

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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New York, New York 10011

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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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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.**

Some of our end-customers of solar power products rely on long-term loans to finance their purchases of solar power systems. An increase in interest rates will have the effect of increasing the prices that end-customers pay for solar power products. While we believe that the overall cost of solar power products will decline as the current polysilicon supply shortage is alleviated, any increase in interest rates may potentially offset some of the benefits derived from reductions in the cost of solar power products, thereby decreasing the demand for our 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

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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, results of operations and financial condition.

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.

**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 and Spain, 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 multicrystalline technology or 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 enhancements for existing solar power products to keep pace with evolving technologies and changing customer requirements.

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Currently, we are focused on monocrystalline silicon technology and the expansion of high efficient production capacity based on monocrystalline silicon. Some of our competitors also produce solar modules using multicrystalline silicon wafers, which have lower energy conversion efficiency. However, producing multicrystalline silicon wafers is cheaper than producing monocrystalline silicon wafers of similar dimensions.

In addition, thin-film technologies are competing technologies in the solar power industry. According to Solarbuzz, in 2006, thin-film technologies represented 8% of the solar market, compared to 92% 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 solar 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.

**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 solar module manufacturing companies such as Yingli Green Energy Holding Co., Ltd., BP Solar International Inc., ErSol Solar Energy AG, Suntech Power Holdings Co., Ltd. and Sunways AG. Some of our competitors also manufacture solar cells and supply us with solar cells. 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. In addition, the barriers to entry are relatively low in the solar module manufacturing business, given that manufacturing solar modules is labor intensive and requires limited technology. Because of the current scarcity of polysilicon, supply chain management and financial strengths are the key barriers to entry. However, if the shortage of polysilicon eases, these barriers may no longer exist and many new competitors may enter the industry and cause the industry to rapidly become over-saturated.

Many of our current and potential competitors have longer operating histories, greater name recognition, access to larger customer bases and resources and significantly greater economies of scale, financial, sales and marketing, manufacturing, distribution, research and development, technical and other resources than us. In addition, our competitors may have stronger relationships or may enter into exclusive relationships with some of our key customers. As a result, they may be able to respond more quickly to changing customer demands or to devote greater resources to the development, promotion and sales of their products than we can. Our business relies on sales of our solar modules, and our competitors with more diversified product offerings may be better positioned to withstand a decline in the demand for solar modules. New competitors or alliances among existing competitors could emerge and rapidly acquire significant market share, which would harm our business. If we fail to compete successfully, our business would suffer and we may lose or be unable to gain market share.

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**Our dependence on a limited number of solar cell manufacturers could prevent us from timely delivering our products to our customers in the required quantities, which could result in order cancellations and decreased revenues.**

We currently enter into toll manufacturing arrangements by providing silicon wafers to toll manufacturers and receiving solar cells from them in return. In connection with such toll manufacturing arrangements, we rely on third-party toll manufacturers' technologies to convert silicon wafers into solar cells. Our major suppliers of solar cells include Suntech Power Holdings Co., Ltd., Q-Cells AG, Motech Industries Inc. and DeSolar Co., Ltd. Some of our suppliers are also competitors as they are also makers of solar modules. To reduce our reliance on the toll manufacturers, we built our own solar cell lines with an initial annual manufacturing capacity of 50 MW to produce solar cells for use in our solar modules. However, if we fail to develop or maintain our relationships with these or our other manufacturers or if these manufacturers experience delays in supplying solar cells to us, 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 delivering our products to our customers in the required quantities and at prices that are profitable. These manufacturers could also decide not to supply solar cells to us due to competitive concerns. Problems of this kind could cause us to experience order cancellations and loss of market share and harm our reputation.

**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 restrict adequately 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.

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

We plan to secure our supply of polysilicon increasingly through fixed-price, prepaid supply arrangements with both overseas and domestic suppliers. If the price of polysilicon decreases in the future and we are locked into fixed price, prepaid arrangements, our cost of revenues will be higher than otherwise. Additionally, if demand for our solar modules decreases, we may incur costs associated with carrying excess inventory, which may have a material adverse effect on our cash flows. To the extent we are not able to pass these increased costs and expenses on to our customers, our business, results of operations and financial condition may be materially and adversely affected. Since some of our supply contracts may require pre-payment of a substantial portion of the contract price, we may not be able to recover such pre-payments and would suffer losses should such suppliers fail to fulfill their delivery obligations under the contracts or fail to deliver raw materials meeting the quality stipulated in the contracts. For example, in 2006, we incurred a charge of \$2.2 million resulting from failures of three of our suppliers to deliver goods as specified in the contracts and to reimburse us for our advance payment due to such suppliers' own financial difficulties. Such incidents could occur in the future and could have a material adverse effect on our operations.

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### **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 monocrystalline ingot pulling 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 achieve 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 of silicon we will pay 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 dependence on a limited number of customers may cause significant fluctuations or declines in our revenues.**

We currently sell a substantial portion of our solar modules to a limited number of customers. In 2005 and 2006, sales to our top five customers accounted for approximately 59.1% and 48.9%, respectively, of our total net revenues. Each of Inowatt Elektro Technik GmbH and Soleko GmbH contributed over 10% of our net revenues in 2005. Each of Corporación Zigor S.A. and Scatec AS contributed over 10% of our net revenues in 2006.

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;

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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.

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**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.

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. However, if any dispute arises between our executive officers and us, these agreements may not be enforceable in China, where these executive officers reside, in light of the uncertainties with China's legal system. 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 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.

**Future acquisitions may have an adverse effect on our ability to manage our business.**

If we are presented with appropriate opportunities, we may acquire technologies, businesses or assets that are complementary to our business. Future acquisitions would expose us to potential risks, including risks associated with the assimilation of new technologies, businesses and personnel, unforeseen or hidden liabilities, the diversion of management attention and resources from our existing business, and the inability to generate sufficient revenues to offset the costs and expenses of acquisitions. Any difficulties encountered in the acquisition and integration process may have an adverse effect on our ability to manage 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 2005 and 2006, we sold approximately 96.9% and 90.7%, 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;

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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; and

trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could increase the prices of our products and make us less competitive in some countries.

**Problems with product quality or product performance may cause us to incur significant warranty expenses, which may damage our market reputation, reduce our market share and cause sales to decline.**

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. In addition, as we currently use toll manufacturers to produce solar cells for our modules, we have limited control over the quality of the solar cells we receive. Unlike solar 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 or other defective components of solar modules or other reasons. Furthermore, the solar cells and other components that we purchase from third-party suppliers are typically sold to us with no or only limited warranties.

On the other hand, our solar modules are typically sold with a two-year warranty for defects in material and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. We believe our warranty periods are consistent with industry practice. We have only begun to sell solar modules since November 2004. Although we conduct accelerated reliability testing of our solar modules, our solar modules have not been and cannot be tested in an environment simulating the two-year and 25-year warranty periods. 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.

**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.

**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 manufacture 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.

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**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 solar 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.

**We have significant outstanding bank borrowings, and we may not be able to arrange adequate financing when they mature.**

As of December 31, 2006, we had \$93.4 million in cash and cash equivalents and \$76.5 million in outstanding borrowings, of which approximately \$71.4 million was due within one year. We might not be able to obtain extensions of these borrowings in the future as they mature. In the event 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. 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. In addition, repaying these borrowings with cash generated by our operating activities will divert our financial resources from the requirements of our ongoing operations and future growth, and would have a material adverse effect on our business, financial condition and future prospects.

**There were historical deficiencies with our internal controls and there remain areas of our internal and disclosure controls that require improvement. If we fail to maintain an effective system of internal controls, we may be unable to accurately report our financial results or prevent fraud, and investor confidence and the market price of our common shares may, therefore, be adversely impacted.**

We are subject to reporting obligations under the U.S. securities laws. The Securities and Exchange Commission, or 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 its internal controls over financial reporting in its prospectus, which contains management's assessment of the effectiveness of the company's internal controls over financial reporting. In addition, an independent registered public accounting firm must attest to and report on management's assessment of the effectiveness of the company's internal controls over financial reporting. These requirements will first apply to us for the fiscal year ending on December 31, 2007. Our management may conclude that our internal controls over our financial reporting are not effective. Moreover, even if our management concludes that our internal controls over financial reporting is effective, our independent registered public accounting firm may still decline to attest to our management's assessment or may issue a report that is qualified if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. Our reporting obligations as a public company place a significant strain on our management, operational and financial resources and systems.

Prior to our initial public offering, we were a young, private company with limited accounting and other resources with which to adequately address our internal controls and procedures. As a result, in our past audits, our auditors had identified material weaknesses and deficiencies with our internal controls. In our audit for the fiscal year ended December 31, 2006, our auditors observed a number of weaknesses and deficiencies with respect to our internal controls under the standards established by the Public Company Accounting Oversight Board. The material weaknesses identified by our independent registered public accounting firm include (i) insufficient accounting resources to properly identify adjustments, analyze transactions and prepare financial statements in accordance with U.S. GAAP, (ii) a lack of formal accounting policies and procedures for U.S. GAAP to ensure that our accounting policies and procedures are appropriately or consistently applied, and (iii) weaknesses in our inventory management. Following the identification of these material weaknesses and other

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deficiencies, we have undertaken remedial steps to address them, including hiring additional staff, training our new and existing staff and augmenting our financial information technology systems.

We plan to continue to take additional steps to improve our internal and disclosure controls to meet the deadline for compliance with the requirements of Section 404 of the Sarbanes-Oxley Act. If, however, we fail to maintain the adequacy of our internal controls, we may not be able to conclude that we have effective internal controls over financial reporting. Moreover, effective internal controls over financial reporting are necessary for us to produce reliable financial reports and are important to help prevent fraud. As a result, our failure to achieve and maintain effective internal controls over financial reporting could result in the loss of investor confidence in the reliability of our financial statements, which in turn could harm our business and negatively impact the trading price of our ADSs. Furthermore, we anticipate that we will incur considerable costs and devote significant management time and efforts and other resources to comply with Section 404 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 transferor's 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.

### **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 interest of our other shareholders.

### **Fluctuations in exchange rates could adversely affect our business.**

Most of our sales are denominated in U.S. dollars, with the remainder in Renminbi and Euros, 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

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margins and could result in fluctuations in foreign exchange and operating gains and losses. In 2006, we entered into two short-term foreign exchange derivative contracts to protect against volatility of cash flows caused by fluctuations in exchange rates between Renminbi and U.S. dollars. We have not used any other forward contracts, currency options or borrowings to hedge our exposure to foreign currency exchange risk. 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.

**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 20 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.

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 slow 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



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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's 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.

**We rely on dividends paid by our subsidiary for our cash needs.**

We conduct substantially all of our operations through Trina China. We rely on dividends paid by Trina China for our cash needs, including the funds necessary to pay dividends and other cash distributions to our shareholders, to service any debt we may incur and to pay our operating expenses. The payment of dividends by entities organized in China is subject to limitations. 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 maintain a general reserve fund and a staff welfare and bonus fund. Contributions to such reserves are made from Trina China's net profit after taxation. As a result of these PRC laws and regulations, Trina China is restricted in its ability to transfer the net profit to us in the form of dividends. In addition, under a new PRC tax law to be effective in January 2008, dividends from Trina China to us may become subject to a 20% withholding tax. See Risks Related to Doing Business in China 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 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.

**Fluctuation in the value of the Renminbi may have a material adverse effect on your investment.**

The change in 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. 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 is permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. This change in policy has resulted in an approximately 8.0% appreciation of Renminbi against the U.S. dollar between July 21, 2005 and May 18, 2007. While the international reaction to the Renminbi revaluation has generally been positive, there remains significant international pressure on the PRC government to adopt an even more flexible currency policy, which could result in a further and more significant appreciation of the Renminbi against the U.S. dollar. On May 18, 2007, China's central bank announced that it would allow Renminbi to fluctuate more during each day's foreign exchange rate trading. As a portion of our costs and expenses is denominated in Renminbi, the revaluation in July 2005 and potential future adjustment or revaluation have increased and could further increase our costs in U.S. dollar terms. In addition, as we rely entirely on dividends paid to us by Trina China, any significant adjustment or 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 ordinary shares or ADSs. For example, to the extent that we need to convert U.S. dollars we receive from our overseas sales 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 ordinary shares or ADSs 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.

**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,

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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 could have a material adverse effect on our results of operations.**

The PRC government has provided various incentives to foreign invested enterprises. Because Trina China is a foreign invested enterprise engaged in manufacturing businesses and located in Changzhou, which is within a coastal economic zone, it is entitled to a preferential enterprise income tax rate of 24%. In addition, Trina China has been 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 has increased to 27% (24% enterprise income tax plus 3% local income tax) in 2007. However, because income from incremental investment to the registered capital of a foreign invested enterprise is entitled to a two-year exemption and a 50% reduction of the applicable income tax rate for the succeeding three years, and Trina China's registered capital was increased from \$7.28 million to \$40 million, Trina China is eligible for an income tax exemption for 81.8% of its income from August 2006 to December 2007 and a 50% reduction from January 2008 to December 2010. 18.2% of Trina China's income remains subject to a tax rate of 27% starting from January 2007. In addition, China's parliament, the National People's Congress, adopted the Enterprise Income Tax Law on March 16, 2007. This new tax law will replace the existing separate income tax laws for domestic enterprises and foreign-invested enterprises and become effective on January 1, 2008. Under the new tax law, a unified enterprise income tax rate is set at 25% for both domestic enterprises and foreign-invested enterprises. However, there will be a five-year transition period for foreign-invested enterprises. In addition, an enterprise that enjoys a preferential tax treatment for a fixed term may continue to enjoy such treatment until the fixed term expires. During the transition period, Trina China will be allowed to continue to enjoy the existing preferential tax treatment. In addition, under the new tax law, a resident enterprise, which includes an enterprise established outside of China with management located in China, will be subject to PRC income tax. If the PRC tax authorities subsequently determine that Trina should be deemed a resident enterprise, then Trina's global income will be subject to PRC income tax at a tax rate of 25%. The exemption to the 20% withholding tax on dividends distributed by foreign-invested enterprises to their foreign investors under the current tax laws may no longer be available under the new tax law. Since the new law has only been adopted recently, there is uncertainty as to how it should be interpreted or implemented. Any discontinuation of tax preferential tax treatment, any increase of the enterprise income tax rate applicable to Trina China, the imposition of PRC income tax on Trina's global income or the imposition of withholding tax on dividends distributed from Trina China to Trina could have a material adverse effect on our financial condition and results of operations.

**The approval of the Chinese Securities Regulatory Commission might have been required in connection with our initial public offering under a recently adopted PRC regulation, 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

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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. We believe, based on the advice of Fangda Partners, our PRC counsel, 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. On September 21, 2006, the CSRC published a notice specifying the documents and materials that are required to be submitted for obtaining CSRC approval. In the opinion of Fangda Partners, the new notice does not contradict its interpretation of the new regulation, nor does it add greater clarity to the applicability of the new regulation to us or our initial public offering. Based on the advice we have received from our PRC counsel, we did not seek the CSRC approval in connection with our initial public offering.

Since the new regulation has only recently been adopted, there is some uncertainty as to how this regulation will be interpreted or implemented. 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.

### **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.**

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.

### **We face risks related to health epidemics and other outbreaks.**

Our business could be adversely affected by the effects of avian flu, SARS or other epidemics or outbreaks. China reported a number of cases of SARS in April 2004. In 2005 and 2006, there have been reports on the occurrences of avian flu in various parts of China, including a few confirmed human cases and deaths. Any prolonged recurrence of avian flu, SARS or other adverse public health developments in China may have a material adverse effect on our business operations. These could include our ability to travel or ship our products outside of China, as well as temporary closure of our manufacturing facilities. Such closures or travel or shipment restrictions would severely disrupt our business operations and adversely affect our results of operations. We have not adopted any written preventive measures or contingency plans to combat any future outbreak of avian flu, SARS or any other epidemic.

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**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;

additions or departures of our executive officers and key research personnel;

announcements regarding patent litigation or the issuance of patents to us or our competitors;

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 markets have 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.

**Substantial future sales or perceived sales of our ADSs or ordinary shares in the public market could cause the price of our ADSs to decline.**

Sales of our ADSs or ordinary shares in the public market, or the perception that these sales could occur, could cause the market price of our ADSs to decline. As of March 31, 2007, we had 2,177,685,722 ordinary shares outstanding, including 581,030,000 ordinary shares represented by 5,810,300 ADSs. All ADSs are freely transferable without restriction or additional registration under the Securities Act of 1933. All shares owned by our directors, executive officers, selling shareholders and certain other shareholders will be available for sale upon the expiration of the 90-day lock-up period from the date of this prospectus placed on those shares in connection with this offering, subject to volume and other

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restrictions as applicable under Rule 144 and Rule 701 under the Securities Act. Any or all of these shares may be released prior to expiration of the relevant lock-up period at the discretion of the underwriters. For example, the underwriters have waived the lock-up provisions with respect to the shares being sold by us and the selling shareholders in this offering that were placed on those shares in connection with our initial public offering. To the extent shares are released before the expiration of the relevant lock-up period and these shares are sold into the market, the market price of our ADSs could decline.

