based on the procedures that we perform around customer credit and collectability, we believe that collectability continues to be reasonably assured and, accordingly, such extended credit terms did not affect revenue recognition.

As of December 31, 2009 and 2010, we had inventories of \$21.0 million and \$18.8 million, respectively, relating to sales to customers where revenues were not recognized because the collection of payment was not reasonably assured.

### *Warranty Cost*

Prior to June 2009, we typically sold our solar modules and products with up to a two-year guarantee for defects in materials and workmanship and 10-year and 25-year warranties against specified declines in the initial minimum power generation capacity at the time of delivery. Since June 2009, we increased our warranty against defects in materials and workmanship to six years. 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. We currently take a 1% warranty provision against our revenue for sales of solar modules and 0.8% for solar system kits.

In April 2010, we started to purchase product warranty insurance to back up our warranties. This insurance applies to our warranty against workmanship and materials defects and power output. Insurance premiums are recorded as other non-current assets and amortized over the 25-year term of the insurance policy. The use of insurance may alter the costs of our warranty program.

### *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, 2008, 2009 and 2010.

### *Allowance for Doubtful Accounts*

We conduct credit evaluations of our customers and generally do not require collateral or other security from them. We establish an allowance for doubtful accounts primarily based upon the age of our receivables and factors surrounding the credit risk of specific customers. As of December 31, 2009 and 2010, allowance for doubtful accounts



of \$18.0 million and \$8.0 million, respectively, were established for certain customers where management expected a credit risk on the collection of accounts receivable balances. From mid-2009,

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we started to purchase insurance from Sinosure 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 Sinosure insurance. For the amounts recoverable from Sinosure, we recorded \$7.1 million and \$4.2 million in prepaid expenses and other current assets as of December 31, 2009 and 2010, respectively. With respect to advances to suppliers, primarily suppliers of solar cells, solar wafers and silicon raw materials, we perform ongoing credit evaluations of our suppliers' 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, 2009 and 2010 of \$11.0 million and \$19.4 million, respectively. The reserves include allowances on advances to LDK of \$8.8 million and \$9.1 million as of December 31, 2009 and 2010, respectively, and an allowance of \$9.7 million on advances to an UMG-Si supplier as of December 31, 2010.

*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, 2008, 2009 and 2010 were \$23.8 million, \$12.5 million and \$2.1 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. In 2010, we fulfilled our 2009 purchase commitment under our agreement with Deutsche Solar but did not meet the minimum purchase obligation for 2010. We believe that it is more likely than not that the take-or-pay provisions of the agreement are void under German law and, accordingly, as of December 31, 2010 have not accrued for the full \$21,143,853 that would otherwise be due under the take-or-pay provision of the agreement. Rather, we have assumed that we will be permitted to purchase the 2010 contracted quantity under the agreement, in addition to the 2011 contracted quantity, in 2011 and have included the purchase obligation for both years in our evaluation of impairment of long-term purchase commitments. Although not considered probable, if we are not successful in our ongoing negotiations with Deutsche Solar, we may be required to make payments and incur additional losses up to the full take-or-pay amount.

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 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 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 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

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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.

### *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.

The notional carrying amount of our outstanding convertible notes as of December 31, 2010 was \$0.9 million. The estimated fair value of these notes was \$0.9 million as of December 31, 2010. The book value of our investment in an 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.

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 protect against volatility of future foreign currency cash flows caused by the changes in foreign exchange rates. 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 gains on foreign currency derivative contracts of \$14.5 million, \$9.9 million and \$1.7 million for the years ended December 31, 2008, 2009 and 2010, 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 option or forward 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 6 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. 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.

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*Share-based Compensation*

We have granted restricted shares and share options 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 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 share 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 April 2010, the FASB issued ASU 2010-13, Compensation (Topic 718) Stock Compensation . This ASU addresses the classification of an employee share-based payment award with an exercise price denominated in the currency of a market in which the underlying equity security trade. FASB Accounting Standards Codification Topic 718, Compensation Stock Compensation, provides guidance on the classification of a share-based payment award as either equity or a liability. A share-based payment award that contains a condition that is not a market, performance, or service condition is required to be classified as a liability. Under Topic 718, awards of equity share options granted to an employee of an entity's foreign operation that provide a fixed exercise price denominated in (1) the foreign operation's functional currency or (2) the currency in which the employee's pay is denominated should not be considered to contain a condition that is not a market, performance, or service condition. However, U.S. GAAP do not specify whether a share-based payment award with an exercise price denominated in the currency of a market in which the underlying equity security trades has a market, performance, or service condition. Diversity in practice has developed on the interpretation of whether such an award should be classified as a liability when the exercise price is not denominated in either the foreign operation's functional currency or the currency in which the employee's pay is denominated. The adoption of this ASU will not have a material impact on the Company's consolidated financial statements and related disclosures.

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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.

