

Trina Solar LTD
Form 20-F
April 02, 2013
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**
- OR**
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2012
- OR**
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ **to** _____
- OR**
- SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report

Commission file number: 001-33195

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TRINA SOLAR LIMITED

(Exact Name of Registrant as Specified in Its Charter)

N/A

(Translation of Registrant's Name Into English)

Cayman Islands

(Jurisdiction of Incorporation or Organization)

No. 2 Tian He Road

Electronics Park, New District

Changzhou, Jiangsu 213031

People's Republic of China

(Address of Principal Executive Offices)

Terry Wang, Chief Financial Officer

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

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

| Title of each class | Name of each exchange on which registered |
|---|---|
| American Depositary Shares, each representing 50 ordinary shares, par value \$0.00001 per share | New York Stock Exchange |

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

None
(Title of Class)

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

3,946,062,783 ordinary shares, par value \$0.00001 per share, as of December 31, 2012.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

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

U.S. GAAP

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

Other

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

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes No

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INTRODUCTION

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

- We, us, our, and our company refer to Trina Solar Limited, its predecessor entities and its subsidiaries;
- Trina refers to Trina Solar Limited;
- Trina China refers to Changzhou Trina Solar Energy Co., Ltd.;
- TST refers to Trina Solar (Changzhou) Science and Technology Co., Ltd.;
- ADSs refers to our American depositary shares, each of which represents 50 ordinary shares;
- ADRs refers to the American depository receipts, which, if issued, evidence our ADSs;
- China or PRC refers to the People's Republic of China, excluding, for the purpose of this annual report, Taiwan, Hong Kong and Macau;
- RMB or Renminbi refers to the legal currency of China, \$ or U.S. dollars refers to the legal currency of the United States, and or Euro refers to the legal currency of the European Union;
- shares or ordinary shares refers to our ordinary shares, par value \$0.00001 per share; and
- issued and outstanding refers to our shares that have been issued, outstanding and paid in full, for the avoidance of doubt, excluding shares that have been set aside in relation to any share incentive plan or convertible debt security.

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

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

This annual report on Form 20-F includes our audited consolidated financial statements for the years ended December 31, 2010, 2011 and 2012.

This annual report contains translations of certain Renminbi amounts into U.S. dollars at the rate of RMB6.2301 to \$1.00, the noon buying rate in effect on December 31, 2012 in New York City for cable transfers of Renminbi as certified for customs purposes by the Federal Reserve Bank of New York. We make no representation that the Renminbi or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. dollars or Renminbi, as the case may be, at any particular rate or at all. See Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Fluctuations in exchange rates could adversely affect our business. On March 22, 2013, the noon buying rate was RMB6.2120 to \$1.00.

We completed the initial public offering of 5,300,000 ADSs on December 22, 2006. On December 19, 2006, we listed our ADSs on the New York Stock Exchange under the symbol TSL. On November 22, 2010, our ADRs started trading on the Singapore Exchange GlobalQuote Board under the symbol K3KD.

Table of Contents**PART I****Item 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not Applicable.

Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable.

Item 3. KEY INFORMATION**A. Selected Financial and Operational Data**

The following selected consolidated statement of operations data (other than ADS data) for the years ended December 31, 2010, 2011 and 2012 and the selected consolidated balance sheet data as of December 31, 2011 and 2012 have been derived from our audited financial statements included elsewhere in this annual report. The selected consolidated financial data should be read in conjunction with those financial statements and the accompanying notes and Item 5. Operating and Financial Review and Prospects below. Our consolidated financial statements are prepared and presented in accordance with United States generally accepted accounting principles, or U.S. GAAP. Our historical results do not necessarily indicate our results expected for any future periods.

Our selected consolidated statements of operations data (other than ADS data) for the years ended December 31, 2008 and 2009 and our consolidated balance sheets data as of December 31, 2008, 2009 and 2010 have been derived from our audited consolidated financial statements, which are not included in this annual report.

| | Year Ended December 31, | | | | |
|--|---|------------|--------------|--------------|--------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| | (in thousands, except for share, per share, operating data and percentages) | | | | |
| Consolidated Statement of Operations Data | | | | | |
| Net sales | \$ 831,901 | \$ 845,136 | \$ 1,857,689 | \$ 2,047,902 | \$ 1,296,655 |
| Cost of goods sold | 667,459 | 607,982 | 1,273,328 | 1,715,260 | 1,239,412 |
| Gross profit | 164,442 | 237,154 | 584,361 | 332,642 | 57,243 |
| Operating expenses: | | | | | |

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| | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|
| Selling expenses | 20,302 | 30,940 | 75,677 | 100,427 | 118,885 |
| General and administrative expenses | 41,114 | 65,406 | 72,711 | 157,129 | 176,719 |
| Research and development expenses | 3,039 | 5,439 | 18,625 | 44,120 | 26,511 |
| Total operating expenses | 64,455 | 101,785 | 167,013 | 301,676 | 322,115 |
| Income (loss) from operations | 99,987 | 135,369 | 417,348 | 30,966 | (264,872) |
| Foreign exchange (loss) gain | (11,802) | 9,958 | (36,156) | (27,435) | 908 |
| Interest expense | (24,558) | (27,095) | (33,952) | (35,021) | (51,887) |
| Interest income | 2,944 | 1,667 | 2,590 | 3,056 | 8,552 |
| Derivatives (loss) gain | (1,067) | (1,590) | 9,476 | (11,393) | 8,542 |
| Other (expense) income, net | (156) | 2,613 | 216 | 9,317 | 6,797 |
| Income (loss) before income taxes | 65,348 | 120,922 | 359,522 | (30,510) | (291,960) |
| Income tax (expense) benefit | (4,609) | (24,696) | (48,069) | (7,310) | 25,405 |
| Net income (loss) | 60,739 | 96,226 | 311,453 | (37,820) | (266,555) |
| Net loss attributable to the noncontrolling interest | | | | (1) | (1) |
| Net income (loss) attributable to Trina Solar Limited Shareholders | \$ 60,739 | \$ 96,226 | \$ 311,453 | \$ (37,820) | \$ (266,555) |
| Earnings (loss) per ordinary share: | | | | | |
| Basic | \$ 0.02 | \$ 0.04 | \$ 0.09 | \$ (0.01) | \$ (0.08) |
| Diluted | \$ 0.02 | \$ 0.03 | \$ 0.08 | \$ (0.01) | \$ (0.08) |
| Earnings (loss) per ADS(2): | | | | | |
| Basic | \$ 1.23 | \$ 1.77 | \$ 4.58 | \$ (0.54) | \$ (3.77) |
| Diluted | \$ 1.20 | \$ 1.69 | \$ 4.18 | \$ (0.54) | \$ (3.77) |
| Weighted average ordinary shares outstanding: | | | | | |
| Basic | 2,501,202,680 | 2,724,185,761 | 3,402,701,503 | 3,521,182,416 | 3,534,829,694 |
| Diluted | 2,690,723,390 | 3,131,505,181 | 3,833,713,796 | 3,521,182,416 | 3,534,829,694 |
| Weighted average ADS outstanding:(2) | | | | | |
| Basic | 50,024,054 | 54,483,715 | 68,054,030 | 70,423,648 | 70,696,594 |
| Diluted | 53,814,468 | 62,630,104 | 76,674,276 | 70,423,648 | 70,696,594 |
| Consolidated Financial Data | | | | | |
| Gross margin | 19.8% | 28.1% | 31.5% | 16.2% | 4.4% |
| Net margin | 7.3% | 11.4% | 16.8% | (1.8)% | (20.6)% |
| Consolidated Operating Data | | | | | |
| PV modules shipped (in MW) | 201.0 | 399.0 | 1,057.0 | 1,512.0 | 1,594.0 |
| Average selling price (\$/W) | \$ 3.92 | \$ 2.10 | \$ 1.75 | \$ 1.33 | \$ 0.78 |

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| | 2008 | 2009 | As of December 31, 2010 (in thousands) | 2011 | 2012 |
|---|------------|--------------|--|--------------|--------------|
| Consolidated Balance Sheet Data | | | | | |
| Cash and cash equivalents | \$ 132,224 | \$ 406,058 | \$ 752,748 | \$ 816,780 | \$ 807,276 |
| Restricted cash | 44,991 | 72,006 | 38,035 | 79,602 | 110,920 |
| Inventories | 85,687 | 81,154 | 79,126 | 249,779 | 318,504 |
| Accounts receivable, net | 105,193 | 287,950 | 377,317 | 466,537 | 390,157 |
| Total current assets | 419,883 | 927,517 | 1,415,139 | 1,768,722 | 1,765,487 |
| Property, plant and equipment, net | 357,594 | 476,858 | 571,467 | 919,727 | 893,340 |
| Total assets | 940,116 | 1,548,698 | 2,132,089 | 2,877,448 | 2,864,857 |
| Short-term borrowings and current portion of long-term borrowings | 248,558 | 267,428 | 158,652 | 389,472 | 875,821 |
| Accounts payable | 62,504 | 186,535 | 188,000 | 472,092 | 423,985 |
| Total current liabilities | 335,714 | 515,401 | 600,070 | 1,007,435 | 1,479,155 |
| Accrued warranty costs | 12,473 | 21,023 | 38,711 | 58,810 | 65,780 |
| Long-term borrowings, excluding current portion | 14,631 | 182,516 | 299,977 | 520,151 | 415,150 |
| Total equity | 436,501 | 679,312 | 1,173,647 | 1,145,325 | 881,785 |
| Total liabilities and equity | \$ 940,116 | \$ 1,548,698 | \$ 2,132,089 | \$ 2,877,448 | \$ 2,864,857 |

(1) The amount of net loss attributable to the noncontrolling interest is less than one thousand for the years ended December 31, 2011 and 2012.