**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 one of our shareholders. Instead, the depositary will be treated as the holder of the shares underlying 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.

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Except as described in this prospectus 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.

**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, 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.

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 Cayman Islands Companies Law and the common law of the Cayman Islands. The rights of shareholders to take action against our 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

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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.

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**SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

We make forward-looking statements in the Summary, Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations and Business sections and elsewhere throughout this prospectus. Whenever you read a statement that is not simply a statement of historical fact (such as when we describe what we believe, expect or anticipate will occur, and other similar statements), you must remember that our expectations may not be correct, even though we believe that they are reasonable. We do not guarantee that the transactions and events described in this prospectus will happen as described or that they will happen at all. You should read this prospectus completely and with the understanding that actual future results may be materially different from what we expect. The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We undertake no obligation, beyond that required by law, to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made, even though our situation will change in the future.

Whether actual results will conform with our expectations and predictions is subject to a number of risks and uncertainties, many of which are beyond our control, and reflect future business decisions that are subject to change. Some of the assumptions, future results and levels of performance expressed or implied in the forward-looking statements we make inevitably will not materialize, and unanticipated events may occur which will affect our results. The Risk Factors section of this prospectus describes the principal contingencies and uncertainties to which we believe we are subject.

This prospectus also contains data related to the solar power market in several countries, including China. These market data, including market data from Solarbuzz and Photon Consulting, each an independent solar energy research firm, include projections that are based on a number of assumptions. The solar power market may not grow at the rates projected by the market data, or at all. The failure of the market to grow at the projected rates may materially and adversely affect our business and the market price of our ADSs. In addition, the rapidly changing nature of the solar power market subjects any projections or estimates relating to the growth prospects or future condition of our market to significant uncertainties. If any one or more of the assumptions underlying the market data proves to be incorrect, actual results may differ from the projections based on these assumptions. You should not place undue reliance on these forward-looking statements.

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**USE OF PROCEEDS**

We will receive net proceeds for this offering of approximately \$176.5 million based on 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 offering expenses payable by us and assuming that the underwriters do not exercise their over-allotment option. We intend to use the net proceeds we receive from 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.

Depending on future events and other changes in the business climate, we may determine at a later time to use the net proceeds for different purposes. Pending the use of the net proceeds, we intend to invest the net proceeds in a variety of capital preservation instruments, including short-term, investment-grade, interest-bearing instruments.

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

**Table of Contents****CAPITALIZATION**

The following table sets forth our capitalization, 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 offering expenses payable by us, assuming that the underwriters do not exercise their over-allotment option.

You should read this table together with our financial statements and the related notes included elsewhere in this prospectus and the information under Management's Discussion and Analysis of Financial Condition and Results of Operations.

	As of December 31, 2006		
	Actual	Pro Forma (in thousands)	Pro Forma As Adjusted <sup>(2)</sup>
Long-term borrowings	\$ 5,122	\$ 5,122	\$ 5,122
Shareholders' equity:			
Ordinary shares, \$0.00001 par value, 5,000,000,000 shares authorized; 2,121,534,728 shares issued and outstanding <sup>(1)</sup>	21	22	25
Additional paid-in capital	139,671	148,450	324,962
Retained earnings	15,622	15,622	15,622
Other comprehensive income	1,840	1,840	1,840
<b>Total shareholders' equity</b>	<b>157,154</b>	<b>165,934</b>	<b>342,449</b>
<b>Total capitalization</b>	<b>\$ 162,276</b>	<b>\$ 171,056</b>	<b>\$ 347,571</b>

(1) Includes 45,725,760 restricted shares granted to our officers, employees and consultants in July and August 2006 under our 2006 share incentive plan.

(2) A \$1.00 increase (decrease) in the assumed public offering price of \$51.43 per ADS would increase (decrease) the amounts representing total shareholders' equity and total capitalization by \$3.5 million.

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Our net tangible book value as of December 31, 2006 was approximately \$154.8 million, or \$0.07 per ordinary share and \$7.30 per ADS. Net tangible book value represents the amount of our total consolidated tangible assets, minus the amount of our total consolidated liabilities.

Without taking into account any other changes in such net tangible book value after December 31, 2006, other than 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, (ii) the issuance and grant of 5,120,994 restricted shares in January 2007 under the 2006 share incentive plan and (iii) 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 \$51.43 per ADS based on the last trading price of our ADSs on May 18, 2007, after deduction of the underwriting discounts and commissions and estimated offering expenses of this offering payable by us, our pro forma net tangible book value as of December 31, 2006 would have increased to \$340.1 million or \$0.13 per ordinary share or \$13.40 per ADS. This represents an immediate increase in net tangible book value of \$0.06 per ordinary share or \$6.11 per ADS, to the existing shareholders and an immediate dilution in net tangible book value of \$0.38 per ordinary share or \$38.03 per ADS, to investors purchasing ADSs in this offering. The following table illustrates such per share dilution:

Public offering price per ordinary share	\$ 51.43
Net tangible book value per ordinary share as of December 31, 2006	\$ 0.07
Pro forma net tangible book value per ordinary share after giving effect to the issuance of 51,030,000 ordinary shares and 5,120,994 restricted shares and this offering	\$ 0.13
Pro forma net tangible book value per ADS after giving effect to the issuance of 51,030,000 ordinary shares and 5,120,994 restricted shares and this offering	\$ 13.40
Amount of dilution in net tangible book value per ordinary share to new investors in this offering	\$ 0.38
Amount of dilution in net tangible book value per ADS to new investors in this offering	\$ 38.03

A \$1.00 increase (decrease) in the assumed public offering price of \$51.43 per ADS would increase (decrease) our pro forma net tangible book value after giving effect to the offering by \$3.5 million, the pro forma net tangible book value per ordinary share and per ADS after giving effect to the issuance of 51,030,000 ordinary shares and 5,120,994 restricted shares and this offering by \$0.01 per ordinary share and \$0.14 per ADS and the dilution in pro forma net tangible book value per ordinary share and per ADS to new investors in this offering by \$0.01 per ordinary share and \$0.86 per ADS, assuming no change to the number of ADSs offered by us as set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and other offering expenses.

The pro forma information discussed above is illustrative only. Our net tangible book value following the completion of this offering is subject to adjustment based on the actual public offering price of our ADSs and other terms of this offering determined at pricing.

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The following table summarizes, on a pro forma basis as of December 31, 2006, the differences between existing shareholders, including holders of the 510,300 ADSs, representing 51,030,000 ordinary shares, and holders of the 5,120,994 restricted shares all issued in January 2007, and the new investors with respect to the number of ordinary shares (in the form of ADSs or shares) purchased in this offering, the total consideration paid and the average price per ordinary share/ADS paid before deducting the underwriting discounts and commissions and estimated offering expenses.

	Ordinary Shares				Average Price Per Ordinary Share	Average Price Per ADS
	Purchased		Total Consideration			
	Number	Percent	Amount	Percent		
Existing shareholders	2,177,685,722	85.8%	\$ 154,905,536	45.6%	\$ 0.07	\$ 7.11
New investors	360,001,600	14.2	185,148,823	54.4	0.51	51.43
<b>Total</b>	<b>2,537,687,322</b>	<b>100.0%</b>	<b>\$ 340,054,359</b>	<b>100.0%</b>		

A \$1.00 increase (decrease) in the assumed public offering price of \$51.43 per ADS would increase (decrease) total consideration paid by new investors, total consideration paid by all shareholders and the average price per ADS paid by all shareholders by \$3.5 million, \$3.5 million and \$0.14, respectively, assuming no change in the number of ADSs sold by us as set forth on the cover page of this prospectus and without deducting underwriting discounts and commissions and other offering expenses.

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**DIVIDEND POLICY**

We have never declared or paid any dividends, nor do we have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

As we are a holding company, we rely on dividends paid to us by Trina China, our wholly-owned subsidiary in the PRC, for our cash requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders, service any debt we may incur and pay our operating expenses. In China, the payment of dividends is subject to limitations. PRC regulations currently permit payment of dividends only out of Trina China's accumulated profits as determined in accordance with PRC accounting standards and regulations. According to the relevant PRC laws and regulations applicable to Trina China and its articles of association, Trina China is required to maintain a general reserve fund and a staff welfare and bonus fund. Trina China is required to transfer 10% of its profit after taxation to its general reserve fund until the balance reaches 50% of its registered capital. The general reserve fund may be used to make up prior years' losses incurred and, with approval from the relevant government authority, to increase capital. Trina China is also required to allocate a portion of its net profit after taxation to its staff welfare and bonus fund, which may not be distributed to its equity owners. However, the amount to be allocated to the staff welfare and bonus fund is at the sole discretion of the board of directors. In 2004, 2005 and 2006, Trina China's board of directors did not elect to make any appropriation to the staff welfare and bonus fund. As a result of these PRC laws and regulations, Trina China is restricted in its ability to transfer the net profit to us in the form of dividends. The registered capital and the general reserve fund of Trina China that are restricted for distribution as dividends to us are included in calculating our net restricted assets as set forth in note 15 to our consolidated financial statements for the years ended December 31, 2004, 2005 and 2006 included elsewhere in this prospectus. They do not appear as separate line items in our financial statements.

Our board of directors has complete discretion on whether to pay dividends, subject to the approval of our shareholders. Even if our board of directors decides to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant. Any dividend we declare will be paid to the holders of ADSs, subject to the terms of the deposit agreement, to the same extent as holders of our ordinary shares, less the fees and expenses payable under the deposit agreement. Any dividend we declare will be distributed by the depository to the holders of our ADSs. Cash dividends on our ordinary shares, if any, will be paid in U.S. dollars. See Description of American Depositary Shares.

**Table of Contents****MARKET PRICE INFORMATION FOR OUR ADSs**

Our ADSs, each representing 100 ordinary shares, have been listed on the New York Stock Exchange since December 19, 2006. Our ADSs trade under the symbol TSL. For the period from December 19, 2006 to May 18, 2007, the trading price of our ADSs on the New York Stock Exchange has ranged from \$17.06 to \$68.90 per ADS. The following table provides the high and low trading prices for our ADSs on the New York Stock Exchange for each of the months since our initial public offering.

<b>Month</b>	<b>Sale Price</b>	
	<b>High</b>	<b>Low</b>
2006:		
December (from December 19)	\$ 26.75	\$ 18.82
2007:		
January	30.70	17.06
February	50.94	27.11
March	49.84	35.50
April	68.90	43.60
May (through May 18)	54.67	51.03

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**ENFORCEABILITY OF CIVIL LIABILITIES**

We are incorporated in the Cayman Islands to take advantage of certain benefits associated with being a Cayman Islands exempted company, such as political and economic stability, an effective judicial system, a favorable tax system, the absence of exchange control or currency restrictions and the availability of professional and support services. However, certain disadvantages accompany incorporation in the Cayman Islands. These disadvantages include that the Cayman Islands has a less developed body of securities laws as compared to the United States and provides significantly less protection to investors. In addition, Cayman Islands companies do not have standing to sue before the federal courts of the United States. Our constituent documents do not contain provisions requiring that disputes be submitted to arbitration, including those arising under the securities laws of the United States, between us, our officers, directors and shareholders.

Substantially all of our current operations are conducted in China, and substantially all of our assets are located in China. A majority of our directors and officers are nationals or residents of jurisdictions other than the United States and a substantial portion of their assets are located outside of the United States. As a result, it may be difficult for a shareholder to effect service of process within the United States upon us or such persons, or to enforce against us or them judgments obtained in United States courts, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state in the United States.

We have appointed CT Corporation System as our agent to receive service of process with respect to any action brought against us in the United States District Court for the Southern District of New York under the federal securities laws of the United States or of any state in the United States or any action brought against us in the Supreme Court of the State of New York in the County of New York under the securities laws of the State of New York.

Conyers Dill & Pearman, our counsel as to Cayman Islands law, and Fangda Partners, our counsel as to PRC law, have advised us, respectively, that there is uncertainty as to whether the courts of the Cayman Islands and China, respectively, would:

recognize or enforce judgments of United States courts obtained against us or our directors or officers predicated upon the civil liability provisions of the securities laws of the United States or any state in the United States; or

entertain original actions brought in each respective jurisdiction against us or our directors or officers predicated upon the securities laws of the United States or any state in the United States.

Conyers Dill & Pearman has further advised us that a final and conclusive judgment in the federal or state courts of the United States under which a sum of money is payable, other than a sum payable in respect of taxes, fines, penalties or similar charges, may be subject to enforcement proceedings as debt in the courts of the Cayman Islands under the common law doctrine of obligation. Civil liability provisions of the U.S. federal and state securities law permit punitive damages against us; however, according to Conyers Dill & Pearman, the Cayman Island courts would not recognize or enforce judgments against us to the extent the judgment is punitive or penal. It is uncertain as to whether a judgment obtained from the U.S. courts under civil liability provisions of the securities law would be determined by the Cayman Islands courts as penal or punitive in nature. Such a determination has yet to be made by any Cayman Islands court.

Fangda Partners has advised us further that the recognition and enforcement of foreign judgments are provided for under PRC Civil Procedures Law. Courts in China may recognize and enforce foreign judgments in accordance with the requirements of PRC Civil Procedures Law based on treaties between China and the country where the judgment is made or on reciprocity between jurisdictions. As there is currently no treaty or other agreement of reciprocity between China and the United States governing the recognition of a judgment, there is uncertainty as to whether a PRC court would enforce a judgment rendered by a court in the United States.

**Table of Contents****RECENT DEVELOPMENTS**

The following is a summary of our selected unaudited consolidated financial results for the first quarter of 2007. Because our business is relatively new, our operating results for any particular quarter are not necessarily indicative of our future results. Furthermore, our quarterly operating results may fluctuate from period to period based on changes in customer demand and the seasonality of consumer spending and industry demand for solar power products. See Management's Discussion and Analysis of Financial Condition and Results of Operations Selected Quarterly Results of Operations.

	<b>March 31, 2006 (unaudited)</b>	<b>Three Months Ended December 31, 2006 (unaudited) (in thousands)</b>	<b>March 31, 2007 (unaudited)</b>
<b>Consolidated Statement of Operations Data</b>			
Net revenues	\$ 14,452	\$ 38,766	\$ 42,548
Cost of revenues	9,875	29,740	33,040
Gross profit	4,577	9,026	9,508
Total operating expenses	1,037	3,167	5,040
Net income from continuing operations	2,894	4,388	4,706
Net income	2,838	4,584	4,755

*Net revenues.* Our net revenues in the first quarter of 2007 were \$42.5 million, a 9.8% increase from \$38.8 million in the prior quarter ended December 31, 2006, and an increase of 194.4% from \$14.5 million in the first quarter of 2006. Our net revenues increased primarily due to an increase in the volume of the solar modules we sold. The volume of the solar modules we sold increased to 10.52 MW, from 8.98 MW in the fourth quarter of 2006 and 3.34 MW in the first quarter of 2006 due to the expansion of our manufacturing capacity. Our average sales price decreased from \$4.03 per watt in the first quarter of 2006 and \$3.86 per watt in the fourth quarter of 2006 to \$3.80 per watt in the first quarter of 2007 due to slower demand for solar modules in major markets such as Germany.

*Cost of revenues.* Our cost of revenues in the first quarter of 2007 were \$33.0 million, an 11.1% increase from \$29.7 million in the prior quarter ended December 31, 2006, and an increase of 234.6% from \$9.9 million in the first quarter of 2006. The increases were due to growth of its solar module business and increases in the price of silicon raw materials. Cost of revenues in the first quarter of 2007 included \$15,111 of share-based compensation expenses.

*Gross profit.* Our gross profit in the first quarter of 2007 was \$9.5 million, an increase of 5.3% from \$9.0 million in the fourth quarter of 2006, and an increase of 107.7% from \$4.6 million in the first quarter of 2006. Our gross margin decreased from 31.7% in the first quarter of 2006 and 23.3% in the fourth quarter of 2006 to 22.3% in the first quarter of 2007 primarily due to the decrease of our average selling price.

*Operating expenses.* Our operating expenses in the first quarter of 2007 were \$5.0 million, an increase of 59.1% from \$3.2 million in the fourth quarter of 2006, and an increase of 386.0% from \$1.0 million in the first quarter of 2006. The increases were primarily due to an increase in research and development expenses associated with testing our newly installed solar cell lines as well as higher selling expenses and general and administrative expenses to support the rapid growth of our business. Our research and development expenses in the first quarter of 2007 were \$0.8 million, \$0.5 million of which were related to the testing of our solar cell lines. Operating expenses in the first quarter of 2007 also included \$0.3 million of share-based compensation expenses.