	Years Ended December 31,					
	2008		2009		2010	
	(In thousands of US\$, except percentages)					
Net revenues	705,006	100.0%	630,961	100.0%	1,495,509	100.0%
Cost of revenues	633,998	89.9%	552,856	87.6%	1,266,737	84.7%
Gross profit	71,008	10.1%	78,105	12.4%	228,772	15.3%
Operating expenses:						
Selling expenses	10,608	1.5%	22,089	3.5%	47,109	3.2%
General and administrative expenses	34,510	4.9%	46,324	7.3%	54,520	3.6%
Research and development expenses	1,825	0.3%	3,180	0.5%	6,843	0.5%
Total operating expenses	46,943	6.7%	71,593	11.3%	108,472	7.3%
Income from continuing operations	24,065	3.4%	6,512	1.0%	120,300	8.0%
Other income (expenses)						
Interest expenses	(12,201)	(1.7)%	(9,459)	(1.5)%	(22,164)	(1.5)%
Interest income	3,531	0.5%	5,084	0.8%	6,936	0.5%
Gain on change in fair value of derivatives	14,455	2.1%	9,870	1.6%	1,657	0.1%
Gain on debt extinguishment	2,429	0.3%				
Debt conversion inducement expenses	(10,170)	(1.5)%				
Investment income (loss)			1,788	0.3%	(2,853)	(0.2)%
Foreign exchange gain (loss)	(19,989)	(2.8)%	7,681	1.2%	(36,294)	(2.4)%
Income before income taxes	2,120	0.3%%	21,476	3.4%	67,582	4.5%
Income tax (expense) benefit	(9,654)	(1.4)%	1,302	0.2%	(16,754)	(1.1)%
Net income (loss) from continuing operations	(7,534)	(1.1)%	22,778	3.6%	50,828	3.4%
Less: Net income attributable to non-controlling interest			132		259	
Net income (loss)	(7,534)	(1.1)%	22,646	3.6%	50,569	3.4%

**Year Ended December 31, 2010 Compared to Year Ended December 31, 2009**

*Net Revenues.* Our total net revenues increased by \$864.6 million, or 137.0%, from \$630.9 million in 2009 to \$1,495.5 million in 2010. Our net revenue increased primarily due to increased shipments from 296.6 MW in 2009 to 803.5 MW in 2010, an increase of 170.8%, offset by decreased average selling prices of our standard solar modules from \$2.13 per watt in 2009 to \$1.80 per watt in 2010.

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, 2009 and 2010, we had sales return reserve of \$8.5 million and \$8.9 million, respectively. Actual returns could differ from these estimates.

*Cost of Revenues.* Our cost of revenues increased by \$713.9 million, or 129.1%, from \$552.8 million in 2009 to \$1,266.7 million in 2010. The increase in our cost of revenue was in line with the increase in net revenues for the year, offset by a decrease in raw materials prices for the year due to market supply competition on wafers and solar cells. Cost of revenues as a percentage of our total net revenues decreased from 87.6% in 2009 to 84.7% in 2010.



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A loss on firm purchase commitments of \$13.8 million and \$1.6 million under our long-term wafer supply agreement with Deutsche Solar was recorded in 2009 and 2010, respectively. Meanwhile for 2009 and 2010, the inventory write-downs were \$12.5 million and \$2.1 million, respectively.

*Gross Profit.* As a result of the foregoing, our gross profit increased by \$150.7 million, or 193.0%, from \$78.1 million in 2009 to \$228.8 million in 2010. Our gross profit margin increased from 12.4% in 2009 to 15.3% in 2010.

*Operating Expenses.* Our operating expenses increased by \$36.9 million, or 51.5%, from \$71.6 million in 2009 to \$108.5 million in 2010. Operating expenses as a percentage of our total net revenues decreased from 11.3% in 2009 to 7.3% in 2010.

*Selling Expenses.* Our selling expenses increased by \$25.0 million, or 113.3%, from \$22.1 million in 2009 to \$47.1 million in 2010. The increase in our selling expenses was due to increases in freight charges, sales commissions and payroll, and advertising and promotion costs in line with the increased shipments and personnel, increasing our brand awareness in 2010. Selling expenses as a percentage of our net total revenues decreased from 3.5% in 2009 to 3.2% in 2010.

*General and Administrative Expenses.* Our general and administrative expenses increased by \$8.2 million, or 17.7%, from \$46.3 million in 2009 to \$54.5 million in 2010. The increase in our general and administrative expenses was due to increases in personnel costs in line with increase in organization and increased compliance related consulting and professional fees, offset by a decrease in allowance for doubtful accounts from tighter credit controls in 2010. General and administrative expenses as a percentage of our total net revenues decreased from 7.3% in 2009 to 3.6% in 2010. The general and administrative expenses included an allowance for doubtful accounts of \$18.1 million for the year ended December 31, 2009, compared to \$3.0 million for the year ended December 31, 2010.

*Research and Development Expenses.* Our research and development expenses increased by \$3.6 million, or 115.2%, from \$3.2 million in 2009 to \$6.8 million in 2010. The increase in research and development expenses was due to increased headcount of our research and development personnel, salaries and investments in research and development of new cell types. We expect our expenditures for research and development efforts continue to increase in 2011 as we continue to undertake technology development related to future product offerings with the established solar module and solar cell testing center and solar cell research laboratory. Research and development expenses as a percentage of our total net revenues remained the same at around 0.5% in 2009 and 2010.

*Interest Expenses, Net.* Our interest expenses, net increased by \$10.8 million, or 247.8%, from \$4.4 million in 2009 to \$15.2 million in 2010. The increase in our interest expenses from \$9.5 million in 2009 to \$22.2 million in 2010, or 134% was due to a significant increase in bank borrowings, both short-term and long-term, to finance our expansion in working capital requirements and our daily operations during 2010. Interest expense is expected to increase in the near future in line with increased long-term borrowings. Interest income increased from \$5.1 million in 2009 to \$6.9 million in 2010, or 36%, was mainly due to increase in deposits in the bank, including guarantee deposits.

*Gain On Change in Fair Value of Derivatives.* In 2009, we recorded a gain on change in fair value of derivatives of \$9.9 million, compared to a gain of \$1.7 million in 2010. The gains on change in fair value of derivatives represent gains on the foreign currency hedges that we established on our Euro cash flows by means of foreign currency collars and forward contracts.

*Investment Income/(Loss).* We recorded an investment loss of \$2.9 million in 2010 compared to investment income of \$1.8 million in 2009. The investment loss in 2010 was mainly due to the impairment of an investment in an UMG-Si supplier amounting to \$3.0 million.

