

Trina Solar LTD
Form 20-F
March 17, 2010

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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, 2009
OR

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

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES
EXCHANGE ACT OF 1934**
Date of event requiring this shell company report _____
Commission file number: 001-33195
TRINA SOLAR LIMITED
(Exact Name of Registrant as Specified in Its Charter)
N/A

(Translation of Registrant's Name Into English)

Cayman Islands

(Jurisdiction of Incorporation or Organization)

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People's Republic of China

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

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

Title of Each Class

Name of Each Exchange on Which Registered

**American Depositary Shares, each representing
50 ordinary shares, par value \$0.00001 per share**

New York Stock Exchange

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.

3,488,891,196 ordinary shares, par value \$0.00001 per share, as of December 31, 2009.

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 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.

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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 the context otherwise requires, in this annual report on Form 20-F:

We, us, our, and our company refer to Trina Solar Limited, its predecessor entities and its subsidiaries

Trina refers to Trina Solar Limited;

Trina China refers to Changzhou Trina Solar Energy Co., Ltd.;

ADSs refers to our American depositary shares, each of which represents 50 ordinary shares.

China or PRC refers to the People's Republic of China, excluding, for the purpose of this annual report, Taiwan, Hong Kong and Macau;

RMB or Renminbi refers to the legal currency of China, \$ or U.S. dollars refers to the legal currency of the United States, and € or Euro refers to the legal currency of the European Union; and shares or ordinary shares refers to our ordinary shares, par value \$0.00001 per share.

Names of certain companies provided in this annual report are translated or transliterated from their original Chinese legal names.

Discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

This annual report on Form 20-F includes our audited consolidated financial statements for the years ended December 31, 2007, 2008 and 2009.

This annual report contains translations of certain Renminbi amounts into U.S. dollars at the rate of RMB6.8259 to \$1.00, the noon buying rate in effect on December 31, 2009 in New York City for cable transfers of Renminbi as certified for customs purposes by the Federal Reserve Bank of New York. We make no representation that the Renminbi or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. 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 Doing Business in China Fluctuation in the value of the Renminbi may have a material adverse effect on your investment. On March 15, 2010, the noon buying rate was RMB6.8259 to \$1.00.

We completed the initial public offering of 5,300,000 ADSs on December 22, 2006. On December 19, 2006, we listed our ADSs on the New York Stock Exchange under the symbol TSL.

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Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

Item 3. Key Information**A. Selected Financial Data**

The following selected consolidated statement of operations data for the years ended December 31, 2007, 2008 and 2009 and the selected consolidated balance sheet data as of December 31, 2007, 2008 and 2009 have been derived from our audited financial statements included elsewhere in this annual report. The selected consolidated financial data should be read in conjunction with those financial statements and the accompanying notes and Item 5. Operating and Financial Review and Prospects below. Our consolidated financial statements are prepared and presented in accordance with United States generally accepted accounting principles, or U.S. GAAP. Our historical results do not necessarily indicate our results expected for any future periods.

Our selected consolidated statements of operations data for the years ended December 31, 2005 and 2006 and our consolidated balance sheets as of December 31, 2005 and 2006 have been derived from our audited consolidated financial statements, which are not included in this annual report.

	Year Ended December 31,				
	2005	2006	2007	2008	2009
	(in thousands, except for share, per share, operating data and percentages)				
Consolidated Statement of Operations Data					
Net revenues	\$ 27,275	\$ 114,500	\$ 301,819	\$ 831,901	\$ 845,136
Cost of revenues	20,986	84,450	234,191	667,459	607,982
Gross profit	6,289	30,050	67,628	164,442	237,154
Operating expenses:					
Selling expenses	521	2,571	11,019	20,302	30,940
General and administrative expenses	1,375	8,656	17,817	41,114	65,406
Research and development expenses	122	1,903	2,805	3,039	5,439
Total operating expenses	2,018	13,130	31,641	64,455	101,785
Income from continuing operations	4,271	16,920	35,987	99,987	135,369
Foreign exchange gain (loss)			(1,999)	(11,802)	9,958
Interest expense	(470)	(2,137)	(7,551)	(23,937)	(25,737)
Interest income	16	261	4,810	2,944	1,667
Gain (loss) on change in fair value of derivative			854	(1,067)	(1,590)
Other (expense) income	(27)	(82)	1,554	(156)	2,613
Income before income taxes	3,790	14,962	33,655	65,969	122,280
Income tax (expense) benefit	(570)	(1,788)	1,707	(4,609))	(24,696)