*Interest expenses.* Our interest expense was \$1.2 million in the first quarter of 2007, compared to \$1.1 million in the fourth quarter of 2006 and \$0.2 million in the first quarter of 2006. The increase from the fourth quarter of 2006 was due to an increase in the outstanding balance of our short-term borrowings.

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*Net income from continuing operations.* Net income from our continuing operations was \$4.7 million in the first quarter of 2007, an increase of 7.3% from \$4.4 million in the fourth quarter of 2006, and an increase of 62.6% from \$2.9 million in the first quarter of 2006.

*Net income.* As a result of foregoing, our net income was \$4.8 million in the first quarter of 2007, an increase of 3.7% from \$4.6 million in the fourth quarter of 2006, and an increase of 67.5% from \$2.8 million in the first quarter of 2006.

Earnings per fully diluted ADS was \$0.223 in the first quarter of 2007, compared to \$0.276 in the fourth quarter of 2006 and \$0.284 in the first quarter of 2006.

As of March 31, 2007, we had \$28.6 million in cash and cash equivalents and \$74.1 million in outstanding borrowings, including \$68.9 million in short-term borrowings. As of the same date, we had total assets of \$264.5 million, total liabilities of \$92.9 million and total shareholders equity of \$171.6 million. As of March 31, 2007, our accounts receivable were \$42.0 million, and our advances to suppliers were \$62.0 million.

**Table of Contents****SELECTED CONSOLIDATED FINANCIAL AND OPERATING DATA**

The following selected consolidated statement of operations data for the years ended December 31, 2004, 2005 and 2006 and the selected consolidated balance sheet data as of December 31, 2004, 2005 and 2006 have been derived from our audited financial statements included elsewhere in this prospectus. The selected consolidated financial data should be read in conjunction with those financial statements and the accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations below. Our consolidated financial statements are prepared and presented in accordance with U.S. GAAP. Our historical results do not necessarily indicate our results expected for any future periods.

Our selected consolidated statement of operations data for the year ended December 31, 2003 and our consolidated balance sheet as of December 31, 2003 have been derived from our audited consolidated financial statements which are not included in this prospectus.

Our selected consolidated statement of operations data for the year ended December 31, 2002 and our consolidated balance sheet as of December 31, 2002 have been derived from our unaudited consolidated financial statements which are not included in this prospectus. Our unaudited consolidated financial statements have been prepared on the same basis as our audited consolidated financial statements.

	2002	2003	Year Ended December 31,		2006
			2004	2005	
	(in thousands, except for operating data and percentages)				
<b>Consolidated Statement of Operations Data</b>					
Net revenues	\$ 6,451	\$ 2,712	\$ 414	\$ 27,275	\$ 114,500
Cost of revenues	4,312	1,771	373	20,986	84,450
Gross profit	2,139	942	41	6,289	30,050
Operating expenses:					
Selling expenses			66	521	2,571
General and administrative expenses	238	295	40	1,375	8,656
Research and development expenses	59	50	262	122	1,903
Total operating expenses	297	345	368	2,018	13,130
Income (loss) from continuing operations	1,842	597	(327)	4,271	16,920
Interest expenses	75	7	73	470	2,137
Interest income		1	4	16	261
Other income (expenses)		(36)	(35)	(27)	(82)
Income (loss) before income taxes	1,767	554	(431)	3,790	14,962
Income tax expenses (benefits)	133	35	(52)	570	1,788
Minority interest		5	13		
Net income (loss) from continuing operations	1,634	524	(366)	3,220	13,174
Net income (loss) from discontinued operations	153	(396)	354	91	(753)
Net income (loss)	\$ 1,787	\$ 128	\$ (12)	\$ 3,311	\$ 12,421

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	Year Ended December 31,				
	2002	2003	2004	2005	2006
(in thousands, except for operating data and percentages)					
<b>Earnings per ordinary share from continuing operations</b>					
Basic	0.002	0.001		0.003	0.010
Diluted	0.002	0.001		0.003	0.010
<b>Earnings per ADS from continuing operations</b>					
Basic	0.163	0.052	(0.037)	0.322	0.978
Diluted	0.163	0.052	(0.037)	0.322	0.959
<b>Earnings per ordinary share</b>					
Basic	0.002			0.003	0.009
Diluted	0.002			0.003	0.009
<b>Earnings per ADS</b>					
Basic	0.179	0.013	(0.001)	0.331	0.922
Diluted	0.179	0.013	(0.001)	0.331	0.904
<b>Weighted average ordinary shares outstanding</b>					
Basic	1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000	1,038,316,484
Diluted	1,000,000,000	1,000,000,000	1,000,000,000	1,000,000,000	1,058,483,593
<b>Weighted average ADS outstanding</b>					
Basic	10,000,000	10,000,000	10,000,000	10,000,000	10,383,165
Diluted	10,000,000	10,000,000	10,000,000	10,000,000	10,584,836

**Consolidated Financial Data**

Gross margin	33.2%	34.7%	9.8%	23.1%	26.2%
Net margin of continuing operations	25.3%	19.3%	(88.6)%	11.8%	11.5%

**Consolidated Operating Data**

Solar modules shipped (in MW)			0.12	6.79	27.39
Average selling price (\$/W)			\$ 3.45	\$ 4.02	\$ 3.98

	As of December 31,				
	2002	2003	2004	2005	2006
(in thousands)					
<b>Consolidated Balance Sheet Data</b>					
Cash and cash equivalents	\$ 2,193	\$ 776	\$ 3,395	\$ 1,224	\$ 93,380
Inventories	376		541	6,696	32,230
Accounts receivable, net		807	81	4,924	29,353
Other receivables	52	98	238	817	1,228
Property, plant and equipment, net	74	63	758	9,630	51,419
Total assets	6,835	5,035	11,192	32,298	251,745
Short-term borrowings	336	63	3,656	6,628	71,409
Accounts payable	2,028	711	1,390	3,845	9,147
Total current liabilities	4,564	2,604	6,178	12,715	88,068
Accrued warranty costs			4	272	1,400
Long-term borrowings				4,957	5,122
Total shareholders' equity	2,271	2,399	5,010	14,355	157,154
Total liabilities and shareholders' equity	\$ 6,835	\$ 5,035	\$ 11,192	\$ 32,298	\$ 251,745

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**MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL  
CONDITION AND RESULTS OF OPERATIONS**

*You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the section entitled "Selected Consolidated Financial and Operating Data" and our consolidated financial statements and the related notes included elsewhere in this prospectus. The discussion in this section contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and 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 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 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.

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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.

Our net revenues have increased rapidly in recent years. In 2006, our net revenues were \$114.5 million compared to \$27.3 million in 2005. Our net revenues increased primarily due to our increased manufacturing capacity as demand for our products remained strong. In addition, our gross margins during those periods improved from 23.1% to 26.2%, and we recorded net income from continuing operations of \$13.2 million in 2006 compared to net income of \$3.2 million in 2005. Our gross margins and net income improved as the average selling prices of our products increased and as we enhanced vertical integration and achieved greater economies of scale, which partially offset higher silicon raw material costs.

The most significant factors that affect the financial performance and results of operations of our solar products business are:

industry demand;

government subsidies and economic incentives;

availability and price of polysilicon and reclaimable silicon raw materials;

vertically integrated manufacturing capabilities; and

product pricing.

### *Industry Demand*

Our business and revenue growth depends on market demand for solar power. Although solar power technology has been used for several decades, the solar power market has only grown significantly in the past several years. According to Photon Consulting, the global solar power market, as measured by annual solar power production, increased by 41.7% from 1.2 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 CAGR of 43.7% from 2005 to 2010, driven largely by rising grid prices, government initiatives and new distribution channels, according to Photon Consulting.

### *Government Subsidies and Economic Incentives*

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. Today, the cost of solar power substantially exceeds the cost of power provided by the electric utility grid in many locations, when upfront system costs are factored into cost per kilowatt. As a result, governmental bodies in many countries, most notably Germany, Spain, Italy, the United States, Japan and China, have provided subsidies and economic incentives to reduce dependency on non-renewable sources of energy. These subsidies and economic incentives have come in the form of capital cost rebates, feed-in tariffs and tax credits and other incentives to end users, distributors, system integrators and manufacturers of solar power products. The demand for our solar modules in our targeted or potential markets is affected significantly by these government subsidies and economic incentives.

### *Availability and Price of Polysilicon and Reclaimable Silicon Raw Materials*

Reclaimable silicon raw materials are essential raw materials for our business. Our proprietary process technology allows us to use a higher proportion (currently approximately 80%) of reclaimable silicon raw materials in the production of monocrystalline silicon ingots. The costs of these reclaimable silicon raw materials have historically been significantly less than the costs of polysilicon. However, due to the solar power industry's



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growing demand for reclaimable silicon raw materials, prices of these reclaimable silicon raw materials are also increasing. We currently purchase reclaimable silicon raw materials from over 20 suppliers, including semiconductor manufacturers and silicon processing companies. Moreover, we are currently in discussions with other China-based semiconductor manufacturers to secure additional reclaimable silicon raw materials.

For the procurement of reclaimable raw materials, we enter into short-term contracts with terms of no more than six months each. The contracts provide for a fixed price and fixed amount and generally require prepayment prior to shipment. Most of the contracts give us the right to reject any shipment by our suppliers that does not meet our quality standards based on usability and resistivity of the materials. The contracts also specify a time period during which we can inspect the goods to ensure their quality.

Increases in the price of polysilicon have in the past increased our production costs and may impact our cost of revenues and net income. 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. 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.

We purchase polysilicon mostly from silicon distributors and silicon manufacturers. For procurement of polysilicon, we enter into short-term, medium-term and long-term contracts. Our short-term contracts have terms of no more than one-year each. The contracts provide for a fixed price and fixed amount and generally require prepayment prior to shipment. Most of the contracts give us the right to reject any shipment by our suppliers that does not meet our quality standards based on grade levels, such as semiconductor grade or solar grade, of the polysilicon. The contracts also specify a time period during which we can inspect the goods to ensure their quality. Our medium-term contracts have terms ranging from one to three years, and our long-term contracts have terms ranging from five to ten years. These contracts generally have a fixed amount and fixed price subject to adjustments or variable price. These contracts generally require us to make an advance payment of a certain negotiated amount. In 2009, some of our medium-term and long-term contracts will become increasingly important as the suppliers will be required to perform under their silicon wafer supply commitment to us. In January and February 2007, we entered into two long-term contracts for the procurement of polysilicon with Wacker Chemie AG and DC Chemical, respectively. The shipments under those contracts are expected to begin in 2009.

Given the current state of the industry, suppliers of polysilicon and reclaimable silicon raw materials typically require customers to make payments in advance of shipment. Our suppliers generally require us to make a prepayment at a certain percentage of the order value prior to shipping. As a result, the purchase of silicon raw materials has required, and will continue to require, us to make significant working capital commitments beyond the capital generated from our cash flows from operations. We are required to manage our borrowings and equity contributions to support our purchases of raw materials.

### *Vertically Integrated Manufacturing Capabilities*

We believe that our vertical integration strategy has allowed us, and will continue to allow us, to capture value throughout the solar power value chain, achieve better quality control of our products and realize synergistic cost savings. As part of our vertical integration efforts, we began manufacturing silicon ingots in August 2005 and wafers in February 2006. We began to use toll manufacturers in August 2005 to produce solar cells for our modules. As our current wafer output is insufficient to meet our wafer requirements, we also sell a portion of our ingots to toll manufacturers and purchase wafers from them in return.

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Depending on prevailing market prices of silicon raw materials, from time to time, we purchase ingots from ingot manufacturers to take advantage of favorable market prices relative to other silicon raw materials. We also purchase wafers and cells, from time to time, 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, wafers and solar cells.

To further our vertical integration strategy, we began production of solar cells in April 2007, which we expect will enhance our margins. Our vertically integrated business model allows us to reduce excess costs, such as those associated with packaging and transportation, and the breakage loss that occurs during shipment between various production locations associated with toll manufacturing.

### *Product Pricing*

We began selling our solar module products in November 2004. Our solar modules are priced based on the number of watts of electricity they generate as well as the market price per watt for solar modules. We price our standard solar modules based on the prevailing market prices at the time we enter into sales contracts with our customers or our customers place their purchase orders with us, taking into account the size of the contract or the purchase order, the strength and history of our relationship with each customer, and our silicon raw materials costs. Over the past few years, the average selling prices for standard solar modules have risen year-to-year across the industry primarily because of high demand and rising polysilicon costs. Correspondingly, the average selling price of our standard solar module products increased from \$3.45 in 2004 to \$4.02 in 2005 but decreased slightly to \$3.98 in 2006. 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. Our business may be materially and adversely affected if such trend continues. See **Risk Factors** **Risks Related to Our Company and Our Industry** We may be adversely affected by volatile market and industry trends, such as the recent decrease in the price of solar modules for more details.

Most of our solar module sales are conducted via short-term purchase orders placed by our customers. We sometimes enter into short-term sales contracts with terms of three to six months with our customers under which we are obligated to sell our products at a set price during the term of the contract. Given the strong industry demand for solar modules and increases in average selling price per watt in the past, the short-term nature of our contractual arrangements had allowed us to benefit from price increases which helped to offset higher polysilicon costs. Our sales contracts typically require our customers to make a prepayment depending on the credit status of our customers, market demand and the term of the contracts, with the remaining price to be paid within 30 days after shipment. As we plan to enhance our relationship with key customers, we intend to enter into longer-term sales contracts with variable pricing in order to secure demand for our solar modules

### **Overview of Financial Results**

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

#### *Net Revenues*

Our net revenues are net of business tax, value-added tax and returns and exchanges. We began to generate net revenues from the sales of solar modules in November 2004. We also generated revenues from our solar power system integration business in 2003 and 2006. Factors affecting our net revenues include average selling price per watt, unit volume shipped and product demand for our solar modules.

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In 2005 and 2006, sales to our top five customers accounted for approximately 59.1% and 48.9% of our net revenues, respectively, and sales to our largest customer accounted for 20.6% and 14.4% of our net revenues, respectively. We currently sell most of our solar modules to customers located in Europe. The following table sets forth our total net revenues by geographical region for the periods indicated:

Region	Year Ended December 31,					
	2004		2005		2006	
	Total Net Revenues	Percent	Total Net Revenues	Percent	Total Net Revenues	Percent
(in thousands, except percentages)						
Europe						
Germany	\$ 337	81.5%	\$ 23,586	86.5%	\$ 49,052	42.8%
Spain					43,448	37.9
Italy and others			2,776	10.2	10,862	9.6
Europe Total	337	81.5	26,362	96.7	103,362	90.3
China	34	8.1	848	3.1	10,632	9.3
South Africa and others	43	10.4	65	0.2	506	0.4
Total	\$ 414	100.0%	\$ 27,275	100.0%	\$ 114,500	100.0%

In the first quarter of 2007, sales to Spain, Italy and Germany consisted of approximately 34.3%, 24.3%, and 13.4% of our total net revenues, respectively. Germany accounted for a smaller percentage of our total net revenues due to slower demand for solar power products in such market during the winter season.

*Cost of Revenues*

Our cost of revenues consists primarily of:

*Silicon raw materials.* Silicon raw materials comprise the majority of our cost of revenues. We purchase polysilicon and reclaimable silicon raw materials from various suppliers, including silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies.

*Other direct materials for solar modules.* Such materials include direct materials for the production of solar modules such as plastic, metallic pastes, tempered glass, laminate material, connecting systems and aluminum frames.

*Toll manufacturing.* We enter into toll manufacturing arrangements by providing wafers to toll manufacturers and receiving solar cells from them in return. The toll manufacturing cost is recorded as a part of our cost of revenues. As our wafer output is not sufficient to meet all of our wafer requirements, currently we also sell a portion of our ingots to toll manufacturers and purchase wafers from them in return. Before we established our current ingot and wafer manufacturing capabilities, we recorded the purchase price of the solar cells, as opposed to the toll manufacturing cost, as part of our cost of revenues.

*Overhead.* Overhead costs include equipment maintenance and utilities such as electricity and water used in manufacturing.

*Direct labor.* Direct labor costs include salaries and benefits for our manufacturing personnel.

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*Depreciation of facilities and equipment.* Depreciation of manufacturing facilities and related improvements is provided on a straight-line basis over the estimated useful life of 20 years and commences from the date the facility is ready for its intended use. Depreciation of manufacturing equipment is provided on a straight-line basis over the estimated useful life of five to ten years, commencing from the date that the equipment is placed into productive use.

*Solar power system integration.* Our cost of revenues for system integration includes solar modules, batteries, inverters, electronic components, supporting structures, other related construction materials and labor.

