Trina Solar LTD (TSL)

20-F

Annual and transition report of foreign private issuers pursuant to sections 13 or 15(d)
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Table of Contents

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, 2010

OR

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

For the transition period from _____ to _____

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report _____

Commission file number: 001-33195

TRINA SOLAR LIMITED

(Exact Name of Registrant as Specified in Its Charter)

N/A

(Translation of Registrant's Name Into English)

Cayman Islands

(Jurisdiction of Incorporation or Organization)

No. 2 Tian He Road

Electronics Park, New District

Changzhou, Jiangsu 213031

People's Republic of China

(Address of Principal Executive Offices)

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

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

Title of Each Class	Name of Each Exchange on Which Registered
American Depositary Shares, each representing 50 ordinary shares, par value $0.00001 per share	**New York Stock Exchange**

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

None

(Title of Class)

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

None

(Title of Class)

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

3,969,986,404 ordinary shares, par value $0.00001 per share, as of December 31, 2010.

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

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☑

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

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

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐

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

U.S. GAAP ☑

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

Other ☐

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

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 ☐

TABLE OF CONTENTS

INTRODUCTION	3
PART I	4
Item 1. Identity of Directors, Senior Management and Advisers	4
Item 2. Offer Statistics and Expected Timetable	4
Item 3. Key Information	4
Item 4. Information on the Company	36
Item 4A. Unresolved Staff Comments	56
Item 5. Operating and Financial Review and Prospects	56
Item 6. Directors, Senior Management and Employees	85
Item 7. Major Shareholders and Related Party Transactions	98
Item 8. Financial Information	100
Item 9. The Offer and Listing	101
Item 10. Additional Information	102
Item 11. Quantitative and Qualitative Disclosures About Market Risk	114
Item 12. Description of Securities Other than Equity Securities	116
PART II	118
Item 13. Defaults, Dividend Arrearages and Delinquencies	118
Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds	118
Item 15. Controls and Procedures	119
Item 16A. Audit Committee Financial Expert	120
Item 16B. Code of Ethics	120
Item 16C. Principal Accountant Fees and Services	121
Item 16D. Exemptions from the Listing Standards for Audit Committees	121
Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers	121
Item 16F. Change in Registrant's Certifying Accountant	121
Item 16G. Corporate Governance	121
PART III	122
Item 17. Financial Statements	122
Item 18. Financial Statements	122
Item 19. Exhibits	122

Exhibit 8.1
Exhibit 12.1
Exhibit 12.2
Exhibit 13.1
Exhibit 13.2
Exhibit 15.1
EX-101 INSTANCE DOCUMENT
EX-101 SCHEMA DOCUMENT
EX-101 CALCULATION LINKBASE DOCUMENT
EX-101 LABELS LINKBASE DOCUMENT
EX-101 PRESENTATION LINKBASE DOCUMENT
EX-101 DEFINITION LINKBASE DOCUMENT

INTRODUCTION

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

- "We," "us," "our," and "our company" refer to Trina Solar Limited, its predecessor entities and its subsidiaries;
- "Trina" refers to Trina Solar Limited;
- "Trina China" refers to Changzhou Trina Solar Energy Co., Ltd.;
- "ADSs" refers to our American depositary shares, each of which represents 50 ordinary shares;
- "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; and
- "shares" or "ordinary shares" refers to our ordinary shares, par value $0.00001 per share.

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

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

This annual report on Form 20-F includes our audited consolidated financial statements for the years ended December 31, 2008, 2009 and 2010.

This annual report contains translations of certain Renminbi amounts into U.S. dollars at the rate of RMB6.6000 to $1.00, the noon buying rate in effect on December 31, 2010 in New York City for cable transfers of Renminbi as certified for customs purposes by the Federal Reserve Bank of New York. We make no representation that the Renminbi or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. dollars or Renminbi, as the case may be, at any particular rate or at all. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Fluctuation in the value of the Renminbi may have a material adverse effect on your investment." On April 8, 2011, the noon buying rate was RMB6.5350 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."

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

Item 3. Key Information

A. Selected Financial Data

The following selected consolidated statement of operations data for the years ended December 31, 2008, 2009 and 2010 and the selected consolidated balance sheet data as of December 31, 2008, 2009 and 2010 have been derived from our audited financial statements included elsewhere in this annual report. The selected consolidated financial data should be read in conjunction with those financial statements and the accompanying notes and "Item 5. Operating and Financial Review and Prospects" below. Our consolidated financial statements are prepared and presented in accordance with United States generally accepted accounting principles, or U.S. GAAP. Our historical results do not necessarily indicate our results expected for any future periods.

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

	Year Ended December 31,				
	2006	2007	2008[1]	2009[1]	2010
	(in thousands, except for share, per share, operating data and percentages)				
Consolidated Statement of Operations Data					
Net revenues	$ 114,500	$ 301,819	$ 831,901	$ 845,136	$ 1,857,689
Cost of revenues	84,450	234,191	667,459	607,982	1,273,328
Gross profit	30,050	67,628	164,442	237,154	584,361
Operating expenses:					
Selling expenses	2,571	11,019	20,302	30,940	75,677
General and administrative expenses	8,656	17,817	41,114	65,406	72,711
Research and development expenses	1,903	2,805	3,039	5,439	18,625
Total operating expenses	13,130	31,641	64,455	101,785	167,013
Income from continuing operations	16,920	35,987	99,987	135,369	417,348
Foreign exchange gain (loss)	—	(1,999)	(11,802)	9,958	(36,156)
Interest expense	(2,137)	(7,551)	(24,558)	(27,095)	(33,952)
Interest income	261	4,810	2,944	1,667	2,590
Gain (loss) on change in fair value of derivative	—	854	(1,067)	(1,590)	9,476
Other (expense) income	(82)	1,554	(156)	2,613	216
Income before income taxes	14,962	33,655	65,348	120,922	359,522
Income tax (expense) benefit	(1,788)	1,707	(4,609)	(24,696)	48,069
Net income from continuing operations	13,174	35,362	60,739	96,226	311,453
Net Income (loss) from discontinued operations	(753)	368	—	—	—
Net income	$ 12,421	$ 35,730	$ 60,739	$ 96,226	$ 311,453

	Year Ended December 31,				
	2006	2007	2008[1]	2009[1]	2010
	(in thousands, except for share, per share, operating data and percentages)				
Earnings per ordinary share from continuing operations:					
Basic	0.01	0.02	0.02	0.04	0.09
Diluted	0.01	0.02	0.02	0.03	0.08
Earnings per ADS from continuing operations[2]:					
Basic	0.49	0.76	1.23	1.77	4.58
Diluted	0.48	0.75	1.20	1.69	4.18
Earnings per ordinary share:					
Basic	0.01	0.02	0.02	0.04	0.09
Diluted	0.01	0.02	0.02	0.03	0.08
Earnings per ADS[2]:					
Basic	0.46	0.77	1.23	1.77	4.58
Diluted	0.45	0.76	1.20	1.69	4.18
Weighted average ordinary shares outstanding:					
Basic	1,038,316,484	2,339,799,657	2,501,202,680	2,724,185,761	3,402,701,503
Diluted	1,058,483,593	2,370,685,156	2,690,723,390	3,131,505,181	3,833,713,796
Weighted average ADS outstanding[2]:					
Basic	20,766,330	46,795,994	50,024,054	54,483,715	68,054,030
Diluted	21,169,672	47,413,704	53,814,468	62,630,104	76,674,276
Consolidated Financial Data					
Gross margin	26.2%	22.4%	19.8%	28.1%	31.5%
Net margin of continuing operations	11.5%	11.7%	7.3%	11.4%	16.8%
Consolidated Operating Data					
PV modules shipped (in MW)	27.4	75.9	201.0	399.0	1,057.0
Average selling price ($/W)	$ 3.98	$ 3.80	$ 3.92	$ 2.10	$ 1.75

	As of December 31,				
	2006	2007	2008[1]	2009[1]	2010
	(in thousands)				
Consolidated Balance Sheet Data					
Cash and cash equivalents	$ 93,380	$ 59,696	$ 132,224	$ 406,058	$ 752,748
Restricted cash	5,004	103,375	44,991	72,006	38,035
Inventories	32,230	58,548	85,687	81,154	79,126
Accounts receivable, net	29,353	72,323	105,193	287,950	377,317
Total current assets	197,801	342,402	419,883	927,517	1,415,139
Property, plant and equipment, net	51,419	197,124	357,594	476,858	571,467
Total assets	251,745	600,674	940,116	1,548,698	2,132,089
Short-term borrowings	71,409	163,563	248,558	267,428	158,652
Accounts payable	9,147	42,691	62,504	186,535	188,000
Total current liabilities	88,068	220,485	335,714	515,401	600,070
Accrued warranty costs	1,400	4,486	12,473	21,023	38,711
Long-term borrowings	5,122	8,214	14,631	182,516	299,977
Total shareholders' equity	157,154	367,489	436,501	679,312	1,173,647
Total liabilities and shareholders' equity	$ 251,745	$ 600,674	$ 940,116	$ 1,548,698	2,132,089

(1) On January 10, we adopted ASC 470-20 (former EITF 09-1, "Accounting for Own Share Lending Agreements in Contemplation of Convertible Debt Issuance or Other Financing"), which resulted in additional interest expenses of $621,246 and $1,357,813 in 2008 and 2009, respectively. Please see Note 20 to our consolidated financial statements for more details.

(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

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

Polysilicon is an essential raw material used in the production of solar cells and modules. Prior to the second half of 2008, there was an industry-wide shortage of polysilicon, primarily as a result of the growing demand for solar power products. According to Solarbuzz, an independent solar energy research and consulting firm, the average long-term supply contract price of polysilicon increased from approximately $60-$65 per kilogram delivered in 2007 to $60-$75 per kilogram in 2008. In addition, according to Solarbuzz, spot prices for solar grade polysilicon were in the range of $230-$375 per kilogram for most of the first half of 2008 and rose to a peak of $450-$475 per kilogram by mid-2008. Increases in the price of polysilicon have in the past increased our production costs, and any significant price increase in the future may adversely impact our business and results of operations. Due to the historical scarcity of polysilicon, supply chain management and financial strength were the key barriers to entry. Beginning in late 2008, however, newly available polysilicon capacity has resulted in an increased supply of polysilicon, which created a downward pressure on the price of polysilicon. According to Solarbuzz, the average price range of long-term polysilicon supply contracts decreased to $52-$57 per kilogram by the fourth quarter of 2010, and spot prices for solar grade polysilicon decreased to $75-$85 per kilogram by the end of 2010. Decreases in polysilicon prices and corresponding increases in PV module production would result in substantial downward pressure on the price of PV modules. The average selling price per watt of our PV modules, for example, has decreased from $3.92 per watt in 2008 to $2.10 per watt in 2009 and $1.75 per watt in 2010. Such price reductions could have a negative impact on our revenues and earnings, and materially and adversely affect our business and results of operations.

In addition, 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 revenues, and any significant price increase in the future may adversely impact our business and results of operations. 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. If there is a significant increase in polysilicon price and the contract prices are renegotiated, our cost of revenues may be materially adversely affected. If such polysilicon price increase cannot be passed onto our customers by increasing the price of modules, our margins may also be materially adversely affected. We cannot assure you that our polysilicon procurement strategy will be successful in ensuring an adequate supply of polysilicon at commercially viable prices to meet our solar module production requirements.

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

We are affected by solar energy market and industry trends. In the fourth quarter of 2008 and the first quarter of 2009, the global solar power industry experienced a precipitous decline in demand due to decreased availability of financing for downstream buyers of solar power products as a result of the global economic crisis. As a result, increased manufacturing capacity combined with decreased demand and prices of polysilicon and reclaimable silicon raw materials caused a decline in the prices of solar power products. As the effect of the global economic crisis subsided through 2009, the combination of increased availability of financing for downstream buyers, decreased average selling prices of solar power products and deadlines for cuts in feed-in tariffs contributed to an overall increase in demand during the second half of 2009 and 2010 for solar power products. However, if demand for solar power products declines again and the supply of solar power products continues to grow, the average selling price of our products will be materially and adversely affected.

Currently, we have an annual manufacturing capacity of ingots and wafers of approximately 750 MW and cells and modules of approximately 1,200 MW. We plan to increase our annual manufacturing capacity of ingots and wafers to approximately 1.2 GW and cells and modules to approximately 1.9 GW in the second half of 2011. However, if demand for our solar power products does not increase proportionally with our manufacturing capacity, we may not be able to benefit from intended economies of scale and our business and results of operations may be materially and adversely affected.

Additionally, the demand for solar power products is 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. Global economic conditions, which affect the availability of financing, may also contribute to the demand for solar power products and the number of solar project. If these negative market and industry trends occur and the price of PV modules continues to decrease as a result, our business and results of operations may be materially and adversely affected.

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

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

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

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

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

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

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

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

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

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

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

The scope of the government incentives for solar power depends, to a large extent, on political and policy developments relating to environmental concerns in a given country, which could lead to a significant reduction in or a discontinuation of the support for renewable energies in such country. Federal, state and local governmental bodies in many of our key markets, most notably Germany, Italy, Spain, the United States, France, South Korea, Taiwan, India, Japan and China have provided subsidies and economic incentives in the form of rebates, tax credits and other incentives to end users, distributors, system integrators and manufacturers of solar power products to promote the use of solar energy in on-grid applications and to reduce dependency on other forms of energy. Policy shifts could reduce or eliminate these government economic incentives altogether. For example, the rapid rises of the German and Spanish markets were largely due to the government policies of those countries that set feed-in tariff terms at attractive rates.

However, in September 2008, the Spanish government introduced a cap of 500 megawatts, or MW, for the feed-in tariff in 2009, which has resulted in limiting demand in the grid-connected market in Spain. Additionally, in December 2010, the Spanish government introduced a decree that reduced the maximum allowable annual operating hours for which PV systems could earn feed-in-tariff payments, applicable to both new and existing installations. 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. In addition, further mid-year tariff cuts are being discussed for 2011, which may result in a significant fall in the price of PV products to support continued demand. In 2008, 2009 and 2010, Germany accounted for 23.9%, 33.9% and 24.1% of our net revenues, respectively, based on record country of sales. In 2008, 2009 and 2010, Spain accounted for 32.5%, 12.1% and 21.8% of our net revenues, 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. A significant reduction in the scope or discontinuation of government incentive programs, especially those in our target markets, could cause demand for our products and our revenues to decline, and have a material adverse effect on our business, financial condition, results of operations and prospects.

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

The United States and international economies have 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 down as a result of the economic turmoil, or if there are further terrorist attacks in the United States or elsewhere, we may experience decreases in the demand for our solar power products, which may harm our operating results.

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

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

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

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

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

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 2008, 2009 and 2010, sales to our top five customers accounted for approximately 41.9%, 36.9% and 24.9%, respectively, of our total net revenues. Our top customer contributed approximately 9.5% of our net revenues in 2010. 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.

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 in February 2009, all of our overseas sales have been insured by China Export & Credit Insurance Corporation, or Sinosure. As of December 31, 2010, $361.2 million, or 95.7% of total accounts receivable, was insured by 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. 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 2011, we believe a majority of our revenues will be derived from credit sales, generally with payment schedules due according to negotiated contracts. In addition, some of our customers pay us through drawn upon acceptance, open account and letter of credit terms, which typically take 90 to 120 days to process in order for us to be paid. Despite the more lenient payment terms, any of our customers may fail to meet their payment obligations, especially due to the global economic crisis and the resulting decrease in the availability of financing, which would materially and adversely affect our financial position, liquidity and results of operations.

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, 2010, we had $752.7 million in cash and cash equivalents, $38.0 million in restricted cash and $458.6 million in outstanding borrowings, of which approximately $158.7 million was due within one year. Additionally, holders of our convertible senior notes may require us to repurchase all or a portion of the notes on July 15, 2011 or upon certain change in control events. We might not be able to obtain extensions of these borrowings in the future as they mature. In the event that we are unable to obtain extensions of these borrowings, or if we are unable to obtain sufficient alternative funding at reasonable terms to make repayments, we will have to repay these borrowings with cash generated by our operating activities. In addition, we estimate that our capital expenditures will be approximately $380 million in 2011 for capacity expansion. Our business might not generate sufficient cash flow from operations to repay these borrowings, some of which are secured by significant amounts of our assets, and at the same time fund our capital expenditures. In addition, repaying these borrowings and capital expenditures with cash generated by our operating activities will divert our financial resources from the requirements of our ongoing operations and future growth, and may have a material adverse effect on our business, financial condition and future prospects. If we are unable to obtain funding in a timely manner or on commercially acceptable terms, or at all, our growth prospects and future profitability may decrease materially. Moreover, future turmoil in the credit markets and the potential impact on the liquidity of financial institutions may have an adverse effect on our ability to fund our business through borrowings, under either existing or newly created instruments in the public or private markets on terms that we believe to be reasonable, if at all. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and market price of ADSs and could require us to delay or abandon critical development plans.

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

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

Currently, we have an annual manufacturing capacity of ingots and wafers of approximately 750 MW and cells and modules of approximately 1,200 MW. We plan to increase our annual manufacturing capacity of ingots and wafers to approximately 1.2 GW and cells and modules to approximately 1.9 GW in the second half of 2011. We will determine the magnitude of increases taking into account market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets, as well as our strategy to expand prudently while preserving liquidity. Accordingly, we cannot assure you that we will not revise our capacity expansion plan after we finalize our review. If we fail to implement our plan as expected, experience a delay in the ramp up or fail to achieve our targeted yields, our business and results of operations may be materially and adversely affected.

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.

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

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

In the past, our PV modules were typically sold with a two-year warranty for defects in materials and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. In 2009, we extended the warranty for defects in materials and workmanship from two years to five years. We believe our warranty periods are consistent with industry practice. We have only begun to sell PV modules since November 2004. Although we conduct accelerated reliability testing of our PV modules, our PV modules have not been and cannot be tested in an environment simulating the 25-year warranty period. As a result, we may be subject to unexpected warranty expense and associated harm to our financial results for as long as 25 years after the sale of our products. Our warranty provision for the years ended December 31, 2008, 2009 and 2010 were $8.0 million, $8.5 million and $17.9 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 square monocrystalline modules, colored modules for architectural applications and larger sized modules for utility grid applications. We may be unable to generate sufficient customer demand for our new products if we are unable to develop and produce new products in a cost-effective manner with the expected performance. If we 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.

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

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

- cost-effectiveness, performance and reliability of solar power products compared to conventional and other renewable energy sources and products;
- availability of government subsidies and incentives to support the development of the solar power industry;
- success of other alternative energy generation technologies, such as wind power, hydroelectric power and biomass;
- fluctuations in economic and market conditions that affect the viability of conventional and other renewable energy sources, such as increases or decreases in the prices of oil and other fossil fuels;
- capital expenditures by end users of solar power products, which tend to decrease when the economy slows down; and
- deregulation of the electric power industry and broader energy industry.

If solar power technology is not 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 have better performance than our technologies. For example, thin-film technologies are competing technologies in the solar power industry. According to Solarbuzz, in 2010, thin-film technologies represented 13.5% of the solar market, compared to 86.5% 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 had begun constructing and operating facilities without having obtained all of the necessary construction and environmental permits. Although we have subsequently obtained all of the construction and environmental permits for these facilities, we could be subject to fines or penalties for our past non-compliance.