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Net income from continuing operations	3,220	13,174	35,362	61,360	97,584
Net Income (loss) from discontinued operations	91	(753)	368		

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	Year Ended December 31,					
	2005	2006	2007	2008	2009	
	(in thousands, except for share, per share, operating data and percentages)					
Net income	\$ 3,311	\$ 12,421	\$ 35,730	\$ 61,360	\$ 97,584	
Earnings per ordinary share from continuing operations:						
Basic	0.00	0.01	0.02	0.02	0.04	
Diluted	0.00	0.01	0.02	0.02	0.03	
Earnings per ADS from continuing operations ⁽¹⁾ :						
Basic	0.16	0.49	0.76	1.23	1.79	
Diluted	0.16	0.48	0.75	1.20	1.68	
Earnings per ordinary share:						
Basic	0.00	0.01	0.02	0.02	0.04	
Diluted	0.00	0.01	0.02	0.02	0.03	
Earnings per ADS ⁽¹⁾ :						
Basic	0.17	0.46	0.77	1.23	1.79	
Diluted	0.17	0.45	0.76	1.20	1.69	
Weighted average ordinary shares outstanding:						
Basic	1,000,000,000	1,038,316,484	2,339,799,657	2,501,202,680	2,724,185,761	
Diluted	1,000,000,000	1,058,483,593	2,370,685,156	2,690,723,390	3,131,505,181	
Weighted average ADS outstanding ⁽¹⁾ :						
Basic	20,000,000	20,766,330	46,795,994	50,024,054	54,483,715	
Diluted	20,000,000	21,169,672	47,413,704	53,814,468	62,630,104	
Consolidated Financial Data						
Gross margin	23.1%	26.2%	22.4%	19.8%	28.1%	
Net margin of continuing operations	11.8%	11.5%	11.7%	7.4%	11.5%	
Consolidated Operating Data						
PV modules shipped (in MW)	6.79	27.39	75.91	201.01	399.01	
Average selling price (\$/W)	\$ 4.02	\$ 3.98	\$ 3.80	\$ 3.92	\$ 2.10	

(1) Reflects ADS ratio change effective

January 2010.

	As of December 31,				
	2005	2006	2007	2008	2009
	(in thousands)				
Consolidated Balance Sheet					
Data					
Cash and cash equivalents	\$ 1,224	\$ 93,380	\$ 59,696	\$ 132,224	\$ 406,058
Restricted cash	527	5,004	103,375	44,991	72,006
Inventories	6,696	32,230	58,548	85,687	81,154
Accounts receivable, net	4,924	29,353	72,323	105,193	287,950
Property, plant and equipment, net	9,630	51,419	197,124	357,594	476,858
Total assets	32,298	251,745	600,674	940,116	1,548,698
Short-term borrowings	6,628	71,409	163,563	248,558	267,428
Accounts payable	3,845	9,147	42,691	62,504	186,535
Total current liabilities	12,715	88,068	220,485	335,714	515,401
Accrued warranty costs	272	1,400	4,486	12,473	21,023
Long-term borrowings	4,957	5,122	8,214	14,631	182,516
Total shareholders' equity	14,355	157,154	367,489	433,057	677,225
Total liabilities and shareholders' equity	\$ 32,298	\$ 251,745	\$ 600,674	\$ 940,116	\$ 1,548,698

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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

As polysilicon supply increases, the corresponding increase in the global supply of photovoltaic (PV) modules may cause substantial downward pressure on the price of such products and reduce our revenues and earnings.