*Foreign Exchange Gain.* We recorded a foreign exchange gain of \$7.7 million in 2009, compared to a foreign exchange loss of \$36.3 million in 2010. As some of our sales contracts were denominated in Euros, the effect of the appreciation of the Euro against the U.S. dollar in 2009 resulted in our recording of a large

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exchange gain in 2009. In contrast, the effect of the depreciation of the Euro against the U.S. dollar in 2010 on our Euro denominated contracts resulted in our recording of an exchange loss in 2010.

*Income Tax Benefit (Expenses).* Our income tax benefit was \$1.3 million in 2009, compared to income tax expenses of \$16.8 million in 2010. The increase of income tax expenses in 2010 was mainly due to an increase in taxable income from the growth of the Company during the year, particularly a substantial increase in taxable income for operations outside China, which are subject to USA and Canadian income tax rates. The increase in income tax expenses is also attributable to the increase of tax rates by some of our Chinese subsidiaries, which ended their tax exemption periods in 2009, and only enjoyed transitional tax rates, which were half of the statutory rates, in 2010.

*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 our Japanese subsidiary.

*Net Income (Loss) Attributable To Canadian Solar Inc.* As a result of the foregoing, our net income attributable to Canadian Solar Inc. increased by \$28.1 million, or 123.3%, from \$22.6 million in 2009, to \$50.6 million in 2010.

***Year Ended December 31, 2009 Compared to Year Ended December 31, 2008***

*Net Revenues.* Our net revenues decreased from \$705.0 million for the year ended December 31, 2008 to \$631.0 million for the year ended December 31, 2009. However, shipments over the same period approximately doubled from 166.5 MW in 2008 to 296.6 MW in 2009, an increase of 78%. The decrease in net revenues was primarily due to the sharp drop in module prices during the fourth quarter of 2008 and the first half of 2009 caused by the global economic crisis and over-supply in the solar power market resulting from a combination of (i) poor weather in Germany; (ii) a sharp reduction in Spanish solar subsidies, including the introduction of a cap on total installations; and (iii) lack of financing for solar projects. In 2009, we permitted certain customers to return products for reasons that were not covered by our warranty. We periodically make estimates of our sales returns based on historical experience and record such estimate as a reduction of revenues. As of December 31, 2009, we had a sales return reserve of \$8.5 million. We did not make provisions in prior periods because such amounts were not material.

The average selling price of our standard solar modules decreased from \$4.23 per watt in 2008 to \$2.13 per watt in 2009.

*Cost of Revenues.* Our cost of revenues decreased from \$634.0 million in 2008 to \$552.9 million in 2009. The decrease was due primarily to a sharp reduction in raw materials costs. This was driven by the same factors that impacted module pricing and demand listed in *Net Revenues* above. As a percentage of our net revenues, cost of revenues decreased from 89.9% for the year ended December 31, 2008 to 87.6% for the year ended December 31, 2009 despite the loss on firm purchase commitments of \$13.8 million for 2009 and 2010 under our long-term wafer supply agreement with Deutsche Solar and an inventory write-down of \$12.5 million.

*Gross Profit.* As a result of the foregoing, our gross profit increased from \$71.0 million for the year ended December 31, 2008 to \$78.1 million for the year ended December 31, 2009. Our gross margin increased from 10.1% for the year ended December 31, 2008 to 12.4% for the year ended December 31, 2009.

*Operating Expenses.* Our operating expenses increased from \$46.9 million for the year ended December 31, 2008 to \$71.6 million for the year ended December 31, 2009. The increase was due primarily to an increase in our selling expenses in line with our increased shipment volumes. General and administrative expenses included an \$18.1 million allowance for doubtful accounts. Operating expenses as a percentage of our net revenues increased from 6.7% for the year ended December 31, 2008 to 11.3% for the year ended December 31, 2009.

*Selling Expenses.* Our selling expenses increased from \$10.6 million for the year ended December 31, 2008 to \$22.1 million for the year ended December 31, 2009. Selling expenses as a percentage of our net revenues increased from 1.5% for the year ended December 31, 2008 to 3.5% for the year ended December 31,

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2009. The increase in our selling expenses was due primarily to increases in freight charges, advertising and promotional expenses, salaries and allowances and sales commissions. The increase in the percentage of selling expenses to net revenues is due primarily to increases in freight charges, payroll and consultancy fees for exploring new markets.

*General and Administrative Expenses.* Our general and administrative expenses increased by 34% from \$34.5 million for the year ended December 31, 2008 to \$46.3 million for the year ended December 31, 2009, primarily due to increase in bad debt provisions compared with 2008. As a percentage of our total net revenues, general and administrative expenses increased from 4.9% for 2008 to 7.3% for 2009. The general and administrative expenses included an \$18.1 million allowance for doubtful accounts for the year ended December 31, 2009, as compared to a \$7.4 million allowance for doubtful accounts for the year ended December 31, 2008.

*Research and Development Expenses.* Our research and development expenses increased from \$1.8 million for the year ended December 31, 2008 to \$3.2 million for the year ended December 31, 2009, due to increased work on the development of new cell types. We expect our expenditures for research and development efforts to increase significantly in 2010 as we established a module and cell test center and a solar cell research laboratory where we will undertake technology development related to future product offerings.

*Interest Expenses.* Our interest expenses decreased from \$12.2 million for the year ended December 31, 2008 to \$9.5 million for the year ended December 31, 2009, primarily due to a reduction in our loan interest rates. The interest expenses for the year ended December 31, 2009 were in connection with short- and long-term bank loans and amortization of the issuance costs of our convertible notes. We expect to enter into new commercial bank loans to further expand our business in 2010, and we expect that our interest expenses will increase as a result.

