Trina Solar LTD
Form 20-F
April 30, 2009

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 20-F

(Mark One)

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

OR

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

For the fiscal year ended December 31, 2008

OR

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

For the transition period from _____ to _____

OR

o **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)

No. 2 Tian He Road
Electronics Park, New District
Changzhou, Jiangsu 213031
People s Republic of China

(Address of Principal Executive Offices)

Terry Wang, Chief Financial Officer
Thomas Young, Director of Investor Relations
No. 2 Tian He Road
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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 100 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.

2,958,183,059 ordinary shares, par value $0.00001 per share, as of December 31, 2008.

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

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 o No þ

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 þ No o

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 o No o

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 þ Accelerated filer o Non-accelerated filer o

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

U.S. GAAP þ

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

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

Item 17 o

Item 18 o

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 o No þ

(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 o No o

TABLE OF CONTENTS

Table of Contents

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 subsidiarie

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 100 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 the United States, and 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, 2006, 2007 and 2008.

This annual report contains translations of certain Renminbi amounts into U.S. dollars at the rate of RMB6.8225 to $1.00, the noon buying rate in effect on December 31, 2008 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 April 24, 2009, the noon buying rate was RMB6.8250 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.

Table of Contents

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

Item 3. Key Information

A. Selected Financial Data

The following selected consolidated statement of operations data for the years ended December 31, 2006, 2007 and 2008 and the selected consolidated balance sheet data as of December 31, 2006, 2007 and 2008 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, 2004 and 2005 and our consolidated balance sheets as of December 31, 2004 and 2005 have been derived from our audited consolidated financial statements, which are not included in this annual report.

	Year Ended December 31,				
	2004	2005	2006	2007	2008
	(in thousands, except for share, per share, operating data and percentages)				
Consolidated Statement of Operations Data					
Net revenues	$ 414	$ 27,275	$ 114,500	$ 301,819	$ 831,901
Cost of revenues	373	20,986	84,450	234,191	667,459
Gross profit	41	6,289	30,050	67,628	164,442
Operating expenses:					
Selling expenses	66	521	2,571	11,019	20,302
General and administrative Expenses	40	1,375	8,656	17,817	41,114
Research and development Expenses	262	122	1,903	2,805	3,039
Total operating expenses	368	2,018	13,130	31,641	64,455
Income (loss) from continuing operations	(327)	4,271	16,920	35,987	99,987
Foreign exchange loss				(1,999)	(11,802)
Interest expense	(73)	(470)	(2,137)	(7,551)	(23,937)
Interest income	4	16	261	4,810	2,944
Gain (loss) on change in fair value of derivative				854	(1,067)

Table of Contents

	Year Ended December 31,				
	2004	2005	2006	2007	2008
	(in thousands, except for share, per share, operating data and percentages)				
Other (expense) income	(35)	(27)	(82)	1,554	(156)
Income (loss) before income taxes	(431)	3,790	14,962	33,655	65,969
Income tax (expense) benefit	52	(570)	(1,788)	1,707	(4,609)
Minority interest	13				
Net income (loss) from continuing operations	(366)	3,220	13,174	35,362	61,360
Net Income (loss) from discontinued operations	354	91	(753)	368	
Net income (loss)	$ (12)	$ 3,311	$ 12,421	$ 35,730	$ 61,360
Earnings per ordinary share from continuing operations:					
Basic		0.00	0.01	0.02	0.02
Diluted		0.00	0.01	0.02	0.02
Earnings per ADS from continuing operations:					
Basic	(0.04)	0.32	0.98	1.51	2.45
Diluted	(0.04)	0.32	0.96	1.49	2.41
Earnings per ordinary share:					
Basic		0.00	0.01	0.02	0.02
Diluted		0.00	0.01	0.02	0.02
Earnings per ADS:					
Basic	(0.00)	0.33	0.92	1.53	2.45
Diluted	(0.00)	0.33	0.90	1.51	2.41
Weighted average ordinary shares outstanding:					
Basic	1,000,000,000	1,000,000,000	1,038,316,484	2,339,799,657	2,501,202,680
Diluted	1,000,000,000	1,000,000,000	1,058,483,593	2,370,685,156	2,690,723,390
Weighted average ADS outstanding:					
Basic	10,000,000	10,000,000	10,383,165	23,397,997	25,012,027
Diluted	10,000,000	10,000,000	10,584,836	23,706,852	26,907,234
Consolidated Financial Data					
Gross margin	9.8%	23.1%	26.2%	22.4%	19.8%
	(88.6)%	11.8%	11.5%	11.7%	7.4%

Net margin of continuing operations					
Consolidated Operating Data					
PV modules shipped (in MW)	0.12	6.79	27.39	75.91	201.01
Average selling price ($/W)	$ 3.45	$ 4.02	$ 3.98	$ 3.80	$ 3.92

Table of Contents

	As of December 31,				
	2004	2005	2006	2007	2008
	(in thousands)				
Consolidated Balance Sheet Data					
Cash and cash equivalents	$ 3,395	$ 1,224	$ 93,380	$ 59,696	$ 132,224
Restricted cash	242	527	5,004	103,375	44,991
Inventories	541	6,696	32,230	58,548	85,687
Accounts receivable, net	81	4,924	29,353	72,323	105,193
Other receivables	238	817	1,228	3,063	4,380
Property, plant and equipment, net	758	9,630	51,419	197,124	357,594
Total assets	11,192	32,298	251,745	600,674	940,116
Short-term borrowings	3,656	6,628	71,409	163,563	248,558
Accounts payable	1,390	3,845	9,147	42,691	62,504
Total current liabilities	6,178	12,715	88,068	220,485	335,714
Accrued warranty costs	4	272	1,400	4,486	12,473
Long-term borrowings		4,957	5,122	8,214	14,631
Total shareholders equity	5,010	14,355	157,154	367,489	433,057
Total liabilities and shareholders equity	$ 11,192	$ 32,298	$ 251,745	$ 600,674	$ 940,116

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. In the past few years, there was an industry-wide shortage of polysilicon, primarily as a result of the growing demand for solar power products. According to Solarbuzz, the average long-term supply contract price of polysilicon increased from approximately $45-$50 per kilogram delivered in 2006 to $60-$65 per kilogram in 2007 and further increased 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 but rose to a peak of $400-$450 per kilogram by mid-2008. In late 2008 and 2009, however, newly available polysilicon supply and slowed global solar power market growth have resulted in an excess supply of polysilicon, which created a downward pressure on the price of polysilicon. According to Solarbuzz, spot prices for solar grade polysilicon decreased rapidly to $150-$300 per kilogram in the fourth quarter of 2008. We cannot assure you that the price of polysilicon will continue to decline, especially once the global solar power market regains its growth momentum. 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. 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 recently, these barriers are 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 adversely affect our business and results of operations.

Table of Contents

We may be adversely affected by volatile market and industry trends, in particular, the demand for our solar 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, the global solar power industry experienced a precipitous decline in demand. During the same period, the global supply of solar products exceeded the global demand due to excess production capacity and the global economic downturn, which contributed to a decline in the average selling price of PV modules. The average selling price per watt of our PV modules decreased from $3.98 in 2006 to $3.80 in 2007 and increased to $3.92 in 2008. The increase in the average selling price of our PV modules in 2008 was due to an increase in demand of our PV modules in the first three quarters of 2008, driven largely by surging market demand, particularly in the Spanish market, which was offset by a decrease in the average selling price of our PV modules in the fourth quarter of 2008, due to the falling demand caused by the global economic downturn. If demand for solar products continues to decline, and the supply of solar products continues to grow, the average selling price of our products will be materially and adversely affected.

The demand for solar products is also influenced by macroeconomic factors such as the worldwide credit crisis, the devaluation of the Euro, 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 financing, also contributed to 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 for certain raw materials for our products, which could prevent us from delivering our products to our customers within required time frames, which could result in sales and installation delays, cancellations, liquidated damages and loss of market share.

We purchase polysilicon from a limited number of international and domestic suppliers. If we fail to develop or maintain our relationships with our limited suppliers, we may be unable to manufacture our products or our products may only be available at a higher cost or after a long delay, which could prevent us from delivering our products to our customers within the required time frames. We may experience order cancellations and loss of market share. Furthermore, the current credit crisis is having a significant negative impact on businesses around the world, and the impact of this crisis on our suppliers cannot be predicted. Our 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 liquidity, 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.

Table of Contents

Our costs and expenses may increase as a result of entering into fixed price, prepaid arrangements with our suppliers.

Due to the industry-wide shortage of polysilicon experienced during the past few years, 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 excess supply of polysilicon resulting from slowed global solar power market growth. Due to such excess supply, we are renegotiating some of our existing, higher priced medium-term and long-term contracts. We cannot assure you that we will be successful in renegotiating existing contracts. If the prices under our medium-term or long-term supply agreements result in our paying more for such supplies than the current market prices available to our competitors, we may be placed at a competitive disadvantage, and our earnings could decline. In addition, if demand for our PV modules decreases and such 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. 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.