Polysilicon is an essential raw material used in the production of solar cells and modules. Prior to the second half of 2008, there was an industry-wide shortage of polysilicon, primarily as a result of the growing demand for solar power products. According to Solarbuzz, an independent solar energy research and consulting firm, the average long-term supply contract price of polysilicon increased from approximately \$60-\$65 per kilogram delivered in 2007 to \$60-\$75 per kilogram in 2008. In addition, according to Solarbuzz, spot prices for solar grade polysilicon were in the range of \$230-\$375 per kilogram for most of the first half of 2008 and rose to a peak of \$450-\$475 per kilogram by mid-2008. Increases in the price of polysilicon have in the past increased our production costs, and any significant price increase in the future may adversely impact our business and results of operations. Due to the historical scarcity of polysilicon, supply chain management and financial strength were the key barriers to entry. In late 2008 and 2009, however, newly available polysilicon capacity has resulted in an increased supply of polysilicon, which created a downward pressure on the price of polysilicon. According to Solarbuzz, the average initial price range of long-term polysilicon supply contracts decreased to \$50-\$60 in the fourth quarter of 2009, and spot prices for solar grade polysilicon decreased rapidly to \$150-\$200 per kilogram by the beginning of 2009, and further declined to \$55-\$60 per kilogram by the end of 2009. However, we cannot assure you that the price of polysilicon will continue to decline or remain at its current levels, especially if the global solar power market regains its growth momentum. As the shortage of polysilicon eases, industry barriers to entry become less significant and PV module production may increase globally. A decrease in polysilicon prices and an increase in PV module production may result in substantial downward pressure on the price of PV modules. Such price reductions could have a negative impact on our revenues and earnings, and materially and adversely affect our business and results of operations.

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

We are affected by solar energy market and industry trends. In the fourth quarter of 2008 and the first quarter of 2009, the global solar power industry experienced a precipitous decline in demand due to decreased availability of financing for downstream buyers of solar power products as a result of the global economic crisis. As a result, increased manufacturing capacity combined with decreased demand caused a decline in the prices of solar power products. The prices of solar power products further declined for the remainder of 2009 primarily due to decreased prices of polysilicon and reclaimable silicon raw materials and increased manufacturing capacity.

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During the same period, however, lowered costs of raw materials have reduced the cost of producing solar power products. As the effect of the global economic crisis subsided through 2009, the combination of increased availability of financing for downstream buyers and decreased average selling prices of solar power products contributed to an overall increase in demand during the second half of 2009 for solar power products compared to the first quarter of 2009. However, if demand for solar power products declines again and the supply of solar power products continues to grow, the average selling price of our products will be materially and adversely affected.

The demand for solar power products is also influenced by macroeconomic factors such as the global economic downturn, 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. A decrease in oil prices, for example, may reduce demand for investment in alternative energy. The global economic downturn, which affects the availability of financing, also contributed to decreased sales and shipments of solar power products and the slowdown of the large solar project market segments. If these negative market and industry trends continue and the price of PV modules continues to decrease as a result, our business and results of operations may be materially and adversely affected.

We continue to rely on a limited number of third-party suppliers and manufacturers for certain raw materials for our products and toll services, which could prevent us from delivering our products to our customers within required time frames and result in sales and installation delays, cancellations, liquidated damages and loss of market share.

We purchase polysilicon from a limited number of domestic and international suppliers and we source or contract toll services from third party manufacturers to manufacture some of our ingots and wafers. If we fail to develop or maintain our relationships with these third party suppliers or manufacturers, we may be unable to manufacture our products timely or our products may only be available at a higher cost or after a long delay. If we do not deliver products to our customers within the required time frames, we may experience order cancellations, loss of market share and legal action.

Furthermore, the global economic crisis and the resulting decrease in availability of financing had a significant negative impact on suppliers and manufacturers of raw materials. Suppliers typically require a significant amount of cash to fund their production and operation. The suppliers also require a significant amount of cash to meet future capital requirements, including the expansion of manufacturing facilities, as well as research and development activities. The inability of our suppliers to access capital or the insolvency of our suppliers could lead to their failure to deliver raw materials to us. Our inability to obtain raw materials in a timely manner from suppliers could have a material adverse effect on our business, financial conditions and results of operations.