(2) Reflects ADS ratio change effective January 2010.

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

Risks Related to Our Company and Our Industry

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

We are affected by solar power markets and industry trends. Weakened global economic conditions may affect the availability of financing, which in turn would slow the demand for photovoltaic, or PV, projects. As a result of global economic conditions, some governments may implement austerity measures that reduce the feed-in tariffs and other subsidies designed to benefit the solar industry. In the fourth quarter of 2008 and the first quarter of 2009, the global solar power industry experienced a precipitous decline in demand due to decreased availability of financing for downstream buyers of solar power products as a result of the global economic crisis. During the same period, increased manufacturing capacity combined with decreased demand for and prices of polysilicon caused a decline in the prices of solar power products. In 2011, a decrease in payment to solar power producers, in the form of feed-in tariffs and other reimbursements, and a reduction in available financing caused a decrease in the growth in a number of solar power projects in the European markets. Payments to solar power producers decreased as governments in Europe, under pressure to reduce sovereign debt levels, reduced subsidies such as feed-in tariffs, which tariffs require public utility companies to pay higher prices for solar power than for power generated through conventional means. Furthermore, many downstream purchasers of solar power products were unable to secure sufficient financing for the solar power projects due to the global credit crunch. As a result, many solar power producers that purchase solar power products from manufacturers like us were unable or unwilling to expand their operations. These market conditions were exacerbated by an over-supply of solar power products primarily driven by an increase in manufacturing capacity that continued through 2011, which adversely affected the prices of solar power products. In 2012, the European governments reduced their support in the European markets that have traditionally relied upon feed-in-tariffs to support demand and newer markets utilized feed-in-tariffs and power purchase agreement to support demand, which in the aggregate resulted in a marked decline in the global growth rate of demand for solar products. In addition, a number of manufacturers faced cash liquidity pressures, which caused the prices of solar power products to decrease. Demand for solar power is also influenced by macroeconomic factors such as global economic conditions, the supply and prices of other energy products such as oil, coal and natural gas, and government regulations and policies concerning the electric utility industry. A decrease in oil prices, for example, may reduce demand for investment in alternative energy.

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If these negative market and industry trends continue and demand for solar power projects and solar power products weakens as a result, our business and results of operations may be materially and adversely affected.

Fluctuations in polysilicon prices may affect our margins.

Polysilicon is an essential raw material used in the production of solar cells and modules. Prior to the second half of 2008, there was an industry-wide shortage of polysilicon, primarily as a result of the growing demand for solar power products. According to Solarbuzz, an independent solar energy research and consulting firm, spot prices for solar grade polysilicon were in the range of \$230-\$375 per kilogram for most of the first half of 2008 and rose to a peak of \$450-\$475 per kilogram by mid-2008. Increases in the price of polysilicon have in the past increased our production costs, and any significant price increase in the future may adversely impact our business and results of operations. Due to the historical scarcity of polysilicon, supply chain management and financial strength were the key barriers to entry. Beginning in late 2008, however, newly available polysilicon capacity has resulted in an increased supply of polysilicon, which created downward pressure on prices. According to Solarbuzz, the average prices of long-term polysilicon supply contracts were \$52-\$57 per kilogram, approximately \$38 per kilogram and approximately \$22-\$24 per kilogram during the fourth quarters of 2010, 2011 and 2012, respectively. According to Solarbuzz, spot prices for solar grade polysilicon were \$75-\$85 per kilogram, approximately \$30 per kilogram and \$16-\$17 per kilogram during the fourth quarters of 2010, 2011 and 2012, respectively.

The price of polysilicon may not continue to decline or remain at its current levels. Increases in the price of polysilicon have in the past increased our cost of goods sold, and any significant price increase in the future may adversely impact our margins. We purchase polysilicon from a limited number of international and domestic suppliers. Consistent with market practice, our medium and long-term supply contracts generally contain price adjustment provisions that offer both parties the right to adjust contract price when the fluctuation of market price during a specified period has exceeded a threshold as agreed to by both parties. If the market price of polysilicon increases significantly in the future, our counterparties will be able to renegotiate contract prices with us based on the then market price. Further, in 2011 and 2012, we renegotiated several medium-term and long-term supply contracts that required us to purchase polysilicon at a predetermined price or quantity to more closely link our purchase costs with market prices. If there is a significant increase in polysilicon price and the contract prices are renegotiated or adjusted higher, our cost of goods sold may be materially and adversely affected. Moreover, as the prices of other silicon-based raw materials, including ingots and wafers, are correlated to the price of polysilicon, an increase in the price of polysilicon would likely lead to increases in the prices of other silicon-based raw materials that we source from third parties. Due to the volatility of polysilicon prices, we also recently renegotiated our wafer purchase amounts and prices under a long-term framework agreement with a third party to more closely track market prices. We cannot assure you that our polysilicon procurement strategy will be successful in ensuring that we have an adequate supply of polysilicon at commercially viable prices to meet our requirements. Further, if the price of polysilicon increases faster than the increase in the price of PV modules, we may be unable to pass the increase to our customers, or if the price of PV modules decreases more quickly than the decrease in the price of polysilicon, our results of operations could be materially and adversely affected.

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

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

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

If we do not successfully renegotiate our medium-term and long-term contracts with our polysilicon and wafer suppliers, our raw material costs and our excess inventory may increase.

We purchase polysilicon from a limited number of international and domestic suppliers using short-term, medium-term and long-term contracts. Several of these medium-term and long-term contracts are partially pre-paid. From the fourth quarter of 2008, the price of polysilicon decreased rapidly due to the increased supply of polysilicon that resulted from intensive investments in silicon manufacturing. As a result of the decrease in the price of polysilicon in late 2008 and early 2009 we renegotiated most of our medium-term and long-term contracts to reduce the purchase price, thereby reducing our costs. In 2011 and 2012, due to a general decrease in polysilicon prices, we renegotiated several medium-term and long-term supply contracts that required us to purchase polysilicon at a pre-determined price or quantity to more closely link our purchase costs with market prices. Due to the volatility of polysilicon prices, we also recently renegotiated our wafer purchase amounts and prices under a long-term framework agreement with a third party to more closely track market prices. See Item 4. Information on the Company B. Business Overview Silicon-based Raw Material Supplies for more information. If we are required to renegotiate our polysilicon and wafer contracts in the future and we are unable to reach an agreement with terms favorable to us, we may be placed at a competitive disadvantage compared to our competitors, and our earnings could decline. In addition, if demand for our PV products decreases, yet our supply agreements require us to purchase more polysilicon or wafers than required to meet our actual customer demand, we may incur costs associated with carrying excess inventory. To the extent we are not able to pass these increased costs on to our customers, our business, cash flows, financial condition and results of operations may be materially and adversely affected.

The determination by U.S. and European Union authorities that our export sales are in violation of international fair trade rules could impede our access to important export markets.

Solar panel manufacturing companies in the United States filed antidumping and countervailing duty actions against imports of Chinese solar panels in 2011. These actions resulted in investigations by U.S. authorities, namely the Department of Commerce and International Trade Commission. On October 10, 2012, the Department of Commerce announced its final affirmative determination regarding antidumping and

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countervailing duties applicable to the importation of crystalline silicon PV cells into the United States, whether or not assembled into modules, from China. On November 7, 2012, the International Trade Commission announced its affirmative determination that imports of crystalline silicon PV cells into the United States from China cause material injury to the U.S. domestic industry. As a result, the Department of Commerce has issued antidumping and countervailing duty orders on our imports at an effective net rate of 23.75%, comprised of an antidumping duty margin of 18.32% and subsidy rate of 15.97%, minus 10.54% under the Department of Commerce rules to avoid a double application of calculated duties. In February 2013, we filed appeals, as did other parties, with the U.S. Court of International Trade, challenging various aspects of the Department of Commerce's findings. We may not be successful in our appeals, and if the domestic industry's appeals are successful, the scope of the antidumping and countervailing duty orders could be expanded and the net rate applicable to our imports into the United States could be increased, which could adversely affect our export sales to the United States.

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In addition, on September 6, 2012, the European Commission announced the initiation of an anti-dumping investigation concerning imports into the European Union of crystalline silicon PV modules and key components (i.e., cells and wafers), originating in China. On November 8, 2012, the European Commission announced the initiation of an anti-subsidy investigation concerning imports into the European Union of crystalline silicon PV modules and key components originating in China. Further, on March 6, 2013, the European Commission also moved to require registration of imports of silicon PV modules and key components into the European Union from China. The European Commission is expected to issue its provisional findings concerning its anti-dumping investigation by June 5, 2013, and concerning its anti-subsidy investigation by August 5, 2013. Its decision as to the imposition of any definitive measures will be presented before December 5, 2013. As one of the China-based suppliers of these products to the European Union, if the European Commission assesses duties on the importation of these products, it could materially and adversely affect our affiliated European Union import operations and increase our cost of selling into the region and thus could adversely impact our export sales to the European Union, which is our largest market.