Table of Contents

Prepayments we provide 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 existing supply contracts with many of our multi-year polysilicon and our equipment suppliers, consistent with industry practice, we make prepayments to our suppliers prior to the scheduled delivery dates for polysilicon and equipment. In many such cases, we make 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 prepay our suppliers, we will 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.

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. In 2008, we used a higher proportion of virgin polysilicon than in the past several years as polysilicon became widely available in the market and we are now able to have access to a high quality and stable supply of polysilicon. In the fourth quarter of 2008, reclaimable silicon materials accounted for no more than 25% of our total silicon requirements, compared to approximately 80% in the fourth quarter of 2007. 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.

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.

Table of Contents

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 and South Korea 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. These government economic incentives could be reduced or eliminated altogether. For example, the rapid rise of the Spanish market was largely due to a government policy that set feed-in tariff terms at attractive rates. However, in September 2008, the Spanish government introduced a cap of 500 MW for the feed-in tariff in 2009, which has resulted in limiting the demand in the grid-connected market in Spain. The policy shift also contributed in part to the decline in global PV market demand in the fourth quarter of 2008. In 2007, Germany and Spain accounted for 31.4% and 40.0% of our net revenues, respectively, and in 2008, Germany and Spain accounted for 23.9% and 32.5% of our net revenues, respectively. We believe that in the time of uncertainty of political and policy developments, competition among solar company 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.

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 recently have experienced (and continue to experience) a period of slow economic growth. A near-term economic recovery is uncertain. In particular, the current credit and housing crises, the increase in U.S. sub-prime mortgage defaults, 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 products. For example, recent global economic, capital markets and credit disruptions have resulted in slower investments in new installation projects that make use of solar products. Existing projects have also been delayed as a result of the credit and other disruptions. If the economic recovery slows down as a result of the recent 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 products, which may harm our operating results.

Recent global economics, capital markets and credit disruptions 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 products, which could have a material adverse effect on our business, results of operations, financial conditions and cash flows.

Table of Contents

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 and SolarWorld AG. Many of our competitors 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 recently, these barriers are less significant and many new competitors may enter the industry and cause the industry to rapidly become over-saturated. Many mid-stream solar 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.

Table of Contents

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 2006, 2007 and 2008, sales to our top five customers accounted for approximately 48.9%, 33.5% and 41.9%, respectively, of our total net revenues. The top customer contributed approximately 9.8% of our net revenues in 2008. 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 generally 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 2009, we believe a larger portion of our revenues will be derived from credit sales to our customers in comparison to 2008, generally with payment schedules due according to negotiated contracts. In addition, some of our customers pay us through letters of credit, which typically take 30 to 90 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 current credit crisis, which would materially and adversely affect our financial position, liquidity and results of operations.

Table of Contents

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 module and cell 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, 2008, we had $132.2 million in cash and cash equivalents and $263.2 million in outstanding borrowings, of which approximately $248.6 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 $189.0 million in 2009 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, recent 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 our own 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 yield 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 14 production lines with an annual manufacturing capacity of approximately 350 MW and plan to increase our annual manufacturing capacity by up to 200 MW to a total of up to 550 MW by the end of 2009. The specific increase will be based on market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets. We are implementing a strategy to focus on preserving cash, which includes reducing costs and reviewing and taking a prudent approach towards our capital expansion plan. 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.

Table of Contents

We may experience difficulty in achieving acceptable yields and product performance as a result of manufacturing problems.

The technology for the manufacturing of silicon ingots and wafers is complex, requires costly equipment and is continuously being modified in an effort 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 wafers can cause a percentage of the wafers to be rejected, which in each case negatively affects our yields. We have, from time to time, experienced production difficulties that have caused manufacturing delays and lower than expected yields.

Because our manufacturing capabilities are concentrated in our manufacturing facilities in Changzhou, China, any problem in our facilities may limit our ability to manufacture products. We may encounter problems in our manufacturing facilities, as a result of, among other things, production failures, construction delays, human errors, equipment malfunction or process contamination, which could seriously harm our operations. We may also experience floods, droughts, power losses and similar events beyond our control that would affect our facilities. For example, shortages or suspensions of power supplied to us have occasionally occurred due to severe thunderstorms in the area, and have disrupted our operations and caused severe damages to wafers in the process. A disruption to any step of the manufacturing process will require us to repeat each step and recycle the silicon debris, thus adversely affecting our yields.

Problems with product quality or product performance could damage our reputation, or result in a decrease in customers and revenues, unexpected expenses or loss of market share, and may cause us to incur significant warranty expenses

Our products may contain defects that are not detected until after they are shipped or are installed because we cannot test for all possible scenarios. Unlike PV modules, which are subject to certain uniform international standards, solar cells generally are not subject to uniform international standards, and it is often difficult to determine whether solar power product defects are a result of defective solar cells, other defective components of PV modules or other reasons. Furthermore, the solar wafers and other components that we purchase from third-party suppliers are typically sold to us with no or only limited warranties. We have received in the past, and may receive from time to time in the future, complaints from certain customers that portions of our PV modules have quality deficiencies. For example, in certain instances in the past, customers raised concerns about the stated versus actual performance output of some of our PV modules. We determined that these concerns resulted from differences in calibration standards we used. However, the corrective actions and procedures that we took may turn out to be inadequate to prevent further similar incidents or to protect against future errors or defects. If we deliver PV module products that do not satisfy our customers or end users quality requirements, or if there is a perception that our products are of poor quality, our credibility and the market acceptance and sales of our PV module products could be harmed. We may also incur substantial expense to replace low quality products.

Table of Contents

In the past, our PV modules were typically sold with a two-year warranty for materials and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. In 2008, we extended the warranty for materials and workmanship from two years to five years. We believe our warranty periods are consistent with industry practice. We have only begun to sell PV modules since November 2004. Although we conduct accelerated reliability testing of our PV modules, our PV modules have not been and cannot be tested in an environment simulating the 25-year warranty period. As a result, we may be subject to unexpected warranty expense and associated harm to our financial results for as long as 25 years after the sale of our products. Any increase in the defect rate of our products would cause us to increase the amount of our warranty reserves and have a correspondingly negative impact on our operating results. Furthermore, widespread product failures may damage our market reputation, reduce our market share and cause our sales to decline.

We may not be successful in the commercial production of new products, which could adversely affect our business and prospects.

We may develop and produce new products from time to time, such as our new PV module product manufactured using Upgraded Metallurgical Grade silicon materials. We may be unable to generate sufficient customer demand for our new products if we are unable to develop and produce new products in a cost-effective manner with the expected performance. If we failed to generate demand for our new products, our business and prospects may be adversely affected and we may be unable to recoup our investment in the development and production of such products.

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

The market for electricity generation products is heavily influenced by government regulations and policies concerning the electric utility industry, as well as policies adopted by electric utilities. These regulations and policies often relate to electricity pricing and technical interconnection of customer-owned electricity generation. In a number of countries, these regulations and policies are being modified and may continue to be modified. Customer purchases of, or further investment in the research and development of alternative energy sources, including solar power technology, could be deterred by these regulations and policies, which could result in a significant reduction in the demand for our products. For example, without a regulatory mandated exception for solar power systems, utility customers are often charged interconnection or standby fees for putting distributed power generation on the electric utility grid. These fees could increase the cost to our customers of using our solar power products and make them less desirable, thereby harming our business, prospects, financial condition and results of operations.

We anticipate that our products and their installation will be subject to oversight and regulation in accordance with national and local regulations relating to building codes, safety, environmental protection, utility interconnection and metering and related matters. It is difficult to track the requirements of individual jurisdictions and design products to comply with the varying standards. Any new government regulations or utility policies pertaining to our solar power products may result in significant additional expenses to us and, as a result, could cause a significant reduction in demand for our solar power products.

Table of Contents

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 not continue to increase or may even decline, and we may be unable to sustain our profitability.

The solar power market is at a relatively early stage of development, and the extent of acceptance of solar power products is uncertain. Market data on the solar power industry are not as readily available as those for other more established industries where trends can be assessed more reliably from data gathered over a longer period of time. In addition, demand for solar power products in our targeted markets, including Germany, Italy, Spain, the United States, France and South Korea, may not develop or may develop to a lesser extent than we anticipate. Many factors may affect the viability of widespread adoption of solar power technology and demand for solar power products, including:

- cost-effectiveness, performance and reliability of solar power products compared to conventional and other renewable energy sources and products;
- availability of government subsidies and incentives to support the development of the solar power industry;
- success of other alternative energy generation technologies, such as wind power, hydroelectric power and biomass;
- 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 down; and
- deregulation of 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.