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

In particular, the manufacturing processes for producing polysilicon employ processes that generate toxic waste products, including the highly volatile and highly toxic substance silicon-tetrachloride. We purchase our polysilicon from our suppliers in the United States, Europe, 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, including our ability to improve and maintain the degree of vertical integration and to increase our efficiencies and margins, the likelihood that we may approach or reach a point of diminishing returns as we continue to expand our scale, the average purchase price we will pay for silicon in the future to meet our expansion requirements, and the cost of conventional grid electricity which will determine at which point grid parity can be reached. We might not be able to meet our desired scale of production in order to fully implement our strategy.

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

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

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

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

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

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

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

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

In 2008, 2009 and 2010, we sold approximately 96.3%, 97.1% and 96.2%, 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.

In addition, we export a substantial amount of our products to Europe. There have been market rumors that the European Union may seek to initiate anti-dumping investigations regarding imports of solar power products from China. If an anti-dumping investigation is initiated against Chinese exporters or if the European Union imposes anti-dumping measures, including tariffs on solar power product imports from China, such action could materially and adversely affect our business and results of operations.

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 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 if the use of our solar power products results in injury. Since our products generate electricity, it is possible that users could be injured or killed by our products as a result of product malfunctions, defects, improper installation or other causes. We only began commercial shipment of our PV modules in November 2004 and, because of our limited operating history, we cannot predict whether product liability claims will be brought against us in the future or the effect of any resulting negative publicity on our business. Moreover, we do not have any product liability insurance and may not have adequate resources to satisfy a judgment in the event of a successful claim against us. The successful assertion of product liability claims against us could result in potentially significant monetary damages and require us to make significant payments.

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

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

Our management has concluded that our internal control over financial reporting is effective as of December 31, 2010. See "Item 15. Control and Procedures." If we fail to maintain effective internal control over financial reporting in the future, it could result in the loss of investor confidence in the reliability of our financial statements and negatively impact the trading price of our ADSs. We have incurred and anticipate that we will continue to incur considerable costs, management time and other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act.

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

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

Under PRC tax law, where both parties to an equity transfer transaction are non-resident enterprises and where the transfer occurs outside the Chinese territory, the non-resident enterprise receiving income must pay taxes to the taxation authority in the locality of the domestic enterprise whose equity was transferred, either directly or through an agent. The domestic enterprise whose equity was transferred must assist the taxation authority in collecting the relevant PRC taxes from the non-resident enterprise. As Trina and all of these transferring shareholders are deemed to be foreign persons without a presence in China, Trina China may be required to withhold tax on capital gains deemed to have been received by these former shareholders. These former shareholders have agreed to indemnify us against any withholding obligations or liabilities due to or imposed by the PRC tax authorities that may arise out of the restructuring. The PRC tax authorities could impose such withholding obligation on Trina or Trina China or impose fines or penalties on Trina or Trina China for its failure to make such withholding. If such withholding obligation is imposed and we are not indemnified by these transferring shareholders, our potential tax exposure would be approximately $2.8 million, excluding any fines or penalties. The amount of such fines or penalties is difficult to estimate as the determination of whether any such fines or penalties would be imposed and the amount of such fines or penalties are at the discretion of the PRC tax authorities.

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

Our principal shareholders have substantial influence over our business, including decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could deprive our shareholders of an opportunity to receive a premium for their shares as part of a sale of our company and might reduce the price of our ADSs. These actions may be taken even if they are opposed by our other shareholders. Furthermore, our articles of association contain a quorum requirement of at least one-third of our total outstanding shares present in person or by proxy. Two or more shareholders with an aggregate shareholding of more than one-third could constitute a quorum and approve actions which may not be in the best interests of our other shareholders.

Fluctuations in exchange rates could adversely affect our business.

The value of the Renminbi against the U.S. dollar, Euro and other currencies is affected by, among other things, changes in China's political and economic conditions and China's foreign exchange policies. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the Renminbi to the U.S. dollar. Under the new policy, the Renminbi was permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. This change in policy caused the Renminbi to appreciate approximately 21.5% against the U.S. dollar over the following three years. However, from July 2008 until June 2010, the RMB 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 RMB exchange rate regime and increase the flexibility of the exchange rate. We cannot predict how this new policy will impact the RMB exchange rate.

Most of our sales are denominated in Euros, with the remainder in U.S. dollars, 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 loss of approximately $36.2 million in 2010. 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 RMB 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, 2010, we had foreign currency forward contracts with a total contract value of approximately €985.8 million ($1,310.8 million). We do not use foreign currency forward contracts to hedge all of our foreign currency denominated commitments. As with all hedging instruments, there are risks associated with the use of foreign currency forward contracts. While the use of such foreign currency forward contracts provides us with protection from certain fluctuations in foreign currency exchange, we potentially forgo the benefits that might result from favorable fluctuations in foreign currency exchange. Any default by the counterparties to these transactions could adversely affect our financial condition and results of operations. Furthermore, these financial hedging transactions may not provide adequate protection against future foreign currency exchange rate fluctuations and, consequently, such fluctuations could adversely affect our financial condition and results of operations.

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, 2010. 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 will generally 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—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. See Item 10, "Additional Information—Taxation—United States Federal Income Taxation—Passive Foreign Investment Company."

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

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

We conduct substantially all of our operations through Trina China. Our ability to make distributions or other payments to our shareholders depends on payments from Trina China, whose ability to make such payments is subject to PRC regulations. Regulations in the PRC currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. According to the relevant PRC laws and regulations applicable to Trina China and its articles of association, Trina China is required to set aside at least 10% of its after-tax profit based on PRC accounting standards each year to its general reserves until the accumulative amount of these reserves reaches 50% of its registered capital. These reserves are not distributable as cash dividends. As of December 31, 2010, these general reserves amounted to $41.3 million, accounting for 9.1% of the registered capital of Trina China. In addition, under the Enterprise Income Tax Law and its Implementation Regulations, or the new 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 new EIT Law. See "—Our business benefits from certain PRC government tax incentives, and the expiration of, or changes to, these incentives could have a material adverse effect on our results of operations" and "Item 4. Information on the Company—Regulation—Tax." Furthermore, if Trina China incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us.

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 Trina China borrows foreign currency loans from us or other foreign lenders, these loans must be registered with the SAFE, and if we finance Trina China by means of additional capital contributions, these capital contributions must be approved by certain government authorities including the Ministry of Commerce or its local counterparts. These limitations could affect the ability of Trina China to obtain foreign exchange through debt or equity financing.

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 Ministry of Commerce 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 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. 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.

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

The new 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 new EIT law, enterprises that were established before March 16, 2007 and already enjoy preferential tax treatments will (i) in the case of preferential tax rates, continue to enjoy the tax rates which will be gradually increased to the new tax rates within five years from January 1, 2008 or (ii) in the case of preferential tax exemption or reduction for a specified term, continue to enjoy the preferential tax holiday until the expiration of such term. In addition, certain enterprises may still benefit from a preferential tax rate of 15% under the new EIT Law if they qualify as "high and new technology enterprises strongly supported by the State," subject to certain general factors described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. Therefore, Trina China is entitled to a preferential income tax rate of 15% in 2008, 2009 and 2010, as long as it maintains its qualification as a "high and new technology enterprise" under the new EIT Law. If Trina China fails to maintain the "high and new technology enterprise" qualification, its applicable EIT rate may increase to up to 25%, which could have a material adverse effect on our results of operations. In addition, in April 2009, we received a notice from the State Tax Bureau of Changzhou Hi-tech Development Zone, which revoked a previous approval for the tax holiday on taxable income related to registered capital contributions made in 2007. As a result, we made an additional income tax payment of $6.5 million in 2009. Our EIT rate for 2010 was 15.0%. We cannot assure you that we will be able to maintain our current effective tax rate in the future. Any discontinuation of preferential tax treatment or any increase of the enterprise income tax rate applicable to Trina China could have a material adverse effect on our financial condition and results of operations.

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

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

Under the new EIT law, an enterprise established outside the PRC with its "de facto management body" within the PRC is considered a "resident enterprise" and will be subject to the enterprise income tax at the rate of 25% on its worldwide income. The "de facto management body" is defined as the organizational body that effectively exercises overall management and control over production and business operations, personnel, finance and accounting, and properties of the enterprise. The State Tax Administration 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. Although SAT Circular 82 only applies to offshore enterprises controlled by PRC enterprises and not those controlled by PRC or foreign individuals or foreign enterprises, the criteria set forth therein may reflect State Tax Administration'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 new EIT law also provides that, if a resident enterprise directly invests in another resident enterprise, the dividends received by the investing resident enterprise from the invested enterprise are exempted from income tax, subject to certain conditions. Therefore, if Trina is classified as a resident enterprise, the dividends received from its PRC subsidiary may be exempted from income tax. However, it remains unclear how the PRC tax authorities will interpret the PRC tax resident treatment of an offshore company, like Trina, having ownership interest in a PRC enterprise.

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

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 State Administration of Taxation 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.

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

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

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

The regulations also established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex, including requirements in some instances that the Ministry of Commerce, or MOFCOM, be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise. For example, China's State Council promulgated the Notice of the General Office of the State Council on the Establishment of the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors on March 3, 2011. According to the Notice, if the target company of merger and acquisition activities by foreign investors is an enterprise: (i) manufacturing military products; (ii) located around the key or sensitive military areas or (ii) related to state safety; or if the foreign investors intend to control an enterprise involved in industries involving: (i) key agriculture; (ii) key energy and resourses; (iii) key fundamental facilities and equipment; (iv) key technologies; or (v) material equipment by merger and acquisition, the transaction will be subject to review by MOFCOM. As we may grow our business in part by acquiring complementary businesses in the future, complying with the requirements of the new regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the MOFCOM, may delay or inhibit our ability to complete such transactions. Any such delay or inability to obtain applicable approvals to complete our potential future acquisitions could affect our ability to expand our business or maintain our market share.

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

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

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

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

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

We face risks related to health epidemics and other outbreaks.

Our business could be adversely affected by the effects of swine flu, avian flu, SARS or other epidemics or outbreaks. China reported a number of cases of SARS in April 2004. In 2006, 2007 and 2008, there have been reports on the occurrences of avian flu in various parts of China, including a few confirmed human cases and deaths. In April 2009, an outbreak of swine flu occurred in Mexico and the United States. 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;
- addition or departure of our executive officers and key research personnel;
- announcements regarding patent litigation or the issuance of patents to us or our competitors;
- conditions affecting general economic performance in the United States;
- fluctuations in the exchange rates between the U.S. dollar, the Euro and Renminbi;
- release or expiry of lock-up or other transfer restrictions on our outstanding ordinary shares; and
- sales or perceived sales of additional ADSs.

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

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

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

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

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

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

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

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

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

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

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

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

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

Our corporate affairs are governed by our memorandum and articles of association, the Companies Law, Cap. 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary responsibilities of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as that from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under Cayman Islands law are not as clearly established as they would be under statutes or

judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States. In addition, some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. As a result of all of the above, shareholders of a Cayman Islands company may have more difficulty in protecting their interests in the face of actions taken by management, members of the board of directors or controlling shareholders than they would as shareholders of a company incorporated in a jurisdiction in the United States. The limitations described above will also apply to the depositary, which is treated as the holder of the shares underlying our ADSs.

You may have difficulty enforcing judgments obtained against us.

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

Item 4. Information on the Company

A. History and Development of the Company

Our legal and commercial name is Trina Solar Limited. Our predecessor company, Changzhou Trina Solar Energy Co., Ltd., or Trina China, was incorporated in December 1997. In anticipation of our initial public offering, we incorporated Trina in the Cayman Islands as a listing vehicle on March 14, 2006. Trina acquired all of the equity interests in Trina China through a series of transactions that have been accounted for as a recapitalization and Trina China became our wholly-owned subsidiary. We conduct substantially all of our operations through Trina China. In December 2006, we completed our initial public offering of our ADSs and listed our ADSs on the 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 4,073,194 ADSs for a related ADS borrow 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 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 capitalize on our vertically integrated platform and low-cost manufacturing capability in China to produce quality products at competitive costs. We produce standard monocrystalline PV modules ranging from 165 W to 185 W in power output and multicrystalline PV modules ranging from 215 W to 240 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 emerging solar power markets, such as the United States, Belgium, Australia, India, China, the Czech Republic, France, Israel, Japan and South Korea. 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 Proysectos Integrales Solares S.L., Enerl S.r.l., Enerray S.p.A., Phoenix Solar AG and TRE Tozzi Renewable Energy.

As of December 31, 2010, we had an annual manufacturing capacity of ingots and wafers of approximately 750 MW and cells and modules of approximately 1,200 MW. In 2009 and 2010, 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. As a result, we have developed relationships with various domestic and international suppliers of ingots and wafers.

We purchase polysilicon and reclaimable silicon materials 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 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 2008, 2009 and 2010, we generated net revenues of $831.9 million, $845.1 million and $1,857.7 million, respectively, and net income from our continuing operations of $60.7 million, $96.2 million $311.5 million, respectively.

Products

We design, develop, manufacture and sell PV modules. PV modules are arrays of interconnected solar cells encased in a weatherproof frame. We produce standard solar monocrystalline modules ranging from 165 W to 185 W in power output and multicrystalline modules ranging from 215 W to 240 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, 2010, we had an annual manufacturing capacity of ingots and wafers of approximately 750 MW and cells and modules of approximately 1,200 MW. We plan to increase our annual manufacturing capacity of ingots and wafers to approximately 1,200 MW and cells and modules to approximately 1,900 MW in the second half of 2011. These capacity increases will be made at our new East Campus manufacturing facility, which commenced commercial operations in the fourth quarter of 2009. We will determine the magnitude of capacity increases taking into account market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets, as well as our strategy to expand while preserving liquidity. Accordingly, we cannot assure you that we will not revise our capacity expansion plan after we finalize our review. The following table sets forth our manufacturing capacity and production output in MW equivalent of module production as a result of our ramp-up for each of our facilities.

Manufacturing Facility	Manufacturing Commencement Date	Annual Manufacturing Capacity as of December 31, 2010	Production Output for the Year Ended December 31, 2010	Estimated Maximum Annual Manufacturing Capacity as of December 31, 2011
Silicon ingots	August 2005	750(1)	705(2)	1,200 MW
Silicon wafers	February 2006	750(1)	718(2)	1,200 MW
Solar cells	April 2007	1,200(1)	973(2)	1,900 MW
PV modules	November 2004	1,200(1)	1,048(2)	1,900 MW

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

(2) Includes modules produced but not shipped as of December 31, 2010.

- *Silicon feedstock*. We purchase polysilicon and reclaimable silicon raw materials from various suppliers, including silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies. We test and categorize reclaimable silicon raw materials based on their technical properties. These reclaimable silicon raw materials then undergo mechanical grinding and chemical cleaning before they are mixed using our proprietary formula. Our ability to mix the materials in the right proportion is critical to the production of high-quality silicon ingots. In the fourth quarter of 2010, we had an average silicon usage of approximately 5.9 grams per watt, compared to approximately 6.0 and 6.3 grams per watt in the fourth quarters of 2009 and 2008, respectively.

- *Ingots*. We began manufacturing monocrystalline ingots in August 2005 with silicon crystal growing furnaces. As of December 31, 2010, we had 110 silicon crystal growing furnaces for manufacturing monocrystalline ingots, which can yield 110 MW of modules annually based on current manufacturing processes, and 90 directional solidification system, or DSS, furnaces for the manufacturing of multicrystalline ingots, which can yield 640 MW of modules annually based on current manufacturing processes.

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

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

- *Wafers*. We began manufacturing wafers in February 2006. Currently, we slice monocrystalline and multicrystalline wafers to a 180 micron thickness, while maintaining a low breakage rate. After the ingots are inspected, monocrystalline ingots are squared by squaring machines. Through high-precision cutting techniques, the squared ingots are then sliced into wafers by wire saws using steel wires and silicon carbon powder. To produce multicrystalline wafers, multicrystalline ingots are first cut into pre-determined sizes. After a testing process, the multicrystalline ingots are cropped and the usable parts of the ingots are sliced into wafers by wire saws by the same high-precision cutting techniques used for slicing monocrystalline wafers. After being inserted into frames, the wafers go through a cleansing process to remove debris from the previous processes, and are then dried. Wafers are inspected for contaminants then packed and transferred to our solar cell production facilities. Our annual wafer manufacturing capacity as of December 31, 2010 was approximately 750 MW of modules based on current manufacturing processes.

- *Solar cells.* We currently produce our own solar cells for use in our PV modules. After we installed our ingot and wafer production lines, we began manufacturing ingots and wafers in-house and outsourced the fabrication of solar cells to solar cell manufacturers. To reduce our dependence on third-party solar cell manufacturers and to increase our efficiencies both in solar cell and PV module manufacturing, we began the production of monocrystalline cells in April 2007 and achieved a conversion efficiency of up to 19.5% as of December 31, 2010 on a test production line basis. In November 2007, we began producing multicrystalline cells and achieved a conversion efficiency of up to 18.0% as of December 31, 2010 on a test production line basis. We currently have 34 production lines with an annual manufacturing capacity of approximately 1,200 MW.

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

  We have also selectively entered into short-term purchase agreements for solar cells with commercially favorable terms to meet the excess PV module demand from new and existing customer segments and geographies.

- *PV modules*. We began module manufacturing in November 2004. We increased our annual manufacturing capacity of modules from approximately 6 MW per year as of November 2004 to approximately 1,200 MW per year as of December 31, 2010. We currently have 71 production lines.

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

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

In 2009 and 2010, 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. As a result, we have developed relationships with various domestic and international suppliers of ingots and wafers.

Silicon Raw Material Supplies

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

According to Solarbuzz, the average long-term supply contract price of polysilicon increased from approximately $60-$65 per kilogram delivered in 2007 to $60-$75 per kilogram in 2008. In addition, according to Solarbuzz, spot prices for solar grade polysilicon were in the range of $230-$375 per kilogram for most of the first half of 2008 and rose to a peak of $450-$475 per kilogram by mid-2008. Due to the industry-wide shortage of polysilicon experienced during the past few years, we have purchased polysilicon using short-term, medium-term and long-term contracts. However, since the fourth quarter of 2008, the price of polysilicon decreased rapidly due to the increased supply of polysilicon resulting from intensive investments in silicon manufacturing. According to Solarbuzz, the average price range of long-term polysilicon supply contracts had decreased to $52-$57 per kilogram by the fourth quarter of 2010, and spot prices for solar grade polysilicon had decreased to $75-$85 per kilogram by the end of 2010. However, we cannot assure you that the price of polysilicon will continue to decline or remain at its current levels.

We have executed agreements with suppliers to obtain our silicon raw material requirements to support our estimated production output in 2011. We intend to leverage the global reach of our procurement personnel to secure our silicon requirements.