*Gain On Change In Fair Value Of Derivatives.* We recorded a gain on change in fair value of derivatives of \$9.9 million for the year ended December 31, 2009 compared to \$14.5 million for the year ended December 31, 2008. This represented a gain on the foreign currency hedges that we established on our Euro cash flows by means of foreign currency collars and forward contracts.

*Foreign Exchange Gain.* We recorded a net currency exchange gain of \$7.7 million for the year ended December 31, 2009, compared to a net foreign currency exchange loss of \$20.0 million for the year ended December 31, 2008, due to the appreciation of the Euro in relation to the U.S. dollar during 2009. Our accounts receivable are mainly denominated in Euros, while the U.S. dollar is our functional and reporting currency.

*Income Tax Benefit (Expense).* Our income tax benefit was \$1.3 million for the year ended December 31, 2009, compared to an income tax expense of \$9.7 million for the year ended December 31, 2008, mainly due to an increase in deferred tax benefits on allowance for doubtful accounts amounting to \$4.2 million and loss on firm purchase commitments amounting to \$1.7 million.

*Net Income Attributable To Non-Controlling Interest.* The net income attributable to non-controlling interest was the share of net income by the minority stockholders in our German subsidiary in 2009.

*Net Income (Loss) Attributable To Canadian Solar Inc.* As a result of the cumulative effect of the above factors, we recorded \$22.6 million of net income attributable to Canadian Solar Inc. for the year ended December 31, 2009, compared to a \$7.5 million net loss for the year ended December 31, 2008.

**B. Liquidity and Capital Resources**

***Cash Flows and Working Capital***

In 2010, we financed our operations primarily through cash flows from operations and short-term and long-term borrowings. As of December 31, 2010, we had \$288.7 million in cash and cash equivalents. Our cash and cash equivalents primarily consist of cash on hand, bank balances and demand deposits with original maturities of three months or less that are outstanding and placed with banks.

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As of March 31, 2011, our bank lines had an aggregate limit of \$1,302 million. Drawn under these bank lines were approximately \$96 million of long-term borrowings, of which \$58 million was secured by plant, inventory and equipment, and approximately \$732 million of short-term borrowings, of which \$20 million was secured by land and buildings. The long-term borrowings will mature at various times during 2012 and 2014 and bear interest at rates of between 4.5% and 6.45% per annum. The short-term borrowings will mature at various times during 2011 and the first quarter of 2012 and bear interest rates of between 0.31% and 6.3% 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. As of March 31, 2011, \$469 million of short-term borrowings with terms of less than one year were available for drawdown under the bank lines at interest rates to be negotiated by the parties. As of March 31, 2011, \$43 million of long-term borrowings facilities remained available under the bank lines.

We were generally required to make prepayments to certain suppliers of silicon wafers, cells and silicon raw materials. Even though we require some customers to make partial prepayments, there is typically a lag between the time our prepayment for silicon wafers, cells and silicon raw materials are due and the time our customers submit those 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.

We expect that our accounts receivable and inventories, two 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 offered 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 \$3.6 million as of December 31, 2009 and \$9.0 million as of December 31, 2010, respectively. As market demand changes and we continue to diversify 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. The balance of allowance for doubtful accounts and advances to suppliers was \$18.0 million and \$8.0 million as of December 31, 2009 and 2010, respectively. The decrease in our allowance for doubtful accounts is primarily due to recovery of historical past dues amounts of \$10.0 million and settlement with Sinasure of \$2.8 million to our claims in the second half of 2010. Moreover, the allowance for advances to suppliers also increased. We made an allowance for advances to LDK amounting to \$9.0 million and 9.1 million for 2009 and 2010, respectively. We also made an allowance of for advances to an UMG-Si supplier amounting to \$9.7 million in 2010. Inventories have increased significantly due to the rapid growth of our operations and business. Our inventory turnover days decreased from 94 days in 2009 to 63 days in 2010.

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

	<b>Years Ended December 31,</b>		
	<b>2008</b>	<b>2009</b>	<b>2010</b>
	<b>(In thousands of US\$)</b>		
Net cash provided by (used in) operating activities	\$ 3,193	\$ 50,915	\$ (58,487)
Net cash used in investing activities	(125,762)	(234,568)	(133,989)
Net cash provided by financing activities	201,356	228,173	312,629
Net increase in cash and cash equivalents	77,994	44,450	128,541
Cash and cash equivalents at the beginning of the year	37,667	115,661	160,111
Cash and cash equivalents at the end of the year	115,661	160,111	288,652

*Operating Activities*

Net cash provided by operating activities of \$50.9 million in 2009 has decreased to net cash used in operating activities of \$58.5 million in 2010. Due to our business expansion this year, inventories significantly increased. In addition, we experienced shorter payment terms from our suppliers as a result of short supplies in the solar market, resulting in sharp decreases in both accounts and short-term notes payable.



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Net cash provided by operating activities of \$3.2 million in 2008 has increased to \$50.9 million in 2009. The increase was due in part to a significant increase in net income, and partially offset by an increase in accounts receivable as we started to extend longer credit terms to customers in 2009 in order to cope with the current business environment. Net cash generated from operating activities was \$3.2 million in 2008, due in part to a decrease in accounts receivable, cash received from derivative assets and an increase in accounts payable, partially offset by increases in advances to suppliers and prepayment of land use rights.

### ***Investing Activities***

Net cash used in investing activities decreased from \$234.6 million in 2009 to \$134.0 million in 2010. The decrease is primarily due to a significant reduction in the use of restricted cash to secure bank notes payable in our operating activities. The decrease is offset partly by the increase in spending for the expansion of our manufacturing facilities in 2010.