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### *Gross Margin*

Our gross margin is affected by changes in our net revenues and cost of revenues. Our net revenues are determined by the average selling prices of our products as well as the number of units of our products that we are able to sell. Our cost of revenues is affected by our ability to control raw material costs, to achieve economies of scale in our operations, and to efficiently manage our supply chain, including our successful execution of our vertical integration strategy and our judicious use of toll manufacturers to fill potential shortfalls in production capability along the supply chain.

Our gross margins increased from 23.1% in 2005 to 26.2% in 2006, despite increases in silicon raw material prices. We were able to improve our gross margins as the average selling price of our solar modules increased and as we became more fully vertically integrated with the production of ingots beginning in August 2005 and wafers beginning in February 2006. Moreover, we achieved higher manufacturing efficiencies and greater economies of scale as we expanded production output of solar modules from 6.8 MW in 2005 to 27.4 MW in 2006.

We may face margin compression in the sales of solar modules due to the increase in the market price of polysilicon and if we are unable to increase our average selling price of solar modules due to market pressure to reduce the price per watt in order to achieve grid parity. However, we have been able to alleviate some of the margin pressure by manufacturing ingots using a higher proportion of reclaimable silicon materials. Furthermore, we believe that as our solar module business expands, additional economies of scale and successful execution of our vertical integration strategy will improve our margins.

We intend to enhance our margin by completing our vertical integration, including operating a solar cell manufacturing facility. Achieving our vertical integration strategy will allow us to reduce excess costs, such as those associated with packaging and transportation, and the breakage loss that occurs during shipment between various production locations associated with toll manufacturing.

### *Operating Expenses*

Our operating expenses include selling expenses, general and administrative expenses and research and development expenses.

### *Selling Expenses*

Selling expenses consist primarily of provisions for product warranties, travel and entertainment expenses, freight expenses, employee salaries, pensions and other sales and marketing expenses. In 2006, we recognized a one-time share-based compensation expense in connection with the transfer of beneficial interests in our company to our marketing personnel, as well as share-based compensation expenses in connection with our grants of restricted shares to employees. Our selling expenses have increased since 2004 primarily due to a warranty provision for solar modules that was established in 2005 and will be included in our selling expenses going forward. Our solar modules are typically sold with a two-year warranty for defects in material and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. We accrue the estimated cost of warranty based on 1% of the revenues generated from solar modules, consistent with the average industry level. Our selling expenses, excluding share-based compensation expense, as a percentage of net revenues decreased between 2004 and 2005 primarily due to a significant increase in net revenues driven by high market demand for our products, and slightly increased between 2005 and 2006. We expect our selling expenses, excluding share-based compensation expense, to increase in the near term as we increase our sales efforts, hire additional sales personnel, target new markets, establish representative offices and initiate additional marketing programs to build our brand.

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*General and Administrative Expenses*

General and administrative expenses consist primarily of salaries and benefits for our administrative and finance personnel, bad debt provision, amortization of land use rights and travel and entertainment expenses. In 2006, we recognized a one-time share-based compensation expense in connection with the transfer of beneficial interests in our company to our administrative personnel, as well as share-based compensation expenses in connection with our grants of restricted shares to employees. Our general and administrative expenses have increased since 2004, primarily due to increases in the number of our administrative employees as well as their salaries and benefits. Our provision for uncollectible accounts has remained immaterial since 2004 as we have not had significant collection issues for receivables generated from our solar module business. We expect our general and administrative expenses, excluding share-based compensation expense, to increase as we hire additional personnel and incur expenses to support our operations as a public company, including compliance-related costs. However, we expect our general and administrative expenses to decrease as a percentage of net revenues as we achieve greater scale.

*Research and Development Expenses*

Research and development expenses consist primarily of costs of raw materials used in our research and development activities, salaries and benefits for research and development personnel and prototype and equipment costs relating to the design, development, testing and enhancement of our products and manufacturing process. In 2006, we recognized a one-time share-based compensation expense in connection with the transfer of beneficial interests in our company to our research and development personnel, as well as share-based compensation expenses in connection with our grants of restricted shares to employees. In late 2004, we disposed of our research and development subsidiary, Tianhe Research Institute Co., Ltd., or Tianhe Research, and in 2005 we received an annual research grant from the PRC government of an amount greater than that we received in 2004. Both of these events led to decreases in research and development expenses in 2005. Between 2005 and 2006, our research and development expenses increased significantly due to investment in solar cell technology in preparation of ramping up our solar cell production in April 2007. We expect our research and development expenses, excluding share-based compensation expense, to increase as we hire additional research and development personnel, expand and promote innovation in our process technologies of manufacturing monocrystalline ingots, wafers, cells and solar modules. We will continue to devote efforts to improve our technical know-how to produce monocrystalline ingots and wafers by using a higher proportion of reclaimable silicon raw materials. Moreover, as we continue to generate more reclaimable silicon from our own processes, we intend to establish a platform to use reclaimable silicon that we have identified as better suited and more cost-effective to be used for multicrystalline silicon production processes. Therefore, we will devote some of our research and development resources to develop such platform in order to improve our production efficiency.

*Share-based Compensation Expenses*

We adopted our 2006 share incentive plan in July 2006 and have granted a total of 45,725,760 restricted shares as of December 31, 2006. For a description of the restricted shares granted, including the exercise prices and vesting periods thereof, see Management 2006 Share Incentive Plan. Under Statement of Financial Accounting Standards No. 123R, we are required to recognize share-based compensation as compensation expense in our statement of operations based on the fair value of equity awards on the date of the grant, with the compensation expense recognized over the period in which the recipient is required to provide services to us in exchange for the equity award. For restricted shares granted to our employees, we record share-based compensation expense for the excess of the fair value of the restricted shares at the date of the grant over the purchase price that a grantee must pay to acquire the shares during the period in which the shares may be purchased. We have categorized these share-based compensation expenses in our (i) cost of revenues; (ii) selling expenses; (iii) general and administrative expenses; and (iv) research and development expenses, depending on the job functions of the grantees of our restricted shares.

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In 2006, we transferred certain beneficial interests of our company to our employees and granted the following restricted shares to our employees.

Grant Date	Type of Securities	Number of Securities (in thousands)	Fair Value of Trina s Ordinary Shares
March 10, 2006	Ordinary shares of Perseverance International Investment Limited	2.9	\$ 0.0710
July 24, 2006	Restricted shares of Trina Solar Limited	38,532.8	\$ 0.1096
August 10, 2006	Restricted shares of Trina Solar Limited	7,193.0	\$ 0.1096

The following table sets forth the allocation of our share-based compensation expenses both in absolute amount and as a percentage of total share-based compensation expenses.

	For the Year Ended December 31,	
	2004	2005
	(in thousand, except for percentages)	
Cost of revenues	\$ 415	15.2%
Selling expenses	323	11.8
General and administrative expenses	389	14.3
Research and development	1,600	58.7
<b>Total share-based compensation expenses</b>	<b>\$ 2,727</b>	<b>100.0%</b>

We are responsible for estimating the fair value of the beneficial interests and restricted shares granted by us. When estimating the fair value of our ordinary shares, our management has considered a number of factors, including the result of a third-party appraisal and an equity transaction of our company, while taking into account standard valuation methods and the achievement of certain events.

In March 2006, certain beneficial interests in our company, held by Perseverance International Investment Limited, or Perseverance, were granted to certain of our employees for their past services. On the date of the grant, we were a shell company and as such, there was no value attributable to the interest transferred. As discussed in note 1 to the consolidated financial statements included elsewhere in this prospectus, we acquired all the equity interests in Trina China in May 2006. This restructuring resulted in a new measurement date for the beneficial interests previously granted to these employees. As such, we recorded a compensation charge of \$2,288,116, which was based on approximately 29% of the aggregate fair value of 106,400,000 ordinary shares of our company held by Perseverance, or \$0.071 per share on the new measurement date.

The fair value of the ordinary shares was based upon the May 2006 issuance of Series A preferred shares. Based on the consideration paid for the Series A preferred shares, we determined an overall equity value of approximately \$107.1 million for our company after the transaction. The interest in the equity value of our company included both preferred shares and ordinary shares. The fair value of the equity interest allocated to the preferred shares was calculated using the option pricing method. The fair value of the ordinary shares was calculated as the residual, or the total equity value less the fair value of the preferred shares. Under the option pricing method, we treated the preferred shares as a call option on our equity value, with the exercise price based on the liquidation preference of the preferred shares. Because a call option is used, the option pricing method commonly used is the Black-Scholes model, which takes into account the expected life of the option, a risk-free interest rate, dividend yield and a measure of volatility. Because we are a private company, we approximated volatility using the historical volatility of comparable publicly traded companies. The significant assumptions used in the Black-Scholes model included: expected life of eight months; risk-free interest rate of 3.8%; no dividend yield; and implied volatility of 29.9%. Based on this methodology, we calculated the residual fair value of our ordinary shares to be \$0.071 per share.

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We determined the fair value of our ordinary shares in connection with our restricted share grants on July 24, 2006 and August 10, 2006 based on a number of factors. Those factors include our estimate of the fair value of our ordinary shares before July 24, 2006 and August 10, 2006, significant events that have transpired at our company and the valuation by an independent appraiser. The independent third-party valuation was based on a combination of a market approach, with a 60% weighting, and an income approach, with a 40% weighting.

The market approach focuses on comparing our company to comparable publicly traded companies. In applying this method, valuation multiples are: (1) derived from historical operating data of comparable companies; (2) evaluated and adjusted, if necessary, based on the strengths and weaknesses of our company relative to the selected guideline companies; and (3) applied to the appropriate operating and future projected financial data of our company to arrive at an indication of fair market value for our company's equity.

In the income approach, equity value is dependent on the present value of future economic benefits such as cost savings, periodic income, or revenues. Indications of equity value are developed by discounting future net cash flows to their present value at a discount rate that reflects both the current return requirements of the market and the risks inherent in the specific investment. A discount rate is the expected rate of return that an investor would theoretically need to give up by investing in our company instead of in available alternative investments that are comparable in terms of risk and other investment characteristics. In most circumstances, the discount rate is the weighted average cost of capital, which takes into account the cost of equity and the cost of debt. For this method, we used a discount rate of 18.5%. Our cost of equity was derived using the Capital Asset Pricing Model, which takes into account the risk-free interest rate and a required risk premium. Our required risk premium takes into account the equity risk premium, a small stock premium and a country risk premium for China.

Based on the above methods, we determined an equity value of our company using an weighted average and taking into account a lack of marketability discount of approximately 7.03% due to our status as a private company at that time.

The valuation model then allocated the equity value between the common shares and the preference shares in a manner consistent with that of May 2006 described above. The significant assumptions used in the Black-Scholes model included: expected life of 3.7 years; risk-free interest rate of 3.8%; no dividend yield; and volatility of 65.8%. Based on this methodology, we calculated the residual fair value of our ordinary shares to be \$0.1096 per share.

For the period from March 10, 2006 to July 24, 2006, a number of significant factors occurred which increased the value of our company, including the following:

we demonstrated another quarter of profitability;

we increased our ingot production capacity from 50,400 kilograms for the three months ended March 31, 2006 to 67,200 kilograms for the three months ended June 30, 2006;

we increased our wafer manufacturing capacity from 1,280 thousand wafers for the three months ended March 31, 2006 to 2,880 thousand wafers for the three months ended June 30, 2006; and

we won a bid to install a solar power system in a residential building in Zhejiang, China on July 12, 2006.

From July 24, 2006 to August 10, 2006, the period between our restricted shares grants, no significant events transpired which we believe directly impacted the valuation of our ordinary shares. During this period, under the market approach, we did not change our guideline comparable companies and there were no new comparable companies publicly listed internationally. Under the income approach, the economic benefits available to us did not materially change. During this brief period, we did not expand our capacity to produce

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solar modules beyond what had already been contemplated or planned by us prior to July 24, 2006. We did not enter into any new, or lose any existing, sales contracts, nor did we change our estimate of our ability to sell solar modules at a higher or lower average selling price. We also did not enter into or lose any existing raw material supply contracts. Therefore, we concluded that the fair value of our shares remained unchanged, at \$0.1096 per ordinary share as of August 10, 2006.

For the period since August 10, 2006, a number of events occurred which have significantly affected the valuation of our ordinary shares, including the following:

We increased our solar module production capacity. We also entered into one distribution agreement in Italy and three letters of intent with customers in October 2006 and November 2006 for the sale of our solar modules.

We made improvements in our manufacturing capabilities, including increased scale as we expanded our module manufacturing capacity to 59.8 MW per annum as of December 31, 2006 from 45 MW per annum as of June 30, 2006, allowing us to achieve economies of scale in our manufacturing operations.

We entered into two raw material supply contracts of two- and three-year durations and we have entered into a number of discussions with raw material suppliers which we expect will yield raw material contracts at average prices lower than the current prices at which we are purchasing our raw materials.

We have completed the construction of our solar cell manufacturing facility as part of our vertical integration strategy.

In September 2006, we entered into two third-party guaranteed short-term credit facilities of RMB50 million and RMB80 million, respectively, principally used to secure raw materials.

We hired a number of key executives with diverse international backgrounds after the first half of 2006, which include the Director of Sales and Marketing, Director of Business Development, and Vice President of Technology. These executives have contributed significantly to our growth strategy. For example, our Director of Sales and Marketing has been in discussion with more than 15 sizable companies worldwide and has secured one distribution agreement in Italy and three letters of intent.

We confirmed that our two independent directors would take up their directorship upon our initial public offering.

In December 2006, we completed the initial public offering of our ADSs and listed our ADSs on the New York Stock Exchange. Based upon an estimated offering price of this offering, the intrinsic value of our restricted shares outstanding as of December 31, 2006 was \$26.2 million, none of which were vested as of such date.

Determining the value of our share-based compensation expense in future periods requires the input of highly subjective assumptions, including estimated forfeitures and the price volatility of the underlying shares. We grant our restricted shares at their fair value which generally represents the fair value of an unrestricted share less a discount calculated based on the length of time the share is restricted. We estimate our forfeitures of our restricted shares based on past employee retention rates and our expectations of future retention rates, and we will prospectively revise our forfeiture rates based on actual history. Our restricted share compensation charges may change based on changes to our actual forfeitures.

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Assuming no change in the estimated forfeiture rates, our total share-based compensation expenses for future periods in respect of the equity awards that we have granted up to December 31, 2006 is expected to be as follows:

Year Ending December 31,	\$
2007	1,002,235
2008	1,002,235
2009	1,002,235
2010	1,002,235
2011	562,899

Given the preliminary nature of our estimates, our actual share-based compensation expenses may be materially different from our current expectations. In addition to the subjective assumptions and estimates discussed above, see Special Note Regarding Forward-Looking Statements for information regarding the various risks and uncertainties inherent in estimates of this type.

**Discontinued Operations**

Prior to June 30, 2006, we were engaged in the aluminum siding business, which included the production, marketing and sale of aluminum exterior wall products used for cladding the exteriors of buildings and houses. On June 28, 2006, our board of directors resolved to discontinue our aluminum siding business and committed to a plan to settle the related liabilities and realize the related assets through the sale of scrap. Our aluminum siding operations ceased on June 30, 2006, and all of the employees from our aluminum siding business were transferred to our solar module business. We had net gains from our aluminum siding business of \$354,237 and \$91,010 in 2004 and 2005, respectively, and a net loss of \$753,277 in 2006. In accordance with Financial Accounting Standards ( FAS ) No. 144, the financial position and results of operations from our aluminum siding business are reflected as discontinued operations in our consolidated financial statements included elsewhere in this prospectus. In December 2006, we entered into a contract to sell the manufacturing equipment and buildings, including the underlying land use rights, previously used in our aluminum siding business, for a total price of RMB5.8 million (\$742,761) to Mr. Weifeng Wu and Mr. Weizhong Wu, brothers-in-law of Mr. Jifan Gao, our chairman and chief executive officer. The price was determined based on the higher of two formal offers, one of which came from a third party unrelated to us, and was approved by our audit committee and all of our independent directors.

**Taxation**

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

Under current PRC laws and regulations, a foreign invested enterprise in China is typically subject to an enterprise income tax of 30% and a local income tax of 3%. In 2002, Trina China relocated to a high-tech zone in Changzhou and was qualified as a high and new technology enterprise. As a result, it was entitled to a preferential enterprise income tax rate of 15%. In addition, as a foreign invested enterprise engaged in a manufacturing business, Trina China was entitled to a two-year exemption from the enterprise income tax for its first two profitable years of operation, which were 1999 and 2000, and to a 50% reduction of its applicable income tax rate for the succeeding three years, which were from 2001 to 2003. Therefore, Trina China had a tax rate of 7.5% in 2003.