We have entered into medium-term and long-term supply contracts to procure silicon feedstock of different grades with Chinese and international suppliers, which provide us with the ability to meet our future requirements. These medium-term and long-term suppliers include Hemlock Semiconductor Group, Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. (a wholly-owned subsidiary of GCL-Poly Energy Holdings Limited), or Jiangsu Zhongneng, OCI Company Ltd. (formerly DC Chemical Co., Ltd.) and Wacker Chemie AG. Our medium-term and long-term contracts have delivery terms beginning from 2009 to 2012 and a fixed price or a price to be determined on an annual or quarterly basis. Several of our long-term contracts contain price adjustment clauses that provide for price renegotiations if the market price is lower or higher than the originally agreed price in any given quarter. These contracts also require us to make an advance payment of a certain negotiated amount. Due to the decrease in polysilicon prices in the market in late 2008 and early 2009, we renegotiated most of our medium-term and long-term silicon supply contracts to achieve favorable pricing and payment terms relative to current market conditions.

To secure sufficient feedstock to support our current and planned sales growth, in March 2008, we entered into an eight-year polysilicon supply agreement with Jiangsu Zhongneng, a wholly-owned subsidiary of GCL-Poly Energy Holdings Limited, a supplier of polysilicon based in Jiangsu Province, China. In August 2009, we extended the term of this supply agreement by another five years. Under this agreement and its supplemental agreements, GCL-Poly is expected to supply us with polysilicon and wafers sufficient to produce approximately 7,500 MW of solar modules from 2011 to 2020. The prices of the polysilicon and wafers are predetermined subject to periodic adjustments.

In April 2008, in order to encourage the development of the solar power industry in Changzhou, the Changzhou municipal government established the PV Park, adjacent to our headquarters that has attracted and continues to attract PV supply chain component manufacturers. Several of our key suppliers have established, or plan to establish, production facilities in the PV Park. We believe the relocation of suppliers to the PV Park will support our goal of realizing procurement and logistical advantages, accelerate our cost reduction initiatives, as well as providing synergies for research and development. For example, starting from January 2010, we commenced sourcing slurry for wafer slicing from a vendor's new facility located in the PV park. Sourcing from suppliers located within the PV park and expanding our Enterprise Resource Planning (ERP) system to cover a greater number of vendors would allow us to collaborate with our vendors for better inventory and production management control, better monitoring of supply quality and easy access to onsite inventory.

Quality Assurance

Our quality control was set up according to the quality system requirements of ISO 9001:2000. Our quality control consists of three components: incoming inspections through which we ensure the quality of the raw materials that we source from third parties, in-process quality control of our manufacturing processes, and outgoing quality control of finished products through inspection and by conducting reliability and other tests. We possess a nationally recognized quality test laboratory in China that performs product and reliability testing on all of our products.

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

Certification Test Date	Certification or Test Standard	Relevant Products
December 2007	ISO 9001:2000 quality system certification	Manufacturing and sales of silicon, ingots, casting, silicon wafers, solar cells and PV modules
April 2008, February 2010	Golden Sun product certification	PV modules sold in China
August 2008, July 2009	UL 1703 certification	PV modules sold in the United States
December 2008	ISO 14001:2004 environmental management system	Manufacturing and sales of silicon, ingots, casting, silicon wafers, solar cells and PV modules
October 2007, November 2007, December 2007, December 2008, May 2009	CE certification	PV modules sold in Europe
March 2008, May 2008, October 2008, February 2009, April 2009, September 2009, April 2010, December 2010, January 2011, February 2011	ICIM product certification	PV modules sold in Europe
August 2006, June 2007, July 2007, February 2009, April 2009, May 2009, June 2009, November 2009, October 2010, December 2010, February 2011	TÜV Rheinland product certification	PV modules sold in Europe
February 2009, May 2009, September 2009, December 2010	Korean module certificate	PV modules sold in Korea
March 2009, October 2009, May 2010, October 2010, February 2011	JET product certification	PV modules sold in Japan
December 2009	RoHS certification	PV modules sold in Europe
April 2010	ISO/IEC17025 CNAS laboratory accreditation certification	Photovoltaic product testing center
December 2010	OHSAS18001:2007 occupational health and safety management system certification	Manufacturing and sales of silicon, ingots, casting, silicon wafers, solar cells and PV modules
December 2010	ISO 9001:2008 quality management system certification	Manufacturing and sales of silicon, ingots, casting, silicon wafers, solar cells and PV modules
December 2010	ISO 14001:2004 environmental management system	Manufacturing and sales of silicon, ingots, casting, silicon wafers, solar cells and PV modules
January 2011	CSA certification(UL1703)	PV modules sold in the United States
February 2011	UL certification(UL1703)	PV modules sold in the United States
February 2011	Clean Energy Council (CEC)	PV modules sold in Australia

In May 2010, we entered into a strategic partnership agreement with TÜV Rheinland Group, Underwriters Laboratories Inc. and China General Certification Center, three of the leading certification bodies. Under the agreement, TÜV Rheinland, UL and CGC will perform product certification tests at our Changzhou PV testing Center and other facilities, allowing us to introduce our newest certified product lines in the shortest time to our customers.

Customers and Markets

We currently sell our PV modules primarily to distributors, wholesalers, power plant developers and operators and PV system integrators. Our focus on which type of clients depends largely on the demand in the specific markets. Distributors and wholesalers tend to be large volume purchasers. We also work with solar power plant developers and operators by supplying solar modules for select downstream projects. PV system integrators typically design and sell integrated systems that include our branded PV modules along with other system components. Some of the PV system integrators also resell our modules to other system integrators. Our major customers for 2010 included Proyectos Integrales Solares, S.L., Enerl S.r.l., Enerray S.p.A., Phoenix Solar AG and TRE Tozzi Renewable Energy. We have a quality customer base as many of our customers are well-known wholesalers and system integrators in their respective markets and are expanding to become multinational PV companies.

A small number of customers have historically accounted for a majority of our net sales. Our top five customers collectively accounted for approximately 41.9%, 36.9% and 24.9% of our net revenues in 2008, 2009 and 2010, respectively. Our top customer contributed approximately 9.5% of our net revenues in 2010.

We currently sell most of our PV modules to customers located in Europe. Solar manufacturers like us have capitalized on government and regulatory policies for the promotion of solar power in many jurisdictions. In order to continue growing our sales and to reduce our exposure to any particular market segment, we intend to broaden our geographic presence and customer base. While Germany continues to be our largest market, we have significantly expanded our sales of PV modules to several solar power markets in Europe, including Italy, Belgium, Spain, France and the United Kingdom. In 2008, 2009 and 2010, we signed several agreements with well-recognized companies in Spain and Italy. These sales are conducted in line with our goals of increasing our market presence in Europe outside of Germany and building our brand as one of the top global solar brands. In 2008, the Spanish market contributed to the accelerated growth in the market demand for solar power products, but contributed to the shortfall in demand globally after the government policy shift in September 2008. Although the policy shift has impacted the demand in the Spanish market, our customers in Spain also purchase large quantities of solar power products for projects to be developed outside of Spain, which we believe will offset some of the impact. Starting from 2009, the German government has made annual reductions in solar feed-in tariffs, which may result in a significant fall in the price of and demand for PV products. See "Item 5. Operating and Financial Review and Prospects—B. Overview— Government Subsidies and Economic Incentives." In the past two years, we also increased our sales in emerging solar power markets outside of Europe, such as China, Australia, Japan, the United States, Thailand, India and Israel. For example, in February 2010, we entered into an agreement with Southern California Edison Company, a large electric utility in Southen California in the United States, to provide 45 MW of PV modules from May of 2010 through calendar year 2012, in connection with the utility's solar photovoltaic projects. Southern California Edison Company recently asked us to provide additional amounts of supply as may be agreed by the parties by our ongoing discussions. Additionally, to enhance the our sales capabilities in the European and United States markets, we established regional headquarters in Switzerland and San Jose, California. We also plan to drive our sales growth through expansion into downstream arrangements in major markets such as system integrations and project developments. We believe these actions will help reduce the negative effects of reduced incentives in countries like Germany and Spain.

The following table sets forth our total net revenues by geographical region, based on record country of sales, for the periods indicated:

	Year Ended December 31,					
	2008		2009		2010	
Region	Total Net Revenues	Percent	Total Net Revenues	Percent	Total Net Revenues	Percent
	(in thousands, except for percentages)					
Europe						
Germany	$ 198,529	23.9%	$ 286,220	33.9%	$ 447,316	24.1%
Italy	149,685	18.0%	166,062	19.6%	409,561	22.0%
Spain	270,549	32.5%	101,849	12.1%	404,131	21.8%
Others	136,641	16.4%	234,021	27.7%	175,115	9.4%
Europe Total	755,404	90.8%	788,152	93.3%	1,436,122	77.3%
China	30,390	3.7%	24,435	2.9%	70,783	3.8%
USA	14,699	1.8%	13,238	1.6%	262,300	14.1%
Others	31,408	3.8%	19,311	2.3%	88,485	4.8%
Total	$ 831,901	100.0%	$ 845,136	100%	$ 1,857,689	100.0%

We conduct our PV module sales typically through short-term contracts with terms of one year or less or, to a lesser extent, long-term sales or framework agreements with terms of generally one to two years. Our short-term contracts provide for an agreed sales volume at a fixed price. Our long-term sales or framework agreements provide for a fixed sales volume or a fixed range of sales volume to be determined generally two to three quarters before the scheduled shipment date. Prices for long-term sales or framework agreements are generally determined one month prior to the start of the quarter of the scheduled shipment date. Compared to short-term contracts, we believe our long-term sales or framework agreements not only provide us with better visibility into future revenues, but also help us enhance our relationships with our customers.

We may require advance payments depending on the credit status of our customer, our relationship with the customer, market demand and the terms of the particular contract. Our contracts with customers stipulate different post-delivery payment schedules based on the credit worthiness of the customer. We have also increased our sales to customers using credit sales, generally with payments due within two to six months. Starting in February 2009, all 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. As of December 31, 2010, $361.2 million, or 95.7% of total accounts receivable, was insured by Sinosure. The remaining balance of $7.0 million was guaranteed by letters of credit or bank deposits.

Pursuant to our sales contracts, we provide customers with warranty services. In the past, our PV modules were typically sold with a two-year warranty for defects in materials and workmanship and a minimum power output warranty for up to 25 years following the date of purchase or installation. In 2009, we extended the warranty for defects in materials and workmanship from two years to five years.

We seek to better serve our customers or their end-customers by setting up local offices with sales and marketing, sales support and logistics teams close to them. We are also expanding our range of value-added services to customers. We service residential and commercial end-customers through a network of local distributors and system integrator partners. For distributors and system integrators, we provide marketing support, logistics support that minimizes handling and administrative costs, and pre-sale and post-sale supports that include customized product selection, technological and installation support. We are also developing a solar power product solution that we hope to launch in 2011 to make rooftop installation of solar power products easier for residential segments. For our customers in the utility sector, we will continue to provide a greater level of pre-sale due diligence and technical input to facilitate their procurement.

Sales and Marketing

Over the years, we have expanded our distribution network globally. While our core solar module customer base continues to be developed markets in Germany, Italy and Spain, we have also expanded our sales and distribution channels into emerging solar markets such as the United States, Australia, India, Israel, China, the Czech Republic, France, Japan, Thailand and South Korea. To grow our sales and reduce exposure to any particular market, we have broadened our geographic presence and diversified our sales among distributors, wholesalers, power plant developers and operators, PV system integrators and regional and national grid operators through increased sales and marketing and customer support efforts.

To further expand our distribution network and enhance our sales and delivery capabilities, we have established regional headquarters and offices in Europe, North America and Asia. We established a representative office in California in September 2007, which became our regional headquarters in January 2010, and a regional headquarters in Switzerland in January 2010. We also established warehouse operations in Rotterdam, a key port city in the Netherlands, in December 2008, and in California in June 2009, further strengthening our distribution networks. We also opened sales offices in Japan and South Korea in 2010. Our localized offices will continue to be supported by our centralized operations and administration located in Changzhou, China.

Our marketing programs include participation in industry conferences, trade fairs and public relations events. Our sales and marketing group works closely with our research and development and manufacturing groups to coordinate our product development activities, product launches and ongoing demand and supply planning. In May 2010, we became a sponsor and partner of the Renault Formula One Team, which we believe will increase our brand awareness and enhance our marketing efforts.

Intellectual Property

In manufacturing our solar power products, we use know-how available in the public domain and unpatented know-how developed in-house. We rely on a combination of trade secrets and employee contractual protections to establish and protect our proprietary rights. We believe that many elements of our solar power products and manufacturing processes involve proprietary know-how, technology or data that are not coverable by patents or patent applications, including technical processes, equipment designs, algorithms and procedures. We have taken security measures to protect these elements. Substantially all of our research and development personnel have entered into confidentiality, non-competition and proprietary information agreements with us. These agreements address intellectual property protection issues and require our employees to assign to us all of their inventions, designs and technologies they develop during their terms of employment with us.

As of December 31, 2010, we had 121 issued patents and 211 patent applications pending in China. We obtained an additional 22 patents in 2011. 323 of our issued patents and our pending patent applications relate to technology that we are currently using, including technology relating to improvements to the solar power product manufacturing process and integration of construction elements into our PV modules or solar systems. 27 of our issued patents relate to technology that we do not use in our current production of solar power products. As we expand our product portfolio, continue our expansion into solar cell manufacturing and enter into polysilicon manufacturing in the future, we believe that the development and protection of our intellectual property will become more important to our business. We intend to continue to assess appropriate opportunities for patent protection of those aspects of our technology that we believe provide a significant competitive advantage to us.

We have registered as a trademark the logo "Trina" in China, the EU, Japan, Singapore, Switzerland, Morocco, Taiwan, Thailand, Croatia, South Korea, the Philippines, Australia, the United States and the United Arab Emirates. We also have registered as a trademark the logo "Trinasolar" in China, the United States, the EU, Australia, the United Arab Emirates, Thailand, the Philippines, Japan, Singapore, Switzerland, Morocco, Taiwan, South Korea and Turkey. We have pending trademark registration applications for the logos "Trina" and "Trinasolar" in India, Indonesia and several other countries. We also filed a trademark registration application for the logo "天合光能" with the trademark office in the PRC in December 2007 and November 2009. We also registered as a trademark the logo "MeSolar" in Taiwan, Japan, Australia and Switzerland and registered as a trademark the logo "YouSolar" in Taiwan, Japan, Switzerland and Singapore. We also filed trademark registration applications for the logo "Trinasolar 天合光能" in China, the EU, Croatia, South Korea, Singapore, Japan and several other countries. Additionally, we have filed the trademark registration applications for the logos "天合," "天和," "天何," "天河," "天禾," "天核" individually with the trademark office in the PRC in November 2009.

Competition

The market for solar power products is competitive and fast evolving. We expect to face increasing competition, which may result in price reductions, reduced margins or loss of market share. We believe that the key competitive factors in the market for PV modules include:

- manufacturing efficiency;
- power efficiency and performance;
- price;
- strength of supplier relationships;
- aesthetic appearance of PV modules; and
- brand name and reputation.

We compete with other module manufacturing companies such as Sharp Electronic Corporation, Suntech Power Holdings Co., Ltd., Yingli Green Energy Holding Co., Ltd. and Mitsubishi Electric Corporation. We believe one of our key advantages over some of these competitors is our high degree of vertical integration, which was strengthened with the completion of our solar cell plant. Some of our competitors have also become vertically integrated, from silicon 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 and have greater resources than we have. Further, many of our competitors are developing and are currently producing products based on new solar power technologies, such as thin-film technology, which may ultimately have costs similar to, or lower than, our projected costs.

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

Environmental Matters

We believe we have obtained the environmental permits necessary to conduct our business. Our manufacturing processes generate noise, waste water, gaseous wastes and other industrial wastes. However, we have devoted efforts to reduce such wastes to acceptable levels. We have installed various types of anti-pollution equipment in our facilities to reduce, treat and, where feasible, recycle the wastes generated in our manufacturing process. We believe we are currently in compliance with all applicable environmental laws and regulations. Our operations are subject to regulation and periodic monitoring by local environmental protection authorities. If we fail to comply with present or future environmental laws and regulations, we could be subject to fines, suspension of production or a cessation of operations.

Insurance

We maintain property insurance policies with reputable insurance companies for covering our equipment, facilities, buildings and their improvements, and office furniture. These insurance policies cover losses due to fire, earthquake, flood and a wide range of other natural disasters. We maintain director and officer liability insurance for our directors and executive officers. We do not maintain product liability insurance. We consider our insurance coverage to be in line with other manufacturing companies of similar size in China. However, significant damage to any of our manufacturing facilities, whether as a result of fire or other causes, could have a material adverse effect on our results of operation. We paid an aggregate of approximately $2.4 million in insurance premiums in 2010. The increase in premium was largely due to an increase in the scope of our insurance coverage, including our purchase of business interruption insurance.

Starting in February 2009, all of our overseas sales have been insured by 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. We paid Sinosure insurance premiums of an aggregate of approximately $4.5 million in 2010.

Regulation

This section sets forth a summary of the most significant regulations or requirements that affect our business activities in China or our shareholders' right to receive dividends and other distributions from us.

Renewable Energy Law and Other Government Directives

In February 2005, China enacted its Renewable Energy Law, which became effective on January 1, 2006 and was amended on December 26, 2009. The Renewable Energy Law sets forth policies to encourage the development and use of solar energy and other non-fossil energy. The law sets forth the national policy to encourage and support the use of solar and other renewable energy and the use of on-grid generation. It also authorizes the relevant pricing authorities to set favorable prices for the purchase of electricity generated by solar and other renewable power generation systems.

The law also sets forth the national policy to encourage the installation and use of solar energy water-heating systems, solar energy heating and cooling systems, solar photovoltaic systems and other solar energy utilization systems. It also provides financial incentives, such as national funding, preferential loans and tax preferences for the development of renewable energy projects. In January 2006, China's National Development and Reform Commission promulgated two implementation directives of the Renewable Energy Law. These directives set forth specific measures in setting prices for electricity generated by solar and other renewal power generation systems and in sharing additional expenses occurred. The directives further allocate the administrative and supervisory authorities among different government agencies at the national and provincial levels and stipulate responsibilities of electricity grid companies and power generation companies with respect to the implementation of the Renewable Energy Law.

China's Ministry of Construction also issued a directive in June 2005 that seeks to expand the use of solar energy in residential and commercial buildings, and encourages the increased application of solar energy in different townships. In addition, China's State Council promulgated a directive in July 2005 that sets forth specific measures to conserve energy resources.

On September 4, 2006, China's Ministry of Finance and Ministry of Construction jointly promulgated the Interim Measures for Administration of Special Funds for Application of Renewable Energy in Building Construction, which provides that the Ministry of Finance will arrange special funds to support the application of renewable energy in building construction in order to enhance building energy efficiency, protect the ecological environment and reduce the consumption of fossil energy. These special funds provide significant support for the application of solar energy in hot water supply, refrigeration and heating, PV technology and lighting integrated into building construction materials.

In August 2007, the National Development Reform Commission issued the Medium and Long-term Development Plan for Renewable Energy which describes the national government's financial incentives for the renewable energy industry for the multi-year period ending 2020, with an estimated required investment amount of approximately US$300 billion. The plan also calls for increasing the overall installation capacity for solar energy to 300 MW by 2010 and 1.8 GW by 2020. Recent policy statements have indicated that these targets may rise to 400 MW to 500 MW by 2010 and 2 GW by 2020.