Net cash used in investing activities increased from \$125.8 million in 2008 to \$234.6 million in 2009, primarily due to a significant increase in restricted cash used to secure our notes payable and short-term borrowings. Net cash used in investing activities was \$125.8 million in 2008, primarily due to our expansion of ingot, wafer and module production capacity and acquisition of equity investments.

### ***Financing Activities***

Net cash provided by financing activities increased from \$228.3 million in 2009 to \$312.6 million in 2010, primarily due to proceeds from our long-term and short-term bank borrowings.

Net cash provided by financing activities increased slightly from \$201.4 million in 2008 to \$228.2 million in 2009, primarily as a result of proceeds from our long-term and short-term bank borrowings. Net cash provided by financing activities was \$201.4 million in 2008, primarily as a result of proceeds from our follow-on public offering of common shares in July 2008 and from long- and short-term bank borrowings.

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 next 12 months 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 sale 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 \$104.8 million, \$72.2 million and \$134.3 million in 2008, 2009 and 2010, respectively. Our capital expenditures were used primarily to expand our manufacturing capacity for ingot, wafer, solar cells and solar modules. As of December 31, 2010, we have a total capital commitment of approximately \$46.3 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 and a staff welfare, and bonus reserve. The general

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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 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 distributing any registered share capital. 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 \$178.3 million, \$258.9 million and \$491.2 million as of December 31, 2008, 2009 and 2010, respectively.

### **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 low cost 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, 2010, we had approximately 135 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 metal wrap-through cells. Such modules will employ conductive adhesives on a metal foil back-sheet instead of employing conventional soldering techniques on a plastic back-sheet;

- 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;

- 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 our customers. We have also established collaborative research and development relationships with a number of companies, universities and research institutes, including DuPont, Shanghai Jiao tong 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.* Our ESE and metal wrap-through cells, which we have begun commercializing as well as future 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

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plan to commercially produce this product until a later date. Such cell structures are believed to lower the overall cost of manufacturing solar modules and 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, 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. 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.

**Table of Contents****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, 2010:

	Total	Payment Due by Period			More Than 5 Years
		Less Than 1 Year	1-3 Years	3-5 Years	
		(In thousands of US\$)			
Short-term debt obligations	540,520	540,520			
Interest related to short-term debt obligations <sup>(1)</sup>	8,945	8,945			
Operating lease obligations	11,382	2,558	2,892	2,279	3,653
Purchase obligations <sup>(2)</sup>	3,366,588	336,459	1,343,452	1,621,674	65,003
Convertible notes <sup>(3)</sup>	1,420	60	120	120	1,120
Other long-term borrowing <sup>(4)</sup>	69,458		30,199	39,259	
Interest related to long-term debt <sup>(5)</sup>	11,691	4,103	5,825	1,763	
Total	4,010,004	892,645	1,382,488	1,665,095	69,776

(1) Interest rates range from 0% to 5.81% per annum for short-term debt.

(2) Includes commitments to purchase production equipment of \$46.3 million and commitments to purchase solar cells, wafers and silicon raw materials of \$3,320.3 million.

(3) Assumes redemption of \$1.0 million aggregate principal amount of 6.0% convertible senior notes due on December 15, 2017, and assumes none of the convertible senior notes will be converted into ordinary shares prior to their scheduled due date in December 2017. The holders of our convertible senior notes may require us to repurchase the convertible senior notes as early as December 2012. This amount also includes interest payable until December 2017.

(4) The other long-term borrowings mainly consist of the following items: commercial loans with Agricultural Bank of China of \$24.2 million; secured commercial loans with Bank of Communication of \$22.6 million; and commercial loans with Export and Import Bank of Nanjing of \$22.6 million.

(5) Interest rates range from 4.50% to 6.22% per annum for long-term borrowings.

The above table excludes uncertain tax liabilities of \$11.5 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.

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,

2010.

**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, plan, believe, estimate, is/are likely to or

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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;
- 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.





**Table of Contents****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.\*

<b>Name</b>	<b>Age</b>	<b>Position/Title</b>
Shawn (Xiaohua) Qu	47	Chairman of the Board, President and Chief Executive Officer
Robert McDermott	69	Lead Independent Director
Lars-Eric Johansson	64	Independent Director
Michael G. Potter	44	Independent Director
Weiwen Chen	43	Chief Financial Officer, Compliance Officer
Charlotte Xi Klein	55	Vice President, Global Operations
Yan Zhuang	47	Vice President, Global Sales and Marketing
Jessica Zhou	38	General Counsel and Corporate Secretary
Gregory Spanoudakis	53	President, European Sales
Xiaohu Wang	55	Vice President, Purchase and Planning
Bencheng Li	68	Vice President, Ingot and Wafer Division

\* Arthur Chien resigned as Chief Financial Officer in October 2010 and resigned from the Company and the board of directors in December 2010. The size of our board of directors was reduced from five to four members.

***Directors***

*Dr. Shawn (Xiaohua) Qu* has served as our chairman, president and chief executive officer since founding our company in October 2001. Prior to joining us, Dr. Qu worked at ATS Automation Tooling Systems, Inc. and its subsidiaries in the solar power business from 1998 to 2001, where he performed various responsibilities, including acting as product engineer, director for silicon procurement, director for solar product strategic planning and business development and technical vice president (Asia Pacific region) of Photowatt International S.A. From 1996 to 1998, Dr. Qu was a research scientist at Ontario Power Generation (formerly Ontario Hydro), where he worked as a process leader in the development of Spherical Solar™ technology, a next-generation solar technology. Prior to joining Ontario Power Generation Corp., Dr. Qu was a post-doctorate research fellow at the University of Toronto, focusing on semiconductor optical devices and solar cells. He has published research articles in academic journals such as IEEE Quantum Electronics, Applied Physics Letter and Physical Review. Dr. Qu received a Ph.D. degree in material science from the University of Toronto in 1995, a master of science in physics from University of Manitoba in 1990 and a bachelor of science in applied physics from Tsinghua University in Beijing, China in 1986.

