

Trina Solar LTD  
Form F-1/A  
May 21, 2007  
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As filed with the Securities and Exchange Commission on May 21, 2007

Registration No. 333-142970

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**Amendment No. 1 to**  
**FORM F-1**  
**REGISTRATION STATEMENT**

*UNDER*

*THE SECURITIES ACT OF 1933*

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**Trina Solar Limited**

(Exact name of Registrant as specified in its charter)

**Not Applicable**

(Translation of Registrant's name into English)

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**Cayman Islands**  
(State or other jurisdiction of  
incorporation or organization)

**3674**  
(Primary Standard Industrial  
Classification Code Number)  
**No. 2 Xin Yuan Yi Road**

**Not Applicable**  
(I.R.S. Employer  
Identification Number)

**Electronic Park, New District**

**Changzhou, Jiangsu 213031**

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People's Republic of China

(86 519) 548 2008

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this registration statement

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. " "

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. " \_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. " \_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earliest effective registration statement for the same offering. " \_\_\_\_\_

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box. " "

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**CALCULATION OF REGISTRATION FEE**

Title of each class of securities to be registered(2)(3)	Amount to be registered	Proposed maximum aggregate offering price(1)	Amount of registration fee
<b>Ordinary shares, par value \$0.00001 per ordinary share</b>	<b>621,722,200</b>	<b>\$ 328,580,183</b>	<b>\$ 10,088</b>

- (1) Estimated solely for the purpose of determining the amount of registration fee in accordance with Rule 457(c) under the Securities Act of 1933 based on \$52.85, which is the average of the high and low trading prices on May 18, 2007 of the Registrant's American depositary shares listed on the New York Stock Exchange and representing the Registrant's ordinary shares.
- (2) Includes (i) ordinary shares initially offered and sold outside the United States that may be resold from time to time in the United States either as part of their distribution or within 40 days after the later of the effective date of this registration statement and the date the shares are first bona fide offered to the public and (ii) ordinary shares that may be purchased by the underwriters pursuant to an over-allotment option. These ordinary shares are not being registered for the purposes of sales outside of the United States.
- (3) American depositary shares issuable upon deposit of the ordinary shares registered hereby have been registered under a separate registration statement on Form F-6 (Registration No.333-139161). Each American depositary share represents 100 ordinary shares.

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**The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to such Section 8(a), may determine.**

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The information in this prospectus is not complete and may be changed. Neither we nor the selling shareholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting any offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

**Subject to Completion**

**Preliminary Prospectus dated May 21, 2007**

**PROSPECTUS**

**5,406,280 American Depositary Shares**

**Trina Solar Limited**

**Representing 540,628,000 Ordinary Shares**

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Trina Solar Limited, or Trina, is offering 3,600,016 American depositary shares, or ADSs, and the selling shareholders identified in this prospectus are offering an additional 1,806,264 ADSs. Each ADS represents 100 ordinary shares, par value \$0.00001 per share, of Trina. ADSs are evidenced by American depositary receipts, or ADRs. We will not receive any proceeds from the ADSs sold by the selling shareholders.

Our ADSs are listed on the New York Stock Exchange under the symbol TSL. On May 18, 2007, the last sale price for our ADSs as reported on the New York Stock Exchange was \$51.43 per ADS.

**Investing in the ADSs and ordinary shares involves risks that are described in the Risk Factors section beginning on page 8 of this prospectus.**

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	<b>Per ADS</b>	<b>Total</b>
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to Trina	\$	\$
Proceeds, before expenses, to the selling shareholders	\$	\$

The underwriters may also purchase up to an additional 810,942 ADSs from Trina at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus to cover over-allotments.

Neither the Securities and Exchange Commission nor any state securities regulator has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The ADSs will be ready for delivery on or about \_\_\_\_\_, 2007.

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**Merrill Lynch & Co.**

**Merrill Lynch &  
Co.**

**Cowen and Company**

**Deutsche Bank Securities**

**CLSA Asia-Pacific Markets**

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The date of this prospectus is \_\_\_\_\_, 2007.