Further development in thin-film technologies or other changes in the solar power industry could render our products uncompetitive or obsolete, which could reduce our market share and cause our sales and profit to decline.

The solar power market is characterized by evolving technologies and standards that result in improved features, such as more efficient and higher power output, improved aesthetics and smaller size. This requires us to develop new solar power products and enhance existing products to keep pace with evolving technologies and changing customer requirements.

Table of Contents

A variety of competing solar technologies that other companies may develop could prove to be more cost-effective and have better performance than our technologies. For example, thin-film technologies are competing technologies in the solar power industry. According to Solarbuzz, in 2008, thin-film technologies represented 13.0% of the solar market, compared to 87.0% for crystalline technology. Thin-film technologies allow for lower production costs for solar cells by using lower amounts of semiconductor materials. Thin-film solar cells generally have a lower conversion efficiency rate than crystalline solar cells.

Further development in competing solar power technologies may result in lower manufacturing costs or higher product performance than those expected from our PV modules. We will need to invest significant financial resources in research and development to maintain our market position, keep pace with technological advances in the solar power industry and effectively compete in the future. Our failure to further refine our technology, enhance our existing solar power products, or develop and introduce new products, could cause our products to become uncompetitive or obsolete, which could reduce our market share and cause our revenues to decline.

Noncompliance with present or future construction and environmental regulations may result in potentially significant monetary damages and fines.

In the past, we had begun constructing and operating facilities without having obtained all of the necessary construction and environmental permits. Although we have subsequently obtained all of the construction and environmental permits for these facilities, we could be subject to fines or penalties for our past non-compliance.

Because our manufacturing processes generate noise, waste water, gaseous wastes and other industrial wastes, we are required to comply with national and local environmental regulations. 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 the use or to adequately restrict the discharge of hazardous substances could subject us to potentially significant monetary damages and fines or suspensions in our business operations, which would have a materially adverse effect on our business and results of operations.

In particular, the manufacturing processes for producing polysilicon employ processes that generate toxic waste products, including the highly volatile and highly toxic substance silicon-tetrachloride. We purchase our polysilicon from our suppliers in the United States, Europe and China. If any of our suppliers fails to comply with environmental regulations for the production of polysilicon and the discharge of the highly toxic waste products, we may face negative publicity which may have a material adverse effect on our business and results of operations. Furthermore, if any of our suppliers are forced to suspend or shut down production due to violations of environmental regulations, we may not be able to secure enough polysilicon for our production needs on commercially reasonable terms, or at all.

Table of Contents

Our future success substantially depends on our ability to significantly expand both our manufacturing capacity and output, which exposes us to a number of risks and uncertainties.

Our future success depends on our ability to significantly increase both our manufacturing capacity and output. If we are unable to do so, we may be unable to expand our business, decrease our costs per watt, maintain our competitive position and improve our profitability. Our ability to establish additional manufacturing capacity and increase output is subject to significant risks and uncertainties, including:

- the need to raise significant additional funds to purchase raw materials or to build additional manufacturing facilities, which we may be unable to obtain on commercially viable terms or at all;
- delays and cost overruns as a result of a number of factors, many of which are beyond our control, such as increases in the price of polysilicon and problems with equipment vendors, particularly with respect to major equipment such as ingot pulling or growing machines;
- 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 additional manufacturing capacity, or if we encounter any of the risks described above, 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.

In particular, we believe that the expansion of our manufacturing capacity is an integral part of our long-term strategy to achieve a grid parity cost structure. Our ability to meet our estimate for the scale of production needed to achieve grid parity is affected by a number of factors, including our ability to improve and maintain the degree of vertical integration and to increase our efficiencies and margins, the likelihood that we may approach or reach a point of diminishing returns as we continue to expand our scale, the average purchase price we will pay for silicon in the future to meet our expansion requirements, and the cost of conventional grid electricity which will determine at which point grid parity can be reached. We might not be able to meet our desired scale of production in order to fully implement our strategy.

Our business depends substantially on the continuing efforts of our executive officers, and our business may be severely disrupted if we lose their services.

Our future success depends substantially on the continued services of our executive officers, especially Mr. Jifan Gao, our chairman and chief executive officer. If one or more of our executive officers or key employees were unable or unwilling to continue in their present positions, we might not be able to replace them easily or at all. Our business may be severely disrupted, our financial condition and results of operations may be materially and adversely affected, and we may incur additional expenses to recruit, train and retain personnel. Since our industry is characterized by high demand and intense competition for talent, we also may not be able to attract or retain additional highly skilled employees or other key personnel that we will need to achieve our strategic objectives. As we are still a relatively young company and our business has grown rapidly, our ability to train and integrate new employees into our operations may not meet the growing demands of our business.

Table of Contents

If any of our executive officers or key employees joins a competitor or forms a competing company, we may lose customers, suppliers, know-how and key professionals and staff members. Each of our executive officers has entered into an employment agreement with us, which contains non-competition provisions. If any dispute arises between our executive officers and us, these agreements may not be enforceable in China in light of the uncertainties with China s legal system, or in another country where they obtain employment. See Risks Related to Doing Business in China Uncertainties with respect to the Chinese legal system could have a material adverse effect on us.

If we are unable to attract, train and retain qualified 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 qualified technical personnel, particularly those with expertise in the solar power industry. There is substantial competition for qualified technical personnel, and we might not be able to attract or retain our qualified technical personnel. If we are unable to do so, our business may be materially and adversely affected.

If we fail to manage our growth effectively, our business may be adversely affected.

We have experienced a period of rapid growth and expansion that has placed, and continues to place, significant strain on our management personnel, systems and resources. To accommodate our growth, we anticipate that we will need to implement a variety of new and upgraded operational and financial systems, procedures and controls, including the improvement of our accounting and other internal management systems, all of which require substantial management efforts. We also will need to continue to expand, train, manage and motivate our workforce, manage our customer relationships and manage our relationship with foundries and assembly and testing houses. All of these endeavors will require substantial management effort and skill and incurrence of additional expenditures. We might not be able to manage our growth effectively, and any failure to do so may have a material adverse effect on our business.

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.

In 2006, 2007 and 2008, we sold approximately 90.7%, 97.9% and 96.3%, respectively, of our products to customers outside of China. The marketing, distribution and sale of our solar power products in the international markets expose us to a number of risks, including:

- fluctuations in currency exchange rates;
- difficulty in engaging and retaining distributors who are knowledgeable about, and can function effectively in, overseas markets;
- increased costs associated with maintaining marketing efforts in various countries;
- difficulty and costs relating to compliance with the different commercial and legal requirements of the overseas markets in which we offer our products;
- 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; and
- demand for solar products in overseas markets as influenced by the worldwide credit crisis and its effects.

Table of Contents

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

Our success depends largely on our ability to use and develop our technology and know-how without infringing the intellectual property rights of third parties. The validity and scope of claims relating to solar power technology patents involve complex scientific, legal and factual questions and analysis and, therefore, may be highly uncertain. We may be subject to litigation involving claims of patent infringement or violation of intellectual property rights of third parties. The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time consuming and may significantly divert the efforts and resources of our technical and management personnel. An adverse determination in any such litigation or proceedings to which we may become a party could subject us to significant liability to third parties, require us to seek licenses from third parties, to pay ongoing royalties, or to redesign our products or subject us to injunctions prohibiting the manufacturing and sale of our products or the use of our technologies. Protracted litigation could also result in our customers or potential customers deferring or limiting their purchase or use of our products until resolution of such litigation.

Our failure to protect our intellectual property rights may undermine our competitive position, and litigation to protect our intellectual property rights or defend against third-party allegations of infringement may be costly.

We rely primarily on patent, trademark, trade secret, copyright law and other contractual restrictions to protect our intellectual property. Nevertheless, these afford only limited protection and the actions we take to protect our intellectual property rights may not be adequate. Third parties may infringe or misappropriate our proprietary technologies or other intellectual property rights, which could have a material adverse effect on our business, financial condition or operating results. Policing unauthorized use of proprietary technology can be difficult and expensive. Also, litigation 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. We cannot assure you that the outcome of such potential litigation will be in our favor. An adverse determination in any such litigation will impair our intellectual property rights and may harm our business, prospects and reputation. Implementation of PRC intellectual property-related laws has historically been lacking, primarily because of ambiguities in the PRC laws and difficulties in enforcement. Accordingly, intellectual property rights and confidentiality protections in China may not be as effective as in the United States or other countries.

Table of Contents

We have limited insurance coverage and may incur losses resulting from product liability claims.