It is also possible that other antidumping or countervailing duty or other import restrictive proceedings will be initiated in any number of additional jurisdictions. For example, in November 2012 India also initiated anti-dumping investigations against solar cell imports from China, the United States, Malaysia and Taiwan. Though our policy is that all of our export sales comply with international trade practices, we cannot guarantee that the government agencies in the jurisdictions in which actions are brought will reach the same conclusion. Violations of antidumping and countervailing duty laws can result in significant additional duties imposed on imports of our products into these countries, which increase our costs of accessing future additional markets. As a result of the duties imposed by U.S. authorities, or if duties are imposed on our PRC-manufactured products, we may adjust our business strategy for selling into these jurisdictions, including moving part of our manufacturing operations overseas. Any change in our business strategy would create a number of operational and legal uncertainties. Any of the above scenarios may materially and adversely impact our sales, thereby limiting our opportunities for growth.

We have been named as a defendant in certain purported legal and administrative actions that may have a material adverse impact on our operating results and financial condition.

We have to defend against legal and administrative actions described in Item 8 of this annual report, Item 8. Financial Information A. Consolidated Statements and Other Financial Information Legal and Administrative Proceedings, including a lawsuit brought by the trustee of Solyndra LLC and trade actions. We may consider appealing the outcome of such legal and administrative actions should our initial defense be unsuccessful. We are currently unable to estimate the possible loss or possible range of loss, if any, associated with the resolution of these legal and administrative actions and disputes. Any unfavorable outcome from these actions and disputes, including an appeal of the judgment or outcome in these actions and disputes, may have a material adverse effect on our consolidated financial position, results of operations, or cash flows in the future. The legal and administrative proceedings may utilize a material portion of our cash resources and divert management's attention from the day-to-day operations of our company, all of which could harm our business. There can be no assurance that we will prevail in any such appeal and any adverse outcome of these cases could have a material adverse effect on our business or results of operations.

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

Demand for our products depends substantially on government incentives aimed to promote greater use of solar power. In many countries in which we are currently, or intend to become, active, the solar power markets, particularly the market of on-grid PV systems, would not be commercially viable without government incentives. This is because the cost of generating electricity from solar power currently exceeds, and we believe will continue to exceed for the foreseeable future, the costs of generating electricity from conventional or non-solar renewable energy sources.

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The scope of the government incentives for solar power depends, to a large extent, on political and policy developments relating to environmental concerns in a given country, which could lead to a significant reduction in or a discontinuation of the support for renewable energies in such country. Federal, state and local governmental bodies in many of our primary-targeted markets, notably, Germany, Italy, the United Kingdom and other countries in Europe, China, the United States, Australia, India, Japan, as well as other markets in Asia, Africa, the Middle East, Latin America and the Caribbean Islands have provided subsidies and economic incentives in the form of capital cost rebates, feed-in tariffs, tax credits and other incentives to end users, distributors, system integrators and manufacturers of solar power products. Policy shifts could reduce or eliminate these government economic incentives altogether. For example, the rapid rises of the German and Spanish markets were largely due to the government policies of those countries that set feed-in tariff terms at attractive rates.

However, in September 2008, the Spanish government introduced a feed-in-tariff cap of 500 megawatts, or MW, which limited demand in the grid-connected market in Spain. Additionally, in December 2010, the Spanish government reduced the maximum allowable annual operating hours for which PV systems could earn feed-in-tariff payments. In 2009, the German government reduced solar feed-in tariffs by 9%. In January, July and October of 2010, Germany introduced further solar feed-in tariffs reductions of approximately 24-26% for rooftop systems and 20-25% for ground-based systems. Germany further reduced its feed-in tariffs in the beginning of 2012 by 15% to up to 24.43 Euro cents per kilowatt hour for rooftop systems and up to 18.76 Euro cents per kilowatt hour for ground-based systems. In September 2012, Germany introduced further feed-in tariff reduction of 1% monthly for roof-based systems while reducing or eliminating feed-in tariffs for ground-based systems. All such reductions may result in a significant fall in the price of PV products in order to support continued demand. In 2010, 2011 and 2012, Germany accounted for 24.1%, 37.0% and 33.1% of our net sales, respectively, Spain accounted for 21.8%, 13.2% and 1.3% of our net sales, respectively, and the United States accounted for 14.1%, 21.5% and 25.5% of our net sales, respectively, based on record country of sales. We believe that uncertainty in political and policy developments may lead to increased competition among solar manufacturers. Electric utility companies that have significant political lobbying powers may also seek changes in the relevant legislation in their markets that may adversely affect the development and commercial acceptance of solar energy. Further, austerity measures being implemented by many countries attempting to lower national spending may reduce subsidies to the solar industry. A significant reduction in the scope or discontinuation of government incentive programs, especially those in our target markets, could cause demand for our products and our revenues to decline, and have a material adverse effect on our business, financial condition, results of operations and prospects.

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

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

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

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

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

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

Under supply contracts with several of our multi-year polysilicon and our equipment suppliers, consistent with industry practice, we have made prepayments to our suppliers prior to the scheduled delivery dates for polysilicon and equipment. In many such cases, we made the prepayments without receiving collateral for such payments. As a result, our claims for such payments would rank as unsecured claims, which would expose us to the credit risks of our suppliers in the event of their insolvency or bankruptcy. Our claims against the defaulting suppliers would rank below those of secured creditors, which would undermine our chances of obtaining the return of our prepayments. Furthermore, if demand for our products decreases, we may incur costs associated with carrying excess materials. Accordingly, any of the above scenarios may have a material adverse effect on our financial condition and results of operations.

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

We typically require a significant amount of cash to fund our operations, especially prepayments or loans to suppliers to secure our polysilicon supply requirements. We also require a significant amount of cash to meet future capital requirements, including the expansion of our PV product manufacturing facilities and research and development activities in order to remain competitive. Future acquisitions, expansions, market changes or other developments may cause us to require additional funds. As of December 31, 2012, we had \$807.3 million in cash and cash equivalents, \$110.9 million in restricted cash and \$1,374.6 million in outstanding borrowings, including convertible senior notes, of which approximately \$959.4 million was due within one year. We have historically negotiated to renew our loans shortly before they mature. In the event that we are unable to extend or renew 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. We do not plan to utilize capital expenditures for capacity expansion in 2013 in addition to our working capital requirements. Our business might not generate sufficient cash flow from operations to repay these borrowings, some of which are secured by significant amounts of our assets, and at the same time fund our capital expenditures. In addition, repaying these borrowings and capital expenditures with cash generated by our operating activities will divert our financial resources from the requirements of our ongoing operations and future growth, and may have a material adverse effect on our business, financial condition and future prospects. If we are unable to obtain funding in a timely manner or on commercially acceptable terms, or at all, our growth prospects and future profitability may decrease materially. Moreover, future turmoil in the credit markets and the potential

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impact on the liquidity of financial institutions may have an adverse effect on our ability to fund our business through borrowings, under either existing or newly created instruments in the public or private markets on terms that we believe to be reasonable, if at all. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and market price of ADSs and could require us to delay or abandon critical development plans.

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

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

The barriers to entry are relatively low in the PV module manufacturing business, given that manufacturing PV modules is labor intensive and requires limited technology. Because of the scarcity of polysilicon in the past few years, supply chain management and financial strength were the key barriers to entry. As the shortage of polysilicon has eased since 2008, these barriers to entry become less significant and many new competitors may enter the industry and cause the industry to rapidly become over-saturated. Many mid-stream solar power products manufacturers have been seeking to move downstream to strengthen their position in regional markets. They are expected to leverage their existing sales capacity as the industry faces challenges posed by the economic downturn. In addition, we may also face new competition from semiconductor and other manufacturers who are developing thin film and other PV technologies that are designed to offer economic or performance advantages, several of which have already announced their intention to start production of solar cells or module products. Decreases in polysilicon prices and increases in PV module production could result in substantial downward pressure on the price of PV modules and intensify the competition we face.

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

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

We currently sell a significant portion of our PV modules to a limited number of customers. In 2010, 2011 and 2012, sales to our top five customers accounted for approximately 24.9%, 23.3% and 25.1%, respectively, of our total net sales. Our largest customer contributed approximately 9.1% of our net sales in 2012. 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 of competing products by one or more of our significant customers;
- 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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We are exposed to the credit risk of these customers, some of which are new customers with whom we have not historically had extensive business dealings. Starting from February 2009, a majority of our overseas sales have been insured by China Export & Credit Insurance Corporation, or Sinosure. The amount of insurance coverage for each transaction is based on a rating assigned by Sinosure to the customer based on such customer's credit history. However, we cannot assure you that all our accounts receivable are sufficiently covered or that Sinosure will be able to make payments on our claims. The failure of any of these significant customers to meet their payment obligations would materially and adversely affect our financial position, liquidity and results of operations.