*Mr. Robert McDermott* has served as lead independent director of our Company since August 2006. Mr. McDermott is a partner with McMillan LLP, a business law firm based in Canada. He joined the firm in 1971 and practices business law with an emphasis on mergers and acquisitions, securities and corporate finance. Mr. McDermott also advises boards and special committees of public companies in Canada on corporate governance matters. From 1997 to 2001, he was a director and senior officer of Boliden Limited, a mining company listed on the Toronto and Stockholm stock exchanges. Mr. McDermott is a member of the Canadian Bar Association. He was admitted to the Ontario Bar in Canada in 1968. Mr. McDermott received a juris doctor degree from the University of Toronto and a Bachelor of

Arts degree from the University of Western Ontario.

*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 is currently the chief executive officer of Ivanhoe Nickel & Platinum Ltd., a Canadian private mining

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company. 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.

*Mr. Michael G. Potter* has served as an independent director of our Company since September 2007. 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 operations in Shenzhen, China. Before joining NeoPhotonics 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. Weiwen Chen* has served as our chief financial officer and compliance officer since October 2010. Prior to that, Mr. Chen served as chief financial officer of ShengdaTech, Inc., a NASDAQ-listed high-tech chemical and specialty materials company, from April 2009 to September 2010. From September 2008 to March 2009, Mr. Chen served as chief financial officer of Trony Solar Holdings, where he played a key role in the completion of a \$45 million private equity financing with JP Morgan and Intel Capital and supported the company's initial public offering preparations. From July 2007 to August 2008, he was the chief financial officer and vice president of China Nepstar Chain Drug Store Ltd., a NYSE-listed, leading pharmacy chain in China, where he played a key role in the company's \$384 million IPO, Sarbanes Oxley implementation, SEC reporting and disclosure, and investor relations. Mr. Chen worked as the director of finance of YRC Worldwide China International Transportation Operations from 2006 to 2007. Between 2000 and 2006, Mr. Chen was with Honeywell International where he progressed from senior corporate auditor in Morristown, New Jersey to financial controller of the company's engines operations in China. Mr. Chen started his professional career with PricewaterhouseCoopers' New York office in 1996. He is a Certified Public Accountant and holds a Master's degree in Accountancy and an MBA in Finance from the University of Alabama at Tuscaloosa. He also has a Bachelor of Arts degree from Xiamen University, China.

*Ms. Charlotte Xi Klein* has served as our vice president of global operations since November 2009, and prior to that as our vice president of finance since August 2008 and our compliance officer from September 2007. 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

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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 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 the company's 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.

*Ms. Jessica Zhou* has served as our general counsel since January 2009 and our corporate secretary since May 2009. Prior to joining us, Ms. Zhou practiced corporate and securities law at Latham & Watkins LLP and other premier international law firms, where she represented public and private companies, investment banks, and venture capital and private equity funds in various transactions and advised boards of public companies. Her practice focused on initial public offerings and other capital markets transactions, mergers and acquisitions, venture capital and private equity transactions, and U.S. public company representation. She received a doctor of jurisprudence degree from the University of Wisconsin Law School and a Bachelor of Arts degree from Beijing University.

*Mr. Gregory Spanoudakis* has served as our president of European sales since August 2008. He was our vice president of Europe from 2002 to 2006 and our vice president of international sales and marketing from January 2002. Mr. Spanoudakis has been involved in the semiconductor and solar power industries for the past 18 years, the last six years of which have been in the solar power industry. He was a senior executive with Future Electronics, one of the world's largest distributors of semiconductor components, where he headed the international division and the export development program from November 1988 to May 1999. Mr. Spanoudakis attended The University of Essex, in Colchester, England and the Sir George William University (now Concordia University) in Montreal, Canada, graduating with a bachelor's degree in business in 1981. In 1987, he received his MBA degree with a focus on international business development from Concordia University in Montreal, Canada.

*Mr. Xiaohu Wang* has served as our vice president of purchase and planning since January 2010. Prior to that, he served as our vice president of ingot and wafer operations from January 2009, before which he was our vice president of China supply chain development from December 2006. Mr. Wang joined us in 2002, initially as the manager in charge of imports and exports, procurement, quality and operations. Since 2004, Mr. Wang has been deputy general manager of commerce of CSI Solartronics, responsible for planning and procurement of all silicon material. From May 1989 to January 2001, Mr. Wang was the branch manager of International Development Group Ltd. in Hunan Province, where he was responsible for the import and export of mineral, hardware, textile and chemical products and was involved in its restructuring from state ownership to shareholder ownership. Mr. Wang has been involved in the import and export of silicon material and silicon cells since 1996. In 1982, Mr. Wang graduated from Nanjing University of Aeronautics and Astronautics with a Bachelor of Science degree.

*Mr. Bencheng Li* has served as vice president of our ingot and wafer division since January 2010. Prior to that, he served as our vice president of business development for China from December 2006, before which he was the general manager of CSI Luoyang. Prior to joining us in June 2003, Mr. Li was the chairman of Luoyang Single Crystalline Silicon Ltd. from 1996 to 2000, and the chairman of Sino-American MCL Electronic Materials Ltd. from 1995 to

2000. From July 1998 to April 2003, Mr. Li was the general manager of China Shijia Semiconductor Materials Corporation, a semiconductor and solar silicon materials

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manufacturing company in China. Mr. Li received his bachelor's degree in radiochemistry from Tsinghua University in Beijing, China in 1967.