In 2004, Trina China moved out of the high-tech zone and was no longer qualified for a preferential enterprise income tax rate of 15%. Trina China, as a foreign-invested enterprise engaged in a manufacturing

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business and established in Changzhou, which is located within a costal economic zone, is entitled to a preferential enterprise income tax rate of 24%. Furthermore, the PRC government provides various incentives to foreign invested enterprises which qualify as advanced technological enterprises. Trina China has been qualified as an advanced technological enterprise and enjoyed a preferential enterprise income tax rate of 12% for the years 2004 to 2006. The PRC has enacted a new tax law to be effective in January 2008 that may change the tax treatment of Trina and Trina China. See Regulation Tax.

### **Critical Accounting Policies**

We prepare financial statements in accordance with U.S. GAAP, which requires us to make judgments, estimates and assumptions that affect (i) the reported amounts of our assets and liabilities, (ii) the disclosure of our contingent assets and liabilities at the end of each fiscal period and (iii) the reported amounts of revenues and expenses during each fiscal period. We continually evaluate these estimates based on our own historical experience, knowledge and assessment of current business and other conditions, our expectations regarding the future based on available information and reasonable assumptions, which together form our basis for making judgments about matters that are not readily apparent from other sources. Since the use of estimates is an integral component of the financial reporting process, our actual results could differ from those estimates. Some of our accounting policies require a higher degree of judgment than others in their application.

When reviewing our financial statements, you should consider (i) our selection of critical accounting policies, (ii) the judgment and other uncertainties affecting the application of such policies and (iii) the sensitivity of reported results to changes in conditions and assumptions. We believe the following accounting policies involve the most significant judgment and estimates used in the preparation of our financial statements.

#### *Revenue Recognition*

We recognize revenues for product sales when persuasive evidence of an arrangement exists, delivery of the product has occurred and title and risk of loss has transferred to the customer, the sales price is fixed or determinable, and the collectibility of the resulting receivable is reasonably assured. Our sales agreements typically contain our customary product warranties but do not contain any post-shipment obligations nor any return or credit provisions. We recognize sales of our solar modules based on the terms of the specific sales contract. Generally, we recognize sales when we have delivered our products to our customers' designated point of shipment, which may include commercial docks or commercial shipping vessels. Some of our contracts may stipulate that we must defer recognizing revenues until we have delivered the product to our customer's location and we receive documentation that they have accepted delivery. Revenues also include reimbursements of shipping and handling costs of products sold to customers.

Most of our sales contracts require our customers to make a prepayment depending on the credit status of our customers, market demand and the term of the contracts, with the remaining balance to be paid within 30 days after shipment. We record these prepayments as advances from customers until revenues are recognized. Our customers generally pay within 30 days after they receive a proof of shipment from us.

We also generate revenues from our solar power system integration business. We recognize revenues on a per project basis and based on the percentage of completion of the project at the time of determination. The percentage of completion is based on the cost incurred over the total cost budgeted for the project. If we determine that the estimated total cost of completion to be incurred on a project exceeds the amount of revenues under the contract, we expense that portion of excess cost in the period that we make such determination.

#### *Warranty Cost*

It is customary in our business and industry to warrant or guarantee the performance of our solar module products at certain levels of power output for extended periods. Our solar modules are typically sold with a

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two-year warranty for defects in material and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. If a solar module is defective, we will either repair or replace the module at our discretion. We maintain warranty reserves (recorded as accrued warranty costs) to cover potential liability that could arise from our warranties. Our accrued warranty cost reflects our best estimate of such liabilities. Due to our limited warranty claims to date, we accrue the estimated costs of warranties based on an assessment of our competitors and average industry level. The provision of the warranty accrues at the time of sale and is recognized as a component of selling expenses. Actual warranty costs are accumulated and charged against the accrued warranty liability. To the extent that actual warranty costs differ from the estimates, we will prospectively revise our accrual rate.

### *Impairment of Long-lived Assets and Definite-lived Intangibles*

We evaluate our long-lived assets and definite-lived intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When these events occur, we measure impairment by comparing the carrying amount of the assets to future undiscounted net cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, we will recognize an impairment loss based on the fair value of the assets.

### *Allowance for Doubtful Accounts*

We conduct credit evaluations of customers and generally do not require collateral or other security from them. We establish an allowance for doubtful accounts primarily based upon the age of the receivables and factors surrounding the credit risk of specific customers. We generally do not require collateral or other security interests from our customers when we grant them credit. With respect to advances to suppliers, our suppliers are primarily suppliers of silicon raw materials. We perform ongoing credit evaluations of our suppliers' financial conditions. We generally do not require collateral or security against advances to suppliers. However, we maintain a reserve for potential credit losses and such losses have historically been within our expectations.

### *Share-based Compensation*

Determining the value of our share based compensation expense in future periods requires the input of highly subjective assumptions, including estimated forfeitures and the price volatility of the underlying shares. We grant our restricted shares at their fair value which generally represents the fair value of an unrestricted share less a discount calculated based on the length of time the share is restricted. We estimate our forfeitures based on past employee retention rates, our expectations of future retention rates, and we will prospectively revise our forfeiture rates based on actual history. Our restricted share compensation charges may change based on changes to our actual forfeitures. See [Overview of Financial Results](#) Share-based Compensation Expenses.

### *Inventories*

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

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

### *Income Taxes*

Deferred income taxes are recognized for temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, net operating loss carry forwards and credits by

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applying enacted statutory tax rates applicable to future years. Deferred tax assets are reduced by a valuation allowance when, in our opinion, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Current income taxes are provided for in accordance with the laws of the relevant taxing authorities. The components of the deferred tax assets and liabilities are individually classified as current and non-current based on the characteristics of the underlying assets and liabilities.

**Selected Quarterly Results of Operations**

The following table presents our unaudited consolidated quarterly results of operations for the eight quarterly periods ended December 31, 2006. You should read the following table in conjunction with our audited consolidated financial statements and related notes included elsewhere in this prospectus. We have prepared the unaudited consolidated quarterly financial information on the same basis as our audited consolidated financial statements. This unaudited consolidated financial information includes all adjustments, consisting only of normal recurring adjustments, that we consider necessary for a fair representation of our financial position and operating results for the quarters presented. Because our business is relatively new, our operating results for any particular quarter are not necessarily indicative of our future results. Furthermore, our quarterly operating results may fluctuate from period to period based on changes in customer demand and the seasonality of consumer spending and industry demand for solar power products. In addition, purchases of solar products tend to decrease during the winter months in our key markets, such as Germany, due to adverse weather conditions that can complicate the installation of solar power systems. For additional risks, see Risk Factors Risks Related to Our Company and Our Industry.

	March 31, 2005	June 30, 2005	September 30, 2005	Three Months Ended		June 30, 2006	September 30, 2006	December 31, 2006
				December 31, 2005	March 31, 2006			
	(in thousands)							
Net revenues	\$ 844	\$ 4,898	\$ 5,663	\$ 15,870	\$ 14,452	\$ 28,921	\$ 32,360	\$ 38,766
Cost of revenues	667	3,647	4,343	12,329	9,875	20,966	23,869	29,740
Gross profit	177	1,251	1,320	3,541	4,577	7,955	8,492	9,026
Operating expenses:								
Selling expenses	25	146	142	208	379	716	549	927
General and administrative expenses	269	69	361	676	582	2,803	3,220	2,050
Research and development expenses	28	44	59	(9)	76	1,518	119	190
Total operating expenses	322	259	562	875	1,037	5,037	3,888	3,167
Income (loss) from continuing operations	(145)	992	758	2,666	3,540	2,918	4,604	5,859
Interest expenses	(51)	(114)	(141)	(164)	(189)	(464)	(415)	(1,069)
Interest income	2	3	4	7	7	57	74	122
Other income (expenses)	(5)			(22)	(26)	(29)	(30)	3
Income (loss) before income taxes	(199)	881	621	2,487	3,332	2,482	4,233	4,915
Tax (expense) benefit	29	(120)	(76)	(403)	(438)	(587)	(236)	(527)
Net income (loss) from continuing operations	(170)	761	545	2,084	2,894	1,895	3,997	4,388
Net income (loss) from discontinued operations	(197)	127	67	94	(56)	(770)	(123)	196
Net income (loss)	\$ (367)	\$ 888	\$ 612	\$ 2,178	\$ 2,838	\$ 1,125	\$ 3,874	\$ 4,584

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For the eight quarters ended December 31, 2006, our net revenues grew quarter-on-quarter, except for the first quarter of 2006, during which period our net revenues decreased slightly from the fourth quarter of 2005 primarily due to slower demand in major markets, such as Germany, during the winter season. The growth of our net revenues was consistent with the continued growth in sales of our solar modules.

Our gross margins increased in 2006 compared to 2005, reflecting the successful implementation of our vertical integration strategy, lower solar cell toll manufacturing costs per watt and higher average selling prices of our solar modules in 2006 compared to 2005, despite increases in silicon raw material prices. The decreases in our gross margins in the last three quarters of 2006 reflect the continuous increases in silicon raw material prices and a decrease in the average selling prices of our solar modules in the last quarter of 2006, despite economies of scale we achieved as we expanded production output.

We have been profitable in every quarter since the second quarter of 2005. We had a decrease in net income in the second quarter of 2006 due to a one-time share-based compensation expense in connection with the transfer of beneficial interests in our company to certain employees.

**Results of Operations**

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

	Year Ended December 31,					
	2004		2005		2006	
	(in thousands, except for percentages)					
Net revenues:						
Solar modules	\$ 414	100.0%	\$ 27,275	100.0%	\$ 114,338	99.9%
System integration					162	0.1
Total net revenues	414	100.0	27,275	100.0	114,500	100.0
Cost of revenues:						
Solar modules	373	90.2	20,986	76.9	84,292	73.6
System integrations					158	0.2
Total cost of revenues	373	90.2	20,986	76.9	84,450	73.8
Gross profit	41	9.8	6,289	23.1	30,050	26.2
Operating expenses:						
Selling expenses	66	16.0	521	1.9	2,571	2.2
General and administrative expenses	40	9.6	1,375	5.0	8,656	7.5
Research and development expenses	262	63.4	122	0.5	1,903	1.7
Total operating expenses	368	89.0	2,018	7.4	13,130	11.5
Income (loss) from continuing operations	(327)	(79.2)	4,271	15.7	16,920	14.8
Interest expenses	73	17.5	470	1.7	2,137	1.8
Interest income	4	0.9	16	0.1	261	0.2
Other income (expenses)	(35)	(8.6)	(27)	(0.1)	(82)	(0.1)
Income (loss) before income taxes	(431)	(104.4)	3,790	14.0	14,962	13.1
Income tax expenses (benefits)	(52)	(12.5)	570	2.1	1,788	1.6
Minority interest	13	3.2				
Net income (loss) from continuing operations	(366)	(88.6)	3,220	11.8	13,174	11.5
Net income (loss) from discontinued operations	354	85.5	91	0.3	(753)	(0.7)
Net income (loss)	\$ (12)	(3.0)%	\$ 3,311	12.1%	\$ 12,421	10.8%



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*Year Ended December 31, 2006 Compared to Year Ended December 31, 2005*

*Net Revenues.* Our total net revenues increased by \$87.2 million, or 319.8%, from \$27.3 million in 2005 to \$114.5 million in 2006. Our net revenues increased due to an increase in the volume of the solar modules we sold. The volume of the solar modules we sold increased from 6.8 MW in 2005 to 27.4 MW in 2006 due to the expansion of our manufacturing capacity. In addition, our average selling price decreased from \$4.02 per watt in 2005 to \$3.98 per watt in 2006 due to slower demand for solar modules in major markets such as Germany.

We did not generate any system integration revenues in 2005 and recorded net revenues of \$162,367 in 2006 from our system integration business in Zhejiang.

*Cost of Revenues.* Our cost of revenues increased by \$63.5 million, or 302.4%, from \$21.0 million in 2005 to \$84.5 million in 2006. Our cost of revenues increased primarily due to the rapid expansion of our solar module business. The increase in our cost of revenues was also impacted by the rising prices of silicon raw materials due to the industry-wide shortage of polysilicon. Moreover, we experienced an increase in depreciation costs due to the wafer manufacturing equipment we installed in 2006 as we ramped up our wafer manufacturing facilities in February 2006. Cost of revenues in 2006 also included charges of \$2.2 million resulting from shipments by suppliers of defective raw materials to us. These suppliers refused to accept the return of the defective materials or to reimburse us for the amount we had prepaid. These suppliers are not our related parties. We have not made any other prepayment to these suppliers, and we do not intend to use these suppliers until these disputes have been settled. Any future use of these suppliers will be subject to modified contracts or credit terms. Cost of revenues in 2006 also included \$414,941 of share-based compensation expenses. As a percentage of our total net revenues, our cost of revenues decreased from 76.9% to 73.8% during the same periods. The decrease was primarily due to cost savings derived from the vertical integration of the ingot-to-wafer manufacturing process which significantly reduced our expenditures on ingots and wafers from third-party suppliers. Our cost of revenues as a percentage of total net revenues decreased also due to the economies of scale we have achieved as our solar module business has grown.

We did not incur any cost of revenues attributable to our system integration business in 2005 and recorded cost of revenues of \$158,090 in 2006 attributable to our system integration business in Zhejiang.

*Gross Profit.* As a result of the foregoing, our gross profit in 2006 increased by \$23.7 million to \$30.0 million, from \$6.3 million in 2005. Our gross margin increased from 23.1% to 26.2% during the same periods.

*Operating Expenses.* Our operating expenses increased by \$11.1 million, from \$2.0 million in 2005 to \$13.1 million in 2006. The increase in operating expenses was due to increases in selling expenses, general and administrative expenses and research and development expenses. As a percentage of total net revenues, operating expenses increased from 7.4% in 2005 to 11.5% in 2006.

Share-based compensation expenses allocated to our selling expenses, general and administrative expenses and research and development expenses in 2006 were \$323,003, \$389,431 and \$1.6 million, respectively, based on the department where such employees worked at the time of the grant. In March 2006, we transferred beneficial interests in our company by our chairman and his wife to certain employees through the transfer of a 29% ownership interest in Perseverance International Investment Limited, or Perseverance, through which Ms. Chunyan Wu, the wife of our chairman, holds shares of our company, as well as grants of restricted shares to our employees. Perseverance was established as a British Virgin Islands company by Ms. Wu, as a special purpose vehicle solely for the purpose of holding a portion of the ordinary shares of our company upon restructuring. The special purpose vehicle Perseverance was used as one of the several options that Mr. Jifan Gao and Ms. Chunyan Wu considered when planning the transfer of interests in our company to certain employees. Ultimately, they considered using Perseverance for such purpose due in part to a desire to avoid diluting other shareholders' beneficial interests in our company. The Perseverance shares were granted for free, and we

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recorded a share-based compensation expense equal to the fair value of our ordinary shares on the grant date. Due to a restructuring of Perseverance in May 2007, Ms. Chunyan Wu no longer holds shares in Perseverance. In addition, we adopted our 2006 share incentive plan in July 2006 and granted a total of 45,725,760 restricted shares in July and August 2006. We recorded share-based compensation expenses of \$413,679 of our operating expenses in connection with the grants of the restricted shares.

*Selling Expenses.* Our selling expenses increased by \$2.1 million from \$520,736 in 2005 to \$2.6 million in 2006, due primarily to an increase in warranty provision for solar modules as a result of significant increases in the volume of solar modules, as well as share-based compensation expenses. Other selling expenses increased due to costs associated with growing our solar module business. Selling expenses as a percentage of net revenues also increased from 1.9% to 2.2%.

*General and Administrative Expenses.* Our general and administrative expenses increased by \$7.3 million, from \$1.4 million in 2005 to \$8.7 million in 2006. The increase was due in part to charges of a total amount of \$2.2 million that were made in 2006 resulting from failures of three of our suppliers to deliver goods as specified in the contracts and to reimburse us for our advance payment due to such suppliers' own financial difficulties. These suppliers are not related parties to us. We have not made any other prepayments to the suppliers, and we do not intend to use these suppliers until these disputes have been settled. Any future use of the suppliers will be subject to modified contracts or credit terms. We do not expect similar charges to be a regular occurrence in our ongoing operations. Other than the \$2.2 million charges and the \$2.2 million charges related to the suppliers who refused to accept the return, we have not recorded any additional valuation allowance against our advances to supplier balance of \$34.6 million as of December 31, 2006. The increase in general and administrative expenses was also partially attributable to share-based compensation expenses, as well as accruals of audit and legal fees and bonuses to employees. Other general and administrative expenses increased due to the expansion of our solar module business.

*Research and Development Expenses.* Research and development expenses increased from \$121,594 to \$1.9 million between 2005 and 2006, primarily due to the incurrence of share-based compensation expenses.