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

We have historically required our customers to make an advance payment of a certain percentage of their orders, a business practice that helped us to manage our accounts receivable, prepay our suppliers and reduce the amount of funds that we needed to finance our working capital requirements. In line with market trends, this practice of requiring our customers to make advance payments is on the decline, which in turn has increased our need to obtain additional short-term borrowings to fund our working capital requirements. In 2012, a majority of our revenues were derived from credit sales, generally with payment schedules due according to negotiated contracts. In addition, some of our customers pay us through drawn upon acceptance, open account and letter of credit terms, which typically take 90 to 120 days to process in order for us to be paid, though in some instances the pay period may be longer. Despite the more lenient payment terms, any of our customers may fail to meet their payment obligations, especially due to the global economic crisis and the resulting decrease in the availability of financing, which would materially and adversely affect our financial position, liquidity and results of operations.

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

The technology for the manufacturing of silicon ingots and wafers is complex, requires costly equipment and is continuously being modified in an effort to improve yields and product performance. Microscopic impurities such as dust and other contaminants, difficulties in the manufacturing process, disruptions in the supply of utilities or defects in the key materials and tools used to manufacture wafers can cause a percentage of the wafers to be rejected, which in each case negatively affects our yields. We have, from time to time, experienced production difficulties that have caused manufacturing delays and lower than expected yields.

Because our manufacturing capabilities are concentrated in our manufacturing facilities in Changzhou, China, any problem in our facilities may limit our ability to manufacture products. We may encounter problems in our manufacturing facilities as a result of, among other things, production failures, construction delays, human errors, equipment malfunction or process contamination, which could seriously harm our operations. We may also experience fires, 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. We experienced an accidental fire in our wafer facilities in March 2010 caused by a hot spot in an electrical installation resulted in damages to our cleaning equipment and temporary disruption to a segment of our production line. A disruption to any step of our manufacturing process will require us to repeat each step and recycle the silicon debris, thus adversely affecting our yields. Operating hazards and natural disasters may cause interruption to our operations, property and/or environmental damage as well as personal injuries, and each of these incidents could have a material adverse impact on our results of operations. Although we carry business interruption insurance, losses incurred or payments required to be made by us due to operating hazards or natural disasters that are not fully insured may have a material adverse effect on our financial condition and results of operations.

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As of December 31, 2012, we had an annual manufacturing capacity of ingots and wafers of approximately 1,200 MW and cells and modules of approximately 2,400 MW. We do not currently plan to build new facilities to increase our annual manufacturing capacity of cells, ingots, wafers or modules during 2013 and plan to incur capital expenditures of up to \$65 million to maintain or enhance our existing manufacturing facilities for new products, increased module efficiencies and systems-related initiatives. However, as we take into account market views concerning both customer demand and the commercial lending environment for financing PV system installations in our respective sales markets, as well as our strategy to expand prudently while preserving liquidity, we may later decide to expand our capacity during 2013 or at a future date. If we develop an expansion plan but fail to implement that plan as expected, experience a delay in the ramp up or fail to achieve our targeted yields, our business and results of operations may be materially and adversely affected.

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

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

Our PV modules have typically been sold with a five-year warranty for defects in materials and product workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. In 2011, we extended the product workmanship warranty to 10 years and began to guarantee that module power output will not decrease by more than approximately 0.7% per year after the initial year of service. We believe our warranty periods are consistent with industry practice. We only began to sell PV modules in November 2004. Although we conduct accelerated reliability testing of our PV modules, our PV modules have not been and cannot be tested in an environment simulating the 25-year warranty period. As a result, we may be subject to unexpected warranty expense and associated harm to our financial results for as long as 25 years after the sale of our products. Our warranty provisions for the years ended December 31, 2010, 2011 and 2012 were \$17.9 million, \$21.9 million and \$12.5 million, respectively. Any increase in the defect rate of our products would cause us to increase the amount of our warranty reserves and have a correspondingly negative impact on our operating results. Furthermore, widespread product failures may damage our market reputation, reduce our market share and cause our sales to decline.

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

We may develop and produce new products from time to time, such as high-efficiency monocrystalline and multicrystalline modules, colored modules for architectural applications and larger sized modules for utility grid applications. Further, we recently introduced our Honey cell technology, which we will use to develop and manufacture a number of new products. We may be unable to generate sufficient customer demand for our new products if we are unable to develop and produce new products that provide the expected performance in a cost-effective manner. If we fail to generate demand for our new products, our business and prospects may be adversely affected and we may be unable to

recoup our investment in the development and production of such products.

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Our future success depends in part on our ability to expand our business into downstream markets. Any failure to successfully implement this strategy could have a material adverse effect on our growth, business prospects and results of operations in future periods.

Our current business strategy includes plans to expand into select downstream markets, such as systems integration and project development, which we believe are natural extensions of our vertically integrated business model. These expansion plans may include investments in downstream companies and joint ventures and formation of strategic alliances with third parties for balance of system technologies, engineering, procurement and construction services, and related financing needs. However, these plans may require significant capital expenditures, which could be used in pursuit of other opportunities and investments. Additionally, our experience in the solar power products manufacturing industry may not be as relevant or applicable in downstream markets. We may also face intense competition from companies with greater experience or established presence in the targeted downstream markets or competition from our industry peers with similar expansion plans. Furthermore, we may not be able to manage or control entities which we invest in or provide adequate resources to such entities to maximize the return on our investments. In the case of joint ventures and strategic alliances with third parties, we may face risks associated with the sharing of proprietary information, loss of control of operations that are material to our business and profit sharing arrangements. We may also consider acquisitions of existing downstream players, in which we may face difficulties related to the integration of the operations and personnel of acquired businesses and the division of resources between our existing and acquired downstream operations.

We cannot assure you that we will be successful in expanding our business into downstream markets along the solar power product value chain. Any failure to successfully identify, execute and integrate our acquisitions, investments, joint ventures and alliances as part of entering into downstream markets may have a material adverse impact on our growth, business prospects and results of operations, which could lead to a decline in the price of our ADSs.

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

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

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

If solar power technology is not adopted widely, or sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our revenues may further 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. We sell and market our products to a growing number of worldwide markets where government incentives are accelerating the adoption of solar power. In recent years, we have also increased our sales in newer and emerging solar power markets, which include China, the United States, the United Kingdom, Australia, India, Israel and Japan, as well as other markets in Asia, Africa, the Middle East, Latin America and the Caribbean Islands. Many factors may affect the viability of widespread adoption of solar power technology and demand for solar power products in our targeted markets, including:

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- availability of government subsidies and incentives to support the development of the solar power industry;
- availability and access to grid infrastructure, including interconnection facilities, for solar power producers;
- 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 adopted widely 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 technological changes in the solar power industry could render our products uncompetitive or obsolete, which could reduce our market share and cause our sales and profit to decline.

The solar power market is characterized by evolving technologies and standards that result in improved features, such as more efficient and higher power output, improved aesthetics and smaller size. This requires us to develop new solar power products and enhance existing products to keep pace with evolving technologies and changing customer requirements. A variety of competing solar technologies that other companies may develop could prove to be more cost-effective and perform better than our technologies. For example, thin-film technologies are competing technologies in the solar power industry. According to Solarbuzz, in 2012, thin-film technologies represented approximately 10% of the solar market, compared to approximately 90% for crystalline technology. Thin-film technologies allow for lower production costs for solar cells by using lower amounts of semiconductor materials. Thin-film solar cells generally have a lower conversion efficiency rate than crystalline solar cells.

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

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

In the past, we began 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 and approvals for these facilities, we could be subject to fines or penalties for our past non-compliance.

Because our manufacturing processes generate noise, waste water, gaseous wastes and other industrial wastes, we are required to comply with national and local environmental regulations. If we fail to comply with present or future environmental regulations, we may be required to pay substantial fines, suspend production or cease operations. Any failure by us to control the use or to adequately restrict the discharge of hazardous substances could subject us to potentially significant monetary damages and fines or suspensions in our business operations, which would have a materially adverse effect on our business and results of operations.

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

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

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

- the need to raise significant additional funds to purchase raw materials or to build additional manufacturing facilities, which we may be unable to obtain on commercially viable terms or at all;
- delays and cost overruns as a result of a number of factors, many of which are beyond our control, such as increases in the price of polysilicon and problems with equipment vendors, particularly with respect to major equipment such as ingot pulling or growing machines;
- delays or denial of required approvals by relevant government authorities;
- diversion of significant management attention and other resources; and
- failure to execute our expansion plan effectively.

If we are unable to establish or successfully operate additional manufacturing capacity, or if we encounter any of the risks described above, we may be unable to expand our business as planned. Moreover, even if we do expand our manufacturing capacity we might not be able to generate sufficient customer demand for our solar power products to support our increased production levels.

In particular, we believe that the expansion of our manufacturing capacity is an integral part of our long-term strategy to achieve a grid parity cost structure. Our ability to meet our estimate for the scale of production needed to achieve grid parity is affected by a number of factors,

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including our ability to improve and maintain the degree of vertical integration and to increase our efficiencies and margins, the likelihood that we may approach or reach a point of diminishing returns as we continue to expand our scale, the average purchase price we will pay for silicon in the future to meet our expansion requirements, and the cost of conventional grid electricity which will determine at which point grid parity can be reached. We might not be able to meet our desired scale of production in order to fully implement our strategy.