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Due to the industry-wide shortage of polysilicon experienced prior to 2009, we have purchased polysilicon using short-term, medium-term and long-term contracts from a limited number of international and domestic suppliers. From the fourth quarter of 2008, the price of polysilicon decreased rapidly due to the increased supply of polysilicon resulting from intensive investments in silicon manufacturing. As a result of such decrease in polysilicon prices in the market in late 2008 and early 2009, we renegotiated most of our medium-term and long-term contracts to reduce the purchase price, thereby reducing our costs. However, if the prices under our amended medium-term or long-term supply agreements continue to be higher than the market prices, we may be placed at a competitive disadvantage vis-a-vis our competitors, and our earnings could decline. In addition, if demand for our PV modules decreases and such supply agreements require us to purchase more polysilicon than required to meet our actual customer demand over time, we may incur costs associated with carrying excess inventory. To the extent we are not able to pass these increased costs and expenses on to our customers, our business, cash flows, financial condition and results of operations may be materially and adversely affected.

Some of the suppliers of polysilicon with whom we have entered into long-term contracts have limited operating experience in polysilicon production and may not be able to produce polysilicon of sufficient quantity and quality or on schedule to meet our manufacturing requirements.

Some of the suppliers of polysilicon with whom we have entered into long-term contracts have limited operating experience in polysilicon production. As a result, they might have difficulty in manufacturing and supplying to us a sufficient amount of polysilicon to meet their obligations under these long-term supply contracts. Manufacturing polysilicon is a highly complex process and these suppliers may not be able to produce polysilicon of sufficient quantity and quality or on schedule to meet our wafer manufacturing requirements. Minor deviations in the manufacturing process can also cause substantial decreases in yield and, in some cases, cause production to be suspended or result in minimal output. If shipments of polysilicon from these suppliers experience major delays or our suppliers are unable to supply us with polysilicon as planned, we may suffer a setback to our raw material procurement, which could materially and adversely affect our growth strategy and our results of operations. Moreover, we may be involved in disputes to retrieve prepayments we made for the polysilicon delivery, which would expose us to risks of losing the prepayment or entering into settlements which may result in losses to us. In addition, the polysilicon supplied by suppliers may contain quality defects. For example, PV modules produced using polysilicon of substandard quality would result in lower cell efficiency and conversion rates than that which the supplier has claimed or provided a warranty for. From time to time, we may engage in negotiations and disputes with certain suppliers that supplied us with polysilicon with quality defects. Any litigation arising out of the disputes could subject us to potentially expensive legal expenses, distract management from the day-to-day operation of our business and expose us to risks for which appropriate damages may not be awarded to us, all of which could materially and adversely affect our business and financial condition.

Prepayments to our polysilicon suppliers and equipment suppliers expose us to the credit risks of such suppliers and may increase our costs and expenses, which could in turn have a material adverse effect on our liquidity.

Under supply contracts with several of our multi-year polysilicon and our equipment suppliers, consistent with industry practice, we have made prepayments to our suppliers prior to the scheduled delivery dates for polysilicon and equipment. In many such cases, we made the prepayments without receiving collateral for such payments. As a result, our claims for such payments would rank as unsecured claims, which would expose us to the credit risks of our suppliers in the event of their insolvency or bankruptcy. Our claims against the defaulting suppliers would rank below those of secured creditors, which would undermine our chances of obtaining the return of our prepayments or interest free loans. In addition, if the market price of polysilicon decreases after we have prepaid our suppliers, we may not be able to adjust any historical payment insofar as it relates to a future delivery at a fixed price. Furthermore, if demand for our products decreases, we may incur costs associated with carrying excess materials. Accordingly, any of the above scenarios may have a material adverse effect on our financial condition and results of operations.