As with other solar power product manufacturers, we are exposed to risks associated with product liability claims if the use of our solar power products results in injury. Since our products generate electricity, it is possible that users could be injured or killed by our products as a result of product malfunctions, defects, improper installation or other causes. We only began commercial shipment of our PV modules in November 2004 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. Moreover, we do not have any product liability insurance and may not have adequate resources to satisfy a judgment in the event of a successful claim 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.

If we fail to maintain an effective system of internal control over financial reporting, we may lose investor confidence in the reliability of our financial statements.

We are subject to reporting obligations under the U.S. securities laws. The 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 such company s internal control over financial reporting in its annual report, which contains management s assessment of the effectiveness of the company s internal control over financial reporting. In addition, an independent registered public accounting firm must render an opinion on the effectiveness of the company s internal control over financial reporting.

Our management has concluded that our internal control over financial reporting is effective as of December 31, 2008. See Item 15. Control and Procedures. If we fail to maintain effective internal control over financial reporting in the future, it could result in the loss of investor confidence in the reliability of our financial statements and negatively impact the trading price of our ADSs. Furthermore, we have incurred and anticipate that we will continue to incur considerable costs, management time and other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act.

Trina or Trina China may be required by the PRC tax authorities to withhold capital gains tax arising out of our restructuring in May 2006.

In connection with our restructuring in May 2006, certain former shareholders of Trina China transferred their equity interests in Trina China to Trina for a nominal consideration. As a result of the nominal consideration paid in these related party transactions, such consideration may be subject to pricing reassessment by the PRC tax authorities, leading to a recognition of capital gains by the transferring shareholders which would be subject to PRC tax. PRC tax law provides a safe harbor exemption from such capital gains tax in the case of an intra-group restructuring. While our restructuring does not fall squarely within the requirements for the safe harbor, we believe that the PRC tax authorities may deem the restructuring to meet substantially all of the requirements for the safe harbor for tax-free treatment. The PRC tax authorities could, however, deem these transferring shareholders to have realized capital gains as a result of the restructuring.

Under PRC tax law, if a transferor is a foreign person without a presence in China, the transferee is obligated to withhold tax on any of the transferors gains arising from the transaction. As all of these transferring shareholders are deemed to be foreign persons without a presence in China, Trina China may be required to withhold tax on capital gains deemed to have been received by these former shareholders. These former shareholders have agreed to indemnify us against any withholding obligations or liabilities due to or imposed by the PRC tax authorities that may arise out of the restructuring. The PRC tax authorities could impose such withholding obligation on Trina or Trina China or impose fines or penalties on Trina or Trina China for its failure to make such withholding. If such withholding obligation is imposed and we are not indemnified by these transferring shareholders, our potential tax exposure would be approximately $2.8 million, excluding any fines or penalties. The amount of such fines or penalties is difficult to estimate as the determination of whether any such fines or penalties would be imposed and the amount of such fines or penalties are at the discretion of the PRC tax authorities.

Table of Contents

Our principal shareholders have substantial influence over our company and their interests may not be aligned with the interests of our other shareholders.

Our principal shareholders have substantial influence over our business, including decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, 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 ADSs. These actions may be taken even if they are opposed by our other shareholders. Furthermore, our articles of association contain a quorum requirement of at least one-third of our total outstanding shares present in person or by proxy. Two or more shareholders with an aggregate shareholding of more than one-third could constitute a quorum and approve actions which may not be in the best interests of our other shareholders.

Fluctuations in exchange rates could adversely affect our business.

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. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the Renminbi to the U.S. dollar. Under the new policy, the Renminbi was permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. This change in policy caused the Renminbi to appreciate approximately 21.5% against the U.S. dollar over the following three years. Since reaching a high against the U.S. dollar in July 2008, however, the Renminbi has traded within a narrow band against the U.S. dollar, remaining within 1% of its July 2008 high but never exceeding it. As a consequence, the Renminbi has fluctuated sharply since July 2008 against other freely traded currencies, in tandem with the U.S. dollar. For example, the Renminbi appreciated approximately 27% against the Euro between July 2008 and November 2008. It is difficult to predict how long the current situation may last and when and how it may change again.

Most of our sales are denominated in U.S. dollars and Euros, with the remainder in Renminbi, while a substantial portion of our costs and expenses is denominated in U.S. dollars, with the remainder in Renminbi. Fluctuations in exchange rates, particularly among the U.S. dollar, Renminbi and Euro, may affect our net profit margins and could result in fluctuations in foreign currency exchange and operating gains and losses. We incurred a foreign exchange loss of approximately $11.8 million in 2008. We cannot predict the impact of future exchange rate fluctuations on our results of operations and may incur net foreign currency losses in the future. In addition, as we rely entirely on dividends paid to us by our operating subsidiaries in China, any significant revaluation of the Renminbi may have a material adverse effect on our revenues and financial condition, and the value of, and any dividends payable on, our common shares. For example, to the extent that we need to convert U.S. dollars into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we receive from the conversion. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our common shares or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us. As a large proportion of our revenues are paid to us in Euros, fluctuation between the Euro and the RMB may also have a material effect on our results of operations.

Table of Contents

In October and December 2008, we entered into a series of foreign currency forward contracts with two commercial banks to hedge our exposure to foreign currency exchange risk. As of December 31, 2008, we had foreign currency forward contracts with a total contract value of approximately 24.0 million ($33.9 million). We do not use foreign currency forward contracts to hedge all of our foreign currency denominated commitments. As with all hedging instruments, there are risks associated with the use of foreign currency forward contracts. While the use of such foreign currency forward contracts provides us with protection from certain fluctuations in foreign currency exchange, we potentially forgo the benefits that might result from favorable fluctuations in foreign currency exchange. Any default by the counterparties to these transactions could adversely affect our financial condition and results of operations. Furthermore, these financial hedging transactions may not provide adequate protection against future foreign currency exchange rate fluctuations and, consequently, such fluctuations could adversely affect our financial condition and results of operations.

Risks Related to Doing Business in China

Adverse changes in political and economic policies of the PRC government could have a material adverse effect on the overall economic growth of China, which could reduce the demand for our products and materially and adversely affect our competitive position.

All of our business operations are conducted in China and some of our sales are made in China. Accordingly, our business, financial condition, results of operations and prospects are affected significantly by economic, political and legal developments in China. The Chinese economy differs from the economies of most developed countries in many respects, including:

- the amount of government involvement;
- the level of development;
- the growth rate;
- the control of foreign exchange; and
- the allocation of resources.

While the Chinese economy has grown significantly in the past 30 years, the growth has been uneven, both geographically and among various sectors of the economy. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures benefit the overall Chinese economy, but may also have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations that are applicable to us.

Table of Contents

The Chinese economy has been transitioning from a planned economy to a more market-oriented economy. Although in recent years the PRC government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets and the establishment of sound corporate governance in business enterprises, a substantial portion of the productive assets in China is still owned by the PRC government. The continued control of these assets and other aspects of the national economy by the PRC government could materially and adversely affect our business. The PRC government also exercises significant control over Chinese economic growth through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies. Efforts by the PRC government to control the pace of growth of the Chinese economy could result in decreased capital expenditure by solar energy users, which in turn could reduce demand for our products.

Uncertainties with respect to the Chinese legal system could have a material adverse effect on us.

We conduct substantially all of our manufacturing operations through our wholly-owned subsidiary, Trina China, a limited liability company established in China. Trina China is 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 continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involves uncertainties. We cannot predict the effect of future developments in the PRC legal system, including the promulgation of new laws, changes to existing laws or the interpretation or enforcement thereof, the preemption of local regulations by national laws, or the overturn of local government decisions by the superior government. These uncertainties may limit legal protections available to us. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

Our ability to make distributions and other payments to our shareholders depends to a significant extent upon the distribution of earnings and other payments made by Trina China.

We conduct substantially all of our operations through Trina China. Our ability to make distributions or other payments to our shareholders depends on payments from Trina China, whose ability to make such payments is subject to PRC regulations. Regulations in the PRC currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. According to the relevant PRC laws and regulations applicable to Trina China and its articles of association, Trina China is required to set aside at least 10% of its after-tax profit based on PRC accounting standards each year to its general reserves until the accumulative amount of these reserves reaches 50% of its registered capital. These reserves are not distributable as cash dividends. As of December 31, 2008, these general reserves amounted to $14.2 million, accounting for 7.5% of the registered capital of Trina China. In addition, under the new EIT Law that became effective in January 2008, dividends from Trina China to us are subject to a 10% withholding tax. See Our business benefits from certain PRC government tax incentives, and the expiration of, or changes to, these incentives could have a material adverse effect on our results of operations and Item 4. Information on the Company Regulation Tax. Furthermore, if Trina China incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us.

Table of Contents

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

Certain portions of our revenues 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 declared, if any, in respect of our ordinary shares or ADSs. Under China s existing foreign exchange regulations, Trina China is 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, the PRC government could take further measures in the future to restrict access to foreign currencies for current account transactions.