In addition, in order to increase our production output of solar PV products, it may be necessary to outsource certain phases of the production process, such as the manufacturing of silicon wafers, to third party manufacturers. Outsourcing portions of the production process leave us more vulnerable to fluctuations in the costs of outsourced products and could further reduce our profit margins. In addition, outsourcing exposes us to quality control, payment, delivery and a number of other risks that, if realized, could materially and adversely affect our business and results of operations.

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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. If any dispute arises between our executive officers and us, these agreements may not be enforceable in China in light of the uncertainties with China's legal system, or in another country where they obtain employment. See Risks Related to Doing Business in China Uncertainties with respect to the Chinese legal system could have a material adverse effect on us.

If we are unable to attract, train and retain qualified technical personnel, our business may be materially and adversely affected.

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

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

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

We face risks associated with the marketing, distribution and sale of our solar power products internationally, and if we are unable to effectively manage these risks, they could impair our ability to expand our business abroad.

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In 2010, 2011 and 2012, we sold approximately 96.2%, 92.9% and 87.0%, respectively, of our products to customers outside of China. The marketing, distribution and sale of our solar power products in the international markets expose us to a number of risks, including:

- fluctuations in currency exchange rates;
- difficulty in engaging and retaining distributors who are knowledgeable about, and can function effectively in, overseas markets;
- increased costs associated with maintaining marketing efforts in various countries;
- difficulty and costs relating to compliance with the different commercial and legal requirements of the overseas markets in which we offer our products;
- trade barriers such as export requirements, tariffs, taxes and other restrictions and expenses, which could increase the prices of our products and make us less competitive in some countries; and
- demand for solar power products in overseas markets as influenced by the global economic downturn and its effects.

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We may be exposed to intellectual property 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 issues and analysis and, therefore, may be highly uncertain. We may be subject to litigation involving claims of patent infringement or violation of intellectual property rights of third parties. The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time consuming and may significantly divert the efforts and resources of our technical and management personnel. An adverse determination in any such litigation or proceedings to which we may become a party could subject us to significant liability to third parties, require us to seek licenses from third parties, to pay ongoing royalties, or to redesign our products or subject us to injunctions prohibiting the manufacturing and sale of our products or the use of our technologies. Protracted litigations could also result in our customers or potential customers deferring or limiting their purchase or use of our products until resolution of such litigation.

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

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

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 should the use of our solar power products results in injury. Since our products generate electricity, it is possible that users could be injured or killed by our products as a result of product malfunctions, defects, improper installation or other causes. We only began commercial shipment of our PV modules in November 2004 and, because of our limited operating history, we cannot predict whether product liability claims will be brought against us in the future or the effect of any resulting negative publicity on our business. We have limited worldwide product liability insurance coverage for our products manufactured in China. Product liability claims successfully brought against us in excess of our coverage amount could result in monetary damages and require us to make significant payments.

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

We are subject to reporting obligations under the U.S. securities laws. The SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, adopted rules requiring every public company to include a management report on such company's internal control over financial reporting in its annual report, which contains management's assessment of the effectiveness of the company's internal control over financial reporting. In addition, an independent registered public accounting firm must render an opinion on the effectiveness of the company's internal control over financial reporting.

Our management has concluded that our internal control over financial reporting is effective as of December 31, 2012. See Item 15. Controls and Procedures. If we fail to maintain effective internal control over financial reporting in the future, it could result in the loss of investor confidence in the reliability of our financial statements and negatively impact the trading price of our ADSs. We have incurred and anticipate that we will continue to incur considerable costs, management time and other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act.

Our independent registered public accounting firm's audit documentation related to their audit report included in this annual report may be located in China. The Public Company Accounting Oversight Board currently cannot inspect audit documentation located in China and, as such, you may be deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit report included in our annual reports filed with the SEC, as auditors of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board, or the PCAOB, is required by the laws of the United States to undergo regular inspections by the PCAOB to assess its compliance with the applicable laws of the United States and professional standards. Our operations are principally conducted in China, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the PRC authorities. Accordingly, any audit documentation located in China related to our independent registered public accounting firm's report included in our filings with the SEC is not currently inspected by the PCAOB.

Inspections conducted by the PCAOB outside China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. This lack of PCAOB inspections in China prevents the PCAOB from regularly evaluating audit documentation located in China and its related quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections in China makes it more difficult to evaluate the effectiveness of our independent registered public accounting firm's audit procedures or quality control procedures as compared to audits outside China that are subject to PCAOB inspections. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

Recently, the SEC commenced administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act against the Chinese affiliates of five global accounting firms, including our independent registered public accounting firm. The Rule 102(e) proceedings initiated by the SEC relate to these firms' failure to produce documents, including audit work papers, at the request of

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the SEC pursuant to Section 106 of the Sarbanes-Oxley Act, as the auditors located in the PRC are not in a position lawfully to produce documents directly to the SEC because of restrictions under PRC law and specific directives issued by the China Securities Regulatory Commission, or CSRC. As the administrative proceedings are ongoing, it is impossible to determine their outcome or the consequences thereof to us. The issues raised by the proceedings are not specific to our independent registered public accounting firm or to us, but affect equally all audit firms based in China and all China-based businesses with securities listed in the United States. However, if the administrative judge were to find in favor of the SEC under the proceeding and depending upon the remedies sought by the SEC, these audit firms could be barred from practicing before the SEC. As a result, listed companies in the United States with major PRC operations will find it difficult or impossible to retain auditors in respect of their operations in the PRC, which may result in their delisting. Moreover, any negative news about the proceedings against these audit firms may erode investor confidence in China-based, United States-listed companies and the market price of our ADSs may be adversely affected.

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Fluctuations in exchange rates could adversely affect our business.

The value of the Renminbi against the U.S. dollar, Euro and other currencies is affected by, among other things, changes in China's political and economic conditions and China's foreign exchange policies. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the Renminbi to the U.S. dollar. Under the new policy, the Renminbi was permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. This change in policy caused the Renminbi to appreciate approximately 21.5% against the U.S. dollar over the following three years. However, from July 2008 until June 2010, the Renminbi traded stably within a narrow range against the U.S. dollar. In June 2010, the People's Bank of China announced that the PRC government would reform the Renminbi exchange rate regime and increase the flexibility of the exchange rate. Between June 30, 2010 and December 31, 2012, the value of the Renminbi appreciated approximately 8.9% against the U.S. dollar and we cannot predict how this new policy will impact the Renminbi exchange rate going forward.

Most of our sales are denominated in Euros, with the remainder in U.S. dollars and Renminbi, while a substantial portion of our costs and expenses is denominated in Renminbi, with the remainder in U.S. dollars. Fluctuations in exchange rates, particularly among the U.S. dollar, Renminbi and Euro, may affect our net profit margins and could result in fluctuations in foreign currency exchange and operating gains and losses. We had a foreign exchange gain of approximately \$0.9 million in 2012. We cannot predict the impact of future exchange rate fluctuations on our results of operations and may incur net foreign currency losses in the future. In addition, as we rely entirely on dividends paid to us by our operating subsidiaries in China, any significant fluctuation 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. As a large proportion of our revenues are paid to us in Euros, fluctuation between the Euro and the Renminbi may also have a material effect on our results of operations.

Starting from October 2008, we have entered into a series of foreign currency forward contracts with several commercial banks to hedge our exposure to foreign currency exchange risk. As of December 31, 2012, we had foreign currency forward contracts with a total contract value of approximately \$177.5 million. We do not use foreign currency forward contracts to hedge all of our foreign currency denominated commitments. As with all hedging instruments, there are risks associated with the use of foreign currency forward contracts. While the use of such foreign currency forward contracts provides us with protection from certain fluctuations in foreign currency exchange, we forgo the potential benefits that might result from favorable fluctuations in foreign currency exchange. Any default by the counterparties to these transactions could adversely affect our financial condition and results of operations. Furthermore, these financial hedging transactions may not provide adequate protection against future foreign currency exchange rate fluctuations and, consequently, such fluctuations could adversely affect our financial condition and results of operations.

We may be classified as a passive foreign investment company, which could result in adverse U.S. federal income tax consequences to U.S. Holders of our ADSs or ordinary shares.

Based on the market price of our ADSs, the value of our assets, and the composition of our income and assets, we do not believe we were a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for our taxable year ended December 31, 2012. However, the application of the PFIC rules is subject to uncertainty in several respects, and we cannot assure you the U.S. Internal Revenue Service will not take a contrary position. A non-U.S. corporation will be a PFIC for any taxable year if either (i) at least 75% of its gross income for such year is passive income or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce passive income or are held for the production of passive income. We must make a separate determination after the close of each taxable year as to whether we were a PFIC for that year. Because the value of our assets for purposes of the PFIC test generally will be determined by reference to the market price of our ADSs and ordinary shares, fluctuations in the market price of the ADSs and ordinary shares may cause us to become a PFIC. In addition, changes in the composition of our income or assets may cause us to become a PFIC. If we are a PFIC for any taxable year during which a U.S. Holder (as defined in Item 10. Additional Information E. Taxation United States Federal Income Taxation) holds an ADS or an ordinary share, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder.

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See Item 10. Additional Information E. Taxation United States Federal Income Taxation Passive Foreign Investment Company.