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

Demand for our products depends substantially on government incentives aimed to promote greater use of solar power. In many countries in which we are currently, or intend to become, active, the solar power markets, particularly the market of on-grid PV systems, would not be commercially viable without government incentives. This is because the cost of generating electricity from solar power currently exceeds, and we believe will continue to exceed for the foreseeable future, the costs of generating electricity from conventional or non-solar renewable energy sources. The scope of the government incentives for solar power depends, to a large extent, on political and policy developments relating to environmental concerns in a given country, which could lead to a significant reduction in or a discontinuation of the support for renewable energies in such country. Federal, state and local governmental bodies in many of our key markets, most notably Germany, Italy, Spain, the United States, France, South Korea, Taiwan, India, Japan and China have provided subsidies and economic incentives in the form of rebates, tax credits and other incentives 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. Policy shifts could reduce or eliminate these government economic incentives altogether. For example, the rapid rises of the German and Spanish markets were largely due to the government policies of those countries that set feed-in tariff terms at attractive rates. However, in September 2008, the Spanish government introduced a cap of 500 megawatts, or MW, for the feed-in tariff in 2009, which has resulted in limiting demand in the grid-connected market in Spain. In 2009, the German government reduced solar feed-in tariffs by 9%. In January 2010, Germany proposed a further mid-year reduction in solar feed-in tariffs of up to 17% for rooftop systems and an estimated 25% for ground-based systems, which may result in a significant fall in the price of and demand for PV products. In 2007, 2008 and 2009, Germany accounted for 31.4%, 23.9% and 33.9% of our net revenues, respectively. In 2007, 2008 and 2009, Spain accounted for 40.0%, 32.5% and 12.1% of our net revenues, respectively. We believe that in the time of uncertainty of political and policy developments, competition among solar manufacturers could become fierce. Electric utility companies that have significant political lobbying powers may also seek changes in the relevant legislation in their markets that may adversely affect the development and commercial acceptance of solar energy. A significant reduction in the scope or discontinuation of government incentive programs, especially those in our target markets, could cause demand for our products and our revenues to decline, and have a material adverse effect on our business, financial condition, results of operations and prospects.

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Failure to procure sufficient reclaimable silicon raw materials at reasonable prices may decrease our gross margin and profitability.

To reduce our reliance on polysilicon, we also produce silicon ingots and wafers by using a portion of reclaimable silicon raw materials, which include tops and tails of discarded portions of silicon ingots, pot scraps and broken silicon wafers acquired primarily from the semiconductor industry. Starting from 2008, we used a higher proportion of virgin polysilicon, as we were able to access a high quality and stable supply of polysilicon, which was widely available in the open market. In the fourth quarter of 2009, reclaimable silicon materials accounted for no more than 10% of our total silicon requirements, compared to approximately 15% in the fourth quarter of 2008. Although the prices of reclaimable silicon raw materials have also been decreasing in line with the recent decrease in the price of polysilicon, we cannot assure you that we will not revert to using a higher proportion of reclaimable silicon raw materials when the price of polysilicon increases in the future. If we fail to procure sufficient reclaimable silicon raw materials at commercially reasonable prices in the future, we may be unable to timely manufacture our products or our products may be available only at a higher cost, and we would be prevented from delivering our products to our customers in the required quantities and at prices that are profitable. This would have a materially negative impact on our business, financial condition and results of operations.

Demand for our products may be adversely affected by the effect of the current economic and credit environment on our customers.

The United States and international economies have experienced (and continue to experience) a period of slow economic growth. Near-term economic recovery remains uncertain. In particular, the credit and housing crises, terrorist acts and similar events, continued turmoil in the Middle East or war in general could contribute to a slowdown of the market demand for products that require significant initial capital expenditures, including demand for solar power products. For example, global economics, capital markets and credit disruptions have resulted in slower investments in new installation projects that make use of solar power products. Existing projects have also been delayed as a result of the credit crisis and other disruptions. If the economic recovery slows down as a result of the economic turmoil, or if there are further terrorist attacks in the United States or elsewhere, we may experience decreases in the demand for our solar power products, which may harm our operating results.