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You should rely only on the information contained in this prospectus. We have not, and the underwriters have not, authorized any other person, including the selling shareholders, to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor the selling shareholders nor the underwriters are making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operation and prospects may have changed since that date.

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**Conventions That Apply to This Prospectus**

Unless the context otherwise requires, in this prospectus,

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

Trina refers to Trina Solar Limited;

shares or ordinary shares refers to our ordinary shares;

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 Taiwan, Hong Kong and Macau;

RMB or Renminbi refers to the legal currency of China, \$ or U.S. dollars, refers to the legal currency of the United States, and Euro refers to the legal currency of the European Union.

This prospectus contains translations of certain Renminbi amounts into U.S. dollars at the rate of RMB7.8041 to \$1.00, the noon buying rate in effect on December 29, 2006 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 that the Renminbi or U.S. dollar amounts referred to in this prospectus 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. On May 18, 2007, the noon buying rate was RMB7.6636 to \$1.00.



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**SUMMARY**

*You should read the following summary together with the entire prospectus, including the more detailed information regarding us, the ADSs being sold in this offering, and our financial statements and related notes appearing elsewhere in this prospectus.*

**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 manufacture of monocrystalline ingots, wafers and solar cells for use in our solar module production. By the end of 2007, we expect to expand our platform to include the production of multicrystalline ingots, wafers and solar cells for use in our solar module production. Our solar modules provide reliable and environmentally-friendly electric power for residential, commercial, industrial and other applications worldwide.

We produce standard solar modules ranging from 160 watts (W) to 185 W in power output. Our solar modules are built to general specifications as well as to our customers' 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 sell most of our products to distributors, wholesalers and system integrators, including Corporación Zigor S.A., Scatec AS, SKR Energie GmbH, Schüco International KG, Conergy AG and Phönix SonnenStrom AG. Since our initial public offering in December 2006, we have expanded into other European markets such as Spain and Italy and have added customers such as Enerpoint srl, Enercat, Enerpal and Ensol.

We address the industry-wide shortage of polysilicon by forging supply relationships with several global and domestic silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies. In addition, our experience and know-how in working with monocrystalline silicon have enabled us to use a higher proportion of low-cost, reclaimable silicon raw materials in the production of ingots, as compared to other manufacturing methods generally used in the industry. We purchase polysilicon and reclaimable silicon materials from our network of over 20 suppliers and leverage our ability to use a higher proportion of lower-cost reclaimable silicon materials, currently accounting for up to 80% of our total silicon requirements. We have entered into long-term supply contracts with polysilicon suppliers, including Wacker Chemie AG and DC Chemical, as the industry-wide supply of polysilicon expands in line with current expectations. We also capitalize on our low-cost manufacturing capability in China to produce quality products at competitive costs.

As of December 31, 2006, we had an annual module manufacturing capacity of 59.8 megawatts (MW). We expect to increase our total annual production capacity from ingots to solar modules, to 150 MW by the end of 2007 and to 350 MW by the end of 2008. We currently use toll manufacturers by providing wafers to them and receiving solar cells from them in return. Such wafers are converted into solar cells using the toll manufacturers' own technology. From time to time, we also sell a portion of our ingots to toll manufacturers and purchase wafers from them in return. Toll manufacturing is a type of contract manufacturing frequently used in the solar power industry whereby part of the manufacturing process is outsourced to qualified third parties, or toll manufacturers. The raw materials used by toll manufacturers are usually supplied by the originating company in order to control sourcing quality. To complete our vertical integration strategy, we have built our own solar cell plant with an initial annual manufacturing capacity of 50 MW and have begun production of solar cells in April 2007.

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 solar module business, and in April 2007 we began our production of solar cells. In 2005 and 2006, we had net revenues of \$27.3 million and \$114.5 million, respectively, and net income of \$3.2 million and \$13.2 million, respectively, from our continuing operations.