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Risks Related to Doing Business in China

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

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

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

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

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

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

We conduct substantially all of our manufacturing operations through our wholly-owned subsidiaries, Trina China and TST, both of which are limited liability companies established in China. Trina China and TST are generally subject to laws and regulations applicable to foreign investment in China and, in particular, laws applicable to wholly foreign-owned enterprises. The PRC legal system is based on written statutes. Prior court decisions may be cited for reference but have limited precedential value. Since 1979, PRC legislation and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China. However, since these laws and regulations are relatively new and the PRC legal system continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always consistent and enforcement of these laws, regulations and rules involves uncertainties. We cannot predict the effect of future developments in the PRC legal system, including the promulgation of new laws, changes to existing laws or the interpretation or enforcement thereof, the preemption of local regulations by national laws, or the overturn of local government decisions by the superior government. These uncertainties may limit legal protections available to us. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

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

We conduct substantially all of our operations through Trina China and TST. Our ability to make distributions or other payments to our shareholders depends on payments from Trina China and TST, whose ability to make such payments is subject to PRC regulations. Regulations in the PRC currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. According to the relevant PRC laws and regulations applicable to Trina China and TST and their respective articles of association, Trina China and TST are required to set aside at least 10% of its after-tax profit based on PRC accounting standards each year to its general reserves until the accumulative amount of these reserves reaches 50% of its registered capital. These reserves are not distributable as cash dividends. As of December 31, 2012, these general reserves amounted to \$49.3 million, accounting for 8.5% of the registered capital of Trina China and TST. In addition, under the Enterprise Income Tax Law and its Implementation Regulations, or the EIT Law, which became effective January 1, 2008, dividends from Trina China to us are subject to a 10% withholding tax to the extent that we are considered a non-resident enterprise under the EIT Law. See [Item 4. Information on the Company](#) The expiration or reduction of tax incentives by the PRC government may have a material adverse effect on our results of operations and [Item 4. Information on the Company](#) Regulation Tax. Furthermore, if Trina China incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us.

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

Certain portions of our revenues and expenses are denominated in Renminbi. If our revenues denominated in Renminbi increase or expenses denominated in Renminbi decrease in the future, we may need to convert a portion of our revenues into other currencies to meet our foreign currency obligations, including, among others, payment of dividends declared, if any, in respect of our ordinary shares or ADSs. Under China's existing foreign exchange regulations, foreign currency under current account transactions such as dividend payments and trade-related transactions are generally convertible. Accordingly, Trina China is able to pay dividends in foreign currencies without prior approval from the State Administration of Foreign Exchange, or the 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 either Trina China or TST borrows foreign currency loans from us or other foreign lenders, these loans must be registered with the SAFE, and if we finance Trina China and TST by means of additional capital contributions, these capital contributions must be approved by certain government authorities including the Ministry of Commerce, or MOFCOM, or its local counterparts. These limitations could affect the ability of Trina China to obtain foreign exchange through debt or equity financing.

SAFE regulations may limit our ability to finance our PRC subsidiaries effectively and affect the value of your investment and may make it more difficult for us to pursue growth through acquisition.

If we finance our PRC subsidiaries through additional capital contributions, the MOFCOM in China or its local counterpart must approve the amount of these capital contributions. On August 29, 2008, SAFE promulgated Circular 142, a notice regulating the conversion by a foreign-invested company of foreign currency into Renminbi by restricting how the converted Renminbi may be used. The notice requires that Renminbi converted from the foreign currency-denominated capital of a foreign-invested company may only be used for purposes within the business scope approved by the applicable governmental authority and may not be used for equity investments in the PRC unless otherwise provided by laws and regulations. In addition, SAFE strengthened its oversight of the flow and use of Renminbi funds converted from the

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foreign currency denominated capital of a foreign-invested company. The use of such Renminbi may not be changed without approval from SAFE, and may not be used to repay Renminbi loans if the proceeds of such loans have not yet been used for purposes within the company's approved business scope. Furthermore, on November 9, 2010, SAFE promulgated a notice on relevant issues concerning strengthening the administration of foreign exchange business, which requires the authenticity of settlement of net proceeds from an offshore offering to be closely examined and the net proceeds to be settled in the manner described in the offering documents.

Violations of Circular 142 may result in severe penalties, including substantial fines as set forth in the Foreign Exchange Administration Regulations. We cannot assure you that we will be able to complete the necessary government registrations or obtain the necessary government approvals on a timely basis, if at all, with respect to future loans by us to our PRC subsidiaries or with respect to future capital contributions by us to our PRC subsidiaries. If we fail to complete such registrations or obtain such approvals, our ability to contribute additional capital to fund our PRC operations may be negatively affected, which could materially adversely affect our liquidity and our ability to fund and expand our business.

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The expiration or reduction of tax incentives by the PRC government may have a material adverse effect on our results of operations.

The EIT Law imposes a uniform tax rate of 25% on all PRC enterprises, including foreign-invested enterprises, and eliminates or modifies most of the tax exemptions, reductions and preferential treatments available under the previous tax laws and regulations. Under the EIT law, enterprises that were established before March 16, 2007 and already enjoy preferential tax treatments will (i) in the case of preferential tax rates, continue to enjoy the tax rates which will be gradually increased to the new tax rates within five years from January 1, 2008 or (ii) in the case of preferential tax exemption or reduction for a specified term, continue to enjoy the preferential tax holiday until the expiration of such term. In addition, certain enterprises may still benefit from a preferential tax rate of 15% under the new EIT Law if they qualify as high and new technology enterprises strongly supported by the State, subject to certain general factors described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. In 2011, Trina China renewed its High and New Technology Enterprise Certificate, effective from 2011 to 2013. Therefore, Trina China is entitled to a preferential income tax rate of 15% from 2008 through 2013 as long as it maintains its qualification as a high and new technology enterprise strongly supported by the State under the EIT Law. Also, in 2011, TST obtained the High and New Technology Enterprise Certificate, effective from 2011 to 2013 and is entitled to a preferential income tax rate of 15%. If either Trina China or TST fails to maintain the high and new technology enterprise qualification, their applicable EIT rate may increase to up to 25%, which could have a material adverse effect on our results of operations. We cannot assure you that we will be able to maintain our current effective tax rate in the future. Any discontinuation of preferential tax treatment or any increase of the enterprise income tax rate applicable to Trina China could have a material adverse effect on our financial condition and results of operations.

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

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

Under the EIT law, an enterprise established outside the PRC with its de facto management body within the PRC is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its worldwide income. The de facto management body is defined as the organizational body that effectively exercises overall management and control over production and business operations, human resources, finance and accounting, and properties of the enterprise. The State Administration of Taxation, or SAT, issued the Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies, or SAT Circular 82, on April 22, 2009. SAT Circular 82 provides certain criteria for determining whether the de facto management body of an offshore-incorporated enterprise controlled by PRC enterprises is located in China. On July 27, 2011, the SAT issued Administrative Measures of Enterprise Income Tax of Chinese-controlled Offshore Incorporated Resident Enterprises (Trial), or Bulletin 45, which became effective on September 1, 2011, to provide further guidance on the implementation of SAT Circular 82. Bulletin 45 clarifies certain issues relating to the determination of PRC resident enterprise status, post determination administration and the authorities responsible for determining offshore incorporated PRC resident enterprise status. Bulletin 45 specifies that when provided with a copy of a Chinese tax resident determination certificate issued by the competent tax authorities from an offshore incorporated PRC resident enterprise, the payer should not withhold 10% income tax when paying Chinese-sourced dividends, interest and royalties to the offshore incorporated PRC resident enterprise. Although SAT Circular 82 only applies to offshore enterprises controlled by PRC enterprises and not those controlled by PRC or foreign

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individuals or foreign enterprises, the criteria set forth therein may reflect the SAT's general position on how the de facto management body test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC or foreign enterprises or individuals. Accordingly, we may be considered a resident enterprise and may therefore be subject to the enterprise income tax at 25% on our global income other than dividends from our PRC subsidiaries, which could significantly increase our tax burden and materially adversely affect our cash flow and profitability. Notwithstanding the foregoing provision, the EIT law also provides that, if a resident enterprise directly invests in another resident enterprise, the dividends received by the investing resident enterprise from the invested enterprise are exempted from income tax, subject to certain conditions. Therefore, if Trina is classified as a resident enterprise, the dividends received from its PRC subsidiary may be exempted from income tax. However, it remains unclear how the PRC tax authorities will interpret the PRC tax resident treatment of an offshore company, like Trina, having ownership interest in a PRC enterprise.

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

Under the PRC Individual Income Tax Law, or IITL, if we are treated as a PRC resident enterprise, it is possible that non-resident individual investors of our shares or ADSs would be subject to PRC individual income tax at a rate of 20% on dividends paid to such investors and any capital gains realized from the transfer of our common shares, ADSs or both, if such dividends or capital gains are deemed income derived from sources within the PRC, except in the case of individuals that qualify for a lower rate under a tax treaty. Under the PRC-U.S. tax treaty, a 10% preferential rate of withholding tax will apply to dividends provided that the recipients are U.S. tax residents that are eligible for the benefits of the PRC-U.S. tax treaty. A non-resident individual is an individual who has no domicile in the PRC and does not stay within the PRC or has stayed within the PRC for less than one year. Pursuant to the IITL and its implementation rules, for purposes of the PRC capital gains tax, the taxable income will be based on the total income obtained from the transfer of our common shares or ADSs minus all the costs and expenses that are permitted under PRC tax laws to be deducted from the income.