On April 1, 2008, the PRC Energy Conservation Law came into effect. Among other objectives, this law encourages the utilization and installation of solar power facilities in buildings for energy-efficiency purposes.

In March 2009, China's Ministry of Finance promulgated the Interim Measures for Administration of Government Subsidy Funds for Application of Solar Photovoltaic Technology in Building Construction, or the Interim Measures, to support the demonstration and the promotion of solar PV applications in China. Local governments are encouraged to issue and implement supporting policies for the development of solar PV technology. These Interim Measures, set forth subsidy funds set at RMB20 per watt for 2009 to cover solar PV systems integrated into building construction that have a minimum capacity of 50 kilowatt peak.

In April 2009, the Ministry of Finance and the Ministry of Housing and Urban-Rural Development jointly issued the "Guidelines for Declaration of Demonstration Project of Solar Photovoltaic Building Applications." These guidelines created a subsidy of up to RMB20 (about US$2.93) per watt for building integrated PV or BIPV projects using solar-integrated building materials and components and up to RMB15 (about US$2.20) per watt for BIPV projects using solar-integrated materials for rooftops or walls.

In July 2010, the Ministry of Housing and Urban-Rural Development issued the "City Illumination Administration Provisions" or the Illumination Provision. The Illumination Provisions encourage the installation and use of renewable energy system such as PV systems in the process of construction and re-construction of city illumination projects.

Environmental Regulations

We are subject to a variety of governmental regulations related to environmental protection and the prevention and control of water, air, solid waste and noise pollution. The major environmental regulations applicable to us include the Environmental Protection Law of the PRC, the Law of PRC on the Prevention and Control of Water Pollution, Implementation Rules of the Law of PRC on the Prevention and Control of Water Pollution, the Law of PRC on the Prevention and Control of Air Pollution, Implementation Rules of the Law of PRC on the Prevention and Control of Air Pollution, the Law of PRC on the Prevention and Control of Solid Waste Pollution, and the Law of PRC on the Prevention and Control of Noise Pollution and the PRC Law on Appraising Environment Impacts.

Labor Laws and Regulations

The Work Safety Law, or the WSL, was adopted at the 28th meeting of the Standing Committee of the Ninth People's Congress on June 29, 2002, and was promulgated for implementation as of November 1, 2002. The WSL is applicable to the work safety for entities engaging in manufacturing and business operation activities within the PRC. Such entities must comply with the WSL and other relevant laws and regulations concerning work safety and strengthen the administration of work safety, establish and perfect the system of responsibility for work safety and ensure safe manufacturing conditions.

The PRC Labor Contract Law was promulgated on June 29, 2007 and became effective on January 1, 2008. This law governs the establishment of employment relationships between employers and employees, and the conclusion, performance and termination of, and the amendment to, employment contracts. To establish an employment relationship, a written employment contract must be signed. In the event that no written employment contract is signed at the time of establishment of an employment relationship, a written employment contract must be signed within one month after the date on which the employer engages the employee. To establish an employment relationship, a written employment contract must be signed. In the event that no written employment contract is signed at the time of establishment of an employment relationship, a written employment contract must be signed within one month after the date on which the employer engages the employee. All employers must compensate their employees with wages equal to at least the local minimum wage standards. All employers are required to establish a system for labor safety and sanitation, strictly abide by state rules and standards and provide employees with workplace safety training. Violations of the PRC Labor Contract Law may result in the imposition of fines and other administrative liabilities. Criminal liability may arise for serious violations.

In addition, employers in China are obliged to provide employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing funds.

Restriction on Foreign Ownership

The principal regulation governing foreign ownership of solar power businesses in the PRC is the Foreign Investment Industrial Guidance Catalogue (effective as of October 31, 2007), or the Catalogue. The Catalogue classifies industries into four categories: encouraged, permitted, restricted and prohibited. As confirmed by the government authorities, Trina China, our operating subsidiary, is engaged in an encouraged industry. Trina China is permitted under the PRC laws to be wholly owned by a foreign company. Trina China is, accordingly, also entitled to certain preferential treatment granted by the PRC government authorities, such as exemption from tariffs on equipment imported for its own use.

Tax

China's parliament, the National People's Congress, adopted the Enterprise Income Tax Law on March 16, 2007. On December 6, 2007, the PRC State Council issued the Implementation Regulations of the Enterprise Income Tax Law, both of which became effective on January 1, 2008. The Enterprise Income Tax Law and its Implementation Regulations, or the new 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 new EIT Law, enterprises that were established before March 16, 2007 and already enjoy preferential tax treatments will (i) in the case of preferential tax rates, continue to enjoy the tax rates which will be gradually increased to the new tax rates within five years from January 1, 2008 or (ii) in the case of preferential tax exemption or reduction for a specified term, continue to enjoy the preferential tax holiday until the expiration of such term. In addition, certain enterprises may still benefit from a preferential tax rate of 15% under the new EIT Law if they qualify as "high and new technology enterprises strongly supported by the State," subject to certain general factors described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. Therefore, Trina China is entitled to a preferential income tax rate of 15% in 2008, 2009 and 2010 as long as it maintains its qualification as a "high and new technology enterprise" under the new EIT Law. In addition, in April 2009, we received a notice from the State Tax Bureau of Changzhou Hi-tech Development Zone, which revoked a previous approval for the tax holiday on taxable income related to registered capital contributions made in 2007. As a result, we made an additional income tax payment of $6.5 million during the year ended December 31, 2009. In 2008, 2009 and 2010, our income tax rate was 15%.

Pursuant to the Provisional Regulation of China on Value Added Tax and its implementing rules, all entities and individuals that are engaged in the sale of goods, the provision of processing, repairs and replacement services and the importation of goods in China are generally required to pay value added tax, or VAT, at a rate of 17.0% of the gross sales proceeds received, less any deductible VAT already paid or borne by the taxpayer. Further, when exporting goods, the exporter is entitled to a portion or all of the refund of VAT that it has already paid or borne. Imported raw materials that are used for manufacturing export products and are deposited in bonded warehouses are exempt from import VAT.

Moreover, under the new EIT Law, enterprises organized under the laws of jurisdictions outside China with "de facto management bodies" located within China may be considered PRC resident enterprises and therefore subject to a 25% PRC enterprise income tax on their worldwide income. The Implementing Rules define "de facto management body" as the management body that exercises full and substantial control and overall management over the business, productions, personnel, accounts and properties of an enterprise. In addition, SAT Circular 82 provides that a foreign enterprise controlled by a PRC company or a PRC company group will be classified as a "resident enterprise" with its "de facto management bodies" located within China if the following requirements are satisfied: (i) the senior management and core management departments in charge of its daily operations function mainly in the PRC; (ii) its financial and human resource decisions are subject to determination or approval by persons or bodies in the PRC; (iii) its major assets, accounting books, company seals, and minutes and files of its board and shareholders' meetings are located or kept in the PRC; and (iv) more than half of the enterprise's directors or senior management with voting rights reside in the PRC. Although the SAT Circular 82 only applies to offshore enterprises controlled by PRC enterprises and not those controlled by PRC individuals, foreigners or foreign enterprises, the determining criteria set forth in the Identification Circular may reflect the State Administration of Taxation'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.

Pursuant to SAT Circular 698, issued by the State Administration of Taxation on December 10, 2009, if 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 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. SAT Circular 698 is retroactively effective on January 1, 2008.

Foreign Currency Exchange

Pursuant to the Foreign Currency Administration Rules promulgated in 1996 and amended in 1997 and 2008 and various regulations issued by SAFE, and other relevant PRC government authorities, the Renminbi is freely convertible only to the extent of current account items, such as trade-related receipts and payments, interests and dividends. An enterprise can choose to either keep or sell its foreign exchange income under the current account to financial institutions authorized to engage in foreign exchange settlement or sales business. Capital account items, such as direct equity investments, loans and repatriation of investment, require the prior approval from SAFE or its local counterpart for conversion of Renminbi into a foreign currency, such as U.S. dollars, and remittance of the foreign currency outside the PRC.

Payments for transactions that take place within the PRC must be made in Renminbi. Absent circumstances specified under Chinese laws and regulations, upon approvals from SAFE, an enterprise can choose to either keep or sell its foreign exchange income under capital account to financial institutions authorized to engage in foreign exchange settlement and sales business. On the other hand, FIEs may retain foreign exchange in accounts with designated foreign exchange banks, subject to a cap set by SAFE or its local counterpart.

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. Pursuant to Circular 142, the RMB fund from the settlement of foreign currency capital of a foreign-invested enterprise must be used within the business scope as approved by the examination and approval department of the government, and cannot be used for domestic equity investment unless it is otherwise provided for. Documents certifying the purposes of the RMB fund from the settlement of foreign currency capital, including a business contract, must also be submitted for the settlement of the foreign currency. In addition, SAFE strengthened its oversight of the flow and use of the RMB capital converted from foreign currency registered capital of a foreign-invested company. The use of such RMB capital may not be altered without SAFE's approval, and such RMB capital may not in any case be used to repay RMB loans if the proceeds of such loans have not been used. Violations of the Circular 142 could result in severe monetary fines or penalties.

Dividend Distribution

The principal regulations governing distribution of dividends of wholly foreign-owned enterprises include the Wholly Foreign-owned Enterprise Law (1986), as amended by the Decision on Amending the Law of the People's Republic of China on Wholly Foreign-owned Enterprise (2000), and the Implementing Rules of the Wholly Foreign-owned Enterprise Law (1990), as amended by the Decision of the State Council on Amending the Implementing Rules of the Law of the People's Republic of China on Wholly Foreign-owned Enterprise (2001).

Under these regulations, foreign invested enterprises in China may pay dividends only out of their accumulated profits, if any, determined in accordance with Chinese accounting standards and regulations. In addition, wholly foreign-owned enterprises in China are required to set aside at least 10% of their respective after-tax profits based on PRC accounting standards each year, if any, to fund its general reserves fund, until the accumulative amount of such reserves reaches 50% of its registered capital. These reserves are not distributable as cash dividends. Wholly foreign-owned enterprises are also required to allocate a portion of its after-tax profits, as determined by its board of directors, to its staff welfare and bonus funds, which may not be distributed to equity owners. As of December 31, 2010, the restricted portion of our PRC subsidiaries' net assets was $497.3 million, which consists of their registered capital and statutory reserves.

In addition, under a new PRC tax law that became effective in January 2008, dividends from Trina China to us may become subject to a 10% withholding tax. See "—Tax."

C. Organizational Structure

The following table sets out the details of our subsidiaries:

Name	Country of Incorporation	Ownership Interest
Top Energy International Limited	Hong Kong	100%
Changzhou Trina Solar Energy Co., Ltd.	China	100%
Trina Solar Korea Limited	South Korea	100%
Trina Solar (Singapore) Pte. Ltd.	Singapore	100%
Trina Solar (Hong Kong) Enterprise Limited	Hong Kong	100%
Trina Solar (Luxembourg) Holdings S.à.r.l	Luxembourg	100%
Trina Solar (Luxembourg) S.à.r.l	Luxembourg	100%
Trina Solar (Japan) Limited	Japan	100%
Trina Solar (Italy) S.R.L	Italy	100%
Trina Solar (Spain), Sociedad Limitada	Spain	100%
Trina Solar (Switzerland) Ltd.	Switzerland	100%
Trina Solar (U.S.) Holding Inc.	United States	100%
Trina Solar (U.S.) Inc.	United States	100%
Trina Solar (Germany) GmbH	Germany	100%
Trina Solar Energy Development Pte. Ltd.	Singapore	100%
Trina Solar Energy (Shanghai) Co., Ltd.	China	100%
Trina Solar (U.S.) Development LLC	United States	100%
TP-CA-South LLC	United States	100%
Trina Solar (Changzhou) Science and Technology Co., Ltd.	China	100%

In December 2007, we established Trina Solar (Lianyungang) Co., Ltd. in Lianyungang, Jiangsu Province, as a part of our plan to establish a 10,000 metric ton polysilicon production facility. In April 2008, we decided to discontinue our development plan. Trina Solar (Lianyungang) Co., Ltd. was dissolved in April 2009.

D. Property, Plant and Equipment

All of our research, development and manufacturing of ingots, wafers, cells and PV modules are conducted at our facilities in Changzhou, China, where we occupy a site area of approximately 366,834 square meters for the facilities currently owned and operated by us. We have also occupied a site area of approximately 453,068 square meters for our future production capacity expansion. In 2008, we received approvals from China's National Development and Reform Commission for investment relating to a capacity expansion project of up to 500MW in our new East Campus manufacturing zone. The facilities, to be completed by 2011, will also include a co-located technology research center. In 2008, we commenced groundwork for this project. In the fourth quarter of 2009, we established new PV cell and module production lines, each with initial capacity of 150 MW in the East Campus manufacturing facility. Furthermore, we expect to increase our total annual production capacity of ingots and wafers from the current approximately 750 MW to 1,200 MW and cells and PV modules from the current approximately 1,200 MW to approximately 1,900 MW in the second half of 2011. These capacity increases will be made at our new East Campus manufacturing facility, which commenced commercial operations in the fourth quarter of 2009. See "—B. Business Overview—Manufacturing" for more details. We believe our current and planned facilities will meet our current and foreseeable requirements.

We selectively use automation to enhance the quality and consistency of our finished products and improve efficiency in our manufacturing processes. We use manufacturing equipment purchased primarily from European, North American and Asian, including Chinese and Japanese, solar equipment suppliers. Other critical equipment is also sourced worldwide. Key equipment used in our manufacturing facilities includes silicon crystal growing furnaces, DSS furnaces, high-precision wafer sawing machines, diffusion furnaces (tube), screen print machine sets and automatic laminators. Set forth below is a list of our major equipment as of December 31, 2010:

Manufacturing Facility	Major Equipment	No. of Units in Operation as of December 31, 2010	Source (Country)
Silicon ingots	Silicon crystal growing furnaces	110	China
	DSS furnaces	90	United States
Silicon wafers	Wafer sawing machines	112	Japan, Switzerland
Solar cells	Diffusion furnaces (tube)	34	Germany
	Screen print machine sets	34	Italy
PV modules	Automatic laminators	71	China

We have purchased wafer sawing machines from Meyer Burger AG since 2007. In September 2007, we entered into an agreement with GT Solar, which was subsequently amended in March 2009, to purchase a certain number of DSS furnaces. Under this agreement and the subsequent amendment, the first set of these DSS furnaces were delivered in 2008, and the remaining furnaces were delivered in 2009. In December 2010, we entered into two additional agreements with GT Solar to purchase additional DSS furnaces for delivery in 2011.

With respect to encumbrances, as of December 31, 2010, we pledged our equipment of a total appraised value of RMB1,244.9 million ($188.0 million) to secure repayment of our borrowings of RMB513.0 million ($77.5 million).

For a discussion of our capital expenditures targeted for our capacity expansion, see "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Expenditures."

Item 4A. Unresolved Staff Comments

None.

Item 5. Operating and Financial Review and Prospects

The following discussion of our financial condition and results of operations is based upon and should be read in conjunction with our consolidated financial statements and their related notes included in this annual report. This report contains forward-looking statements. See "—G. Safe Harbor." In evaluating our business, you should carefully consider the information provided under the caption "Item 3. Key Information—D. Risk Factors" in this annual report. We caution you that our businesses and financial performance are subject to substantial risks and uncertainties.

A. Operating Results

Overview

We are a large-scale integrated solar-power products manufacturer based in China with a global distribution network covering Europe, North 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 photovoltaic, or PV, module production. Our PV modules provide reliable and environmentally-friendly electric power for residential, commercial, industrial and other applications worldwide.

We capitalize on our vertically integrated platform and low-cost manufacturing capability in China to produce quality products at competitive costs. We produce standard monocrystalline PV modules ranging from 165 W to 185 W in power output and multicrystalline PV modules ranging from 215 W to 240 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. We also target sales in emerging solar power markets such as the United States, Australia, India, Israel, China, the Czech Republic, France, Japan, Thailand and South Korea. We sell our products to distributors, wholesalers, power plant developers and operators and PV system integrators, including Proysectos Integrales Solares S.L., Enerl S.r.l., Enerray S.p.A., Phoenix Solar AG and TRE Tozzi Renewable Energy.

In 2010, our net revenues were $1,857.7 million, compared to $845.1 million in 2009 and $831.9 million in 2008. Our net revenues increased primarily due to increased shipments that offset decreased average selling prices. In addition, we recorded net income of $311.5 million in 2010, compared to net income of $96.2 million in 2009 and $60.7 million in 2008.

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

- industry demand;
- government subsidies and economic incentives;
- product pricing;

- vertically integrated manufacturing capabilities; and
- availability and prices of polysilicon and reclaimable silicon raw materials.

Industry Demand

Our business and revenue growth depends on market demand for solar power. Although solar power technology has been used for several decades, the global solar power market has grown significantly only in the past several years. According to Solarbuzz, the global solar power market, as measured by annual volume of modules delivered to installation sites, grew at a CAGR of 80% from approximately 1.75 gigawatts, or GW, in 2006 to approximately 18.23 GW in 2010. According to a Solarbuzz forecast named "Green World," in one of several possible scenarios, annual volume of modules delivered to installation sites may further increase to approximately 36.4 GW in 2015, and solar power industry revenue may increase from $82.1 billion in 2010 to $96.2 billion in 2015, which we believe will be driven largely by growing market demand, rising grid prices and government initiatives.

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 and prices of polysilicon caused a decline in the prices of solar power products. The average selling price per watt of our PV modules decreased from $3.92 in 2008 to $2.10 in 2009 and $1.75 in 2010.

The demand for solar power products is also influenced by macroeconomic factors such as the global economic downturn, the supply and prices of other energy products, such as oil, coal and natural gas, as well as government regulations and policies concerning the electric utility industry. A decrease in oil prices, for example, may reduce demand for investment in alternative energy. The global economic downturn, which affects the availability of financing, also contributed to decreased sales and shipments of solar power products and the slowdown of the large solar project market segments. Although global demand began to recover in the second half of 2009, lower costs of raw materials have continued to cause a decrease in the prices of solar power products, which will lower the cost of producing renewable energy over time. We cannot assure you that demand for solar power products in 2011 will exceed the demand for solar power products in 2010 or that the oversupply of solar power products will not continue to exist in 2011. Please see "Item 3. Key Information — D. Risk Factors" for discussions of the risks related to declining industry demand for solar power products.

Government Subsidies and Economic Incentives

We believe that the near-term growth of the market for on-grid applications depends in large part on the availability and size of government subsidies and economic incentives. Today, the cost of solar power substantially exceeds the cost of power provided by the electric utility grid in many locations, when upfront system costs are factored into cost per kilowatt. As a result, governmental bodies in many countries, most notably Germany, Italy, Japan, Spain, South Korea, Taiwan and the United States, have provided subsidies and economic incentives to reduce dependency on non-renewable sources of energy. Additionally, countries such as India, China, Australia, the United Kingdom, Israwl and Portugal have recently introduced or favorably revised feed-in tariff policies. These subsidies and economic incentives have come 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.