Foreign exchange transactions by Trina China under capital accounts continue to be subject to significant foreign exchange controls and require the approval of, or registration with, PRC governmental authorities. In particular, if Trina China borrows foreign currency loans from us or other foreign lenders, these loans must be registered with the SAFE, and if we finance Trina China by means of additional capital contributions, these capital contributions must be approved by certain government authorities including the Ministry of Commerce or its local counterparts. These limitations could affect the ability of Trina China to obtain foreign exchange through debt or equity financing.

Our business benefits from certain PRC government tax incentives, and expiration of, or changes to, these incentives.

The PRC government has provided various incentives to foreign invested enterprises, although these incentives are subject to the new Enterprise Income Tax Law as discussed below. Because Trina China is a foreign invested enterprise engaged in manufacturing businesses and located in Changzhou, which is within a coastal economic zone, it was entitled to a preferential enterprise income tax rate of 24%. In addition, Trina China was qualified as an advanced technological enterprise and, as a result, enjoyed a preferential enterprise income tax rate of 12% for the years 2004 to 2006. As the tax benefit for an advanced technological enterprise expired in 2006, the tax rate of Trina China increased to 27% (24% enterprise income tax plus 3% local income tax) in 2007. Trina China made several additional capital investments during 2006, 2007 and 2008. Income from incremental investment to the registered capital of a foreign invested enterprise was entitled to a two-year exemption and a 50% reduction of the applicable income tax rate for the succeeding three years. Trina China s registered capital was increased from $7.28 million in 2005 to $40.0 million in 2006 and to $120 million in 2007. Accordingly, for the year 2007, an income tax rate of 12% was applied to 18.2% of Trina China s taxable profit and 81.8% of its taxable profit was exempted from income taxes. However, the additional capital investments made in 2008 were not entitled to additional tax holidays. Due to varying applicable tax rates in each quarter of 2008 caused by the various additional capital investments, the tax authority agreed that we could use a blended EIT rate for 2008.

Table of Contents

The Enterprise Income Tax Law and its Implementation Regulations, or the new EIT Law, which became effective January 1, 2008, imposes a uniform tax rate of 25% on all PRC enterprises, including foreign-invested enterprises, and eliminates or modifies most of the tax exemptions, reductions and preferential treatments available under the previous tax laws and regulations. Under the new EIT law, enterprises that were established before March 16, 2007 and already enjoy preferential tax treatments will (i) in the case of preferential tax rates, continue to enjoy the tax rates which will be gradually increased to the new tax rates within five years from January 1, 2008 or (ii) in the case of preferential tax exemption or reduction for a specified term, continue to enjoy the preferential tax holiday until the expiration of such term. In addition, certain enterprises may still benefit from a preferential tax rate of 15% under the new EIT Law if they qualify as high and new technology enterprises strongly supported by the State, subject to certain general factors described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. Therefore, Trina China is entitled to a preferential income tax rate of 15% in 2008, 2009 and 2010, as long as it maintains its qualification as a high and new technology enterprise under the new EIT Law. If Trina China fails to maintain the high and new technology enterprise qualification, its applicable EIT rate may increase to up to 25%, which could have a material adverse effect on our results of operations. In addition, in April 2009, we received a notice from the State Tax Bureau of Changzhou Hi-tech Development Zone notifying us that the exemption and 50% tax reduction for Trina China s taxable profit representing the proportion of increase in registered capital expired on December 31, 2007. As a result, we expect to make an additional income tax payment of $6.5 million in 2009. We cannot assure you that we will be able to maintain our current effective tax rate in the future. Any discontinuation of preferential tax treatment or any increase of the enterprise income tax rate applicable to Trina China could have a material adverse effect on our financial condition and results of operations.

The dividends we receive from our PRC subsidiaries and our global income may be subject to PRC tax under the new EIT law, which would have a material adverse effect on our results of operations; our foreign ADS holders may be subject to a PRC withholding tax upon the dividends payable by us and upon gains realized on the sale of our ADSs, if we are classified as a PRC resident enterprise.

Under the new EIT law, dividends, interests, rents and royalties payable by a foreign-invested enterprise in the PRC to its foreign investor who is a non-resident enterprise, as well as gains on transfers of shares of a foreign-invested enterprise in the PRC by such a foreign investor, will be subject to a 10% withholding tax, unless such non-resident enterprise s jurisdiction of incorporation has a tax treaty with the PRC that provides for a reduced rate of withholding tax. The Cayman Islands, where Trina is incorporated, does not have such a tax treaty with the PRC. Therefore, if Trina is considered a non-resident enterprise for purposes of the new EIT law, this new 10% withholding tax imposed on dividends paid to Trina by its PRC subsidiaries would reduce Trina s net income and have an adverse effect on Trina s operating results.

Table of Contents

Under the new EIT law, an enterprise established outside the PRC with its de facto management body within the PRC is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its worldwide income. The de facto management body is defined as the organizational body that effectively exercises overall management and control over production and business operations, personnel, finance and accounting, and properties of the enterprise. It remains unclear how the PRC tax authorities will interpret such a broad definition. Substantially all of Trina s management members are based in the PRC. If the PRC tax authorities subsequently determine that Trina should be classified as a resident enterprise, then Trina s worldwide income will be subject to income tax at a uniform rate of 25%, which may have a material adverse effect on Trina s financial condition and results of operations. Notwithstanding the foregoing provision, the new EIT law also provides that, if a resident enterprise directly invests in another resident enterprise, the dividends received by the investing resident enterprise from the invested enterprise are exempted from income tax, subject to certain conditions. Therefore, if Trina is classified as a resident enterprise, the dividends received from its PRC subsidiary may be exempted from income tax. However, it remains unclear how the PRC tax authorities will interpret the PRC tax resident treatment of an offshore company, like Trina, having ownership interest in a PRC enterprise.

Moreover, under the new EIT law, a withholding tax at the rate of 10% is applicable to dividends payable to investors that are non-resident enterprises, which do not have an establishment or place of business in the PRC, or which have such establishment or place of business but the relevant income is not effectively connected with the establishment or place of business, to the extent such interest or dividends have their sources within the PRC unless such non-resident enterprises can claim treaty protection. As such, these non-resident enterprises would enjoy a reduced withholding tax from treaty. Similarly, any gain realized on the transfer of ADSs or shares by such investors is also subject to a 10% withholding tax if such gain is regarded as income derived from sources within the PRC. If Trina is considered a PRC resident enterprise, it is unclear whether the dividends Trina pays with respect to its ordinary shares or ADSs, or the gain you may realize from the transfer of Trina s ordinary shares or ADSs, would be treated as income derived from sources within the PRC and be subject to PRC withholding tax.

The approval of the Chinese Securities Regulatory Commission might have been required in connection with our initial public offering, and, if required, we could be subject to sanction, fines and other penalties.

On August 8, 2006, six PRC regulatory agencies, including the Chinese Securities Regulatory Commission, or CSRC, promulgated the Regulation on Mergers and Acquisitions of Domestic Companies by Foreign Investors, which became effective on September 8, 2006. This new regulation, among other things, requires offshore special purpose vehicles, formed for overseas listing purposes through acquisitions of PRC domestic companies and controlled by PRC individuals, to obtain the approval of the CSRC prior to publicly listing their securities on an overseas stock exchange. On September 21, 2006, the CSRC published a notice specifying the documents and materials that are required to be submitted for obtaining CSRC approval. Based on the advice we received from Fangda Partners, our PRC counsel, we did not seek the CSRC approval in connection with our initial public offering as we believe that this regulation does not apply to us and that CSRC approval is not required because (1) Trina is not a special purpose vehicle formed for the purpose of acquiring a PRC domestic company because Trina China was a foreign-invested enterprise before it was acquired by Trina, and, accordingly, Trina China did not fall within the definition of a PRC domestic company as set forth in the new regulation; and (2) such acquisition was completed before the new regulation became effective.

Table of Contents

The interpretation and application of the New M&A Rule remains unclear, and we cannot assure you that our initial public offering did not require approval from the CSRC. If the CSRC or other PRC regulatory body subsequently determines that the CSRC s approval was required for our initial public offering, we may face sanctions by the CSRC or other PRC regulatory agencies. In that case, these regulatory agencies may impose fines and penalties on our operations in the PRC, limit our operating privileges in the PRC, restrict or prohibit payment or remittance of dividends by Trina China, or take other actions that could have a material adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ADSs.

The regulations also established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex, including requirements in some instances that the Ministry of Commerce, or MOFCOM, be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise. As we may grow our business in part by acquiring complementary businesses in the future, complying with the requirements of the new regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the MOFCOM, may delay or inhibit our ability to complete such transactions. Any such delay or inability to obtain applicable approvals to complete our potential future acquisitions could affect our ability to expand our business or maintain our market share.