We face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies.

Pursuant to the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises, or SAT Circular 698, issued by the SAT on December 10, 2009 with retroactive effect from January 1, 2008, where a non-resident enterprise transfers the equity interests of a PRC resident enterprise indirectly via disposing of the equity interests of an overseas holding company, or an Indirect Transfer, and such overseas holding company is located in a tax jurisdiction that: (i) has an effective tax rate less than 12.5% or (ii) does not tax foreign income of its residents, the foreign investor shall report to the competent tax authority of the PRC resident enterprise this Indirect Transfer. Using a substance over form principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of avoiding PRC tax. As a result, gains derived from such Indirect Transfer may be subject to PRC withholding tax at a rate of up to 10%. SAT Circular 698 also provides that, where a non-PRC resident enterprise transfers its equity interests in a PRC resident enterprise to its related parties at a price lower than the fair market value, the relevant tax authority has the power to make a reasonable adjustment to the taxable income of the transaction.

There is uncertainty as to the application of SAT Circular 698. For example, while the term Indirect Transfer is not clearly defined, it is understood that the relevant PRC tax authorities have jurisdiction regarding requests for information over a wide range of foreign entities having no direct contact with China. Moreover, the relevant authority has not yet promulgated any formal provisions or formally declared or stated how to calculate the effective tax rates in foreign tax jurisdictions, and the process and format of the reporting of an Indirect Transfer to the competent tax authority of the relevant PRC resident enterprise. In addition, there are not any formal declarations with regard to how to determine whether a foreign investor has adopted an abusive arrangement in order to avoid PRC tax. As a result, we may become at risk of being taxed under SAT Circular 698 and we may be required to expend valuable resources to comply with SAT Circular 698 or to establish that we should not be taxed under SAT Circular 698, which may materially adversely affect our financial condition and results of operations.

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

On August 8, 2006, six PRC regulatory agencies, including the CSRC, promulgated the Regulation on Mergers and Acquisitions of Domestic Companies by Foreign Investors, or the M&A Rules, which became effective on September 8, 2006 and was amended on June 22, 2009. The M&A Rules, among other things, require offshore special purpose vehicles, formed for overseas listing purposes through acquisitions of PRC domestic companies and controlled by PRC enterprises or individuals, to obtain the approval of the CSRC prior to publicly listing their securities on an overseas stock exchange. On September 21, 2006, the CSRC published a notice specifying the documents and materials that are required to be submitted for obtaining CSRC approval. Based on the advice we received from Fangda Partners, our PRC counsel, we did not seek the CSRC approval in connection with our initial public offering as we believe that this regulation does not apply to us and that CSRC approval is not required because (1) Trina is not a special purpose vehicle formed for the purpose of acquiring a PRC domestic company because Trina China was a foreign-invested enterprise before it was acquired by Trina, and, accordingly, Trina China did not fall within the definition of a PRC domestic company as set forth in the new regulation; and (2) such acquisition was completed before the new regulation became effective.

Uncertainty still exists as to how the M&A Rules will be interpreted and implemented, and the opinion of our PRC counsel is subject to any new laws, regulations, rules and their detailed implementations in the future in any form relating to the M&A Rules. If the CSRC or other PRC regulatory body subsequently determines that the CSRC's approval was required for our initial public offering, we may face sanctions by the CSRC or other PRC regulatory agencies. In that case, these regulatory agencies may impose fines and penalties on our operations in the PRC, limit our operating privileges in the PRC, restrict or prohibit payment or remittance of dividends by Trina China, or take other actions that could have a material adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ADSs.

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

We may be subject to Regulations on National Security Review of Merger and Acquisition by Foreign Investors, which could jeopardize future transactions

On February 3, 2011, the State Council promulgated Circular 6, a notice on the establishment of the security review system for mergers and acquisitions of domestic enterprises by foreign investors, which became effective on March 3, 2011. To implement Circular 6, the MOFCOM promulgated the MOFCOM Security Review Rules on August 25, 2011 which became effective on September 1, 2011. According to Circular 6 and the MOFCOM Security Review Rules, a national security review is required for certain mergers and acquisitions by foreign investors of enterprises relating to national defense and certain mergers and acquisitions by which foreign investors may acquire de facto control of domestic enterprises raising national security concerns. When deciding whether a specific merger or acquisition of a domestic enterprise by foreign investors is subject to the national security review, the MOFCOM will look into the substance and actual impact of the transaction and the foreign investors are prohibited from bypassing the national security review requirement by structuring transactions through proxies, trusts,

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indirect investments, leases, loans, control through contractual arrangements or offshore transactions. In addition, if a merger or acquisition by foreign investors which was not submitted for national security review, or was determined to have no impact on national security after such review, but thereafter, due to changed elements, including modification of the merger, change of business activities or acquisition transaction or amendment of the relevant agreements or documents and other changes, involves an enterprise relating to national defense or a change of de facto control of a domestic enterprise raising national security concerns such that it becomes subject to national security review, the foreign investor to such merger or acquisition will be required to file an application for national security review with the MOFCOM. Currently, there are no public provisions or official interpretations specifically providing that our current businesses fall within the scope of national security review and there is no requirement that foreign investors to those merger and acquisition transactions completed prior to the promulgation of the Circular 6 take initiatives to submit such transactions to MOFCOM for national security review. However, as the MOFCOM Security Review Rules and the Circular 6 are relatively new and there is no clear statutory interpretation on their implementation, there is no assurance that the relevant PRC regulatory authorities will have the same view as us when applying them. Moreover, there exists the possibility that our future merger and acquisition transactions will be subject to the national security review under the MOFCOM Security Review Rules and the Circular 6.

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

In October 2005, SAFE promulgated a regulation known as Circular No. 75 that states that if PRC residents use assets or equity interests in their PRC entities as capital contributions to establish offshore companies or inject assets or equity interests of their PRC entities into offshore companies to raise capital overseas, they must register with local SAFE branches with respect to their overseas investments in offshore companies. They must also file amendments to their registrations if their offshore companies experience material events involving capital variation, such as changes in share capital, share transfers, mergers and acquisitions, spin-off transactions, long-term equity or debt investments or uses of assets in China to guarantee offshore obligations. Under this regulation, failure to comply with the registration procedures set forth in such regulation may result in restrictions being imposed on the foreign exchange activities of the relevant PRC entity, including the payment of dividends and other distributions to its offshore parent, as well as restrictions on the capital inflow from the offshore entity to the PRC entity. On May 20, 2011, SAFE issued the Operational Rules on Foreign Exchange Administration for Financing and Return Investments by Domestic Residents through Special-Purpose Overseas Companies or Circular 19, which provides detailed procedures and specific instructions for SAFE registration under the Circular 75. 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.

On December 25, 2006, the People's Bank of China promulgated the Measures for Administration of Individual Foreign Exchange. On January 5, 2007, the SAFE promulgated Implementation Rules for those measures and on February 15, 2012, the SAFE promulgated the notice on issuers concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Listed Company which terminated the Operating Procedures on Administration of Foreign Exchange regarding PRC individuals' Participation in Employee Share Ownership Plans and Employee Stock Option Plans of Overseas Listed Company issued by SAFE on March 28, 2007 (collectively, referred to as the Individual Foreign Exchange Rules). According to the Individual Foreign Exchange Rules, PRC citizens who are granted shares or share options by a company listed on an overseas stock market according to its employee share option or share incentive plan are required to register with the SAFE or its local counterparts by following certain procedures. We and our employees who are PRC citizens and individual beneficiary owners, or have been granted restricted shares or share options, are subject to the Individual Foreign Exchange Rules and its relevant implementation regulations. The failure of our PRC individual beneficiary owners and the restricted holders to complete their SAFE registrations pursuant to the SAFE Jiangsu Branch's requirement or the Individual Foreign Exchange Rules may subject these PRC citizens to fines and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries, limit our PRC subsidiaries' ability to distribute dividends to us or otherwise materially adversely affect our business.

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

On June 29, 2007, the PRC government promulgated the Labor Contract Law of the PRC, or the PRC Labor Contract Law, which became effective on January 1, 2008. On September 3, 2008, the PRC government promulgated the Implementing Rules on PRC Labor Contract Law, or the Implementing Rules. The PRC Labor Contract Law and the Implementing Rules impose requirements concerning contracts entered into between an employer and its employees and establish time limits for probationary periods and for how long an employee can be placed in fixed-term labor contracts. According to the PRC Labor Contract Law and the Implementing Rules, employers must pay their employees wages equal to or above the local minimum wage standards, establish labor safety and workplace sanitation systems, comply with national labor rules and standards and provide employees with appropriate training regarding workplace safety. Furthermore, if we enforce the non-compete provision in a labor contract, we have to compensate the employee on a monthly basis during the term of the non-compete period after the termination or expiration of the labor contract, which may cause additional expenses to us.