The demand for PV modules in our targeted or potential markets is affected significantly by government subsidies and economic incentives. According to Solarbuzz, Germany had the largest PV market in 2010 with a market size of 7.74 GW, which accounted for 42% of the global PV market demand in 2010 and represents an increase of 100% from 2009. Italy had a market size of 3.74 GW, an increase of 386% from 2009, and accounted for 20.5% of the global PV market demand in 2010.

The expansion of the German market in 2010 was largely driven by urgency by downstream players to make deadlines for cuts in feed-in tariffs and a fear of tightening of incentive levels. 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. In addition, further mid-year tariff cuts are being discussed for 2011, which may result in a significant fall in the price of PV products supporting continued demand. The rapid rise of the Italian market in 2010 was largely due to an increase in the maximum installation of size that may be incentivized from 20 kW to 200 kW and a reduction in the bureaucratic steps for securing incentives. The Italian market in 2010 was driven by small to large rooftop installations, BIPV systems and ground-mounted PV parks and an expectation of worsening funding levels in 2011.

The Spanish market has declined dramatically in recent years, primarily due to the cap of 500 MW for the feed-in tariff in 2009 introduced by the Spanish government in September 2008, which has resulted in limiting the demand in the grid-connected market in Spain, and national and global issues such as more stringent project financing conditions and banks becoming less willing to lend into Spain. Although the policy shift and the national and global environment have impacted the demand in the Spanish market, our customers in Spain purchased large quantities of solar power products for projects to be developed outside of Spain, which, we believe, offset some of the impact. However, the Spanish market expanded in 2010 because quota allocations made in 2009 were required to be installed and registered within 12 months to qualify for subsidies.

In 2010, Germany, Italy and Spain accounted for 24.1%, 22.0% and 21.8% of our net revenues, respectively. As a result of the expiring incentives in Germany and Spain, our net revenues generated from these two countries as a percentage of our total net revenues have decreased from 56% in 2008 to 46% in 2010. We seek to counteract the impact of the expiring incentives by enhancing our brand recognition and shifting some of our sales focus to other markets such as Italy, the United States and more than 20 other emerging markets, including France, South Korea, Greece, the Czech Republic and Australia. To enhance our sales capabilities in the European and United States markets, we established regional headquarters in Switzerland and San Jose, California.

Furthermore, we believe that although the expiration of incentive policies in Germany and Spain will likely result in a decrease in average selling price globally, global demand will have a positive upward trend. According to Solarbuzz, the average sales price of modules in 2011 will decrease by approximately 6.3%, from $2.07/W in 2010 to $1.94/W in 2011, but volume globally will increase by approximately 18.6% from 9.7 GW in 2010 to 11.5 GW in 2011. We believe that reduced feed-in tariffs will force customers to concentrate even more on quality and price, which we believe will be to our advantage given our favorable rankings by TÜV Reinland, a global independent safety and quality testing agency for solar modules, and Photon International, an international solar power magazine. We were ranked in the top two out of 14 participating international module manufacturers for specific energy yield during TUV Reinland's Energy Yield 2008 testing period from September 1 to September 30, 2008. In 2009, we were ranked in the top three out of 12 international brands for power output measurement in the test performed by Photon International. To further offset possible decline in feed-in tariffs, we are continuing to enter into long-term silicon supply contracts to manage its raw material costs and to reduce its non-silicon manufacturing cost through technology development, transfer and manufacturing process improvements, cell conversion improvements, wafer and cell breakage reduction and economies of scale in production.

Product Pricing

We began selling our PV module products in November 2004. Our PV modules are priced based on the number of watts of electricity they generate as well as the market price per watt for PV modules. We price our standard PV modules based on the prevailing market prices at the time we enter into sales contracts with our customers or our customers place their purchase orders with us, taking into account the size of the contract or the purchase order, the strength and history of our relationship with each customer, and our silicon raw materials costs. In the fourth quarter of 2008 and the first quarter of 2009, the global solar power industry experienced a precipitous decline in demand due to decreased availability of financing for downstream buyers of solar power products as a result of the global economic crisis. As a result, increased manufacturing capacity combined with decreased demand and prices of polysilicon and reclaimable silicon raw materials caused to a decline in the average selling price of PV modules. The demand for solar power products is 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 well as government regulations and policies concerning the electric utility industry. Although global demand began to recover in the second half of 2009, lower costs of raw materials continued to cause decreases in manufacturing costs and the selling prices of solar power products.

The average selling price per watt of our PV modules decreased from $3.92 in 2008 to $2.10 in 2009 and $1.75 in 2010. The decrease in the average selling price of our PV modules in 2010 was primarily due to decreased prices of polysilicon and reclaimable silicon raw materials and increased manufacturing capacity. If demand for solar power products declines and the supply of solar power products continues to grow, the average selling price of our products will be materially and adversely affected. See "Item 3. Key Information—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 demand for solar power products may decline, which may reduce our revenues and earnings" for more details.

We conduct our PV module sales typically through short-term contracts with terms of one year or less or, to a lesser extent, long-term sales or framework agreements with terms of generally one to two years. Our short-term contracts provide for an agreed sales volume at a fixed price. Our long-term sales or framework agreements provide for a fixed sales volume or a fixed range of sales volume to be determined generally two to three quarters before the scheduled shipment date. Prices for long-term sales or framework agreements are generally determined one month prior to the start of the quarter of the scheduled shipment date. Compared to short-term contracts, we believe our long-term sales or framework agreements not only provide us with better visibility into future revenues, but also help us enhance our relationships with our customers. Our contracts with customers stipulate different post-delivery payment schedules based on the credit worthiness of the customer. We have also increased our sales to customers using credit sales, generally with payments due within two to six months. Starting in February 2009, all of our overseas sales have been insured by 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. As of December 31, 2010, $361.2 million, or 95.7% of total accounts receivable, was insured by Sinosure. The remaining balance of $7.0 million was guaranteed by letters of credit or bank deposits.

Vertically Integrated Manufacturing Capabilities

We believe that our vertical integration strategy has allowed us, and will continue to allow us, to capture value throughout the solar power product value chain. Our vertically integrated business model enables us to:

- reduce excess costs, such as those associated with packaging and transportation, and the breakage loss that usually occurs during shipment between various production locations;
- achieve better quality control of our products;
- shorten production cycle and improve value chain coordination;
- discontinue excess reliance on toll manufacturing; and
- capture upstream or downstream profit margins.

Starting from 2008, we have met nearly all of our solar cell needs with our in-house production capabilities. Currently, we have an annual manufacturing capacity of approximately 750 MW for ingots and wafers and approximately 1,200 MW for cells and modules.

In 2009 and 2010, 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. As a result, we have developed relationships with various domestic and international suppliers of ingots and wafers.

Availability and Prices of Polysilicon Raw Materials

Polysilicon is an essential raw material for our business. We purchase polysilicon raw materials from our network of over ten suppliers. We have entered into long-term contracts with our principal suppliers of polysilicon, including several leading global producers, to secure favorable pricing for the majority of our raw material costs through long-term supply agreements.

Increases in the price of polysilicon have in the past increased our production costs and impacted our cost of revenues and net income. According to Solarbuzz, the average long-term supply contract price of polysilicon increased from approximately $60-$65 per kilogram delivered in 2007 to $60-$75 per kilogram in 2008. In addition, according to Solarbuzz, spot prices for solar grade polysilicon were in the range of $230-$375 per kilogram for most of the first half of 2008 and rose to a peak of $450-$475 per kilogram by mid-2008. According to Solarbuzz, the average price range of long-term polysilicon supply contracts had decreased to $52-$57 per kilogram by the fourth quarter of 2010, and spot prices for solar grade polysilicon had decreased to $75-$85 per kilogram by the end of 2010. However, the price of polysilicon may not continue to decline. See "Item 3. Key Information—D. Risk Factors— As polysilicon supply increases, the corresponding increase in the global supply of photovoltaic (PV) modules may cause substantial downward pressure on the price of such products and reduce our revenues and earnings."

We purchase polysilicon from silicon distributors and silicon manufacturers by contract. For procurement of polysilicon, we enter into short-term, medium-term and long-term contracts. Our short-term contracts have terms of no more than one year each. The contracts provide for a fixed price and fixed amount and generally require prepayment prior to shipment. Most of the contracts give us the right to reject any shipment by our suppliers that does not meet our quality standards based on grade levels, such as semiconductor grade or solar grade, of the polysilicon. The contracts also specify a time period during which we can inspect the goods to ensure their quality. Our medium-term contracts have terms ranging from one to three years, and our long-term contracts have terms ranging from five to eight years. These contracts generally have a fixed amount and fixed price subject to adjustments or variable price and require us to make an advance payment of a certain negotiated amount. Our medium-term and long-term suppliers include Hemlock Semiconductor Group, Jiangsu Zhongneng, OCI Company Ltd. (formerly DC Chemical Co., Ltd.) and Wacker Chemie AG. These medium-term and long-term contracts have delivery terms beginning from 2009 to 2012 and a fixed price or a price to be determined on an annual or quarterly basis. Several of our long-term contracts contain price adjustment clauses that provide for price renegotiations if the market price is lower or higher than the originally agreed price in any given quarter. These contracts also require us to make an advance payment of a certain negotiated amount. Due to the decrease in polysilicon prices in the market in late 2008 and early 2009, we renegotiated most of our medium-term and long-term silicon supply contracts to achieve favorable pricing and payment terms relative to current market conditions. Historically, we have also used reclaimable silicon raw materials for our polysilicon needs.

We have secured most of our polysilicon requirements to support our estimated production output through the end of 2011 and will continue our efforts to secure raw materials for future years. As part of our balanced and prudent supply management, we source most of our raw materials through long-term contracts, reserving up to 20% of our polysilicon requirements to be sourced from the spot market in order to capitalize on the rapid declining prices of polysilicon in recent periods.

Suppliers of polysilicon typically require customers to make payments in advance of shipment. Our suppliers generally require us to make a prepayment at a certain percentage of the order value prior to shipping. Due to the availability of polysilicon, prepayment as a percentage of the entire contract has been reducing. However, the purchase of silicon raw materials will continue to require us to make certain working capital commitments beyond the capital generated from our cash flows from operations. We are required to manage our borrowings to support our raw material purchases.

Overview of Financial Results

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

Net Revenues

Our net revenues are net of business tax, value-added tax and returns and exchanges, as applicable. We began to generate net revenues primarily from the sales of PV modules in November 2004. We generated revenues from other products and services such as system integration prior to 2006, but such revenues are not significant after 2006. Factors affecting our net revenues include average selling price per watt, market demand for our PV modules, unit volume shipped and our production capacity expansion.

In 2008, 2009 and 2010, sales to our top five customers accounted for approximately 41.9%, 36.9% and 24.9% of our net revenues, respectively, and sales to our top customer accounted for 9.8%, 9.5% and 9.5% of our net revenues, respectively.

We currently sell most of our PV modules to customers located in Europe, in particular Germany, Italy and Spain. For an industry which end market is significantly impacted by government incentives and policies, Germany and Spain were the largest solar power products markets in the past several years and accounted for the biggest concentrations of our sales. In each of the last three years, Germany was the largest solar power products market in the world and accounted for a major portion of our sales. In 2008, the Spanish market contributed to the accelerated growth in the market demand for solar power products, but contributed to the shortfall in demand globally after its policy shift in September 2008. See "—Overview—Government Subsidies and Economic Incentives" for more details about government policies of Spain and Germany. In 2008, we expanded our sales into Italy and achieved one of the largest market shares in Italy. We have also expanded our business presence in emerging solar power markets such as the the United States, Australia, India, Israel, China, the Czech Republic, France, Japan, Thailand and South Korea. We expect to continue to expand our customer base geographically in 2011.

The following table sets forth our total net revenues by geographical region, based on record country of sales, for the periods indicated:

	Year Ended December 31,					
	2008		2009		2010	
Region	Total Net Revenues	Percent	Total Net Revenues	Percent	Total Net Revenues	Percent
	(in thousands, except for percentages)					
Europe						
Germany	$ 198,529	23.9%	$ 286,220	33.9%	$ 447,316	24.1%
Italy	149,685	18.0%	166,062	19.6%	409,561	22.0%
Spain	270,549	32.5%	101,849	12.1%	404,131	21.8%
Others	136,641	16.4%	234,021	27.7%	175,115	9.4%
Europe Total	755,404	90.8%	788,152	93.3%	1,436,122	77.3%
China	30,390	3.7%	24,435	2.9%	70,782	3.8%
USA	14,699	1.8%	13,238	1.6%	262,300	14.1%
Others	31,408	3.8%	19,311	2.3%	88,485	4.8%
Total	$ 831,901	100.0%	$ 845,136	100%	$ 1,857,689	100%

Cost of Revenues

Our cost of revenues consists primarily of:

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

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

- *Toll manufacturing*. Prior to 2008, we entered into toll manufacturing arrangements by providing wafers to toll manufacturers for processing and receiving solar cells from them in return. The toll manufacturing cost is capitalized as inventory, and recorded as a part of our cost of revenues when our finished PV modules are sold. Starting from 2010, we were able to meet nearly all of our solar cell needs with our in-house production capabilities and we have discontinued our reliance on toll manufacturers for processing solar cells. In 2009 and 2010, we fulfilled some of our ingot and wafer requirements by sourcing and obtaining toll services from our strategic partners.

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

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

- *Depreciation of facilities and equipment*. Depreciation of manufacturing facilities and related improvements is provided on a straight-line basis over the estimated useful life of 10 to 20 years and commences from the date the facility is ready for its intended use. Depreciation of manufacturing equipment is provided on a straight-line basis over the estimated useful life of five to ten years, commencing from the date that the equipment is placed into productive use.

Our cost of revenues is affected by our ability to control raw material costs, to achieve economies of scale in our operations, and to efficiently manage our supply chain, including our successful execution of our vertical integration strategy and our judicious use of toll manufacturers or third-party wafer suppliers to fill potential shortfalls in production capability along the supply chain.

Gross Margin

Our gross margin is affected by changes in our net revenues and cost of revenues. Our gross margins increased from 19.8% in 2008 to 28.1% in 2009 and 31.5% in 2010. The margin increase from 2009 to 2010 was primarily due to decreases in silicon purchase prices and reduced non-silicon manufacturing costs per watt in 2010. The margin increase from 2008 to 2009 was mainly due to a decrease in silicon raw material prices and reduced manufacturing costs. We may continue to face margin compression in the sales of PV modules if the average selling price of our PV modules continues to decline and we are unable to lower our cost of revenues due to our existing, higher priced medium-term and long-term contract. As our PV module business expands, we believe additional economies of scale and successful execution of our vertical integration strategy will help to improve our margins to offset negative market trends.

Operating Expenses

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

Selling expenses

Selling expenses consist primarily of provisions for product warranties, outbound freight, employee salaries, pensions, share-based compensation expenses and benefits, travel and other sales and marketing expenses. In the past, our PV modules were typically sold with a two-year warranty for defects in material and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. In 2009, we extended the warranty for defects in materials and workmanship from two years to five years. We accrue the estimated cost of warranty based on 1% of the revenues generated from PV modules, consistent with the average industry level. Our selling expenses as a percentage of net revenues increased from 2.4% in 2008 to 3.7% in 2009 as we increased our sales efforts, hired additional sales personnel, targeted new markets, established representative offices and subsidiaries and initiated additional marketing programs to build our brand, and increased to 4.1% in 2010 due to increased sales efforts, including hiring additional sales personnel, targeting of new markets, establishing representative offices and subsidiaries and additional marketing programs to continue to build our brand. We expect our selling expenses to increase in the near term consistent with the growth of our revenues.

General and administrative expenses

General and administrative expenses consist primarily of salaries and benefits for our administrative personnel, compliance related consulting and professional fees and travel expenses. Our general and administrative expenses as a percentage of net revenues increased from 5.0% in 2008 to 7.7% in 2009 primarily due to allowance for doubtful accounts for certain suppliers and customers, and decreased to 3.9% in 2010 due to measures to control our expenses undertaken in 2010. We expect our general and administrative expenses to moderately increase in 2011, as we continue to carefully control costs in our business. We will continue to hire additional personnel on an as needed basis and incur expenses to support our operations as a public company, including compliance-related costs.

Research and development expenses

Research and development expenses consist primarily of costs of raw materials used in our research and development activities, salaries and benefits for research and development personnel, share-based compensation and prototype and equipment costs relating to the design, development, testing and enhancement of our products and manufacturing process. In 2010, our research efforts focused on further increasing our cell efficiencies and improving the performance of our module. In June 2010, we announced our research agreement with Solar Energy Research Institute of Singapore to develop an all-back-contact high-efficiency silicon wafer solar cell using our monocrystalline wafers. In particular, we have invested significantly in research and development of solar cell technology in order to achieve high conversion efficiency rates required for our advanced solar cells and modules. As of December 31, 2010, we achieved a conversion efficiency of monocrystalline cells of up to 19.5% and multicrystalline cells of up to 18.0% on our test production line. We also designed products with specific applications. We have developed a variety of PV solar power product applications based on our existing monocrystalline and multicrystalline technologies. These products include architecturally-friendly modules of different colors, shapes and sizes, such as black modules, square monocrystalline modules and large-size modules.

We will continue to expand and promote innovation in our process technologies of manufacturing ingots, wafers, cells and PV modules. In particular, we plan to focus on improving cell efficiency and reducing our production costs by enhancing manufacturing yields, which enable us to deliver higher-efficiency products at a lower cost. Our research and development efforts range from leveraging on declining raw material costs to optimize silicon feedstock mix to enhancing the quality of our solar wafers and refining ingot growing and wafer slicing processes. Accordingly, we expect our research and development expenses to increase as we hire additional research and development personnel and advance our research and development projects

Share-based compensation expenses

We adopted our share incentive plan in July 2006 and a total of 46,288,982 restricted shares and 39,445,389 share options were outstanding as of March 15, 2011. For a description of the restricted shares and share options granted, including the exercise prices and vesting periods thereof, see "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Share Incentive Plan." We are required to recognize share-based compensation as compensation expense in our statement of operations based on the fair value of equity awards on the date of the grant, with the compensation expense recognized over the period in which the recipient is required to provide services to us in exchange for the equity award. For restricted shares granted to our employees, we record share-based compensation expense for the excess of the fair value of the restricted shares at the date of the grant over the purchase price that a grantee must pay to acquire the shares during the period in which the shares may be purchased. We have categorized these share-based compensation expenses in our (i) cost of revenues; (ii) selling expenses; (iii) general and administrative expenses; and (iv) research and development expenses, depending on the job functions of the grantees of our restricted shares and share options.