Recent regulations relating to offshore investment activities by PRC residents may limit our ability to acquire PRC companies and could adversely affect our business, financial condition and results of operations. The regulations also establish more complex procedures for acquisitions by foreign investors, which could make it more difficult to pursue growth through acquisitions.

In October 2005, SAFE promulgated a regulation known as Circular No. 75 that states that if PRC residents use assets or equity interests in their PRC entities as capital contributions to establish offshore companies or inject assets or equity interests of their PRC entities into offshore companies to raise capital overseas, they must register with local SAFE branches with respect to their overseas investments in offshore companies. They must also file amendments to their registrations if their offshore companies experience material events involving capital variation, such as changes in share capital, share transfers, mergers and acquisitions, spin-off transactions, long-term equity or debt investments or uses of assets in China to guarantee offshore obligations. Under this regulation, failure to comply with the registration procedures set forth in such regulation may result in restrictions being imposed on the foreign exchange activities of the relevant PRC entity, including the payment of dividends and other distributions to its offshore parent, as well as restrictions on the capital inflow from the offshore entity to the PRC entity. While we believe our shareholders have complied with existing SAFE registration procedures, any future failure by any of our shareholders who is a PRC resident, or controlled by a PRC resident, to comply with relevant requirements under this regulation could subject our company to fines or sanctions imposed by the PRC government, including restrictions on Trina China s ability to pay dividends or make distributions to us and our ability to increase our investment in or to provide loans to Trina China.

Table of Contents

On December 25, 2006, the People s Bank of China promulgated the Measures for Administration of Individual Foreign Exchange. On January 5, 2007, the SAFE promulgated Implementation Rules for those measures and on March 28, 2007, the SAFE further promulgated the Operating Procedures on Administration of Foreign Exchange regarding PRC Individuals Participation in Employee Share Ownership Plans and Employee Stock Option Plans of Overseas Listed Companies (collectively, referred to as the Individual Foreign Exchange Rules). According to the Individual Foreign Exchange Rules, PRC citizens who are granted shares or share options by a company listed on an overseas stock market according to its employee share option or share incentive plan are required to register with the SAFE or its local counterparts by following certain procedures. We and our employees who are PRC citizens and individual beneficiary owners, or have been granted restricted shares or share options, may be subject to the Individual Foreign Exchange Rules. The failure of our PRC individual beneficiary owners and the restricted holders to complete their SAFE registrations pursuant to the SAFE Jiangsu Branch s requirement or the Individual Foreign Exchange Rules may subject these PRC citizens to fines and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries, limit our PRC subsidiaries ability to distribute dividends to us or otherwise materially adversely affect our business.

New labor laws in the PRC may adversely affect our results of operations.

On June 29, 2007, the PRC government promulgated a new labor law, namely, the Labor Contract Law of the PRC, or the New Labor Contract Law, which became effective on January 1, 2008. The New Labor Contract Law imposes greater liabilities on employers and significantly impacts the cost of an employer s decision to reduce its workforce. Further, it requires certain terminations to be based upon seniority and not merit. In the event we decide to significantly change or decrease our workforce, the New Labor Contract Law could adversely affect our ability to enact such changes in a manner that is most advantageous to our business or in a timely and cost effective manner, thus materially and adversely affecting our financial condition and results of operations.

We face risks related to health epidemics and other outbreaks.

Our business could be adversely affected by the effects of swine flu, avian flu, SARS or other epidemics or outbreaks. China reported a number of cases of SARS in April 2004. In 2006, 2007 and 2008, there have been reports on the occurrences of avian flu in various parts of China, including a few confirmed human cases and deaths. In April 2009, an outbreak of swine flu occurred in Mexico and the United States. Any prolonged occurrence or recurrence of swine flu, avian flu, SARS or other adverse public health developments in China or any of the major markets in which we do business may have a material adverse effect on our business and operations. These could include our ability to travel or ship our products outside of China and to designated markets, as well as temporary closure of our manufacturing facilities, logistic facilities and/or our customers facilities, leading to delayed or cancelled orders. Any severe travel or shipment restrictions and closures would severely disrupt our operations and adversely affect our business and results of operations. We have not adopted any written preventive measures or contingency plans to combat any future outbreak of swine flu, avian flu, SARS or any other epidemic.

Table of Contents

Risks Related to Our Ordinary Shares and ADSs

The market price for our ADSs has been and is likely to continue to be highly volatile.

The market price for our ADSs has been and is likely to continue to be highly volatile and subject to wide fluctuations in response to factors including the following:

- announcements of technological or competitive developments;
- regulatory developments in our target markets affecting us, our customers or our competitors;
- announcements of studies and reports relating to the conversion efficiencies of our products or those of our competitors;
- actual or anticipated fluctuations in our quarterly operating results;
- changes in financial estimates by securities research analysts;
- changes in the economic performance or market valuations of other solar power technology companies;
- addition or departure of our executive officers and key research personnel;
- announcements regarding patent litigation or the issuance of patents to us or our competitors;
- conditions affecting general economic performance in the United States;
- fluctuations in the exchange rates between the U.S. dollar, the Euro and Renminbi;
- release or expiry of lock-up or other transfer restrictions on our outstanding ordinary shares; and
- sales or perceived sales of additional ADSs.

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 adverse effect on the market price of our ADSs. For example, financial markets have experienced extreme disruption in recent months, including, among other things, extreme volatility in securities prices. In the event of a continuing market downturn, the market price of our ADSs may decline further.

Holders of our ADSs do not have the same voting rights as the holders of our ordinary shares and may not receive voting materials in time to be able to exercise their right to vote.

Holders of our ADSs are not treated as shareholders. Instead, the depositary will be treated as the holder of the shares underlying the ADSs. Holders of our ADSs, however, may exercise some of the shareholders rights through the depositary and have the right to withdraw the shares underlying their ADSs from the deposit facility.

Except as described in this annual report and provided in the deposit agreement, holders of our ADSs will not be able to exercise voting rights attaching to the shares evidenced by our ADSs on an individual basis. Holders of our ADSs may instruct the depositary to exercise the voting rights attaching to the shares represented by the ADSs. If no instructions are received by the depositary on or before a date established by the depositary, the depositary shall deem the holders to have instructed it to give a discretionary proxy to a person designated by us to exercise their voting rights. Holders of our ADSs may not receive voting materials in time to instruct the depositary to vote, and holders of our ADSs, or persons who hold their ADSs through brokers, dealers or other third parties, might not have the opportunity to exercise a right to vote.

Table of Contents

We have adopted a shareholders rights plan, which, together with the other anti-takeover provisions of our articles of association, could discourage a third party from acquiring us, which could limit our shareholders opportunity to sell their shares, including ordinary shares represented by our ADSs, at a premium.

In November 2006, we adopted our amended and restated articles of association, which became effective immediately upon completion of our initial public offering in December 2006. Our current articles of association contain provisions that limit the ability of others to acquire control of our company or cause us to engage in change-of-control transactions. In November 2008, our board of directors adopted a shareholders rights plan. Under this rights plan, one right was distributed with respect to each of our ordinary shares outstanding at the closing of business on December 1, 2008. These rights entitle the holders to purchase ordinary shares from us at half of the market price at the time of purchase in the event that a person or group obtains ownership of 15% or more of our ordinary shares (including by acquisition of the ADSs representing an ownership interest in the ordinary shares) or enters into an acquisition transaction without the approval of our board of directors.

This rights plan and the other anti-takeover provisions of our articles of association could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. Our existing authorized ordinary shares confer on the holders of our ordinary shares equal rights, privileges and restrictions. Our board of directors may, without further action by our shareholders, issue additional ordinary shares, or issue shares of a preferred class and attach to such shares special rights, privileges or restrictions, which may be different from those associated with our ordinary shares, up to the amount of the authorized capital and the number of authorized shares of our company. Preferred shares could also be issued with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult. If our board of directors decides to issue ordinary shares or preferred shares, the price of our ADSs and the notes may fall and the voting and other rights of the holders of our ordinary shares and ADSs may be materially and adversely affected.

Holders of our ADSs may not be able to participate in rights offerings that are made available to our shareholders, and may not receive cash dividends if it is impractical to make them available to them.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. Under the deposit agreement, the depositary bank will not make rights available to holders of our ADSs unless the distribution to ADS holders of both the rights and any related securities are either registered under the Securities Act of 1933, as amended, or the Securities Act, or exempted from registration under the Securities Act with respect to all holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, holders of our ADSs may be unable to participate in our rights offerings and may experience dilution in their holdings.