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### **Industry Background**

Solar power is the generation of electricity from sunlight through a process known as the photovoltaic effect. Solar cells perform the conversion of sunlight into electricity. These solar cells are interconnected and packaged into solar modules, which are mounted in areas with exposure to the sun. Solar power systems, which are comprised of multiple solar modules and system components such as batteries, inverters, electronic components and supporting structures, are used in residential, commercial and industrial applications in both on-grid and off-grid applications. The market for on-grid applications, where solar power is used to supplement a customer's electricity purchased from a utility grid, represents the largest and fastest growing segment of the market.

The solar power market has grown significantly in the past several years. According to Photon Consulting, an independent solar energy research firm, the global solar power market as measured by annual solar power production increased by 41.7% from 1.2 gigawatts (GW) in 2004 to 1.7 GW in 2005. During the same period, solar power industry revenues grew from approximately \$8 billion in 2004 to approximately \$12 billion in 2005. Photon Consulting projects that solar power industry revenues and solar power production will reach \$72 billion and 10.4 GW, respectively, by 2010. Solar power production is expected to grow at a compound annual growth rate, or CAGR of 43.7% from 2005 to 2010, driven largely by rising grid prices, government initiatives and new distribution channels, according to Photon Consulting.

Currently, the majority of installed solar systems employ crystalline silicon technology. According to Solarbuzz, an independent solar energy research firm, crystalline silicon-based solar power products represented 92% of the market in 2006, compared to 8% for thin-film-based solar power products.

We believe the following factors will continue to drive the growth of the solar power industry:

*Growing electric power demand, supply constraints and desire for energy security.* Electric power demand is expected to increase from 16.1 trillion kilowatt hours in 2002 to 31.7 trillion kilowatt hours by 2030 while the generation, transmission and distribution infrastructure is capacity constrained and dependent upon fossil fuel feedstock. Further, with rising fuel prices and for national security reasons many governments seek to further develop domestic sources of energy;

*Government incentives for solar power.* Many national and regional governments are encouraging the adoption of solar and other renewable sources of power through capital cost rebates, feed-in tariff programs and tax incentives; and

*Growing awareness of the advantages of solar energy.* Solar power offers a variety of advantages over other sources of power, including the absence of the need for fuel, high reliability, no negative environmental effects, greater efficiency during peak demand periods, and modularity and distributed generation capabilities. We believe that when the cost of electricity generated from solar power approaches the cost of electricity purchased from conventional sources of power, or grid parity, solar power will become more attractive to consumers and result in greater demand for solar power than currently estimated.

### **Our Competitive Strengths**

We believe that the following competitive strengths enable us to compete effectively and to capitalize on the rapid growth in the global solar power market:

vertically integrated business model;

proven execution by an established management team with significant industry expertise;

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experienced producer of monocrystalline solar power products;

active management of upstream raw material supplies; and

low-cost, China-based manufacturing capability.

### **Our Strategies**

Our objective is to be a global leader in the development and manufacturing of solar power products. We intend to achieve this objective by pursuing the following strategies:

leverage our vertically integrated manufacturing capabilities;

expand our manufacturing capacity;

expand and maintain flexible raw material supply sources;

pursue large-scale production to achieve a grid parity cost structure in the long run;

continue to enhance efficiency of our manufacturing process;

further diversify our geographic sales effort and customer base; and

target the emerging solar market in China.