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

	For the Year Ended December 31,					
	2008		2009		2010	
	(in thousands, except for percentages)					
Cost of revenues	$ 111	2.8%	$ 62	1.4%	$ 63	1.1%
Selling expenses	512	12.7%	678	15.9%	484	8.1%
General and administrative expenses	3,297	81.9%	3,295	77.0%	5,131	86.1%
Research and development	105	2.6%	244	5.7%	278	4.7%
Total share-based compensation expenses	$ 4,025	100%	$ 4,279	100%	5,955	100%

Taxation

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

The new EIT Law, which became effective on January 1, 2008, imposes a uniform tax rate of 25% on all PRC enterprises, including foreign-invested enterprises, and eliminates or modifies most of the tax exemptions, reductions and preferential treatments available under the previous tax laws and regulations. Under the new EIT Law, enterprises that were established before March 16, 2007 and already enjoy preferential tax treatments will (i) in the case of preferential tax rates, continue to enjoy the tax rates which will be gradually increased to the new tax rates within five years from January 1, 2008 or (ii) in the case of preferential tax exemption or reduction for a specified term, continue to enjoy the preferential tax holiday until the expiration of such term. In addition, certain enterprises may still benefit from a preferential tax rate of 15% under the new EIT Law if they qualify as "high and new technology enterprises strongly supported by the State," subject to certain general factors described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. Therefore, Trina China is entitled to a preferential income tax rate of 15% in 2008, 2009 and 2010 as long as it maintains its qualification as a "high and new technology enterprise" under the new EIT Law. In addition, in April 2009, we received a notice from the State Tax Bureau of Changzhou Hi-tech Development Zone, which revoked a previous approval for the tax holiday on taxable income related to registered capital contributions made in 2007. As a result, we made an additional income tax payment of $6.5 million during the year ended December 31, 2009. Our EIT rate for 2009 was 15%. Our EIT rate for 2010 was 15.0%.

Our subsidiary in Switzerland, Trina Solar (Schweiz) AG, serves as our European sales center and was subject to an income tax rate of 10.12% in 2010. Our United States subsidiaries were subject to an income tax rate of 40% in 2010.

Critical Accounting Policies

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

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

Revenue Recognition

We recognize revenues for product sales when persuasive evidence of an arrangement exists, delivery of the product has occurred and title and risk of loss has passed to the customer, the sales price is fixed or determinable, and the collectability of the resulting receivable is reasonably assured. Our sales agreements typically contain our customary product warranties but do not contain any post-shipment obligations nor any return or credit provisions. We recognize sales of our solar modules based on the terms of the specific sales contract. Generally, we recognize sales when we have delivered our products to our customers' designated point of shipment, which may include commercial docks or commercial shipping vessels.

In 2009, in response to the financing constraints, our customers requested longer credit terms. As a result, we began granting extended credit terms to customers with whom we had positive historical collection experience and overall creditworthiness. 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. To assess the creditworthiness of our customers, we generally obtain credit information from reputable third-party sources, including Dunn & Bradstreet and insurance companies that ultimately insure us against customer credit default. Our senior management also performs on-site customer visits, monitors customer payments and adjusts customer credit limits as appropriate. Using the information collected, we further evaluate the potential effect of a delay in financing on the customers' liquidity and financial position, their ability to draw down financing as well as their ability and intention to pay should it not obtain the related financing. Based on this analysis, we determine what credit terms, if any, to offer to each customer individually. If our assessment indicates a likelihood of collection risk, we do not sell the products or sell on a cash or prepayment basis. Therefore, based on our strict credit assessment, we attempt to conduct business with those customers we believe have the ability and intent to pay.

We believe that the extension of longer payment terms is in line with changes in the industry and is not necessarily an indication that our customers are less likely to satisfy their obligations. In late 2008, due to the impact of the economic recession, banks decreased financing activities and extended the length of the approval process. Furthermore, banks restricted our customers' ability to draw down financing for solar projects until they were substantially completed and grid-connected. Given the negative cash flow implications of these changes, our customers began seeking longer payment terms. We believe that such changes generally reflect a change in the macro environment as opposed to reflecting a decline in our customers' creditworthiness. Based on this and the procedures that we performed around customer credit and collectability, we believe that collectability continued to be reasonably assured and, accordingly, such extended credit terms did not affect revenue recognition.

We may enter into multiple element arrangements which can include, in addition to solar modules, installation or training, product manuals and materials and limited technical maintenance support. We are not contractually obligated to provide returns or refunds in the event these additional elements are not delivered. To date, these additional elements have been deemed to be inconsequential or perfunctory and we have recognized revenue upon the delivery of the solar modules, the predominant deliverable in the total contract, provided all other revenue recognition criteria have been met. Addition, we accrue the estimated cost of the unperformed obligations.

Warranty Cost

It is customary in our business and industry to warrant or guarantee the performance of our solar module products at certain levels of power output for extended periods. In the past, our solar modules were typically sold with a two-year warranty for defects in material and workmanship and a minimum power output warranty of up to 25 years following the date of delivery or installation. In 2008, we extended the warranty for materials and workmanship from two years to five years. If a solar module is defective, we will either repair or replace the module at our discretion. Warranty costs primarily consist of replacement costs for parts and materials and labor costs for maintenance personnel.

We maintain warranty reserves (recorded as accrued warranty costs) to cover potential liabilities that could arise from our warranties. Due to our limited solar module manufacturing history, we do not have a significant history of warranty claims. Our accrued warranty cost reflects our best estimate of the probability of incurring warranty claims and costs associated with those warranty claims. These significant estimates are determined based on a number of factors, primarily including (1) an ongoing analysis of our actual historical costs incurred in connection with our warranty claims, (2) an assessment of our competitors' accrual and claim history and (3) analysis of academic research results, available from industry research publications and papers, and other assumptions that we believes to be reasonable under the circumstances. We acknowledge that such estimates are subjective and we will continue to analyze our claim history and the performance of our products compared to our competitors and future academic research results to determine whether the accrual is appropriate. To the extent that actual warranty costs differ from the estimates, or our expectations of future costs change, we will prospectively revise our accrual rate and/or the accrual balance. Such adjustments could have a material effect on our consolidated results of operations. For example, an increase or decrease of 0.1% accrual rate (i.e., to 1.1% or 0.9%) would have resulted in an in corresponding increase or decrease in warranty expense of $1.8 million for the year ended December 31, 2010.

Impairment of Long-lived Assets and Definite-lived Intangibles

We evaluate our long-lived assets and definite-lived intangibles for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When these events occur, we measure impairment by comparing the carrying amount of the assets to future undiscounted net cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, we will recognize an impairment loss based on the fair value of the assets. The determination of fair value of the intangible and long lived assets acquired involves certain judgments and estimates. These judgments can include, but are not limited to, the cash flows that an asset is expected to generate in the future. Future cash flows can be affected by factors such as changes in global economies, business plans and forecast, regulatory developments, technological improvements, and operating results. Any impairment write-downs would be treated as permanent reductions in the carrying amounts of the assets and a charge to operations would be recognized.

Generally, our actual shipments for a given year is lower than the manufacturing capacity for that year. We believe that there is sufficient evidence that demand for our PV products will increase and, accordingly, we will continue to ramp up our manufacturing capacity through the end of 2011. We view under-utilization of our capacity as a potential indicator of impairment, and we will continue to evaluate our capacity utilization in determining whether our assets are recoverable. However, we have effectively utilized most, if not all, of our capacity in the past and have been forced to outsource production from 2006 to 2010 in order to meet demand.

Allowance for Doubtful Accounts

We conduct credit evaluations of customers and generally do not require collateral or other security from them when we grant them credit. We establish an allowance for doubtful accounts primarily based upon the age of the receivables and factors surrounding the credit risk of specific customers like the length of time receivables are passing due, previous loss history and the counterparty's current ability to fulfill its obligation. However, we maintain a reserve for potential credit losses and such losses have historically been within our expectations.

With respect to advances to suppliers, our suppliers are primarily suppliers of silicon raw materials. We perform ongoing credit evaluations of our suppliers' financial conditions. We generally do not require collateral or security against advances to suppliers.

Share-based Compensation

We have granted restricted shares and share options to our directors, officers and employees. Share-based payment compensation is based on grant-date fair value and is recognized in our consolidated financial statements over the requisite service period, which is generally the vesting period. We grant our restricted shares at their fair value which generally represents the fair value of an unrestricted share. For share options, determining the value of our share-based compensation expense in future periods requires the input of highly subjective assumptions, including the expected life of the options, the price volatility of our underlying shares, the risk free interest rate, the expected dividend rate, as well as estimated forfeitures of the options. We estimate our forfeitures based on past employee retention rates, our expectations of future retention rates, and we will prospectively revise our forfeiture rates based on actual history. Our compensation charges may change based on changes to our actual forfeitures.

Inventories

We report inventories at the lower of cost or market. We determine cost on a weighted-average basis. These costs include direct material, direct labor, tolling manufacturing costs, and fixed and variable indirect manufacturing costs, including depreciation and amortization.

We regularly review the cost of inventory against our estimated fair market value and records a lower of cost or market write-down if any inventories have a cost in excess of estimated market value. In addition, we regularly evaluate the quantity and value of our inventory in light of current market conditions and market trends and record write-downs for any quantities in excess of demand and for any product obsolescence. This evaluation considers historic usage, expected demand, anticipated sales price, new product development schedules, the effect new products might have on the sale of existing products, product obsolescence, customer concentrations, product merchantability and other factors. We also write off silicon materials that may not meet our required specifications for inclusion in our manufacturing process. These materials are periodically sold for scrap. To date, the majority of the inventory write-downs were due to the rapid decline in the market price of silicon raw materials. We may not be able to reasonably predict the price trend of silicon raw materials. If the silicon price continues to decrease, we may have to take additional write-downs on inventory in the future. Additionally, market conditions are subject to change and actual consumption of our inventory could differ from forecasted demand. When evaluating expected demand, we largely consider third-party industry forecasts, seasonality fluctuations, customer backlog and regulatory changes. Historically, our estimates of future demand have been materially accurate and, as a result, we were not required to make significant revision to such estimates. Our inventories have a long life cycle and obsolescence has not historically been a significant factor in their valuation.

We have entered into firm purchase commitments to acquire materials from our suppliers. A firm purchase commitment represents an agreement that specifies all significant terms, including the price and timing of the transactions, and includes a penalty for non-performance that is sufficiently large to make performance probable, such as prepayment. We evaluate these agreements and record a loss, if any, on firm purchase commitments using the same lower of cost or market approach as that used to value inventory.

Project Assets

Project assets consist primarily of costs relating to solar power projects in various stages of development that are capitalized prior to the sale of the solar power project. These costs include modules, installation and other development costs, such as legal, consulting and permitting. Once we enter into a definitive sales agreement, the project assets are reclassified to deferred project costs on the consolidated balance sheets until all criteria for sale recognition have been met. While the project assets are not constructed for any specific customers, we intend to sell the project assets upon their completion.

We review project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In determining whether or not the project assets are recoverable, we consider a number of factors, including changes in environmental, ecological, permitting, or regulatory conditions that affect the project. Such changes may cause the cost of the project to increase or the selling price of the project to decrease.

Income Taxes

Deferred income taxes are recognized for temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, net operating loss carry forwards and credits by applying enacted statutory tax rates applicable to future years. Deferred tax assets are reduced by a valuation allowance when, in our opinion, it is more likely than not that some portion or all of the deferred tax assets will not be realized. In 2008, 2009 and 2010, our deferred tax assets were reduced by a valuation allowance. Current income taxes are provided for in accordance with the laws of the relevant taxing authorities. The components of the deferred tax assets and liabilities are individually classified as current and non-current based on the characteristics of the underlying assets and liabilities.

We recognize a tax benefit associated with an uncertain tax position when, in our judgment, it is more likely than not that the position will be sustained upon examination by a taxing authority. For a tax position that meets the more-likely-than-not recognition threshold, we initially and subsequently measure the tax benefit as the largest amount that we judge to have a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority. Our liability associated with unrecognized tax benefits is adjusted periodically due to changing circumstances, such as the progress of the tax audits, case law developments and new or emerging legislation. Such adjustments are recognized entirely in the period in which they are identified. Our effective tax rate includes the net impact of changes in the liability for unrecognized tax benefits and subsequent adjustments as considered appropriate by management. We classify interest and penalties recognized on the liability for unrecognized tax benefits as income tax expense.

Derivative Financial Instruments

Our primary objective for holding derivative financial instruments is to manage currency risk. We record derivative instruments as assets or liabilities, measured at fair value. The recognition of gains or losses resulting from changes in fair values of those derivative instruments is based on the use of each derivative instrument and whether it qualifies for hedge accounting.

In 2008, 2009 and 2010, we entered into a series of forward foreign currency exchange contracts with several commercial banks to protect against volatility of future cash flows caused by the changes in foreign exchange rates associated with the outstanding accounts receivable. The forward foreign currency exchange contracts do not qualify for hedge accounting and, as a result, the changes in fair value of the derivatives are recognized in the statement of operations. In 2008 and 2009, we recorded losses in fair value of derivatives related to forward foreign currency exchange contracts of $1.1 million and $1.6 million, respectively. In 2010, we recorded a gain in fair value of derivatives related to forward foreign currency exchange contracts of $9.5 million. These losses and gain are included in the line item "Gain (loss) on change in fair value of derivative" in the consolidated statements of operations.

Effective from December 1, 2009, we adopted ASC 820, "Fair Value Measurements and Disclosures," for non-financial assets and liabilities. ASC 820 applies to all financial assets and financial liabilities that are being measured and reported on a fair value basis. ASC 820 establishes a framework for measuring fair value and expands disclosure about fair value measurements. When available, we measure the fair value of financial instruments based on quoted market prices in active markets, valuation techniques that use observable market-based inputs or unobservable inputs that are corroborated by market data. When observable market prices are not readily available, we generally estimate the fair value using valuation techniques that rely on alternate market data or inputs that are generally less readily observable from objective sources and are estimated based on pertinent information available at the time of the applicable reporting periods.

Results of Operations

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

	Year Ended December 31,					
	2008		2009		2010	
	(in thousands, except for percentages)					
Net revenues	$ 831,901	100.0%	$ 845,136	100.0%	$ 1,857,689	100%
Cost of revenues	667,459	80.2%	607,982	71.9%	1,273,328	68.5%
Gross profit	164,442	19.8%	237,154	28.1%	584,361	31.5%
Operating expenses:						
Selling expenses	20,302	2.4%	30,940	3.7%	75,677	4.1%
General and administrative expenses	41,114	5.0%	65,406	7.7%	72,711	3.9%
Research and development expenses	3,039	0.4%	5,439	0.6%	18,625	1.0%
Total operating expenses	64,455	7.8%	101,785	12.0%	167,013	9.0%
Income from operations	99,987	12.0%	135,369	16.0%	417,348	22.5%
Foreign exchange gain (loss)	(11,802)	(1.5%)	9,958	1.2%	(36,156)	(1.9%)
Interest expense	(24,558)	(3.0%)	(27,095)	(3.1%)	(33,952)	(1.8%)
Interest income	2,944	0.4%	1,667	0.2%	2,590	0.1%
Gain (loss) on change in fair value of derivative	(1,067)	(0.1%)	(1,590)	(0.2%)	9,476	0.5%
Other (expense) income	(156)	(0.0%)	2,613	0.3%	216	0.0%
Income before income taxes	65,348	7.8%	120,922	14.5%	359,522	19.4%
Income tax expense	4,609	0.5%	24,696	2.9%	48,069	2.6%
Net income from operations	60,739	7.3%	96,226	11.6%	311,453	16.8%

Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

Net Revenues. Our total net revenues increased by $1,012.6 million, or 119.8%, from $845.1 million in 2009 to $1,857.7 million in 2010, primarily due to increased shipments from 399.0 MW in 2009 to 1,057.0 MW in 2010, an increase of 164.9%, offset by decreased average selling prices. Our average selling price decreased from $2.10 per watt in 2009 to $1.75 per watt in 2010. The decrease in the average selling price of our PV modules in 2010 was primarily due to decreased prices of polysilicon raw materials and increased manufacturing capacity.

Cost of Revenues. Our cost of revenues increased by $665.3 million, or 109.4%, from $608.0 million in 2009 to $1,273.3 million in 2010, primarily due to increased production and shipments. As a percentage of our total net revenues, our cost of revenues decreased from 71.9% to 68.5% during the same periods.

Gross Profit. As a result of the foregoing, our gross profit increased by $347.2 million, or 146.4%, from $237.2 million in 2009 to $584.4 million in 2010. Our gross margin increased from 28.1% to 31.5% during the same period, primarily due to decreases in silicon purchase prices and non-silicon manufacturing costs per watt in 2010 that exceeded declines in average selling price per watt in 2010.

Operating Expenses. Our operating expenses increased by $65.2 million, or 64.1%, from $101.8 million in 2009 to $167.0 million in 2010. The increase in operating expenses was due to increases in selling expenses and research and development expenses. As a percentage of total net revenues, operating expenses decreased from 12.0% in 2009 to 9.0% in 2010. Share-based compensation expenses allocated to our selling expenses, general and administrative expenses and research and development expenses in 2010 were $0.5 million, $5.1 million and $0.3 million, respectively, based on the respective departments where such employees worked at the time of the grant.

Selling Expenses. Our selling expenses increased by $44.7 million, or 144.6%, from $30.9 million in 2009 to $75.7 million in 2010, primarily due to an increase in export expenses and our overseas expansion in connection with the continued growth of our solar module business. Selling expenses as a percentage of net revenues increased from 3.7% to 4.1%.

General and Administrative Expenses. Our general and administrative expenses increased by $7.3 million, or 11.2%, from $65.4 million in 2009 to $72.7 million in 2010. The increase in general and administrative expenses was primarily due to increased salaries and benefits and costs related to the development and expansion of our overseas offices. General and administrative expenses as a percentage of net revenues decreased from 7.7% to 3.9%.

Research and Development Expenses. Our research and development expenses increased by $13.2 million, or 242.4%, from $5.4 million in 2009 to $18.6 million in 2010, primarily due to increased headcount of our research and development personnel, salaries and investments in research and development projects. Research and development expenses as a percentage of net revenues increased from 0.6% to 1.0%.

Foreign Exchange Gain (Loss). We had a foreign exchange loss of $36.2 million in 2010, compared to a gain of $10.0 million in 2009. The change is primarily due to the depreciation of the Euro against the U.S. dollar.

Interest Expenses, Net. Our interest expenses, net, increased from $25.4 million in 2009 to $31.4 million in 2010, primarily due to additional bank borrowings to support our announced capacity expansion.

Gain (Loss) on the Change in Fair Value of Derivative. In 2010, we had a gain on the change in fair value of derivatives of $9.5 million, compared to a loss of $1.6 million in 2009, primarily due to foreign currency forward contracts between the Euro and the U.S. dollar used to mitigate the effects of exchange rate volatility. See "—Critical Accounting Policies—Derivative Financial Instruments" for more details.

Income Tax Expenses. Our income tax expenses increased by $23.4 million, or 94.6%, from $24.7 million in 2009 to $48.1 million in 2010, primarily due to our increased profitability. Our effective tax rates decreased from 20.4% in 2009 to 13.4% in 2010, primarily due to profits before tax of $200.3 million in Switzerland, where we were subject to an effective profit tax rate of 10.12% in 2010.

Net Income. As a result of the foregoing, our net income increased from $96.2 million in 2009 to $311.5 million in 2010, representing an increase of 223.7%. Our net margin increased from 11.6% in 2009 to 16.8% in 2010, primarily due to improved gross margins and reduced operating expenses as a percentage of net revenues in 2010.