***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 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 \$2,124,130 for 2010. Of this amount, we paid \$249,000 to our three independent directors and \$1,875,130 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 options and restricted shares under the Plan to the sum of (i) 2,330,000 plus (ii) the sum of (a) 1% of the number of outstanding common shares of the Company on the first day of each of 2007, 2008 and 2009 plus (b) 2.5% of the number of outstanding common shares of the Company on the first day of each calendar year after 2009. As at March 31, 2011, the maximum number of common shares which may be issued pursuant to all awards of options and restricted shares under the Plan was 5,371,700 shares, of which 3,261,329 options and 566,190 restricted shares (in both cases net of forfeitures) have been awarded, leaving 1,544,181 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:

options to purchase our common shares, and

restricted shares, which are non-transferable common shares without voting or dividend rights.

*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

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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 Awards.* 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.

**Options**

The following table summarizes, as of March 31, 2011, 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.

Name	Common Shares Underlying Options Granted	Common Shares Exercised	Common Shares Forfeited	Common Shares Outstanding	Exercise Price (US\$ per Share)	Date of Grant	Date of Expiration
<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
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

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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

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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>Exercise Price (US\$ per Share)</b>	<b>Date of Grant</b>	<b>Date of Expiration</b>
Michael G. Potter	23,300 <sup>(2)</sup>			23,300	7.36 <sup>(4)</sup>	September 24, 2007	September 23, 2010
	23,300 <sup>(2)</sup>			23,300	41.75 <sup>(4)</sup>	June 26, 2008	June 25, 2010
	23,300 <sup>(2)</sup>			23,300	13.75 <sup>(4)</sup>	June 29, 2009	June 28, 2010
	23,300 <sup>(2)</sup>			23,300	12.09 <sup>(4)</sup>	September 20, 2010	September 19, 2010
Chun Chien <sup>(9)</sup>	46,600 <sup>(1)</sup>	46,600			4.29	August 6, 2006	August 7, 2010
	23,300 <sup>(2)</sup>	23,300			9.88	July 1, 2007	June 30, 2010
	46,600	34,950	11,650		7.36	September 24, 2007	September 23, 2010
	20,000	5,000	15,000		3.18	March 12, 2009	March 11, 2010
	15,000		15,000		11.33	August 27, 2010	August 26, 2010
<b>Directors as a Group</b>	<b>569,300</b>	<b>158,150</b>	<b>41,650</b>	<b>369,500</b>			
<b>Executive Officers:</b>							
Wen Chen	100,000			100,000	15.19	October 8, 2010	October 7, 2010
Zhuang	23,300 <sup>(2)</sup>	23,300			7.36	September 24, 2007	September 23, 2010
	23,300 <sup>(2)</sup>			23,300	41.75	June 26, 2008	June 25, 2010
	80,000			80,000	9.37	May 23, 2009	May 22, 2010
	15,000			15,000	11.33	August 27, 2010	August 26, 2010
Gregory Spanoudakis	116,500			116,500	2.12	May 30, 2006	May 29, 2010
	20,000			20,000	3.18	March 12, 2009	March 11, 2010
	12,000			12,000	11.33	August 27, 2010	August 26, 2010
John Wang	89,705	44,853		44,852	2.12	May 30, 2006	May 29, 2010
	12,000			12,000	3.18	March 12, 2009	March 11, 2010
	12,000			12,000	11.33	August 27, 2010	August 26, 2010
Cheng Li	64,075	48,056		16,019	2.12	May 30, 2006	May 29, 2010
	12,000			12,000	3.18	March 12, 2009	March 11, 2010
	12,000			12,000	11.33	August 27, 2010	August 26, 2010
Charlotte Xi Klein	46,600	34,950		11,650	12.10	March 1, 2007	February 28, 2010
	11,652 <sup>(5)</sup>	11,652			7.36	September 24, 2007	September 23, 2010
	12,000	3,000		9,000	3.18	March 12, 2009	March 11, 2010
	40,000			40,000	16.10	November 8, 2009	November 7, 2010
	15,000			15,000	11.33	August 27, 2010	August 26, 2010
Yanica Zhou	36,000	6,000		30,000	3.18	March 12, 2009	March 11, 2010
	12,000			12,000	11.33	August 27, 2010	August 26, 2010
<b>Executive Officers as a Group</b>	<b>765,132</b>	<b>171,811</b>		<b>593,321</b>			
<b>Employees:</b>							
Senior employees as a group	520,755	233,265	121,160	166,330	2.12	May 30, 2006	May 29, 2010
Senior employee	23,300	5,825	17,475		4.29	May 30, 2006	May 29, 2010
Senior employee							
Senior employees as a group	102,870	41,623	14,795	46,452	4.29	May 30, 2006	May 29, 2010
Senior employee	2,330 <sup>(6)</sup>	2,330			4.29	May 30, 2006	May 29, 2010
	51,260	47,765		3,495	4.29	June 30, 2006	June 29, 2010

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o employees as a up							
e employee	64,075	34,056		30,019	4.29	July 17, 2006	July 16, 20
bing Zhang <sup>(7)</sup>	46,600			46,600	4.29	July 28, 2006	July 27, 20
e employee	58,250	14,563		43,687	12.00 <sup>(8)</sup>	August 8, 2006	August 7, 20
ee employees as a up	11,650	5,079	1,747	4,824	12.00 <sup>(8)</sup>	August 31, 2006	August 30, 20
o employees as a up	33,300	11,650	21,650		12.10	March 1, 2007	February 28, 20
e employee	6,990	1,748	5,242		12.10	March 1, 2007	February 28, 20
e employees as a up	52,280	5,413	41,867	5,000	8.21	August 17, 2007	August 16, 20
en employees as a up	27,556	22,724	4,832		7.36	September 24, 2007	September 23, 20