### **Our Challenges**

We believe that the following are some of the major risks and uncertainties that may materially affect us:

our limited operating history in the solar module business may not serve as an adequate basis to judge our prospects and future results of operations;

failure to obtain sufficient quantities of silicon raw materials could decrease our revenues and prevent us from expanding as planned;

we may not succeed in developing and manufacturing solar cells to implement our vertical integration strategy;

we face competition from both renewable and conventional energy sources and products;

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the reduction or elimination of government subsidies and economic incentives for on-grid solar energy applications could cause a reduction in demand for our products and in our revenues;

higher interest rates may cause demand for solar power products to decline;

we may be unable to manage our expanding operations effectively; and

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

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### **First Quarter 2007 Operating Results**

The following is a summary of our selected unaudited consolidated financial results for the first quarter of 2007. In the first quarter of 2007, we had:

net revenues of \$42.5 million, an increase of 9.8% from \$38.8 million in the fourth quarter of 2006;

gross profit of \$9.5 million, an increase of 5.3% from \$9.0 million in the fourth quarter of 2006;

net income from our continuing operations of \$4.7 million, an increase of 7.3% from \$4.4 million in the fourth quarter of 2006; and

net income of \$4.8 million, an increase of 3.7% from \$4.6 million in the fourth quarter of 2006.

For a more complete discussion of our operating results for the first quarter of 2007, see Recent Developments.

### **Corporate Structure**

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 Solar Limited, or 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 the initial public offering of our ADSs and listed our ADSs on the New York Stock Exchange.

### **Corporate Information**

Our principal executive offices are located at No. 2 Xin Yuan Yi Road, Electronics Park, New District, Changzhou, Jiangsu 213031, People's Republic of China. Our telephone number at this address is (86-519) 548-2008 and our fax number is (86-519) 548-5869.

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](http://www.trinasolar.com). The information contained on our website does not form part of this prospectus. Our agent for service of process in the United States is CT Corporation System located at 111 Eighth Avenue, New York, New York 10011.

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**The Offering**

American depositary shares offered:

By Trina 3,600,016 ADSs.

By the selling shareholders 1,806,264 ADSs.

The ADSs Each ADS represents 100 ordinary shares, par value \$0.00001 per share. To understand the terms of the ADSs, you should carefully read the section in this prospectus entitled "Description of American Depositary Shares." We also encourage you to read the deposit agreement, which is an exhibit to the registration statement that includes this prospectus.

ADSs outstanding immediately after the offering 11,216,580 ADSs.

Ordinary shares outstanding immediately after the offering 2,537,687,322 ordinary shares.

Use of proceeds We intend to use the proceeds of this offering for the following purposes:

approximately \$140 million to expand our manufacturing lines for the production of silicon ingots, wafers, solar cells and solar modules;

approximately \$25 million to purchase raw materials;

approximately \$10 million for research and development; and

the remaining amount for other general working capital purposes.

We will not receive any of the proceeds from the sale of ADSs by the selling shareholders.

Depositary The Bank of New York

Over-allotment option We have granted to the underwriters an option, which is exercisable within 30 days from the date of this prospectus, to purchase up to an aggregate of 810,942 additional ADSs.

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Risk factors

See Risk Factors and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in the ADSs.

New York Stock Exchange symbol

TSL

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**Table of Contents****SUMMARY FINANCIAL AND OPERATING DATA**

The following summary consolidated statement of operations data for the years ended December 31, 2004, 2005 and 2006 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. You should read the summary consolidated financial data in conjunction with those financial statements and the accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations. 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.

	Year Ended December 31,		
	2004	2005	2006
	(in thousands, except for operating data and percentages)		
<b>Consolidated Statement of Operations Data</b>			
Net revenues	\$ 414	\$ 27,275	\$ 114,500
Gross profit	41	6,289	30,050
Operating expenses	368	2,018	13,130
Income (loss) from continuing operations	(327)	4,271	16,920
Net income (loss) from continuing operations	(366)	3,220	13,174
Net income (loss) from discontinued operations	354	91	(753)
Net income (loss)	\$ (12)	\$ 3,311	\$ 12,421
<b>Consolidated Financial Data</b>			
Gross margin	9.8%	23.1%	26.2%
Net margin of continuing operations	(88.6)%	11.8%	11.5%
<b>Consolidated Operating Data</b>			
Solar modules shipped (in MW)	0.12	6.79	27.39
Average selling price (\$/W)	\$ 3.45	\$ 4.02	\$ 3.98