Global economics, capital markets and credit disruptions also pose risks for our customers. We have benefited from historically low interest rates that have made it more attractive for our customers to use credit to purchase our products. Interest rates have fluctuated recently, which could increase the cost of financing these purchases and may reduce our customers' profits and investors' expected returns on investment. Given the current credit environment, particularly the tightening of the credit markets, there can be no assurance that our customers will be able to borrow money on a timely basis or on reasonable terms, which could have a negative impact on their demand for our products. If economic recovery is slow in the United States or elsewhere, we may experience decreases in the demand for our solar power products, which may harm our operating results. These factors may adversely impact our existing or future sales agreements, including increasing the likelihood of contract breaches. Our sales are affected by interest rate fluctuations and the availability of liquidity, and would be adversely affected by increases in interest rates or liquidity constraints. Rising interest rates may also make certain alternative investments more attractive to investors, and therefore lead to a decline in demand for our solar power products, which could have a material adverse effect on our business, results of operations, financial conditions and cash flows.

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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.

The market for solar power products is competitive and fast evolving. We expect to face increased competition, which may result in price reductions, reduced margins or loss of market share. We compete with other PV module manufacturing companies such as Sharp Electronic Corporation, Suntech Power Holdings Co., Ltd., Yingli Green Energy Holding Co., Ltd. and Mitsubishi Electric Corporation. Some of our competitors have also become vertically integrated, from polysilicon production, silicon ingot and wafer manufacturing to solar power system integration, such as Renewable Energy Corporation ASA, SolarWorld AG and Canadian Solar Inc. Some of our competitors may have a stronger market position than ours, more sophisticated technologies and products, and larger resources and better name recognition than we have. Further, many of our competitors are developing and are currently producing products based on new solar power technologies, such as thin-film technology, which may ultimately have costs similar to, or lower than, our projected costs.

The barriers to entry are relatively low in the PV module manufacturing business, given that manufacturing PV modules is labor intensive and requires limited technology. Because of the scarcity of polysilicon in the past few years, supply chain management and financial strength were the key barriers to entry. As the shortage of polysilicon has eased since 2008, these barriers to entry become less significant and many new competitors may enter the industry and cause the industry to rapidly become over-saturated. Many mid-stream solar power products manufacturers have been seeking to move downstream to strengthen their position in regional markets. They are expected to leverage on their existing sales capacity as the industry faces challenges posed by the economic downturn. In addition, we may also face new competition from semiconductor manufacturers, several of which have already announced their intention to start production of solar cells. Decreases in polysilicon prices and increases in PV module production could result in substantial downward pressure on the price of PV modules and intensify the competition we face. Some of our current and potential competitors have longer operating histories, access to a larger customer base, stronger relationships with customers, access to greater resources, and significantly greater economies of scale, financial, sales and marketing, manufacturing, distribution, research and development, technical and other resources than us. As a result, they may be able to respond more quickly to changing customer demands or market conditions or to devote greater resources to the development, promotion and sales of their products than we can. Our business relies on sales of our PV modules, and our competitors with more diversified product offerings may be better positioned to withstand a decline in the demand for PV modules. New competitors or alliances among existing competitors could emerge and rapidly acquire a significant market share, which would harm our business. If we fail to compete successfully, our business would suffer and we may lose or be unable to gain market share.

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Our dependence on a limited number of customers may cause significant fluctuations or declines in our revenues.

We currently sell a significant portion of our PV modules to a limited number of customers. In 2007, 2008 and 2009, sales to our top five customers accounted for approximately 33.5%, 41.9% and 36.9%, respectively, of our total net revenues. The top customer contributed approximately 9.5% of our net revenues in 2009. Sales to our customers are typically made through non-exclusive, short-term arrangements. We anticipate that our dependence on a limited number of customers will continue for the foreseeable future. Consequently, any one of the following events may cause material fluctuations or declines in our revenues:

- reduction, delay or cancellation of orders from one or more of our significant customers;
- selection by one or more of our significant customers of products competitive with ours;
- loss of one or more of our significant customers due to disputes, dissatisfaction with our products or otherwise and our failure to attract additional or replacement customers; and
- failure of any of our significant customers to make timely payment for our products.

We are exposed to the credit risk of these customers, some of which are new customers with whom we have not historically had extensive business dealings. The failure of any of these significant customers to meet their payment obligations would materially and adversely affect our financial position, liquidity and results of operations.