Year Ended December 31, 2009 Compared to Year Ended December 31, 2008

Net Revenues. Our total net revenues increased by $13.2 million, or 1.6%, from $831.9 million in 2008 to $845.1 million in 2009, primarily due to increased shipments from 201.0 MW in 2008 to 399.0 MW in 2009, an increase of 98.5%, offset by decreased average selling prices. Our average selling price decreased from $3.92 per watt in 2008 to $2.10 per watt in 2009. The decrease in the average selling price of our PV modules in 2009 was primarily due to decreased prices of polysilicon and reclaimable silicon raw materials, increased manufacturing capacity, decreased demand for solar power products in the first quarter of 2009 caused by the global economic downturn and credit crisis and inventory build-up in Spain and Germany in the first quarter of 2009.

Cost of Revenues. Our cost of revenues decreased by $59.5 million, or 8.9%, from $667.5 million in 2008 to $608.0 million in 2009. Our cost of revenues decreased primarily due to the favorable reduction in our silicon purchase prices and non-silicon manufacturing costs, partially offset by a slight increase in impairment charge on inventory in 2009 compared to 2008. In 2008, we had a non-cash inventory write-down of $21.5 million based on a revaluation of our silicon inventory as a result of the decline of market prices and defective silicon feedstock, compared to a non-cash inventory write-down of $23.1 million in 2009. As a percentage of our total net revenues, our cost of revenues decreased from 80.2% to 71.9% during the same periods.

Gross Profit. As a result of the foregoing, our gross profit increased by $72.8 million from $164.4 million in 2008 to $237.2 million in 2009. Our gross margin increased from 19.8% to 28.1% during the same periods, primarily due to decreases in our cost of revenues.

Operating Expenses. Our operating expenses increased by $37.3 million, or 57.9%, from $64.5 million in 2008 to $101.8 million in 2009. The increase in operating expenses was due to increases in selling expenses, general and administrative expenses and research and development expenses. As a percentage of total net revenues, operating expenses increased from 7.8% in 2008 to 12.0% in 2009. Share-based compensation expenses allocated to our selling expenses, general and administrative expenses and research and development expenses in 2009 were $0.7 million, $3.3 million and $0.2 million, respectively, based on the respective departments where such employees worked at the time of the grant.

Selling Expenses. Our selling expenses increased by $10.6 million, or 52.4%, from $20.3 million in 2008 to $30.9 million in 2009, primarily due to an increase in export expenses (including shipment expenses and insurance), as well as in warranty provision for solar modules as a result of significant increases in the sale of solar modules. The increase in selling expenses was also the result of increased costs associated with increased marketing efforts and overseas expansion in connection with the continued growth of our solar module business. Selling expenses as a percentage of net revenues increased from 2.4% to 3.7%.

General and Administrative Expenses. Our general and administrative expenses increased by $24.3 million, or 59.1%, from $41.1 million in 2008 to $65.4 million in 2009. The increase in general and administrative expenses was primarily due to allowance for doubtful accounts for certain suppliers and customers, increased guarantee cost and bank charges due to credit lines provided for customers and suppliers, increased compliance related consulting and professional fees and costs related to setting up overseas offices. General and administrative expenses as a percentage of net revenues increased from 5.0% to 7.7%.

Research and Development Expenses. Our research and development expenses increased by $2.4 million, or 79.0%, from $3.0 million in 2008 to $5.4 million in 2009, primarily due to increased headcount of our research and development personnel, salaries, and investments in research and development projects as described in "—Overview of Financial Results—Operating Expenses—Research and Development Expenses." Research and development expenses as a percentage of net revenues increased from 0.4% to 0.6%.

Foreign Exchange Gain (Loss). We had a foreign exchange gain of $10.0 million in 2009, compared to a loss of $11.8 million in 2008. As some of our sales contracts were denominated in Euros, the effect of the depreciation of the Euro against the U.S. dollar, as well as the effect of appreciation of the RMB against the U.S. dollar on our RMB-denominated borrowings in 2008 resulted in our recording of a large exchange loss in 2008. In contrast, the effect of the appreciation of the Euro against the U.S. dollar in 2009 on our Euro-denominated contracts resulted in our recording of a large exchange gain.

Interest Expenses, Net. Our interest expenses, net, was $25.4 million in 2009, compared to $21.6 million in 2008. Our interest expenses, net, increased mainly due to additional bank borrowings to support our announced capacity expansion.

Gain (Loss) on the Change in Fair Value of Derivative. In 2009, we had a loss on the change in fair value of derivatives of $1.6 million, compared to a loss of $1.1 million in 2008. In 2008 and 2009, we recorded a loss due to the change in fair value of our forward foreign currency exchange contracts entered into in the fourth quarter of 2008. See "—Critical Accounting Policies—Derivative Financial Instruments" for more details.

Income Tax Benefit (Expenses). Our income tax expenses increased by $20.1 million, from $4.6 million in 2008 to $24.7 million in 2009. The increase of our income tax expenses in 2009 was primarily due to increased profitability and effective tax rates. Our effective tax rates increased from 7.1% in 2008 to 20.4% in 2009, primarily due to the expiration of the tax holiday on taxable income related to registered capital contributions in 2008.

Net Income. As a result of the foregoing, our net income increased significantly from $60.7 million in 2008 to $96.2 million in 2009, representing an increase of 58.4%. Our net margin increased from 7.3% in 2008 to 11.4% in 2009, primarily due to our improved gross margin in 2009.

B. Liquidity and Capital Resources

We have financed our operations primarily through short-term and long-term borrowings, proceeds from public offerings, including our convertible senior notes offering in July 2008, our follow-on offerings of ADSs in July 2009 and March 2010, and, to a lesser extent, cash generated from operations. We believe that our current cash, cash equivalents, short-term and long-term borrowings and anticipated cash flow from operations will be sufficient to meet our anticipated cash needs, including our cash needs for working capital and capital expenditures, for at least the next 12 months. We may, however, require additional cash due to changing business conditions or other future developments, including any investments or acquisitions we may decide to pursue. If our existing cash is insufficient to meet our requirements, we may seek to sell additional equity or debt securities or borrow from banks. However, the current financial downturn affecting the financial markets and banking system may significantly restrict our ability to obtain financing in the capital markets or from financial institutions. We cannot assure you that financing will be available in the amounts we need or on terms acceptable to us, if at all. The sale of additional equity securities, including convertible debt securities, would dilute our earnings per share. The incurrence of debt would divert cash for working capital and capital expenditures to service debt obligations and could result in operating and financial covenants that restrict our operations and our ability to pay dividends to our shareholders.

As of December 31, 2008, 2009 and 2010, we had $132.2 million, $406.1 million and $752.7 million, respectively, in cash and cash equivalents, $45.0 million, $72.0 million and $38.0 million in restricted cash and $401.2 million, $588.0 million and $596.6 million, respectively, in outstanding borrowings (inclusive of convertible senior notes outstanding of $138.0 million). Our cash and cash equivalents primarily consist of cash on hand and demand deposits with original maturities of three months or less that are placed with banks and other financial institutions. Of the available cash as of December 31, 2010, we have committed approximately $164.8 million to capacity expansion project at our East Campus manufacturing facility. We plan to use the remaining available cash for other capital expenditures, including expenditures for the construction of R&D Laboratory in the PV Park and other capacity expansion on top of the 500 MW capacity expansion project, and for working capital and other day-to-day operating purposes.

We had total bank facilities of $483.9 million, $893.9 million and $1,741.6 million with various banks, of which $282.5 million, $510.4 million and $650.9 million were drawn down and $201.4 million, $383.5 million and $1,090.7 million were available as of December 31, 2008, 2009 and 2010, respectively. As of December 31, 2010, we had $138.0 million in principal amount of 4% convertible senior notes outstanding. For details on our borrowings, please see "—Borrowings."

In the past, we had significant working capital commitments for purchases of polysilicon and reclaimable silicon raw materials. Our prepayments to suppliers were recorded either as advances to suppliers, if they are expected to be utilized within 12 months as of each balance sheet date, or as long-term silicon procurement advances, if they represented the portion expected to be utilized after 12 months. As of December 31, 2010, we had long-term silicon procurement advances of $93.2 million, compared to $105.2 million as of December 31, 2009, due to the requirements stipulated in our long-term silicon supply contracts. We also had the current portion of advances to suppliers of $81.2 million in 2010, an increase from $41.3 million in 2009. We generally make prepayments without receiving collateral. As a result, our claims for such prepayments would rank only as an unsecured claim, which exposes us to the credit risks of these suppliers in the event of their insolvency or bankruptcy. Going forward, we expect our advances to suppliers to decline as the polysilicon supply market further improves, offset by greater volume purchases as we expand our manufacturing capacity and use a higher percentage of virgin polysilicon.

We also have significant capital expenditures as we as expand our existing capacity in each segment of our value chain. See "—Capital Expenditures." We plan to fund part of the capital expenditures for such expansion with additional borrowings from third parties, including banks, and, if any, cash from operations.

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

Cash Flows and Working Capital

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

	Year Ended December 31,		
	2008	2009	2010
		(in thousands)	
Net cash provided by (used in) operating activities	$ (30,920)	$ 101,150	$ 263,929
Net cash used in investing activities	(118,523)	(156,377)	(102,852)
Net cash provided by financing activities	221,788	329,036	186,045
Effect of exchange rate changes	183	25	(433)
Net increase (decrease) in cash and cash equivalents	72,528	273,834	346,690
Cash and cash equivalents at the beginning of the year	59,696	132,224	406,058
Cash and cash equivalents at the end of the year	$ 132,224	$ 406,058	$ 752,748

Operating Activities

Net cash provided by operating activities amounted to $263.9 million in 2010, compared to net cash provided by operating activities of $101.2 million in 2009. The net cash provided by operating activities in 2010 was primarily due to higher net income offset by (1) an increase in account receivables of $94.8 million due to increased sales, (2) an increase in advances to suppliers of $28.2 million due to increase in prepayments to our polysilicon suppliers to secure polysilicon feedstock, and (3) an increase in project assets of $33.0 million due to the development of solar power projects in Europe.

Net cash provided by operating activities amounted to $101.2 million in 2009, compared to net cash used by operating activities of $30.9 million in 2008. The net cash provided by operating activities in 2009 was primarily a result of (1) higher net income, (2) an increase in accounts payables of $106.8 million due to longer payment terms we obtained from suppliers as a result of the global economic crisis, and (3) a decrease in long-term silicon procurement and other advances of $24.1 million due to improved supply conditions, offset by (1) an increase in accounts receivable of $195.1 million as we increased our sales as wells as longer payment terms as a result of the global economic crisis, (2) an increase in inventory of $18.6 million as our business and capacity expanded and (3) an increase in prepaid expenses and other current assets of $26.2 million due to increases of foreign currency derivatives and deferred tax assets.

The net cash used in operating activities in 2008 was primarily a result of (1) an increase of long-term silicon procurement and other advances of $81.8 million, (2) an increase in inventories of $48.7 million as our business and capacity expanded, and (3) an increase in accounts receivable of $34.3 million as we increased our sales. These items were partially offset by (1) net income, (2) an increase in accrued warranty costs of $8.0 million, (3) an increase in accrued expenses of $7.1 million due to increases in interest expense from bank borrowings and convertible senior notes and professional expenses, and (4) an increase in accounts payable of $4.5 million due to longer payment terms.

Investing Activities

Net cash used in investing activities amounted to $102.9 million in 2010, compared to $156.4 million in 2009. The net cash used in investing activities in 2010 was primarily a result of an increase in property, plant and equipment expenditures of $144.1 million, comprised mainly of purchases of cell, ingot and wafer production equipment, and a decrease in restricted cash of $34.0 million.

Net cash used in investing activities amounted to $156.4 million in 2009, compared to $118.5 million in 2008. The net cash used in investing activities in 2009 was primarily a result of an increase in property, plant and equipment expenditures of $136.5 million, comprised mainly of purchases of cell, ingot and wafer production equipment, construction of facilities in our East Campus and materials for the construction of facilities and an increase in restricted cash of $27.0 million, which includes cash pledged to banks to secure our notes payable, hedge and letter of credit facilities.

The net cash used in investing activities in 2008 was primarily a result of an increase in property, plant and equipment expenditures of $165.4 million, comprised mainly of purchases of cell, multicrystalline ingot and wafer production equipment and an increase in payments for land-use rights, partially offset by a decrease in restricted cash of $58.4 million.

Financing Activities

Net cash provided by financing activities amounted to $186.0 million in 2010, which consisted primarily of net proceeds received from our follow-on public offering of $176.3 million completed in March 2010 and proceeds of $117.5 million from long-term bank borrowings, offset by net repayment of short-term bank borrowings of $108.8 million.

Net cash provided by financing activities amounted to $329.0 million in 2009, which consisted primarily of proceeds of $182.5 million from long-term bank borrowings, net proceeds of $141.5 million received from our public offering of shares in August 2009 and proceeds from our short-term bank borrowings of $536.5 million, offset by repayment of our short-term bank borrowings of $532.3 million.

Net cash provided by financing activities amounted to $221.8 million in 2008, which consisted primarily of net proceeds received from our public offering of convertible senior notes of $130.4 million completed in July 2008 and proceeds from our short-term bank borrowings of $191.3 million, offset by repayments of our short-term bank borrowings of $106.3 million.

Restrictions on Cash Dividends

For a discussion on the ability of our subsidiaries to transfer funds to our company, and the impact this has on our ability to meet our cash obligations, see "Item 3. Key Information—D. Risk Factors—We rely on dividends paid by our subsidiary for our cash needs," and "Item 3. Key Information—D. Risk Factors—The dividends we receive from our PRC subsidiary and our global income may be subject to PRC tax under the new EIT law, which would have a material adverse effect on our results of operations; our foreign ADS holders may be subject to a PRC withholding tax upon the dividends payable by us and upon gains realized on the sale of our ADSs, if we are classified as a PRC resident enterprise.'"

Borrowings

We had short-term and long-term borrowings due within one year of $248.6 million, $267.4 million and $158.7 million as of December 31, 2008, 2009 and 2010. Our short-term borrowings outstanding as of December 31, 2008, 2009 and 2010 bore an average interest rate of 7.11%, 5.14% and 4.04%, respectively. In connection with most of our short-term borrowings, we have either sought guarantees by third parties or granted security interests over significant amounts of our assets. With respect to encumbrances, as of December 31, 2010, we pledged our equipment of a total appraised value of RMB1,244.9 million ($188.0 million) to secure repayment of our borrowings of RMB513.0 million ($77.5 million).

We had $14.6 million, $182.5 million and $300.0 million of long-term borrowings as of December 31, 2008, 2009 and 2010, respectively. In 2009, we obtained a five-year credit facility of approximately $303.3 million with a syndicate of five PRC banks led by the Agricultural Bank of China and Bank of China. As of December 31, 2010, we had drawn down $275.1 million under the facility. In January 2010, we entered into a 15-year credit facility with China Development Bank under which we can draw down up to €100.0 million ($133.0 million) within one year commencing in March 2010. The facility will expire in March 2025 and bears an interest rate of the six-month Euro Interbank Offered Rate plus 3%. As of December 31, 2010, we had drawn down €50.0 million under the facility.

We have historically been able to repay our total borrowings as they became due mostly from cash from operations and proceeds from short-term and long-term borrowings. We may also seek additional debt or equity financing to repay the remaining portion of our borrowings. As we continue to ramp up our current and planned operations in order to complete our vertical integration and expansion strategies, we also expect to generate cash from our expanded operations to repay a portion of our borrowings.

In July 2008, we completed an offering of $138 million of 4% convertible senior notes. The debt issuance costs are being amortized over the life of the convertible senior notes using the interest method. Holders of our convertible senior notes may require us to repurchase all or a portion of the notes on July 15, 2011 or upon certain change in control events. As such, we classified the notes as a current liability on our consolidated balance sheets as of December 31, 2010. The notes are convertible at any time prior to maturity, which is on July 15, 2013, unless previously redeemed at the option of the holders into our ADSs at a conversion price of $16.94 per ADS, subject to certain adjustments. We used the net proceeds received from the offering to expand our manufacturing lines for the production of silicon ingots, wafers, solar cells and solar modules, to purchase raw materials and other general corporate purposes. In connection with the senior convertible senior notes offering, we also offered 4,073,194 ADSs in an ADS borrowing facility. The ADS borrower will be required to return the borrowed ADSs by the scheduled maturity date of the notes in July 2013.

In June 2009, we secured from Standard Chartered Bank (China) Limited revolving credit facilities totaling approximately $57 million, consisting of trade financing and hedge products. The facilities are aimed to provide financial support to our raw material procurement and product sales while helping us mitigate foreign exchange risks associated with market volatilities.

In July 2009, we secured loans of approximately $80 million due on June 30, 2010 from a domestic bank to support our East Campus capacity expansion project. The loans were denominated in Euros, U.S. dollars and Renminbi and bore annual interest rates linked to LIBOR for Euros denominated loan and U.S. dollar denominated loan and the basic one-year borrowing rate of the People's Bank of China for Renminbi denominated loan. These loans subsequently became part of a five-year syndicated loan facility we secured in September 2009 to support our East Campus capacity expansion project.

In September 2009, Trina China entered into a five-year credit facility of approximately $303.3 million, consisting of RMB1,524.6 million Renminbi denominated loan and $80.0 million U.S. dollar denominated loan, with a syndicate of five PRC banks led by the Agricultural Bank of China and Bank of China. Approximately $269.2 million of the facility are designated solely for the expansion of our production capacity, with the remaining to be used to supplement working capital requirements once the capacity expansion is completed. The facility can be drawn down either in Renminbi or U.S. dollars. As of December 31, 2010, we had drawn down approximately $275.1 million under the facility. The remaining facility to supplement working capital requirements can only be drawn on or after the date of completion of capacity expansion. The weighted average interest rate for borrowings under the facility was 5.53% for the year ended December 31, 2010. Interest is payable quarterly or biannually in arrears for loans denominated in Renminbi and U.S. dollars, respectively. Interest rate applied for Renminbi-denominated borrowings is the same interest rate stipulated by Chinese central bank plus 10%. U.S.-dollar denominated borrowings are subject to the six-month London Interbank Offered Rate plus 3%. The facility is guaranteed by Trina and Mr. Jifan Gao, our chairman and chief executive officer, and his wife, Ms. Chunyan Wu, and is collateralized by the property, plant and equipment of the project and the related land-use right. Borrowings outstanding as of December 31, 2010 are payable on a biannual basis, commencing on October 27, 2011. For purposes of the expansion, we are required to match draw-downs from the facility with an equal amount of cash from sources other than the facility. The terms of facility also contain financial covenants which, among other things, require us to maintain a debt-asset ratio of no more than 0.60, a net profit ratio of not less than zero percent and an interest coverage ratio of greater than 2.

In January 2010, Trina Solar (Luxembourg) S.à.r.l., or Trina Luxembourg, one of our wholly-owned subsidiaries, entered into a 15-year credit facility with China Development Bank under which Trina Luxembourg can draw down up to €100 million within one year commencing in March 2010. As of December 31, 2010, we had drawn down approximatedly US$66.5 million under the facility. The facility will expire in March 2025. The interest rate for borrowings drawn under this facility is the six-month Euro Interbank Offered Rate plus 3%. The repayment of the credit facility is guaranteed by Trina China. Trina Luxembourg can only use the proceeds of a draw down to finance its business activities associated with certain downstream projects in Europe. We are required to obtain approval from the lender if Trina Luxembourg or Trina China disposes its assets or provides guarantees with a significant amount.