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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>Exercise Price (US\$ per Share)</b>	<b>Date of Grant</b>	<b>Date of Expiration</b>
thirteen employees as a group	170,145	68,943	49,332	51,870	7.36	September 24, 2007	September 23, 2011
six employees as a group	36,136		5,500	30,636	19.55	February 28, 2008	February 27, 2011
one employee	10,000			10,000	20.67	March 31, 2008	March 30, 2011
two employees as a group	18,000		18,000		20.67	March 31, 2008	March 30, 2011
one employee	30,000			30,000	46.28	June 26, 2008	June 25, 2011
four employees as a group	30,000		12,500	17,500	27.88	August 7, 2008	August 6, 2011
twenty-four employees as a group	308,200	39,500	97,050	171,650	3.18	March 12, 2009	March 11, 2011
Yanbing Zhang <sup>(7)</sup>	6,000			6,000	3.18	March 12, 2009	March 11, 2011
one employee	20,000	2,500		17,500	5.26	March 30, 2009	March 29, 2011
eighteen employees as a group	59,400	750	5,650	53,000	9.37	May 23, 2009	May 22, 2011
one employee	10,000			10,000	11.58	May 31, 2009	May 30, 2011
seven employees as a group	30,800		8,800	22,000	15.18	August 6, 2009	August 5, 2011
thirteen employees as a group	42,600		2,800	39,800	16.10	November 8, 2009	November 7, 2011
one hundred and twenty-seven employees as a group	420,600		79,200	341,400	11.33	August 27, 2010	August 26, 2011
Yanbing Zhang <sup>(7)</sup>	12,000			12,000	11.33	August 27, 2010	August 26, 2011
one hundred and twenty-three employees as a group	236,000		9,500	226,500	15.24	November 14, 2010	November 13, 2011
five employees as a group	32,900			32,900	13.99	March 5, 2011	March 4, 2011
<b>employees as a group</b>	<b>2,473,997</b>	<b>537,734</b>	<b>517,100</b>	<b>1,419,163</b>			
two individuals as a group	11,650			11,650	15.00 <sup>(3)</sup>	April 13, 2007	April 12, 2011
<b>individuals as a group</b>	<b>11,650</b>			<b>11,650</b>			

<b>tal Options</b>	<b>3,820,079</b>	<b>867,695</b>	<b>558,750</b>	<b>2,393,634</b>
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- (1) Vest in two equal installments, the first upon the date of grant and the second upon the first year anniversary of the grant date so long as the director remains in service.
- (2) All 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 grant date.
- (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.
- (9) Resigned as Chief Financial Officer in October 2010 and from the Board of Directors in December 31, 2010

We have agreed to grant each of our independent directors, Robert McDermott, Lars-Eric Johansson and Michael G. Potter, 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.

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The following table summarizes, as of March 31, 2011, 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.

<b>Name</b>	<b>Restricted Shares Granted</b>	<b>Restricted Shares Exercised</b>	<b>Date of Grant</b>	<b>Expiration</b>
<b>Executive Officers</b>				
Gregory Spanoudakis	233,000		May 30, 2006	May 29, 2016
Bencheng Li	23,300	23,300	May 30, 2006	May 29, 2016
Xiaohu Wang	18,640	18,640	May 30, 2006	May 29, 2016
<b>Executive Officers as a group</b>	<b>274,940</b>	<b>41,940</b>		
<b>Employees</b>				
Eight individuals as a group	44,270	40,490	May 30, 2006	May 29, 2016
Hanbing Zhang <sup>(3)</sup>	116,500 <sup>(4)</sup>		July 28, 2006	July 27, 2016
<b>Employees as a group</b>	<b>160,770</b>	<b>40,490</b>		
<b>Other Individuals</b>				
One individual	11,650	11,650	May 30, 2006	May 29, 2016
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>130,480</b>	<b>130,480</b>		
<b>Total Restricted Shares</b>	<b>566,190</b>	<b>212,910</b>		

(1) Also vest on accelerated termination.

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

(3) The wife of Dr. Qu, our founder, chairman and chief executive officer.

(4) Vest over a four-year period from the date of grant.

**C. Board Practices**

In 2010, our board of directors held eight meetings, three of which were combined meetings of the board of directors and the audit committee, and passed three 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 consists of Messrs. Lars-Eric Johansson, Robert McDermott and Michael G. Potter, and is chaired by Mr. Johansson. Each of Messrs. Johansson and Potter qualify as an audit committee financial expert as required by the SEC. Each of Messrs. Johansson, McDermott and Potter 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

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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 2010, our audit committee held 30 meetings, three of which were combined meetings of the board of directors and the audit committee, and passed one resolution by unanimous written consent.

*Compensation Committee*

Our compensation committee consists of Messrs. Lars-Eric Johansson, Robert McDermott and Michael G. Potter and is chaired by Mr. McDermott. Each of Messrs. Johansson, McDermott and Potter satisfies the independence requirements of the NASDAQ corporate governance rules. Our 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 2010, our compensation committee held six meetings and passed one resolution by unanimous written consent.

*Nominating and Corporate Governance Committee*

Our nominating and corporate governance committee consists of Messrs. Lars-Eric Johansson, Robert McDermott and Michael G. Potter and is chaired by Mr. McDermott. Each of Messrs. Johansson, McDermott and Potter satisfies the independence requirements of the NASDAQ corporate governance rules, the nominating and corporate governance committee assists the board of directors in identifying individuals

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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;