The practice of requiring customers to make advance payments when they place orders with us has declined, and we have experienced and will continue to experience increased needs to finance our working capital requirements and are exposed to increased credit risk.

We have historically required our customers to make an advance payment of a certain percentage of their orders, a business practice that helped us to manage our accounts receivable, prepay our suppliers and reduce the amount of funds that we needed to finance our working capital requirements. In line with market trends, this practice of requiring our customers to make advance payments is on the decline, which in turn has increased our need to obtain additional short-term borrowings to fund our working capital requirements. In 2010, we believe a majority of our revenues are expected to be derived from credit sales, generally with payment schedules due according to negotiated contracts. In addition, some of our customers pay us through drawn upon acceptance, open account and letter of credit terms, which typically take 90 to 120 days to process in order for us to be paid. Despite the more lenient payment terms, any of our customers may fail to meet their payment obligations, especially due to the global economic crisis and the resulting decrease in the availability of financing, which would materially and adversely affect our financial position, liquidity and results of operations.

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We have significant outstanding bank borrowings and capital expenditure needs, and we may not be able to arrange adequate financing when our outstanding borrowings mature or when capital expenditures are required.

We typically require a significant amount of cash to fund our operations, especially prepayments or loans to suppliers to secure our polysilicon supply requirements. We also require a significant amount of cash to meet future capital requirements, including the expansion of our PV cell and module manufacturing facilities, as well as research and development activities in order to remain competitive. Future acquisitions, expansions, market changes or other developments may cause us to require additional funds. As of December 31, 2009, we had \$406.1 million in cash and cash equivalents, \$72.0 million in restricted cash and \$450.0 million in outstanding borrowings, of which approximately \$267.4 million was due within one year. We might not be able to obtain extensions of these borrowings in the future as they mature. In the event that we are unable to obtain extensions of these borrowings, or if we are unable to obtain sufficient alternative funding at reasonable terms to make repayments, we will have to repay these borrowings with cash generated by our operating activities. In addition, we estimate that our capital expenditures will be approximately \$200.0 million in 2010 for capacity expansion. Our business might not generate sufficient cash flow from operations to repay these borrowings, some of which are secured by significant amounts of our assets, and at the same time fund our capital expenditures. In addition, repaying these borrowings and capital expenditures with cash generated by our operating activities will divert our financial resources from the requirements of our ongoing operations and future growth, and may have a material adverse effect on our business, financial condition and future prospects. If we are unable to obtain funding in a timely manner or on commercially acceptable terms, or at all, our growth prospects and future profitability may decrease materially. Moreover, future turmoil in the credit markets and the potential impact on the liquidity of financial institutions may have an adverse effect on our ability to fund our business through borrowings, under either existing or newly created instruments in the public or private markets on terms that we believe to be reasonable, if at all. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and market price of ADSs and could require us to delay or abandon critical development plans.

We may not be successful in manufacturing solar cells cost-effectively.

We began manufacturing solar cells in May 2007, and prior to that we did not have any significant operating experience in solar cell manufacturing. Manufacturing solar cells is a complex process. Minor deviations in the manufacturing process can cause substantial decreases in yields and cell conversion efficiency and, in some cases, cause production to be suspended or yield no output. We have invested significantly in research and development in solar cell technology in order to achieve the high conversion efficiency rates required for our solar cells and modules to remain competitive. If we face technological difficulties in our production of solar cells, we may be unable to expand our business as planned.

Currently, we have an annual manufacturing capacity of ingots and wafers of approximately 500 MW and cells and modules of approximately 600 MW. We plan to increase our annual manufacturing capacity of ingots and wafers to approximately 700 MW and cells and modules to between approximately 850 MW and 950 MW by the end of 2010. We will determine the magnitude of increases taking into account market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets, as well as our strategy to expand prudently while preserving liquidity. Accordingly, we cannot assure you that we will not revise our capacity expansion plan after we finalize our review. If we fail to implement our plan as expected, experience a delay in the ramp up or fail to achieve our targeted yields, our business and results of operations may be materially and adversely affected.

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