*Interest Expenses.* Our interest expenses increased by \$1.7 million, from \$470,245 in 2005 to \$2.1 million in 2006. Our interest expenses increased due to increases in interest payments in connection with two long-term loans which we entered into in June and July 2005, respectively, as well as increases in our short-term borrowings.

*Income Tax Expenses.* Our income tax expenses increased by \$1.2 million, from \$570,723 in 2005 to \$1.8 million in 2006. Our income tax expenses increased primarily due to a significant increase in our profitability between 2005 and 2006. Trina China is subject to a preferential income tax rate of 12% in 2005 and 2006.

*Net Income from Continuing Operations.* Net income from our continuing operations increased significantly between 2005 and 2006, from \$3.2 million to \$13.2 million. Net margin from our continuing operations decreased from 11.8% to 11.5% over the same periods due to share-based compensation expenses recorded in 2006.

*Net Income from Discontinued Operations.* We had a net gain of \$91,010 and a net loss of \$753,277 from our discontinued aluminum sidings business in 2005 and 2006, respectively, as we wound down such business.

*Net Income.* As a result of the foregoing, our net income increased significantly, from \$3.3 million in 2005 to \$12.4 million in 2006, representing an increase of \$9.1 million. Our net margin decreased from 12.1% to 10.8% over the same periods partially due to share-based compensation expenses recorded in 2006.

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*Year Ended December 31, 2005 Compared to Year Ended December 31, 2004*

*Net Revenues.* Our total net revenues increased by \$26.9 million, or 6,494%, from \$413,632 in 2004 to \$27.3 million in 2005. The increase was due to the significant increase in revenues in our solar module business, which completed its first full year of operations. The volume of the solar modules we sold significantly increased from 0.12 MW in 2004 to 6.79 MW in 2005. The average selling price of our solar modules rose from \$3.45 per watt in 2004 to \$4.02 per watt in 2005 due to industry-wide higher prices for solar modules.

We did not generate any system integration revenues in 2004 and 2005.

*Cost of Revenues.* Our cost of revenues increased by \$20.6 million, or 5,526%, from \$373,028 in 2004 to \$21.0 million in 2005. Our cost of revenues was driven by the rising prices of silicon raw materials due to the industry-wide shortage of polysilicon and high demand for such materials. We also experienced an increase in depreciation of equipment due to the installation of our ingot manufacturing capacities in July 2005. As a percentage of our total net revenues, cost of revenues decreased from 90.2% in 2004 to 76.9% in 2005. The decrease in our cost of revenues as a percentage of our total revenues was due primarily to the rapid increase in our net revenues in the first full year of our solar module operations, offset in part by an increase in our expenditures on silicon raw materials and other direct costs.

We did not incur any cost of revenues in 2004 and 2005 attributable to our system integration business.

*Gross Profit.* As a result of the foregoing, our gross profit increased by \$6.2 million, or 15,390%, from \$40,604 in 2004 to \$6.3 million in 2005. Our gross margin increased from 9.8% in 2004 to 23.1% in 2005.

*Operating Expenses.* Our operating expenses increased by \$1.6 million, or 448%, from \$368,287 in 2004 to \$2.0 million in 2005. The increase in our operating expenses was due to increases in selling expenses and general and administrative expenses, offset by a decrease in research and development costs. Operating expenses as a percentage of our total net revenues decreased from 89.0% in 2004 to 7.4% in 2005.

*Selling Expenses.* Our selling expenses increased by \$452,522, or 686.4%, from \$66,214 in 2004 to \$520,736 in 2005. The increase in our selling expenses was due primarily to provision for warranty for solar modules that was established in 2005. Selling expenses as a percentage of our net revenues decreased from 16.0% in 2004 to 1.9% in 2005. Selling expenses as a percentage of net revenues decreased primarily due to our achieving economies of scale in our operations.

*General and Administrative Expenses.* Our general and administrative expenses increased by \$1.3 million, or 3,367%, from \$39,650 in 2004 to \$1.4 million in 2005. The increase in our general and administrative expenses was due primarily to increases in salaries and benefits for our administrative and finance personnel as we hired additional personnel in connection with our expansion into solar module business. General and administrative expenses as a percentage of our total net revenues decreased from 9.6% in 2004 to 5.0% in 2005 primarily due to our achieving economies of scale in our operations.

*Research and Development Expenses.* Our research and development expenses decreased by \$140,829, or 53.7%, from \$262,423 in 2004 to \$121,594 in 2005. At the end of 2004 we sold our research and development subsidiary, Tianhe Research Institute, and in 2005 we received an annual research grant from the PRC government that exceeded the amount we received in 2004. Both of these events contributed to decreases in research and development expenses between 2004 and 2005.

*Interest Expenses.* Our interest expense increased by \$397,631, or 547.6%, from \$72,614 in 2004 to \$470,245 in 2005 due to increases in interest payments in connection with our two long-term loans which we entered into in 2005, as well as increases in our short-term borrowings.

*Income Tax Expenses.* Our income tax expenses increased by \$622,530, from an income tax benefit of \$51,807 in 2004 to an income tax expense of \$570,723 in 2005. The income tax benefit in 2004 was primarily

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due to a loss in our income before income tax in 2004, which partly offset the taxable income from our discontinued operations. In 2005, we had a taxable income from our continuing operations of \$3.8 million. Trina China was subject to preferential enterprise income tax rates of 12% in 2004 and 2005.

*Net Income from Continuing Operations.* Net income from our continuing operations increased significantly by \$3.6 million, from a loss of \$366,647 in 2004 to \$3.2 million in 2005. The net margin of our continuing operations increased from a negative 88.6% to 11.8% over the same periods.

*Net Income from Discontinued Operations.* The gain from our discontinued aluminum operations decreased by \$263,227 from \$354,237 in 2004 to \$91,010 in 2005 as we wound down such business.

*Net Income.* As a result of the foregoing, our net income increased significantly by \$3.3 million, from a loss of \$12,410 in 2004 to \$3.3 million in 2005. Our net margin increased from a negative 3.0% to 12.1% over the same periods.

## **Liquidity and Capital Resources**

### *Cash Flows and Working Capital*

We have financed our operations primarily through short-term borrowings, term loans and equity contributions by our shareholders and, to a lesser extent, cash generated from operations. As of December 31, 2004, 2005 and 2006, we had \$3.4 million, \$1.2 million and \$93.4 million, respectively, in cash and cash equivalents and \$3.7 million, \$11.6 million and \$76.5 million, respectively, in outstanding borrowings, of which \$3.7 million, \$6.6 million and \$71.4 million, respectively, were due within one year. Our cash and cash equivalents primarily consist of cash on hand and demand deposits with original maturities of three months or less that are placed with banks and other financial institutions. Our short-term borrowings outstanding as of December 31, 2004, 2005 and 2006 bore an average interest rate of 5.91%, 6.10% and 6.10%, respectively. In connection with our short-term borrowings, we have granted security interests over significant amounts of our assets. For example, in September 2006, we pledged our raw materials and inventories of a total appraised value of RMB144.31 million to secure repayment of our short-term borrowings of RMB70.0 million that will become due in September and October 2007. In March 2007, we mortgaged 20,381 square meters of our facilities and the underlying land use rights of 51,746 square meters to secure repayment of our RMB34.0 million short-term borrowings that will become due on March 30, 2008. We did not have any outstanding long-term borrowings as of December 31, 2004, and had \$5.0 million and \$5.1 million of long-term borrowings as of December 31, 2005 and 2006, respectively, from two term loans. These term loans have three-year terms expiring on June 20, 2008 and July 7, 2008, respectively, and are guaranteed by Changzhou Fulai Property Development Co., Ltd., a related party. Each of the term loans bears an interest rate of 6.91% per annum. We have historically been able to repay our total borrowings as they became due mostly from capital contributions from our shareholders and proceeds from short-term and long-term borrowings. We may also seek additional debt or equity financing to repay the remaining portion of our borrowings. As we continue to ramp up our current and planned operations in order to complete our vertical integration and expansion strategies, we also expect to generate cash from our expanded operations to repay a portion of our borrowings.

We have significant working capital commitments because suppliers of polysilicon and reclaimable silicon raw materials require us to make prepayments in advance of shipment. Due to the industry-wide shortage of polysilicon, working capital and access to financings to allow for the purchase of silicon raw materials are critical to growing our business. Our short-term borrowings increased primarily as a result of our need to fund our expanded working capital, including advances to supplier and increase in our inventory. Our advances to suppliers increased significantly from \$426,669 as of December 31, 2004 to \$34.6 million as of December 31, 2006 due to the significant growth of our solar module business.

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We expect that our accounts receivable and inventories, two of the principal components of our current assets, will continue to increase as our net revenues increase. Although we require prepayments (depending on the credit status of our customers, market demand and the term of the contracts), we also allow some of our customers to pay a major portion of the purchase price by letters of credit. Until the letters of credit are drawn in accordance with their terms, the amount earned is recorded as accounts receivable. Because of the prepayment and the letters of credit payment requirements that we impose on our customers, our allowance for doubtful accounts has not been significant with respect to our solar module business.

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

	Year Ended December 31,		
	2004	2005	2006
	(in thousands)		
Net cash provided by (used in) operating activities	\$ (1,893)	\$ (7,977)	\$ (54,000)
Net cash provided by (used in) investing activities	(1,538)	(8,323)	(46,556)
Net cash provided by (used in) financing activities	6,050	13,868	190,968
Effect of exchange rate changes		261	1,744
Net increase (decrease) in cash and cash equivalents	2,619	(2,171)	92,156
Cash and cash equivalents at the beginning of the year	776	3,395	1,224
Cash and cash equivalents at the end of the year	\$ 3,395	\$ 1,224	\$ 93,380

Net cash used in operating activities amounted to \$54.0 million in 2006, mainly as a result of a significant increase in advances to suppliers and inventories primarily due to increases in volumes of silicon raw materials purchased, partially offset by a positive net income and an increase in accounts payable. Net cash used in operating activities in 2005 was \$8.0 million, compared to \$1.9 million in 2004. The net cash used in operating activities in 2005 was mainly a result of significant increases in accounts receivable, other receivables and inventories primarily due to increases in prices and volumes of silicon raw materials purchased. The net cash used in operating activities in 2005 was partially offset by a positive net income and an increase in accounts payable in 2005. In 2004, net cash used in operating activities was mainly a result of increases in inventories and accounts receivable due to growth in our solar module operations and amounts due from related parties.

Net cash used in investing activities amounted to \$46.6 million in 2006, primarily as a result of an increase in property, plant and equipment expenditures, comprised mainly of purchases of wafer sawing machines related to the beginning of our production of silicon wafers in February 2006, and the continuing expansion of our other manufacturing facilities. Net cash used in investing activities in 2006 also included an increase in restricted cash, which includes cash pledged to banks to secure our notes payable and letter of credit facilities. Net cash used in investing activities increased from \$1.5 million in 2004 to \$8.3 million in 2005, primarily as a result of an increase in property, plant and equipment expenditures in 2005 comprised mainly of purchases of ingot pulling machines related to the beginning of our production of silicon ingots in August 2005 and the expansion of our assembly lines for the production of solar modules. In 2004, net cash used in investing activities was comprised of property, plant and equipment expenditures for our solar module assembly lines and the acquisition of land use rights.

Net cash provided by financing activities amounted to \$191.0 million in 2006, which consisted primarily of net proceeds received from our initial public offering. Net cash provided by financing activities amounted to \$13.9 million in 2005, consisting of proceeds received from short-term and long-term borrowings and subscriptions for our shares. Net cash provided by financing activities was \$6.1 million in 2004, consisting of proceeds from short-term borrowings and subscriptions for our shares.

We believe that our current cash and cash equivalents, anticipated cash flow from operations and proceeds from our initial public offering will be sufficient to meet our anticipated cash needs, including our cash needs for working capital and capital expenditures for the next 12 months. We may, however, require additional

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cash due to changing business conditions or other future developments, including any investments or acquisitions we may decide to pursue. If our existing cash is insufficient to meet our requirements, we may seek to sell additional equity securities, debt securities or borrow from lending institutions. We cannot assure you that financing will be available in the amounts we need or on terms acceptable to us, if at all. The sale of additional equity securities, including convertible debt securities, would dilute our earnings per share. The incurrence of debt would divert cash for working capital and capital expenditures to service debt obligations and could result in operating and financial covenants that restrict our operations and our ability to pay dividends to our shareholders.

*Capital Expenditures*

We had capital expenditures of \$676,166, \$7.7 million and \$41.4 million in 2004, 2005 and 2006, respectively. Our capital expenditures were used primarily to purchase equipment for the production of ingots, wafers, cells and modules. We estimate that our capital expenditure in 2007 will be used primarily to build our own solar cell plant and purchase equipment for the expansion of our manufacturing and assembly lines. We expect our total capital expenditures to be approximately \$100 million in 2007. We plan to increase our annual manufacturing capacity from ingots to solar modules to 150 MW by the end of 2007. We expect our total expenditures to be approximately \$200 million in 2008. We plan to increase our annual manufacturing capacity from ingots to solar modules to 350 MW by the end of 2008.

**Contractual Obligations and Commercial Commitments**

The following table sets forth our contractual obligations and commercial commitments as of December 31, 2006:

	Total	Payment Due by Period			More than 5 Years
		Less than 1 Year	1-3 Years (in thousands)	3-5 Years	
Long-term debt obligations <sup>(1)</sup>	\$ 5,668	\$ 354	\$ 5,314		\$
Purchase obligations	27,295	27,295			
Other long-term liabilities reflected on the company's balance sheet <sup>(2)</sup>	1,400				1,400
Total	\$ 34,363	\$ 27,649	\$ 5,314		\$ 1,400

(1) Consist of two term loans entered into with Bank of Communications in June and July 2005 and estimated interest under the loans.

(2) Consist of accrued warranty costs for solar modules.

From December 31, 2006 to the date of this prospectus, we entered into purchase contracts of an aggregate amount of \$15.9 million to purchase equipment for our capacity expansion.

Other than the contractual obligations and commercial commitments described above, we did not have any other long-term debt obligations, operating lease obligations, purchase obligations or other long-term liabilities.

**Off-Balance Sheet Commitments and Arrangements**

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

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entity that provides financing, liquidity, market risk or credit support to us or that engages in leasing, hedging or research and development services with us.

### **Inflation**

Since our inception, inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the change of consumer price index in China was 3.9%, 1.8% and 1.5% in 2004, 2005 and 2006, respectively.

### **Market Risks**

#### *Foreign Exchange Risk*

Most of our sales are currently denominated in U.S. dollars, with the remainder in Renminbi and Euros, while a substantial portion of our costs and expenses is denominated in U.S. dollars, with the remainder in Renminbi. Therefore, fluctuations in currency exchange rates could have an adverse impact on our financial stability due to a mismatch among various foreign currency-denominated sales and costs. Fluctuations in exchange rates, particularly among the U.S. dollar, Renminbi and Euro, affect our gross and net profit margins and could result in foreign exchange and operating losses. Our exposure to foreign exchange risk primarily relates to currency gains or losses resulting from timing differences between signing of sales contracts and settling of these contracts. As of December 31, 2005 and 2006, we held \$4.9 million and \$29.4 million in accounts receivable, respectively, most of which were denominated in U.S. dollars. Had we converted all of our accounts receivable as of either date into Renminbi at an exchange rate of RMB7.8041 for \$1.00, the exchange rate as of December 31, 2006, our accounts receivable would have been RMB38.4 million and RMB229.1 million as of December 31, 2005 and December 31, 2006, respectively. Assuming that Renminbi appreciates by a rate of 10% to an exchange rate of RMB 7.0237, we would record a decrease or loss in the fair value of our accounts receivable in Renminbi terms. Our calculation model is based on multiplying our accounts receivable, which are held in U.S. dollar, by a smaller Renminbi equivalent amount resulting from an appreciation of Renminbi. Our calculation model does not take into account optionality nor does it take into account the use of financial instruments. Based on our calculation model, we estimate that a 10% appreciation of Renminbi would result in our holding Renminbi equivalents of RMB 34.6 million and RMB206.2 million for our accounts receivable as of December 31, 2005 and December 31, 2006, respectively. These amounts would therefore reflect a theoretical loss of RMB3.8 million and RMB22.9 million for our accounts receivable as of December 31, 2005 and December 31, 2006, respectively.

Furthermore, we translate monetary assets and liabilities denominated in other currencies into Renminbi, our functional currency, at the rates of exchange in effect at each balance sheet date. We record these exchange gains and losses in the statements of operations. We recorded net foreign currency gains of \$103, \$260,316 and \$1.6 million in 2004, 2005 and 2006, respectively. In 2006, we entered into two short-term foreign exchange derivative contracts with respect to raw material supplies to protect against volatility of cash flows caused by fluctuations in exchange rates between Renminbi and U.S. dollars. As of December 31, 2006, we had no outstanding foreign exchange hedge contracts. We have not used any other forward contracts, currency options or borrowings to hedge our exposure to foreign currency exchange risk. 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. As our sales denominated in foreign currencies, such as Euros, continue to grow, we will consider using derivative instruments to hedge our exposure to foreign currency exchange risk.