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The following table presents a summary of the balance sheet data as of December 31, 2006:

on an actual basis;

on a pro forma basis to give effect to (i) the issuance and sale of 510,300 ADSs, representing 51,030,000 ordinary shares, upon the exercise of the over-allotment option in January 2007 by the underwriters in our initial public offering and (ii) the issuance and grant of 5,120,994 restricted shares in January 2007 under our 2006 share incentive plan; and

on a pro forma as adjusted basis to give effect to the issuance and sale of 360,001,600 ordinary shares in the form of ADSs by us in this offering, at the assumed public offering price of \$51.43 per ADS based on the last trading price of our ADSs on May 18, 2007, after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us and assuming no exercise of the underwriters' over-allotment option.

	As of December 31, 2006		
	Actual	Pro Forma (in thousands)	Pro Forma As Adjusted <sup>(1)</sup>
<b>Consolidated Balance Sheet Data</b>			
Cash and cash equivalents	\$ 93,380	\$ 102,160	\$ 278,675
Total assets	251,745	260,525	437,040
Short-term borrowings	71,409	71,409	71,409
Total liabilities	94,591	94,591	94,591
Total shareholders' equity	157,154	165,934	342,449
Total liabilities and shareholders' equity	251,745	260,525	437,040

- (1) \$1.00 increase (decrease) in the assumed public offering price of \$51.43 per ADS would increase (decrease) the amounts representing cash and cash equivalents, total assets and total shareholders' equity by \$3.5 million.

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**RISK FACTORS**

*An investment in our ADSs involves significant risks. You should carefully consider the risks described below before you decide to buy our ADSs. If any of the following risks actually occurs, our business, prospects, financial condition and results of operations could be materially harmed, the trading price of our ADSs could decline and you could lose all or part of your investment.*

**Risks Related to Our Company and Our Industry**

**Our limited operating history may not serve as an adequate measure of our future prospects and results of operations.**

There is limited historical information available about our company upon which you can base your evaluation of our business and prospects. We only began our current solar module manufacturing business in late 2004. As a result, we have shipped only a limited number of solar modules and have recognized limited revenues from sales of our solar modules. Our future success will depend on our ability to expand our manufacturing capacity significantly beyond its current level. Our business model, technology and ability to achieve satisfactory manufacturing yields for monocrystalline silicon ingots, wafers, cells and modules at higher volumes are unproven. Accordingly, you should consider our business and prospects in light of the risks, expenses and challenges that we will face as an early-stage company seeking to develop and manufacture new products in a rapidly growing market.

**The current industry-wide shortage of polysilicon and the continuing increase of the price of reclaimable silicon may constrain our revenue growth and decrease our gross margins and profitability.**

Polysilicon is an essential raw material in the production of solar cells and modules, and is also used in the semiconductor industry. There is currently 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 \$35-\$40 per kilogram delivered in 2005 to \$50-\$55 per kilogram delivered in 2006, and is expected to increase to \$60-\$65 per kilogram delivered in 2007. In addition, according to Solarbuzz, spot prices for incremental supplies of polysilicon, in some cases, reached \$300 per kilogram in 2006. We purchase most of our polysilicon from the spot market using short-term contracts and purchase orders. Based on our experience, we believe that the average price of polysilicon will continue to remain high or increase in the foreseeable future until a significant portion of polysilicon manufacturing capacity currently under construction becomes available. Any increase in demand from the semiconductor industry will exacerbate the shortage. Increases in the price of polysilicon have in the past increased our production costs and may adversely impact our cost of revenues and net income.

We purchase polysilicon from a limited number of international and domestic suppliers. We cannot assure you that our polysilicon procurement strategy will be successful in ensuring an adequate supply of polysilicon at commercially viable prices to meet our solar module production requirements. If we are unable to meet customer demand for our products because of a shortage of polysilicon, we could lose customers, market share and revenues. This would materially and adversely affect our business, financial condition and results of operations.