Table of Contents

In addition, the depositary of our ADSs has agreed to pay to holders of our ADSs the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. Holders of our ADSs will receive these distributions in proportion to the number of ordinary shares their ADSs represent. However, the depositary may, at its discretion, decide that it is inequitable or impractical to make a distribution available to any holders of ADSs. For example, the depositary may determine that it is not practicable to distribute certain property through the mail, or that the value of certain distributions may be less than the cost of mailing them. In these cases, the depositary may decide not to distribute such property and holders of our ADSs will not receive such distribution.

Holders of our ADSs may be subject to limitations on transfer of their ADSs.

Our ADSs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deem it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

We are a Cayman Islands company and, because judicial precedent regarding the rights of shareholders is more limited under Cayman Islands law than that under U.S. law, our shareholders may have less protection for their shareholder rights than they would under U.S. law.

Our corporate affairs are governed by our memorandum and articles of association, the Companies Law, Cap. 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary responsibilities of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as that from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States. In addition, some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. As a result of all of the above, shareholders of a Cayman Islands company may have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would as shareholders of a company incorporated in a jurisdiction in the United States. The limitations described above will also apply to the depositary, which is treated as the holder of the shares underlying our ADSs.

You may have difficulty enforcing judgments obtained against us.

We are a Cayman Islands company and substantially all of our assets are located outside of the United States. Substantially all of our current operations are conducted in the PRC. In addition, most 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 are located outside the United States. As a result, it may be difficult for you to effect service of process within the United States upon these persons. It may also be difficult for you to enforce in U.S. courts 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, most of whom are not residents in the United States and the substantial majority of whose assets are located outside of the United States. In addition, there is uncertainty as to whether the courts of the Cayman Islands or the PRC would recognize or enforce judgments of U.S. courts.

Table of Contents

Item 4. Information on the Company

A. History and Development of the Company

Our legal and commercial name is Trina Solar Limited. Our predecessor company, Changzhou Trina Solar Energy Co., Ltd., or Trina China, was incorporated in December 1997. In anticipation of our initial public offering, we incorporated Trina in the Cayman Islands as a listing vehicle on March 14, 2006. Trina acquired all of the equity interests in Trina China through a series of transactions that have been accounted for as a recapitalization and Trina China became our wholly-owned subsidiary. We conduct substantially all of our operations through Trina China. In December 2006, we completed our initial public offering of our ADSs and listed our ADSs on the NYSE. In June 2007, we completed a follow-on public offering of our ADSs. In July 2008, we completed public offerings of $138 million aggregate principal amount of convertible senior notes due 2013 and 4,073,194 ADSs for a related ADS borrow facility.

Our principal executive offices are located at No. 2 Tian He Road, Electronics Park, New District, Changzhou, Jiangsu 213031, People s Republic of China. Our telephone number at this address is (+86) 519 8548-2008 and our fax number is (+86) 519 8517-6025. Our registered office in the Cayman Islands is located at the offices of Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands.

Investor inquiries should be directed to us at the address and telephone number of our principal executive offices set forth above. Our website is www.trinasolar.com. The information contained on our website does not form part of this annual report. Our agent for service of process in the United States is CT Corporation System located at 111 Eighth Avenue, New York, New York 10011.

B. Business Overview

Overview

We are an integrated solar-power products manufacturer based in China. Since we began our solar-power products business in 2004, we have integrated the manufacturing of ingots, wafers and solar cells for use in our PV module production. Our PV modules provide reliable and environmentally-friendly electric power for residential, commercial, industrial and other applications worldwide.

We produce standard monocrystalline PV modules ranging from 165 watts (W) to 230 W in power output and multicrystalline PV modules ranging from 210 W to 230 W in power output. Our PV modules are built to general specifications as well as to our customers and end-users specifications. We sell and market our products worldwide, including in a number of European countries, such as Germany, Spain and Italy, where government incentives have accelerated the adoption of solar power. We are also targeting sales in emerging solar power markets such as the Benelux market, China, Czech Republic, France, South Korea and the United States. We sell our products to distributors, wholesalers and PV system integrators, including Enipower Spa, Gestamp Solar S.L. and IBC Solar AG.

Table of Contents

In the past, we addressed the industry-wide shortage of polysilicon by establishing supply relationships with several global and domestic silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies. As a result, we have developed strong relationships with several suppliers. In addition, our experience and know-how in manufacturing monocrystalline based products have enabled us to use a portion of low-cost, reclaimable silicon raw materials in the production of ingots, as compared to other manufacturing methods generally used in the industry. We also expanded our platform in November 2007 to include the production of multicrystalline ingots, wafers and solar cells for use in our PV module production. In 2008, we used a higher proportion of virgin polysilicon than in the past several years as polysilicon became widely available in the market and we were able to have access to high quality and a stable supply of polysilicon. In the fourth quarter of 2008, reclaimable silicon materials accounted for no more than 25% of our total silicon requirements, compared to approximately 80% in the fourth quarter of 2007. We purchase polysilicon and reclaimable silicon materials from our network of over 20 suppliers. We also capitalize on our low-cost manufacturing capability in China to produce quality products at competitive costs.

As of December 31, 2008, we had an annual module manufacturing capacity of approximately 350 megawatts (MW). We expect to increase our total annual production capacity from ingots to PV modules by up to 200 MW to a total of up to 550 MW by the end of 2009. The specific increase will be based on market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets. We are implementing a strategy to focus on preserving cash, which includes reducing costs and reviewing and taking a prudent approach towards our capital expansion plan. Accordingly, we cannot assure you that we will not revise our capacity expansion plan after we finalize our review.

We began our research and development efforts in solar products in 1999. In 2002, we began our system integration business, in late 2004, we began our current PV module business, and in April 2007, we began our production of solar cells. In 2006, 2007 and 2008, we had net revenues of $114.5 million, $301.8 million and $831.9 million, respectively, and net income of $13.2 million, $35.4 million and $61.4 million, respectively, from our continuing operations.

Products

We design, develop, manufacture and sell PV modules. PV modules are arrays of interconnected solar cells encased in a weatherproof frame. We produce standard solar monocrystalline modules ranging from 165 W to 230 W in power output and multicrystalline modules ranging from 210 W to 230 W in power output, built to general specifications for use in a wide range of residential, commercial, industrial and other solar power generation systems. The variation in power output is based on the conversion efficiency of the cells used in our PV modules, as well as the types of cells. We assemble PV modules either from monocrystalline or multicrystalline cells. We also design and produce PV modules based on our customers specifications. Our PV modules are sealed, weatherproof and able to withstand high levels of ultraviolet radiation and moisture. We sell our modules under our own brand.

Table of Contents

Manufacturing

We manufacture ingots, wafers, cells and modules. As of December 31, 2008, our facilities include ingot, wafer, cell and module production lines with annual manufacturing capacity of approximately 350 MW for each segment in our value chain. We expect to increase our total annual production capacity from ingots to PV modules by up to 200 MW in 2009. The specific increase will be based on market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets. We are implementing a strategy to focus on preserving cash, which includes reducing costs and reviewing and taking a prudent approach towards our capital expansion plan. Accordingly, we cannot assure you that we will not revise our capacity expansion plan after we finalize our review. The following table sets forth our manufacturing capacity and production output in MW equivalent of module production as a result of our ramp-up for each of our facilities.

Manufacturing Facility	Manufacturing Commencement Date	Annual Manufacturing Capacity as of December 31, 2008	Production Output for the Year Ended December 31, 2008	Estimated Maximum Annual Manufacturing Capacity as of December 31, 2009
Silicon ingots	August 2005	350 MW [1]	166 MW [2]	550 MW
Silicon wafers	February 2006	350 MW [1]	194 MW [2]	550 MW
Solar cells	April 2007	350 MW [1]	209 MW [2]	550 MW
PV modules	November 2004	350 MW [1]	211 MW	550 MW

(1) These are approximate figures due to discrepancies of the manufacturing capacity for each stage of our solar power value chain.

(2) Includes modules produced but not shipped as of December 31, 2008.

Silicon feedstock. We purchase polysilicon and reclaimable silicon raw materials from various suppliers, including silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies. We test and categorize reclaimable silicon raw materials based on their technical properties. These reclaimable silicon raw materials then undergo mechanical grinding and chemical cleaning before they are mixed using our proprietary formula. Our ability to mix the materials in the right proportion is

critical to the production of high-quality silicon ingots. In the fourth quarter of 2008, we had an average silicon usage of approximately 6.3 grams per watt, compared to approximately 8.0 grams per watt in the fourth quarter of 2007.

Ingots. We began manufacturing monocrystalline ingots in August 2005 with pulling machines. As of December 31, 2008, we had 110 pulling machines for manufacturing monocrystalline ingots, which can yield 110 MW of modules annually based on current manufacturing processes, and 45 directional solidification system (DSS) furnaces for the manufacturing of multicrystalline ingots, which can yield 240 MW of modules annually based on current manufacturing processes.