Our financial statements are expressed in U.S. dollars but our functional currency is Renminbi. The value of your investment in our ADSs will be affected by the foreign exchange rate between U.S. dollars and Renminbi. To the extent we hold assets denominated in U.S. dollars, including the net proceeds to us from this offering, any appreciation of the Renminbi against the U.S. dollar could result in a change to our statement of operations and a reduction in the value of our U.S. dollar denominated assets. On the other hand, a decline in the

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value of Renminbi against the U.S. dollar could reduce the U.S. dollar equivalent amounts of our financial results, the value of your investment in our company and the dividends we may pay in the future, if any, all of which may have a material adverse effect on the prices of our ADSs.

### *Interest Rate Risk*

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

### **Recent Accounting Pronouncements**

In June 2006, the Financial Accounting Standards Board ( FASB ) released Interpretation No. 48, Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement No. 109, or FIN 48, which prescribes a recognition threshold and a measurement attribute for tax positions taken, or expected to be taken, in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006, with early adoption encouraged if the enterprise has not yet issued financial statements for fiscal years or interim periods in the period FIN 48 is adopted. We are currently evaluating the impact of FIN 48 on our financial position, cash flow and results of operations.

In June 2006, the Emerging Issues Task Force ( EITF ) reached a consensus on Issue No. 06-3, How Taxes Collected from Customers and Remitted to Governmental Authorities Should be Presented in the Income Statement (That Is, Gross Versus Net Presentation) ( EITF 06-3 ). The scope of EITF 06-3 includes sales, use, value added and some excise taxes that are assessed by a governmental authority on specific revenue-producing transactions between a seller and customer. EITF 06-3 states that a company should disclose its accounting policy (i.e., gross or net presentation) regarding the presentation of taxes within its scope and, if significant, these disclosures should be applied retrospectively to the financial statements for all periods presented. EITF 06-3 is effective for interim and annual reporting periods beginning after December 15, 2006. We are currently evaluating the impact, if any, of this statement on our consolidated financial statements and related disclosures.

In September 2006, the FASB released FAS 157, Fair Value Measurement ( FAS 157 ). FAS 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. FAS 157 applies under other accounting pronouncements that require or permit fair value measurements and the FASB had previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, FAS 157 does not require any new fair value measurements. FAS157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. We are in the process of assessing the impact of the adoption of FAS 157 on our financial position and results of operations.

In February 2007, the FASB released FAS 159, The Fair Value Option for Financial Assets and Financial Liabilities ( FAS 159 ). FAS 159 permits entities to choose to measure certain financial instruments at fair value to expand the use of fair value measurement and improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. FAS 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. We are in the process of assessing the impact of the adoption of FAS 159 on our financial position and results of operations.

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**BUSINESS**

**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 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 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.

**Our Industry**

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

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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 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 CAGR of 43.7% from 2005 to 2010, driven largely by rising grid prices, government initiatives and new distribution channels, according to Photon Consulting.

The tables below set forth the estimated growth of the global solar industry by MW of solar system production and revenues from 2004 through 2010.

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Source: Photon Consulting, 2006.

*Solar Power Manufacturing Value Chain*

The crystalline silicon-based solar power manufacturing value chain starts with the processing of quartz sand to produce metallurgical-grade silicon. This material is further purified to semiconductor-grade or solar-grade polysilicon feedstock. Reclaimable silicon raw materials, which include tops and tails of discarded portions of silicon ingots, pot scraps and broken silicon wafers acquired from the semiconductor and solar power industries, may also be used as feedstock.

In the most widely used crystalline silicon-based solar manufacturing process, feedstock is melted in high temperature furnaces, then formed into ingots through a crystallization process. Due to the significant increase in polysilicon prices as a result of its shortage, using less polysilicon and more reclaimable silicon raw

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materials to manufacture ingots results in lower overall cost of raw materials. However, the use of reclaimable silicon raw materials increases the difficulty of producing ingots of similar quality to those made from only polysilicon.

Ingots are cut and shaped, then sliced into wafers using high precision cutting techniques. Wafers are manufactured into solar cells through a multiple step manufacturing process that entails etching, doping, coating and applying electrical contacts. Solar cells are then interconnected and packaged to form solar modules, which together with system components such as batteries and inverters, are distributed to installers, systems integrators, service providers or directly to end-users, for installation for on-grid or off-grid systems.

The following diagram illustrates the value chain for the manufacture of monocrystalline-based solar power products.

### *Solar Cell Technologies*

Currently, a majority of installed solar systems employ crystalline silicon technologies. A small portion of the installed base of solar systems uses thin-film technologies. Crystalline silicon cells are manufactured using either monocrystalline silicon, multicrystalline silicon or string ribbon technology.

Monocrystalline silicon technology has the longest production record of all available solar power technologies. In monocrystalline technology, the basic silicon material used is produced from a single seed crystal, which is dipped in molten polysilicon then pulled to become a single cylindrical ingot. Monocrystalline-based solar power products are more expensive to produce than multicrystalline-based solar power products of similar dimensions. However, due to the uniform properties associated with using a single crystal, the conductivity of electrons in monocrystalline silicon is optimized, thus yielding higher energy conversion rates.

Multicrystalline silicon is made from casting polysilicon into ingot blocks. It consists of numerous smaller crystals and generally contains more impurities and crystal defects that impede the flow of electrons relative to monocrystalline silicon. While this results in a lower energy conversion efficiency, producing multicrystalline-based solar power products is cheaper than producing monocrystalline-based solar power products of similar dimensions.

String ribbon technology is an emerging wafer fabrication process in which multicrystalline wafers are grown to their final thickness by drawing strings through a molten silicon pool forming continuous wafer ribbons, avoiding the need to saw wafers from ingots.

Thin-film technologies generally do not require polysilicon in the production of solar cells and modules, and have received increasing attention over the last few years due to the increase in polysilicon prices. Thin-film technologies allow for lower production costs by using lower amounts of semiconductor material; however, the efficiency of thin-film-based solar cells is generally lower than that of crystalline silicon-based solar cells. Further, thin-film production typically requires higher investment costs for production equipment.

According to Solarbuzz, crystalline silicon-based solar power products represented 92% of the market in 2006, compared to 8% for thin-film-based solar power products.

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### *Key Growth Drivers*

We believe the following factors have driven and will continue to drive the growth of the solar power industry.

*Growing Electric Power Demand, Supply Constraints and Desire for Energy Security.* Worldwide demand for electricity is expected to increase from 16.1 trillion kilowatt hours in 2002 to 31.7 trillion kilowatt hours by 2030, according to the International Energy Agency, or IEA. The IEA also estimates that over 66% of the world's electricity is generated from fossil fuels such as coal, natural gas and oil. Declining fossil fuel reserves and escalating electricity consumption are driving up wholesale electricity prices, resulting in higher electricity costs for consumers and highlighting the need to develop technologies for reliable and sustainable electricity generation. In addition to generation challenges, the electric grid infrastructure in many parts of the world is in need of substantial upgrades. The IEA estimates that the transmission and distribution infrastructure in North America requires over \$900 billion in investments between 2003 and 2030 to meet the anticipated electricity demand. During the same period, in China almost \$1.2 trillion in additional investments for electricity transmission and distribution may be needed. Furthermore, many governments are attempting to reduce their dependence on foreign sources of energy because of the political and economic instability in many oil and gas producing regions of the world. Solar power offers an attractive means of power generation without relying extensively on foreign energy resources.

*Government Incentives for Solar Power.* Increasing environmental concerns and climate change risks associated with fossil fuel-based power generation have created political momentum for and pressure to implement greenhouse gas reduction strategies. Many countries have agreed to reduce emissions of carbon dioxide and other gases through international treaties such as the Kyoto Protocol. In addition, national and regional air pollution regulations also restrict the release of carbon dioxide and other gases. Solar power and other renewable sources, such as wind power, hydroelectric power and biomass, help address these environmental concerns.

Governments around the world have implemented a variety of policy initiatives to accelerate the development and adoption of solar power and other renewable energy sources. According to Photon Consulting's estimate, government support globally for solar power will increase from \$1.8 billion in 2005 to \$7.2 billion in 2008. Renewable energy policies are in place in many European countries, certain Asian countries, many of the states and provinces in Australia, Canada and the United States and in certain Latin American countries. Examples of customer-focused financial incentives include capital cost rebates, feed-in tariffs and tax credits. Capital cost rebates provide money to partially offset the consumer's upfront investment in a solar system. Feed-in tariffs require utilities to pay customers for the electricity they generate with solar systems based on kilowatt-hours produced, at a rate generally guaranteed for a period of time. Below is a description of the recent government incentives in the markets where we generate most of our revenues, such as Germany, Spain and Italy, and where we expect to further target, such as France, China, Japan and the United States:

*Germany.* Since 2000, Germany has enacted several laws that have contributed to the development of its solar power market. The Renewable Energy Law, as amended in 2004, requires electricity transmission grid operators to connect various renewable energy sources to their electricity transmission grids and to purchase all electricity generated by such sources at guaranteed feed-in tariffs. Germany's renewable energy policy has contributed to Germany surpassing Japan as the leading solar power market in terms of annual megawatt additions in 2004. According to Solarbuzz, German installation grew 16% in 2006 to absorb 968 MW, or 56% of the world's total photovoltaic production of 1,744 MW.

*Spain.* In Spain, there are two policies that provide support for solar power. One of the policies sets a framework for feed-in tariffs for solar power. The Spanish government also put in place a New Renewable Energy Plan for the period of 2005 to 2010. The plan, although focused on wind power,

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envisages renewable energy sources to account for 12% of the country's overall energy needs and 30% of total electricity consumption by 2010. We believe the size of the Spanish market was approximately 50 MW in 2006.

*Italy.* Italy passed renewable energy laws in 2005 which set fixed feed-in tariffs for electricity produced from renewable energy sources. The incentives are available to individuals, companies and public entities. There are other regional incentive programs to promote the installation of building integrated photovoltaic applications throughout Italy. The government is targeting to double the country's production of energy from renewable sources by 2012.

*France.* According to Solarbuzz, France has traditionally relied on nuclear power for its electricity needs. In 2006, the market for photovoltaic on-grid and off-grid systems totaled approximately 14 MW. Recently, France has raised its feed-in tariff, established in 2002, to Euro 0.225 per watt for homeowners and to Euro 0.30 per watt for businesses. According to Solarbuzz, by 2010, France aims to increase the use of renewable energy to 21% of its energy use from the current 14%.

*China.* China's Renewable Energy Law, which went into effect on January 1, 2006, authorizes relevant authorities to set favorable prices for the purchase of on-grid solar power-generated electricity, and provides other financial incentives for the development of renewable energy projects. Implementation rules have been promulgated in 2006. The National Development and Reform Commission is forecasting 400 MW to be installed by 2010 with continued growth to 1,000 MW installed by 2020.

*Japan.* Until 2005, Japan was the world-leading solar power market in terms of solar power installed capacity. The government runs a decade-long market incentive program which currently runs at 20 yen per watt for residential installation of solar power systems. According to Solarbuzz, demand for electricity in Japan has grown approximately 3.8% per year over the last 30 years, paralleling economic growth. While previous electricity generating facilities have matched growing demand, under the Kyoto Protocol, beginning in 2008, Japan will be obligated to cut back its carbon dioxide emissions by 6% from the levels in 1990. As a result, the government is expected to raise renewable energy to 3% of total energy consumed in 2010 and has a cumulative installation goal of 4,820 MW of solar power by 2010.

*United States.* Incentive programs in the United States have been implemented by several states, with the most notable programs in California and New Jersey. In California, the state's Public Utilities Commission provides rebates of capital cost of \$2.50 per watt installed. In August 2006, California enacted a law to promote residential and commercial solar installation in California, with a stated goal to install 3,000 MW of solar capacity by 2017. The New Jersey Clean Energy Program targets 90 MW of installed solar generation capacity by 2009 through rebates, grants and low interest project financing. In addition, the federal Energy Policy Act of 2005 provides tax credits for residential and commercial systems. The overall U.S. market for solar installation grew from 105 MW of new installation in 2005 to 140 MW in 2006, according to Solarbuzz.

*Growing Awareness of the Advantages of Solar Energy.* Solar power has several advantages over both conventional and other forms of renewable energy:

*Fuel risk advantage.* Unlike fossil and nuclear fueled power generation, solar power generation does not require additional fuel and therefore is not susceptible to rising fuel prices or delivery risk. Although the amount and timing of sunlight varies over the day, season and year, a properly sized and configured system can be designed to be highly reliable while providing a long-term, fixed price electricity supply.

*Reliability.* With no moving parts or regularly required maintenance, solar power systems are among the most reliable forms of electricity generation. Accelerated aging tests have indicated that solar modules can operate for more than 20 years without the need for major maintenance other than the occasional cleaning of the solar module surface.

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*Environmental advantage.* Solar power is one of the cleanest electric generation sources, capable of generating electricity without air or water emissions, noise, vibration, habitat impact or waste generation.

*Peak energy use advantage.* Solar power is well-suited to match peak energy needs as maximum sunlight hours generally correspond to peak energy demand periods when electricity prices are at their highest, as compared to other renewable resources that generally do not align power generation with peak demand periods.

*Modularity and distributed generation capability.* Solar power products can be deployed in many different sizes and configurations to meet the specific needs of the customer. Unlike other sources of electrical power, solar power allows for electric power generation at the point of consumption and does not require a transmission grid infrastructure to deliver electric power to the consumer.

### *Challenges Facing Solar Power*

Despite the benefits, the solar power industry must overcome the following challenges to achieve widespread commercialization of its products.

*Higher Cost to Consumers.* For most on-grid applications, the current overall cost of generating solar power electricity, when upfront capital costs are factored into cost-per-kilowatt, is greater than the cost of purchasing retail electricity from a utility grid. While government programs and consumer awareness have accelerated the use of solar power for on-grid applications, higher costs of solar power products remain one of the impediments to growth. To provide an economically attractive alternative to conventional grid power, the solar power industry must continually reduce manufacturing and installation costs and find ways to make the use of solar power cost-effectively over time without government incentives or subsidies. 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.

According to Photon Consulting, there will be higher demand for solar power in certain markets if the price of solar modules is reduced to \$2.5 per watt or below. The following illustrates the 2006 demand curve for solar modules.

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Source: Photon Consulting, 2006.

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*Achieving Higher Conversion Efficiencies at Lower Cost.* Solar modules are typically measured and sold on the basis of cost per watt of power output. As a result, increasing the conversion efficiency of solar cells used in solar modules while holding constant or reducing material and assembly costs required to build solar modules will increase the attractiveness of solar modules to consumers. In addition, increased conversion efficiency of solar cells will also reduce the size and space required for a solar power system, thereby lowering the cost of installation for a consumer.

*Shortages of Polysilicon.* There currently exists, and is expected in the near term to continue to exist, an industry-wide shortage of polysilicon, an essential raw material in the solar power supply chain. According to Solarbuzz, the polysilicon shortage is expected to last through at least 2008, when additional polysilicon manufacturing capacity is expected to become available. The increase in polysilicon manufacturing capacity is expected to come from the expansion of existing plants and new plants which will employ existing, well-proven technologies as well as new technologies expected to offer the potential for lower cost polysilicon. Given the current demand and supply imbalance, effective supply chain management is a critical element for the continued growth of the solar power industry and for controlling silicon raw material costs.

### **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.* We are currently engaged in the manufacturing of ingots, wafers and solar modules. In addition, we have constructed a solar cell manufacturing plant with an initial capacity of 50 MW and have begun production of solar cells in April 2007. Compared to other manufacturers who rely on toll manufacturing throughout the solar power value chain and a supply-chain management strategy, we believe that this model provides us with the following advantages:

*Capturing value along the solar power value chain.* We believe that opportunities exist to capture additional margin by producing ingots, wafers, solar cells and solar modules ourselves. As a vertically integrated solar manufacturer, we believe we will be better positioned to compete against companies that specialize only in certain stages of the solar power value chain because we can control more steps of the manufacturing process and eliminate the costs associated with our dependence on toll manufacturers and third-party suppliers.

*Realizing greater control over quality and continuous process improvement.* We believe that it is difficult for many solar manufacturers to efficiently examine and test, on a large scale, the technical parameters of materials procured from third-party suppliers. Our integrated manufacturing capabilities allow us to monitor the quality of our solar power products without having to rely on the quality assurances of other manufacturers or third-party suppliers. In addition, our integrated approach provides us with insights into methods to improve our manufacturing processes by designing more efficient ways of delivering goods across various stages of the value chain. For example, in our integrated model, we can identify which portion of an ingot is of higher quality compared to other parts of the ingot. We can then use the higher quality portion of the ingot (after slicing into wafers) to produce higher conversion efficiency solar cells for our own use. Under toll manufacturing, by contrast, we receive a guaranteed conversion efficiency from the solar cells manufacturers but we will potentially not be able to capture the additional conversion efficiency that result from our identification of the higher quality portion of an ingot.