To reduce our reliance on polysilicon, we produce monocrystalline silicon ingots and wafers by using a high proportion 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. However, prices of reclaimable silicon raw materials are also increasing due to growing demand, and we cannot assure you that we will be able to secure sufficient reclaimable silicon raw materials at commercially viable prices. If we fail to procure sufficient reclaimable silicon raw materials at reasonable prices, we may be unable to timely manufacture our products or our products may be available only at a higher cost, and we could be prevented from

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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.

### **We may be adversely affected by volatile market and industry trends, such as the recent decrease in the price of solar modules.**

There are indications that the solar energy market and industry have been experiencing a price decrease in solar modules since the second half of 2006. Demand for solar modules in major markets, such as Germany, slowed in 2006, partly due to the adverse weather conditions during the winter season. With the continued strong global growth in production capacity of cells and modules, the production of modules has risen further compared to 2005. For example, companies in the semiconductor industry have begun to move to solar wafer and cell production. The growth of young but promising markets, such as Spain and Italy, may not be rapid enough to absorb the modules that are made available on the market. As a result, the price of modules has been adversely affected. Our business may be materially and adversely affected by the negative market and industry trend if it continues, particularly with respect to the fall in the price of solar modules when more existing and new manufacturers are ramping up production capacity in modules.

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

We began manufacturing our own solar cells in April 2007. Prior to April 2007, we did not have any significant operating experience in solar cell manufacturing and face challenges in starting solar cell production. 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 made significant capital expenditures to purchase manufacturing equipment for solar cell production. We will also need to invest significantly in research and development in solar cell technology 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 two production lines with an annual manufacturing capacity of 50 MW, and plan to increase our annual manufacturing capacity to 150 MW by adding four additional lines by the end of 2007. Of the solar cell lines to be added by the end of 2007, we intend to add two lines, equal to approximately 50 MW of capacity, that are capable of producing multicrystalline solar cells. We are targeting a conversion efficiency of approximately 15.5% for our multicrystalline solar cells. If we fail to implement our plan as expected or experience a delay in the ramp up, our business and results of operations may be materially and adversely affected.

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

The technology for the manufacture 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. Further, most of our equipment is made domestically, which may be less reliable than foreign-made equipment.

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

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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.

### **The reduction or elimination of government subsidies and economic incentives for on-grid solar energy applications could cause demand for our products and our revenues to decline.**

Most of our products are used for on-grid applications, where solar power is used to supplement a customer's electricity purchased from the utility grid. We believe that the near-term growth of the market for on-grid applications depends in large part on the availability and size of government subsidies and economic incentives for the use of solar power. The reduction or elimination of government subsidies and economic incentives may adversely hinder the growth of this market or result in increased price competition, which could cause our revenues to decline.

Today, the cost of solar power substantially exceeds the cost of power furnished by the electric utility grid in many locations, when upfront system costs are factored into cost per kilowatt hour. As a result, federal, state and local governmental bodies in many countries, such as Germany, Spain, Italy, the United States, Japan and China, have provided subsidies and economic incentives in the form of feed-in tariffs, rebates, tax credits and other incentives to 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 subsidies and economic incentives could be reduced or eliminated altogether. For example, Germany, our most significant market, has been a strong supporter of solar power products and systems. Utilities in Germany are generally obliged to purchase electricity generated from grid-connected solar power installation at defined feed-in tariff rates, which decline over time according to a predetermined schedule. Any political or market changes in Germany could result in significant reductions or eliminations of subsidies or economic incentives, such as a more accelerated reduction of feed-in tariffs than as planned according to the current schedule. Reductions in, or eliminations of, government subsidies and economic incentives for on-grid solar energy applications before the solar power industry reaches the economies of scale necessary for solar power to become cost-effective in a non-subsidized market place could result in decreased demand for our products and cause our revenues to decline.

### **Higher interest rates may cause demand for solar power products to decline.**