Table of Contents

To produce monocrystalline silicon ingots, silicon raw materials are first melted in a quartz crucible in the pulling furnace. Then, a thin crystal seed is dipped into the melted material to determine the crystal orientation. The seed is rotated and then slowly extracted from the melted material which solidifies on the seed to form a single crystal.

We began commercial production of multicrystalline ingots in November 2007. To produce multicrystalline ingots, molten silicon is changed into a block through a casting process in a DSS furnace. Crystallization starts by gradually cooling the crucibles in order to create multicrystalline ingot blocks. The resulting ingot blocks consist of multiple smaller crystals as opposed to the single crystal of a monocrystalline ingot.

Wafers. Currently, we slice monocrystalline wafers to a 170 micron or 180 micron thickness and multicrystalline wafers to a 180 micron thickness, while maintaining a low breakage rate. We began manufacturing wafers in February 2006. After the ingots are inspected, monocrystalline ingots are squared by squaring machines. Through high-precision cutting techniques, the squared ingots are then sliced into wafers by wire saws using steel wires and silicon carbon powder. To produce multicrystalline wafers, multicrystalline ingots are first cut into pre-determined sizes. After a testing process, the multicrystalline ingots are cropped and the usable parts of the ingots are sliced into wafers by wire saws by the same high-precision cutting techniques as used for slicing monocrystalline wafers. After being inserted into frames, the wafers go through a cleansing process to remove debris from the previous processes, and are then dried. Wafers are inspected for contaminants then packed and transferred to our solar cell production facilities. Our annual wafer manufacturing capacity as of December 31, 2008 was approximately 350 MW of modules based on current manufacturing processes.

Solar cells. We currently produce our own solar cells for use in our PV modules. We have historically purchased solar cells from third-party solar cell manufacturers. After we installed our ingot and wafer production lines, we began manufacturing ingots and wafers in-house and outsourced the fabrication of solar cells to solar cell manufacturers. To reduce our dependence on third-party solar cell manufacturers and to increase our efficiencies both in solar cell and PV module manufacturing, we began the production of monocrystalline cells in April 2007 and achieved a conversion efficiency of up to 17.5% as of December 31, 2008. In November 2007, we began producing multicrystalline cells and achieved a conversion efficiency of up to 16.3% as of December 31, 2008. In 2008, we were able to meet our solar cell needs with our in-house production capabilities. We currently have 14 production lines with an annual manufacturing capacity of approximately 350 MW.

To manufacture solar cells, the crystalline silicon wafer is used as the base substrate. After cleaning and texturing the surface, emitter is formed through a diffusion process. The front and back sides of the wafer are then isolated using the plasma etching technique, the oxide formed during the diffusion process is removed and thus an electrical field is formed. We then apply an anti-reflective coating to the surface of the cell using plasma enhanced chemical vapors to enhance the absorption of sunlight. The front and back sides of the cell are screen printed with metallic inks and the cell then undergoes a fire treatment in order to preserve its mechanical and electrical properties. The cell is tested and classified according to its parameters.

Table of Contents

PV modules. We began module manufacturing in November 2004. We increased our annual manufacturing capacity of modules from approximately 6 MW per year as of November 2004 to approximately 350 MW per year as of December 31, 2008. We currently have 26 production lines.

To assemble PV modules, we interconnect multiple solar cells by taping and stringing the cells into a desired electrical configuration. The interconnected cells are laid out, laminated in a vacuum, cured by heating and then packaged in a protective light-weight aluminum frame. Through this labor-intensive process, our PV modules are sealed and become weatherproof and are able to withstand high levels of ultraviolet radiation and moisture.

PV module assembly remains a labor intensive process. We leverage China s lower labor costs by using a greater degree of labor in our manufacturing process when it proves to be more efficient and cost-effective than using automated equipment. We are in close proximity to Chinese solar equipment manufacturers that offer many of the solar manufacturing equipment we require at competitive prices compared to most similar machinery offered by international solar equipment manufacturers.

Depending on prevailing market prices of silicon raw materials, from time to time we purchase ingots and wafers from manufacturers to take advantage of favorable market prices relative to other silicon raw materials. We also purchase wafers to supplement any shortfalls we have with respect to our production capacity or to take advantage of favorable market conditions. As a result, we have developed relationships with various international and domestic suppliers of ingots and wafers.

Silicon Raw Material Supplies

Our business depends on our ability to obtain silicon raw materials, including polysilicon, reclaimable silicon raw materials and, from time to time, ingots. We procure polysilicon from international manufacturers as well as international and domestic distributors, and purchase reclaimable silicon raw materials from over 20 suppliers, including semiconductor manufacturers and silicon processing companies. In addition to our headquarters, we have four offices located in Asia and Europe to conduct procurement activities. We believe our procurement team s geographical proximity to the supply sources helps us better communicate with the suppliers and respond to them more efficiently. We believe our efforts to procure silicon raw materials from various sources will enable us to better control the silicon supply chain, increase manufacturing efficiency, and reduce margin pressure.

According to Solarbuzz, the average long-term supply contract price of polysilicon increased from approximately $45 to $50 per kilogram delivered in 2006 to $60 to $65 in 2007 and further increased to $60 to $75 per kilogram in 2008. In addition, according to Solarbuzz, spot prices for solar grade polysilicon were in the range of $230 to $375 per kilogram for most of the first half of 2008, rose to a peak of $400 to $450 per kilogram by mid-2008, and decreased rapidly to $150 to $300 per kilogram in the fourth quarter of 2008. Due to the industry-wide shortage of polysilicon experienced during the past few years, we have purchased polysilicon using short-term, medium-term and long-term contracts. From the fourth quarter of 2008, the price of polysilicon decreased due to the excess supply of polysilicon resulting from the slowed growth of the global solar power market. Due to excess supply, we are seeking to re-negotiate some of our existing, higher priced medium-term and long-term contracts.

Table of Contents

We have executed agreements with suppliers to obtain our silicon raw material requirements to support our estimated production output in 2009. In addition, we are in discussions with our suppliers to secure our expected silicon raw material requirements needed for our production output in 2010. We intend to leverage the global reach of our procurement personnel to secure our silicon requirements.

We have entered into medium-term and long-term supply contracts to procure silicon feedstock of different grades with Chinese and international suppliers, which provide us with the ability to meet our future requirements. These medium-term and long-term suppliers include OCI Company Ltd. (formerly DC Chemical Co., Ltd.), Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. (a subsidiary of GCL Silicon Technology Holdings Ltd.), or Jiangsu Zhongneng, and Wacker Chemie AG. Our medium-term and long-term contracts have delivery terms beginning in 2008, 2009 or 2010 and a fixed price or a price to be determined on a quarterly or annual basis. Several of our long-term contracts contain price adjustment clauses that offer a market-linked price formula that would apply if the market price is lower than the originally agreed price in any given year. These contracts also require us to make an advance payment of a certain negotiated amount. We are currently renegotiating some of our higher priced medium-term and long-term contracts.

To secure sufficient feedstock to support our current and planned sales growth, in March 2008, we entered into a long-term polysilicon supply agreement with Jiangsu Zhongneng, which was supplemented by a supplemental agreement entered into in August 2008. Under this agreement and its supplemental agreement, Jiangsu Zhongneng is required to supply to us an aggregate of 1,726 metric tons of polysilicon, with 226 metric tons delivered in 2008 and 1,500 metric tons to be delivered in 2009. Jiangsu Zhongneng is also required to supply us with an aggregate of 15,200 metric tons of polysilicon and 912.0 million wafers in the period starting from 2010 to 2015. The prices of the polysilicon and wafers are predetermined subject to periodic adjustments. Jiangsu Zhongneng operates a polysilicon production facility in the Jiangsu Province, China. The wafer purchases will allow us to supplement any shortfalls we have with respect to our production capacity and to take advantage of favorable market prices.

Quality Assurance

Our quality control was set up according to the quality system requirements of ISO 9001:2000. Our quality control consists of three components: incoming inspections through which we ensure the quality of the raw materials that we source from third parties, in-process quality control of our manufacturing processes, and output quality control of finished products through inspection and by conducting reliability and other tests.

We have received international certifications for our quality assurance programs, including ISO 9001:2000, which we believe demonstrates our technological capabilities as well as instill customer confidence. The following table sets forth the major certifications we have received and major test standards our products have met as of the date of this annual report.

Table of Contents

Certification Test Date	Certification or Test Standard	Relevant Products
December 2007	ISO 9001:2000 quality system certification	Manufacturing and sales of silicon, ingots, casting, silicon wafers, solar cells and PV modules
April 2008	Golden Sun product certification	PV modules sold in China
August 2008	UL 1703 certification	PV modules sold in the United States
September and October 2008	ASU-PTL product certification	PV modules sold in Europe