*Achieving higher efficiency and lower costs by streamlining and shortening production cycles.* We believe that our vertically integrated business model provides us with a more streamlined in-house production process with shorter production cycles as compared to other non-integrated solar power products companies. For example, we do not need to repeat tasks such as packing, unpacking and shipping ingots, wafers or cells prior to their respective processing through the value chain.

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Furthermore, the elimination of such logistical tasks will help reduce product breakage that typically occurs during shipment, packing or unpacking processes. Moreover, we can consolidate some of our back-office functions such as shipping, inventory management and other related logistical tasks. As a result, we believe that we have the ability to reduce production cycle times as our machinery can be put to better use with less interference from shipping times or delays, and we can raise our efficiency through a streamlined operation.

*Flexibility to changing market conditions.* From time to time, depending on market conditions, we have the ability to buy and sell other products along the value chain in order to maximize our revenue and profit. For example, if solar module inventories or market conditions indicate that selling solar modules will result in lower profitability, we have the ability to use our products in other parts of the value chain and enter into buy and sell arrangements which may allow us to maintain or increase our profitability.

*Proven Execution by an Established Management Team with Significant Industry Expertise.* We have an experienced management team that has a record of implementing new technologies and production processes quickly and has successfully expanded the scope of our production capacity in the past year. Since our initial public offering, our management team has:

helped us to become one of the few Chinese manufacturers of solar products to have entered into long-term polysilicon supply contracts with non-Chinese polysilicon manufacturers;

rapidly implemented the construction and commercial production of our initial 50 MW solar cell production line;

increased our operational efficiency by maintaining our margins despite rising polysilicon prices; and

successfully expanded our customer and geographic sales markets to regions such as Spain, Italy and Greece, in addition to maintaining our sales to Germany.

Mr. Jifan Gao, our chairman and chief executive officer, has over 15 years of management experience in solar and other manufacturing industries. Mr. Gao currently serves as the vice chairman of the China Renewable Energy Society Solar Power Construction Committee and as the standing vice chairman of New Energy Chamber of Commerce of All-China Federation of Industry and Commerce. Dr. Srinivasamohan Naryanan, our vice president of technology, has more than 18 years of experience in the solar industry. He previously worked in the Photovoltaic Research Center at the University of New Wales, Australia and was a director of technology of BP Solar. Mr. Diming Qiu, head of our technology committee, has more than 23 years of experience in the solar industry. He was involved in the construction of a vertically integrated production line from ingot manufacturing to module assembly in China in the 1980s, and was a member of China's National Solar Photovoltaic Energy System Standardization Technology Commission. We have also recruited experienced managers with diverse international backgrounds to help continue our expansion and growth.

*Experienced Producer of Monocrystalline-based Solar Power Products.* We are one of the few Chinese producers of solar power products who specialize in the use of monocrystalline silicon. Monocrystalline-based solar power products offer higher conversion efficiency, but are typically produced at a higher cost than multicrystalline-based solar power products of similar dimensions. We believe that our proprietary process and technical know-how in working with monocrystalline silicon offer us a distinct cost advantage. Compared to methods generally used in our industry, we continue to use a higher proportion, approximately 80%, of reclaimable silicon raw materials in lieu of more expensive virgin polysilicon. During periods of polysilicon supply shortage, our know-how and access to reclaimable silicon raw materials allow us to achieve optimal flexibility in raw material procurement. Moreover, as we continue to generate more reclaimable silicon from our own processes, we intend to establish a platform to use reclaimable silicon that we have identified as better suited and more cost-effective to be used for multicrystalline silicon production processes. Therefore, we will devote some of our research and development resources to develop such platform in order to improve our production efficiency.

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Furthermore, even though we began wafer manufacturing in February 2006, our ability to implement new technologies quickly has enabled us to cut thinner monocrystalline wafers to an industry standard of 220 microns. We have also been able to cut wafers with a 200 micron thickness and continue to explore ways to commercially produce wafers of such thickness. At the same time, we are also able to, on a trial basis, increase the diameter of our monocrystalline silicon ingots and thus the dimension of our wafers. We continue to work towards the production, on a trial basis, of monocrystalline silicon wafers with a length and a width of 156 millimeters (from the existing 125 millimeters).

Our experience in the production of monocrystalline-based solar power products has enabled us to use approximately 8.0 grams of silicon per watt of modules produced, which is better than the industry average of approximately 9.5 grams of silicon per watt of module produced, as estimated by Photon Consulting.

*Active Management of Upstream Raw Material Supplies.* We actively manage many supply sources and types of silicon needed for our business. This management capability helps us to secure a reliable and cost-effective supply of raw materials and to mitigate the effects of the current polysilicon supply shortage. We procure silicon raw materials from various sources, including international polysilicon manufacturers as well as international and domestic distributors. We purchase reclaimable silicon raw materials from over 20 suppliers, including semiconductor manufacturers and silicon processing companies. Our spot cost per kilogram of reclaimable silicon has historically been significantly lower than the spot cost of polysilicon.

Moreover, we have procurement personnel located in China and Europe. Our procurement team's geographic proximity to raw material supply sources helps us better communicate with our suppliers and allows us to respond to them quickly. We have secured approximately 90% of our silicon raw material requirements to support our estimated production output in 2007 and 60% of our silicon raw material requirements in 2008. We intend to leverage the global reach of our procurement personnel to secure the remainder of our silicon requirements.

In the first quarter of 2007, we entered into two long-term polysilicon supply contracts with Wacker Chemie AG and DC Chemical for delivery starting in 2009. We believe that we are one of the few Chinese manufacturers of solar products to have secured such long-term contracts from non-Chinese polysilicon manufacturers. Our long-term contract from Wacker Chemie AG is for a six-year term with delivery beginning in 2009 and will allow us to produce approximately 150 MW of solar modules. Our long-term contract with DC Chemical is for delivery from 2009 to 2015 and will allow us to produce approximately 120 MW of solar modules.

*Low-cost, China-based Manufacturing Capability.* We believe our China-based manufacturing provides us with a cost advantage over manufacturers in Europe, Japan and North America. We maximize production efficiency by optimizing automated and manual operations in our manufacturing processes to leverage our lower cost skilled workforce, engineering and technical resources. Moreover, we also procure and utilize lower-cost domestically-built equipment with comparable quality to that of imported equipment.

## **Our Strategies**

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

*Leverage Our Vertically Integrated Manufacturing Capabilities.* We are vertically integrated with the production of monocrystalline silicon ingots, wafers, solar cells and solar modules. We believe our in-house production capabilities from ingot to modules allows us to reduce our dependence on third-party manufacturers and will allow us to maintain our margins as raw material prices continue to increase in the near-term. We also believe that our integrated in-house manufacturing capabilities will allow us to monitor the quality of our solar products without relying on the quality assurance of third-party manufacturers or suppliers and have better quality control over the entire manufacturing process. In addition, as the market conditions may continue to change, our vertically integrated business model will give us the flexibility to respond to changing conditions.

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*Expand Our Manufacturing Capacity.* We plan to substantially increase our manufacturing capacity in order to both meet ongoing demand for our products and maximize economies of scale. Currently, our solar module manufacturing capacity is 59.8 MW per year. We plan to construct additional production facilities and to increase our annual manufacturing capacity from ingots to solar modules to 150 MW and 350 MW by the end of 2007 and 2008, respectively. To support our capacity expansion plans, we intend to continue to source our production equipment from cost-competitive suppliers, and to purchase certain precision-calibrated equipment from overseas equipment suppliers. As part of our capacity expansion plans, we will continue to utilize low-cost skilled labor to achieve economies of scale and enhance our margins.

*Expand and Maintain Flexible Raw Material Supply Sources.* We believe that our future success will continue to depend largely on our ability to secure reliable and cost-effective silicon raw materials. We intend to pursue a two-pronged strategy to secure our silicon raw material needs. We will seek to minimize our purchases of polysilicon on the spot market, which has traditionally been characterized by higher prices than reclaimable silicon materials. We will also continue to rely on our proprietary process and technical know-how and our network of suppliers to procure an optimal mix of polysilicon and reclaimable silicon materials sufficient to meet our production output.

*Pursue Large-Scale Production to Achieve a Grid Parity Cost Structure in the Long Run.* We recognize that the long-term challenge for solar power remains its higher cost compared to conventional sources of electricity such as fossil fuel. We anticipate 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. Solar-power product manufacturers who have the ability to manufacture products that can generate electricity closer to grid parity will consequently have a distinct advantage, including the ability to sell into markets where government subsidies are minimal. It is our long-term strategy to build our company into an industry leader in pursuing production cost approaching grid parity pricing for electricity by leveraging our inherent strengths, including our vertically integrated business model, our proprietary process and know-how with monocrystalline silicon production, as well as our low-cost, China-based manufacturing presence.

In the long term, we anticipate that the price of polysilicon will decrease, particularly after 2008, as additional polysilicon manufacturing capacity becomes available through the expansion of existing plants and new plants employing existing, well-proven technologies and new technologies that offer the potential for lower cost polysilicon production. As a result, we have entered into long-term supply contracts for polysilicon delivery starting in 2009.

Despite the decrease in the price of polysilicon, we anticipate that the long-term strategy of reaching grid parity may not be achieved until 2010 to 2020. In addition, the price at which grid parity exists varies based on each individual market. Currently, we do not derive significant revenues from markets where grid parity could be reached in the shortest period of time. In addition, we estimate that our cost of revenues would need to reach approximately \$1.75 per watt or below in order for us to begin to reach grid parity in some markets.

*Continue to Enhance Efficiency of our Manufacturing Process.* We plan to devote substantial research and development resources to enhancing the efficiency of our monocrystalline-based manufacturing processes, which will be relevant to both our current manufacturing mix of ingots, wafers and solar modules, and our expansion into solar cell production. We will focus on developing process technologies to make full use of the conversion efficiency advantage of monocrystalline silicon. As part of this strategy, our focus is to improve our existing proprietary manufacturing know-how and to increase the use of higher proportions of reclaimable silicon raw materials in the production of monocrystalline silicon ingots and wafers, without compromising quality. We are also investing in the development of process technologies to reduce the thickness and enlarge the dimension of wafers to conserve the use of polysilicon.

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Moreover, as we continue to generate more reclaimable silicon from our own processes, we intend to establish a platform to use reclaimable silicon that we have identified as better suited and more cost-effective to be used for multicrystalline silicon production processes. Our vertically integrated business model allows us the ability to identify and use such silicon in a multicrystalline silicon process in order to improve our production efficiency.

*Further Diversify our Geographic Sales Effort and Customer Base.* In order to continue to grow our sales and to reduce our exposure to any particular geographic market, we intend to broaden our geographic presence and diversify our customer base. Historically, the majority of our revenues attributable to solar modules were generated from sales to customers located in Europe, particularly Germany. While Germany is expected to continue to be a significant market for us, we plan to expand our business presence in the emerging solar power markets of Spain, Italy, France, Greece, South Korea, the United States, Japan and China. Moreover, we have near-term plans to expand our sales network by establishing offices in Europe and the United States for local sales to those regions.

We plan to use a two-pronged market penetration strategy. First of all, we will continue to sell to large customers, such as distributors and wholesalers of solar power products at existing or greater volumes. Secondly, as our production output grows, we will sell the remainder of our productions to medium customers such as PV integrators. Our sales to these customers will focus on developing our brand and servicing these customers regionally, while at the same time provide us further insights into market trends and conditions. We believe that we will achieve better pricing by selling to medium customers compared to large customers.

*Target the Emerging Solar Market in China.* We expect the solar energy market in China to have great potential in response to recent legislation and policies encouraging the use of renewable energy sources. We intend to further pursue the system integration market in China when it becomes more developed as well as actively sell our solar modules to Chinese customers. We believe our expertise in solar power system integration, our in-depth knowledge of the local market and our proven track record obtained through the experience of completing several pilot installation projects with various governmental entities will give us a competitive advantage to capture market growth opportunities.

## **Products**

We design, develop, manufacture and sell solar modules. Solar modules are arrays of interconnected solar cells encased in a weatherproof frame. We produce standard solar modules, ranging from 160 W to 185 W in power output, built to general specifications for use in a wide range of residential, commercial, industrial and other solar power generation systems. This power output is slightly below the amount of power required for a typical 29-inch television set with a 200 W specification. The variation in power output is based on the conversion efficiency of the cells used in our solar modules. We also design and produce solar modules based on our customers' specifications. Our solar modules are sealed, weatherproof and able to withstand high levels of ultraviolet radiation and moisture. We primarily sell our modules under our own brand.

## **Manufacturing**

We manufacture ingots, wafers, cells and modules. Our facilities include ingot, wafer, cell and module production lines with the current annual manufacturing capacity of 90.0 MW, 75.8 MW, 50 MW and 59.8 MW, respectively. 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.

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<b>Manufacturing Facility</b>	<b>Floor Space (Leased/Owned) (square meters)</b>	<b>Manufacturing Commencement Date</b>	<b>Annual Manufacturing Capacity as of December 31, 2006</b>	<b>Production Output for the Year Ended December 31, 2006</b>	<b>Estimated Annual Manufacturing Capacity as of December 31, 2007</b>
Silicon ingots	Owned/11,163	August 2005	90.0 MW <sup>(1)</sup>	27.4 MW <sup>(1)</sup>	150 MW
Silicon wafers	Owned/5,286	February 2006	75.8 MW <sup>(1)</sup>	24.9 MW <sup>(1)</sup>	150 MW
Solar cells	Owned/13,344	April 2007	50.0 MW <sup>(2)</sup>		150 MW
Solar modules	Owned/5,348	November 2004	59.8 MW	27.4 MW	150 MW

(1) Include modules produced but not shipped as of December 31, 2006.

(2) As of April 2, 2007, when we commenced our production of solar cells.

We expect to increase our total annual manufacturing capacity from ingots to solar modules, to 150 MW by the end of 2007.

*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.

*Ingots.* We began manufacturing ingots in August 2005 with pulling machines. As of December 31, 2006, we had 90 pulling machines with an aggregate annual capacity of approximately 229.3 metric tonnes, which typically yields 90.0 MW of modules based on current manufacturing processes. In the first quarter of 2007, we added another 20 pulling machines and our ingot output can support an estimated annual module capacity of 150 MW.

To produce monocrystalline silicon ingots, silicon raw materials are first melted in a quartz crucible in the pulling machine, which acts as a 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 intend to establish a platform for the production of multicrystalline ingots by the end of 2007 and have purchased the necessary equipment, such as DSS (Directional Solidification System) furnaces, for its establishment. To produce multicrystalline ingots, silicon raw materials are first melted and cast into ingots. The resulting ingot consists of multiple smaller crystals as opposed to the single crystal of a monocrystalline ingot.

*Wafers.* Currently, we slice silicon wafers to a 220 micron thickness, while maintaining a low breakage rate. We began manufacturing wafers in February 2006. Ingots are squared and then sliced into wafers by high-precision cutting techniques using steel wires and silicon carbon powder. 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 and packed and shipped in boxes to solar cell manufacturers. Our annual wafer manufacturing capacity as of December 31, 2006 was approximately 32.4 million wafers, which typically yields 75.8 MW of modules based on current manufacturing processes. We currently use toll manufacturers to produce a portion of our silicon wafers. We plan to increase our annual manufacturing capacity to approximately 66 million wafers by the end of 2007 to meet our estimated annual module capacity of 150 MW.

*Solar cells.* We currently produce our own solar cells, as well as use toll manufacturers for use in our solar modules. In April 2007, we began production of cells and have achieved an average conversion efficiency of 16.3%. We currently have two production lines with an annual manufacturing capacity of 50 MW and produce approximately 39,000 solar cells per day. We plan to



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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.

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.

*Solar modules.* We began module manufacturing in November 2004. We increased our annual manufacturing capacity of modules from 6 MW per year as of November 2004 to 59.8 MW per year as of December 31, 2006. We currently have eight production lines, and plan to increase our annual manufacturing capacity to 150 MW by adding six additional lines by the end of 2007.

To assemble solar 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 solar modules are sealed and become weatherproof and are able to withstand high levels of ultraviolet radiation and moisture.

Solar 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 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.

All of our research, development and manufacture of ingots, wafers, cells and solar modules are conducted at our facilities in Changzhou, China, where we occupy a site area of approximately 152,526 square meters. We believe our current and planned facilities will meet our current and foreseeable requirements.

## **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 polysi