In addition, the PRC regulatory authorities have enacted a variety of laws and regulations regarding social insurance and housing funds. Pursuant to these laws and regulations, PRC companies have to make contributions to the relevant local social insurance and housing funds regulatory authorities for their employees. Due to the limited period of effectiveness of the PRC Labor Contract Law and the Implementing Rules and the lack of clarity with respect to their implementation and potential penalties and fines, it is uncertain how they will impact our current employment policies and practices. Therefore, we cannot assure you that our employment policies and practices do not, or will not, violate these laws and regulations and that we will not be subject to related penalties, fines or legal fees. If we are subject to large penalties or fees related to these laws and regulations, our business, financial condition and results of operations may be materially and adversely affected.

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We face risks related to health epidemics and other outbreaks.

Our business could be adversely affected by the effects of swine flu, avian flu, SARS or other epidemics or outbreaks. China reported a number of cases of SARS in April 2004. In 2006, 2007, 2008 and 2011, there have been reports on the occurrences of avian flu in various parts of China, including a few confirmed human cases and deaths. In April 2009, an outbreak of swine flu occurred in Mexico and the United States. In May 2009, the World Health Organization declared a level 6 flu pandemic, its highest pandemic alert phase, indicating a global pandemic underway. Any prolonged occurrence or recurrence of swine flu, avian flu, SARS or other adverse public health developments in China or any of the major markets in which we do business may have a material adverse effect on our business and operations. These could include our ability to travel or ship our products outside of China and to designated markets, as well as temporary closure of our manufacturing facilities, logistic facilities and/or our customers' facilities, leading to delayed or cancelled orders. Any severe travel or shipment restrictions and closures would severely disrupt our operations and adversely affect our business and results of operations. We have not adopted any written preventive measures or contingency plans to combat any future outbreak of swine flu, avian flu, SARS or any other epidemic.

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;

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- addition or departure of our executive officers and key research personnel;
- financial blogs, Internet chat room or other media forms which publish unsubstantiated opinions or claims in support of undisclosed trades, including short selling, of the Company's ADSs;
- announcements regarding patent litigation or the issuance of patents to us or our competitors;
- conditions affecting general economic performance in the United States;
- fluctuations in the exchange rates between the U.S. dollar, the Euro and Renminbi;
- release or expiry of lock-up or other transfer restrictions on our outstanding ordinary shares; and
- sales or perceived sales of additional ADSs.

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In addition, the securities market has from time to time experienced significant price and volume fluctuations that are not related to the operating performance of particular companies. These market fluctuations may also have a material adverse effect on the market price of our ADSs. For example, financial markets have experienced extreme disruption in recent months, including, among other things, extreme volatility in securities prices. In the event of a continuing market downturn, the market price of our ADSs may decline further.

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

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

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

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

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

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

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

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

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

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

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

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

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

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You may have difficulty enforcing judgments obtained against us.

We are a Cayman Islands company and substantially all of our assets are located outside of the United States. Substantially all of our current operations are conducted in the PRC. In addition, most of our directors and officers are nationals and residents of countries other than the United States. A substantial portion of the assets of these persons are located outside the United States. As a result, it may be difficult for you to effect service of process within the United States upon these persons. It may also be difficult for you to enforce in U.S. courts judgments obtained in U.S. courts based on the civil liability provisions of the U.S. federal securities laws against us and our officers and directors, most of whom are not residents in the United States and the substantial majority of whose assets are located outside of the United States. In addition, there is uncertainty as to whether the courts of the Cayman Islands or the PRC would recognize or enforce judgments of U.S. courts.

Item 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Our legal and commercial name is Trina Solar Limited. Our predecessor company, Trina China, was incorporated in December 1997. In anticipation of our initial public offering, we incorporated Trina in the Cayman Islands as a listing vehicle on March 14, 2006. Trina acquired all of the equity interests in Trina China through a series of transactions that have been accounted for as a recapitalization and Trina China became our wholly-owned subsidiary. In the past, we conducted substantially all of our operations (and we continue to conduct a significant part of our operations) through Trina China. In December 2006, we completed our initial public offering of our ADSs and listed our ADSs on the New York Stock Exchange. In June 2007, we completed a follow-on public offering of 5,406,280 ADSs sold by us and certain selling shareholders. In July 2008, we completed public offerings of \$138 million aggregate principal amount of convertible senior notes due 2013 and 8,146,388 ADSs for a related ADS borrowing facility. In August 2009, we completed a follow-on public offering of 5,175,000 ADSs. In March 2010, we completed another follow-on public offering of 9,085,000 ADSs.

Our principal executive offices are located at No. 2 Tian He Road, Electronics Park, New District, Changzhou, Jiangsu 213031, People's Republic of China. Our telephone number at this address is (+86) 519 8548-2008 and our fax number is (+86) 519 8517-6023. Our registered office in the Cayman Islands is located at the offices of Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands.

For information regarding our principal capital expenditures, see D. Property, Plants and Equipment.

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

B. Business Overview

Overview

We are a large-scale integrated solar-power products manufacturer based in China with a global distribution network covering Europe, North and South America and Asia. Since we began our solar-power products business in 2004, we have integrated the manufacturing of ingots, wafers and solar cells for use in our PV module production. Our PV modules provide reliable and environmentally-friendly electric power for residential, commercial, industrial and other applications worldwide.

We produce standard monocrystalline PV modules ranging from 185 watts, or W, to 210 W in power output and multicrystalline PV modules ranging from 230 W to 310 W in power output. We build our PV modules to general specifications, as well as to our customers' and end-users specifications. We sell and market our products worldwide, including in a number of European countries, such as Germany, Spain and Italy, where government incentives have accelerated the adoption of solar power. In recent years, we have also increased our sales in newer and emerging solar power markets, which include China, the United States, the United Kingdom, Australia, India, Israel and Japan, as well as other markets in Asia, Africa, the Middle East, Latin America and the Caribbean Islands. We have established regional headquarters and offices located in Europe, North America and Asia to target sales and distribution in those markets. We sell our products to distributors, wholesalers, power plant developers and operators and PV system integrators, including Enerparc AG, SolarCity, Pabel AG, GCL Solar Energy, Inc., Solartechnik Stiens GmbH & Co. KG and Fluor Corporation.

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As of December 31, 2012, we had an annual manufacturing capacity of ingots and wafers of approximately 1,200 MW and cells and modules of approximately 2,400 MW. In 2011 and 2012, we fulfilled some of our ingot and wafer requirements by sourcing and obtaining toll services from our strategic partners. We will continue to contract toll services from third party manufacturers to process ingots and wafers and source wafers from our suppliers and strategic partners in order to fill the gap between our PV cell and module manufacturing capacity and our ingot and wafer manufacturing capacity as a result of strong market demand and to achieve import cost advantages to certain markets. As a result, we have developed relationships with various domestic and international suppliers of ingots and wafers.

We purchase polysilicon from our network of over ten suppliers, including several leading global producers of polysilicon, and have developed strong relationships with our suppliers. To reduce raw material costs, we continue to focus on improving solar cell conversion efficiency and enhancing manufacturing yields. Our research and development platform will be further enhanced by the R&D Laboratory we have been commissioned by the PRC Ministry of Science and Technology to establish in the Changzhou PV Park, or the PV Park, located adjacent to our headquarters. We completed construction of our R&D laboratory during the second quarter of 2012 and began utilizing the new facilities in March 2012.

We began our research and development efforts in solar power products in 1999. We began our system integration business in 2002, our PV module business in late 2004 and our production of solar cells in April 2007. In 2010, 2011 and 2012, we generated net sales of \$1,857.7 million, \$2,047.9 million and \$1,296.7 million, respectively. We recorded a net income of \$311.5 million in 2010, a net loss of \$37.8 million in 2011 and a net loss of \$266.6 million in 2012.

Products

We design, develop, manufacture and sell high efficiency PV modules. PV modules are arrays of interconnected solar cells encased in a weatherproof frame. We produce standard solar monocrystalline modules ranging from 185 W to 210 W in power output and multicrystalline modules ranging from 230 W to 310 W in power output, built to general specifications for use in a wide range of residential, commercial, industrial and other solar power generation systems. The variation in power output is based on the conversion efficiency of the cells used in our PV modules, as well as the types of cells. We assemble PV modules either from monocrystalline or multicrystalline cells. We also design and produce PV modules based on our customers' and end-users' specifications, such as colored modules for architectural applications and larger sized modules for utility grid applications. Our PV modules are sealed, weatherproof and able to withstand high levels of ultraviolet radiation and moisture. We sell our module products under our own brand.

Manufacturing

We manufacture ingots, wafers, cells and modules. As of December 31, 2012, we had an annual manufacturing capacity of ingots and wafers of approximately 1,200 MW and cells and modules of approximately 2,400 MW. We do not currently plan to build new facilities to increase our annual manufacturing capacity of cells, ingots, wafers or modules during 2013, though we expect small gains in capacity through increased efficiency. However, as we take into account market views concerning customer demand and the commercial lending environment, which is essential for the financing of PV system installations in our respective sales markets as well as our strategy to expand while preserving liquidity, we may later decide to expand our capacity during 2013 or at a future date. 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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| Manufacturing Facility | Manufacturing Commencement Date | Annual Manufacturing Capacity as of December 31, 2012 | Production Output for the Year Ended December 31,&nbs |
|-------------------------------|--|--|--|
|-------------------------------|--|--|--|