Capital Expenditures

We had capital expenditures of $165.4 million, $136.5 million and $164.8 million in 2008, 2009 and 2010, respectively. Our capital expenditures were used primarily to purchase equipment for the production of ingots, wafers, cells and modules. We expect our capital expenditures to increase in the future as we expand our solar module business. We estimate that our capital expenditures in 2011 will be approximately $380.0 million for manufacturing capacity expansion. As of December 31, 2010, we had an annual manufacturing capacity of ingots and wafers of approximately 750 MW and cells and modules of approximately 1,200 MW. We plan to increase our annual manufacturing capacity of ingots and wafers to approximately 1,200 MW and cells and modules to approximately 1,900 MW in the second half of 2011. The specific increase will be based on market visibility in both customer demand and the commercial lending environment to finance PV system installations in our respective sales markets. We are implementing a strategy to focus on preserving cash, which includes reducing costs and reviewing and taking a prudent approach to our capital expansion plan. Accordingly, we cannot assure you that we will not revise our capacity expansion plan after we finalize our review.

Recent Accounting Pronouncements

In December 2010, the FASB issued ASU 2010-29, Disclosure of Supplementary Pro Forma Information for Business Combinations. This ASU specifies that if a public company presents comparative financial statements, the entity should only disclose revenue and earnings of the combined entity as though the business combinations that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period. ASU 2010-29 is effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010, with early adoption permitted. The adoption of ASU 2010-29 will not impact our financial position, results of operations, or cash flows, as its requirements only pertain to financial statement footnote disclosure.

C. Research and Development

We focus our research and development efforts towards improving our ingot, wafer, solar cell and solar module manufacturing capabilities. We seek to reduce manufacturing costs and improve the performance of our products. As of December 31, 2010, we had a total of 343 employees involved in our research and development activities. Among them, 69 employees are under our technology development department and are dedicated to research and development. We also have a team of 274 employees under our engineering department and responsible for manufacturing technology development and further fine-tuning our production processes.

Our research and development department is divided into teams responsible for research in each stage of the solar power product value chain, such as ingot, wafer, solar cell and module production and system integration. We also have a technology committee, which meets regularly to review current development progress and identify new research and development areas. Our technology committee is spearheaded by our senior management and is comprised of both our employees and external solar energy experts.

Our research and development efforts will be further enhanced by our currently under construction R&D Laboratory in the PV Park, a research and development center that focuses on developing PV technologies, including utilization of alternative materials, increasing cell conversion efficiencies and conducting assembly and system research, and to conduct technology exchanges with PV experts from world leading companies, research institutes and emerging technology companies. We have also formed a world-class academic committee dedicated to creating a technology platform for the development of photovoltaic technologies. We are one of the two solar companies in China commissioned by the PRC government to establish and operate research and development centers.

Our research efforts are currently focused on four main product areas, namely ingots, wafers, solar cells and solar modules. We focus on improving cell efficiency and reducing our production costs by enhancing manufacturing yields, which enable us to deliver higher-efficiency products at a lower cost. Our research and development efforts range from leveraging on declining raw material costs to optimize silicon feedstock mix to enhancing the quality of our solar wafers and refining ingot growing and wafer slicing processes. In the fourth quarter of 2010, our average silicon usage was approximately 5.9 grams per watt, compared to approximately 6.0 and 6.3 grams per watt in the fourth quarters of 2009 and 2008, respectively.

Currently, we slice monocrystalline and multicrystalline wafers to a 180 micron thickness, while maintaining a low breakage rate.

For the assembly of modules, our research and development team works closely with our manufacturing team and customers to improve our solar module and system designs. We have designed products with specific applications. We have developed a variety of PV solar power product applications based on our existing monocrystalline and multicrystalline technologies. These products include architecturally-friendly modules of different colors, shapes and sizes, such as black modules, square modules and large-size modules. In April 2010, we announced our new utility-scale TSM-PC14 solar module, our most powerful module to date with expected power output targets ranging from 265 W to 290 W.

We have invested significantly in research and development of solar cell technology in order to achieve high conversion efficiency rates required for our advanced solar cells and modules. We achieved conversion efficiencies of up to 19.5% in monocrystalline solar cells and 18.0% in multicrystalline solar cells in 2010 on a test production line basis, and plan to increase the efficiencies to up to 18.5% in multicrystalline solar cells on a test production line basis by the end of 2011. In June 2010, we announced our research agreement with Solar Energy Research Institute of Singapore to develop an all-back-contact high-efficiency silicon wafer solar cell using our monocrystalline wafers. We have a team of 29 employees dedicated to the development and implementation of this process technology. We also plan to make additional efforts to realize the technical and cost synergies of having in-house vertically integrated manufacturing capabilities.

In each of the three years ended December 31, 2008, 2009 and 2010, our research and development expenditures were $3.0 million, $5.4 million and $18.6 million, representing 0.4%, 0.6% and 1.0% of our total revenues for 2008, 2009 and 2010, respectively. We will continue to expand and promote innovation in our process technologies of manufacturing ingots, wafers, cells and PV modules. Accordingly, we expect our research and development expenses to increase as we hire additional research and development personnel and advance our research and development projects.

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the period from January 1, 2010 to December 31, 2010 that are reasonably likely to have a material adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

E. Off-Balance Sheet Commitments and Arrangements

Other than our purchase obligations for raw materials and equipment, we have not entered into any financial guarantees or other commitments to guarantee the payment obligations of third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholders' equity, or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or that engages in leasing, hedging or research and development services with us.

F. Contractual Obligations and Commercial Commitments

The following table sets forth our contractual obligations and commercial commitments as of December 31, 2010:

	Payment Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
	(in thousands)				
Long-term borrowings[1]	$ 388,075	$ 58,437	$ 201,285	$ 112,319	$ 16,034
Purchase obligations[2]	$ 14,813,811	$ 1,030,825	$ 2,188,066	$ 3,195,023	$ 8,399,897
Convertible senior notes[3]	$ 139,190	$ 139,190	$ —	—	—
Other long-term liabilities reflected on our balance sheet[4]	$ 58,396	—	$ 19,685	—	$ 38,711
Total	$ 15,399,472	$ 1,228,452	$ 2,409,036	$ 3,307,342	$ 8,454,642

(1) Includes interests that are derived using an average rate of 5.25% per annum for long-term borrowings.

(2) Consists of raw material and equipment purchase commitments and operating lease commitments.

(3) Includes interests that are derived using the coupon rate of 4% per annum for convertible senior notes. The convertible senior notes will mature on July 15, 2013 and the holders may require us to early redeem the convertible senior notes on July 15, 2011.

(4) Consists of accrued warranty costs for solar modules.

Since December 31, 2010, we have entered into substantial commitments for future purchases of raw materials, including reclaimable silicon raw materials and polysilicon. See "Item 5. Operating and Financial Review and Prospects—A. Operating Results—Overview—Availability and Price of Reclaimable Silicon Raw Materials and Polysilicon" and "Item 4. Information on the Company—Business Overview—Silicon Raw Material Supplies" for more information about our future commitments to purchase raw materials.

G. Safe Harbor

This annual report on Form 20-F contains forward-looking statements that relate to future events, including our future operating results and conditions, our prospects and our future financial performance and condition, all of which are largely based on our current expectations and projections. The forward-looking statements are contained principally in the sections entitled "Item 3. Key Information—D. Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects." These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995.

You can identify these forward-looking statements by terminology such as "may," "will," "expect," "anticipate," "future," "intend," "plan," "believe," "estimate," "is/are likely to" or other and similar expressions. Forward-looking statements involve inherent risks and uncertainties. A number of factors could cause actual results to differ materially from those contained in any forward-looking statement, including but not limited to the following: expectations regarding the worldwide demand for electricity and the market for solar energy; the company's beliefs regarding the effects of environmental regulation, the lack of infrastructure reliability and long-term fossil fuel supply constraints; the importance of environmentally friendly power generation; expectations regarding governmental support for the deployment of solar energy; expectations regarding the scaling of the company's manufacturing capacity; expectations with respect to the company's ability to secure raw materials in the future; future business development, results of operations and financial condition; and competition from other manufacturers of PV products and conventional energy suppliers.

This annual report on Form 20-F also contains data related to the PV market worldwide and in China taken from third party reports. The PV market may not grow at the rates projected by the market data, or at all. The failure of the market to grow at the projected rates may have a material adverse effect on our business and the market price of our ADSs. In addition, the rapidly changing nature of the PV market subjects any projections or estimates relating to the growth prospects or future condition of our market to significant uncertainties. If any one or more of the assumptions underlying the market data turns out to be incorrect, actual results may differ from the projections based on these assumptions. You should not place undue reliance on these forward-looking statements.

The forward-looking statements made in this annual report on Form 20-F relate only to events or information as of the date on which the statements are made in this annual report on Form 20-F. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this annual report on Form 20-F completely and with the understanding that our actual future results may be materially different from what we expect.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

The following table sets forth information regarding our directors and executive officers as of the date of this annual report.

Directors and Executive Officers	Age	Position/Title
Jifan Gao	46	Chairman and Chief Executive Officer
Liping Qiu	46	Independent Director
Jerome Corcoran	61	Independent Director
Junfeng Li	54	Independent Director
Peter Mak	49	Independent Director
Qian Zhao	42	Independent Director
Yeung Kwok On	49	Independent Director
Terry Wang	51	Chief Financial Officer
Suping Chen	45	Vice President of Manufacturing, East Campus
Benjamin Hill	40	Vice President of Sales and Marketing (Europe)
Qiang Huang	37	Vice President of Technology
Chen Chung Yu	45	Senior Vice President of Operations
Yu Zhu	36	Vice President of Project Development
Diming Qiu	70	Head of Technology Committee
Yang Shao	45	Chief Human Resources Officer

* Mr. Tzou has resigned as our chief strategy officer effective from October 27, 2010.

Directors

Mr. Jifan Gao founded our company in 1998. He has been our chairman and chief executive officer since January 1998. From August 2001 to October 2006, Mr. Gao served as the chairman of Changzhou Tianhe Investment Co., Ltd., a Chinese company that invests in new energy technologies, and he served as the chairman of Changzhou Tianhe New Energy Institute Co., Ltd., a Chinese company that is engaged in R&D and consulting services for new energy technologies, from May 2003 to October 2006. Mr. Gao also served as the vice chairman of Changzhou Minsheng Financing Guarantee Co., Ltd, a Chinese company that provides guarantee, investment and consulting services, from June 2004 to October 2006. Prior to founding our company, Mr. Gao was the founder and the head of Wujin Xiehe Fine Chemical Factory, a Chinese company that manufactures detergents for metal surfaces, from 1992 through 1997. From 1989 to 1992, Mr. Gao was one of the co-founders and the head of Guangdong Shunde Fuyou Detergent Factory. Mr. Gao also serves as the vice chairman of the Solar Power Construction Committee of the China Renewable Energy Society and as the standing vice chairman of the New Energy Chamber of Commerce of the All-China Federation of Industry and Commerce. Mr. Gao has published and presented several articles and papers in solar power related magazines and conferences. Mr. Gao received his master's degree in physical chemistry from Jilin University in 1988 and his bachelor's degree in chemistry from Nanjing University in 1985.

Independent Directors

Mr. Liping Qiu has been a director of our company since May 2006 and an independent director of our company since 2010. He is a co-founder of Milestone Capital, a China-focused private equity investment company, and the general partner of Milestone China Opportunities Fund I and Fund II, L.P, a partnership that invests primarily in high-growth Chinese companies, since 2002. In 2001, Mr. Qiu was Bear Stearns's Beijing Office Representative, responsible for investment banking operations in China. From 1997 to 2000, Mr. Qiu worked at Merrill Lynch's direct investment group and corporate finance group in Beijing and Hong Kong. Mr. Qiu received his bachelor's degree and master's degree in engineering from the National University of Defense Technology of China in 1984 and 1986, respectively.

Mr. Jerome Corcoran has been an independent director of our company since December 2006. From 1995 to 1998, Mr. Corcoran was a managing director at Merrill Lynch's China Private Equity Group in Beijing, China. From 1989 to 1994, Mr. Corcoran had served as a managing director and the head of international investment banking of Merrill Lynch in New York and London. Mr. Corcoran retired from his investment banking career in 1998 and has been managing his personal wealth since his retirement. Mr. Corcoran received his bachelor's degree in political philosophy from Loyola University in 1971 and his MBA degree from St John's University in 1974.

Mr. Junfeng Li has been an independent director of our company since November 2007. Mr. Junfeng Li is the vice chair of China's Renewable Energy Society and the deputy director general of the Energy Research Institute (ERI) of the National Development and Reform Commission in Beijing. He also serves as the chair of ERI's Academic Committee, and as a coordinator of the Renewable Energy and Energy Efficiency Partnership in East Asia. During China's 10th Five-Year Plan (2001-05), Mr. Li facilitated implementation of a national technology development program for wind and solar and chaired the government's Sustainable Energy Task Force. Mr. Li was also the lead author for China's 2005 Renewable Energy Law, and has worked on renewable energy project development with the World Bank, Global Environment Facility, and the United Nations Development Programme. Mr. Li received his bachelor's degree in electronic engineering from Shandong University of Science and Technology in 1982.

Mr. Peter Mak has been an independent director and audit committee chairman of our company since December 2006. Mr. Mak is the managing director of Venfund Investment, a Shenzhen based mid-market M&A investment banking firm specializing in cross-border mergers and acquisitions, corporate restructuring, capital raising and international financial advisory services for Chinese privately-owned clients, which he co-founded in late 2001. Prior to that, Mr. Mak spent 17 years at Arthur Andersen Worldwide where he was a firm partner and served as the managing partner of Arthur Andersen Southern China in his last position with the firm. Mr. Mak also serves as an independent non-executive director and audit committee chairman of China GrenTech Corp. Ltd., Dragon Pharmaceutical Inc. and China Security & Surveillance Technology, Inc., all listed in the U.S.; Shenzhen Fiyata Holdings Ltd., a company listed in China; and Huabao International Holdings Ltd., China Dongxiang (Group) Co., Ltd., Pou Sheng International (Holdings) Limited, Real Gold Mining Limited and 361 Degrees International Limited, all listed on the Hong Kong Stock Exchange. Mr. Mak is also the non-executive director of Bright World Precision Machinery Ltd., a company listed in the Republic of Singapore. Mr. Mak is a fellow member of the Association of Chartered Certified Accountants and the Hong Kong Institute of Certified Public Accountants. He received his accounting degree from the Hong Kong Polytechnic University in 1985.

Mr. Qian Zhao has been an independent director of our company since May 2007. Mr. Zhao is a founding partner of CXC China Sustainable Growth Fund, a private equity fund that makes investments in China-based companies. He is also a managing director of CXC Captial, Inc., which is the management company of CXC China Sustainable Growth Fund. Mr. Zhao co-founded Haiwen & Partners, a preeminent China corporate finance law firm in Beijing, and was a senior partner of the law firm. He worked in Sullivan & Cromwell LLP's New York office from 1996 to 2000, and Skadden, Arps, Slate, Meagher & Flom LLP and Affiliates' Beijing office from 2000 to 2003. He is admitted to practice law in both China and New York. Mr. Zhao received his J.D. degree from New York University School of Law in 1997 and his LL.B from University of International Business & Economics, Beijing in 1990.

Dr. Yeung Kwok On has been an independent director of our company since August 2010. Dr. Yeung is the Philips Chair Professor of Human Resource Management, Associate Dean, and Director of Centre of Organization and People Excellence at China Europe International Business School. He founded CEO Learning Consortium, a learning platform where CEOs from more than thirty leading firms in China joined together to share the best business practices in China. Between January 1999 and June 2002, Dr. Yeung served as chief learning officer and chief human resources officer of Acer Group. Dr. Yeung currently serves as a board director at Kingdee International Software Group, a company listed on the Hong Kong Stock Exchange, and as an independent director of three private companies. Dr. Yeung received his bachelor and master degrees in management from the University of Hong Kong and Ph.D. in human resource management from the University of Michigan.

Executive Officers

Mr. Terry Wang has been our chief financial officer since June 2008. He served as our senior vice president of finance from January 2008 to June 2008. Prior to joining us, Mr. Wang served as the executive vice president of finance of Spreadtrum Communications, Inc., a fabless semiconductor company listed on NASDAQ, from 2004 to 2007. Before that, Mr. Wang was on various senior financial management positions in public and private companies in Silicon Valley, the United States from 1998 to 2004, including as a controller at Chippac, Inc. from 1998 to 2001. Mr. Wang received his MBA degree in finance from the University of Wisconsin at Madison in 1994 and received his master's degree in economics and bachelor's degree in business administration from Fudan University in 1985 and 1982, respectively. Mr. Wang is a Certified Management Accountant (CMA) and Certified in Financial Management (CFM).

Dr. Suping Chen has been our vice president of manufacturing of East Campus since October 2008. Prior to joining us, Dr. Chen was in a privately owned business, which provided management consulting services in the manufacturing industry for more than two years. From September 2005 to October 2006, Dr. Suping Chen worked as the operations director in Filtronic (Suzhou) Telecommunications Products Co., Ltd. Prior to that, Dr. Suping Chen worked as business development manager, senior product manager and operations director in Seagate Technology International (Wuxi) Co., Ltd. for seven years. Dr. Chen received his Ph.D degree in Industrial Automation from Zhejiang University in China in 1994, his master and bachelor degrees in Measurement Technology and Instrumentation from Zhejiang University in China in 1990 and 1987, respectively.

Mr. Benjamin Hill joined us as a director sales and marketing (Europe) in April 2009 and has been our vice president of sales and marketing (Europe) since September 2009. Prior to joining us, he worked with BP Solar for over ten years. He was previously a sales director of Europe, Africa and the Middle East from September 1998 to January 2003, a regional director of North Europe from January 2003 to November 2005, a European sales director from November 2005 to July 2007 and a general manager (Performance Unit Leader South Europe) from July 2007 to April 2009. From August 1986 to August 1998, he worked with Hiltec Solar Ltd., Nestec Ltd. and Sollatek Ltd. (UK). Mr. Hill has more than 20 years of experience in managing business development in the PV industry.

Dr. Qiang Huang has been our vice president of technology since October 2008. Dr. Huang served as our director of manufacturing engineering from May 2007 to July 2008. Prior to joining us, he served as senior manager of device integration of ST Microelectronics in Singapore from September 2006 to April 2007. From July 2004 to September 2006, he served as the thin-film module manager in X-Fab Sarawak (previously known as "1-Silicon") in Malaysia. From April 2001 to January 2004, he served as a senior engineer, and then the acting engineering manager in System-on-Silicon Manufacturing Co. Ltd., a joint venture between Taiwan Semiconductor Manufacturing Company Limited (TSMC) and Philips. Dr. Huang has more than eight years of commercial operations experience in semiconductor engineering development and engineering problem solving. Dr. Huang received a Ph.D degree in physics specializing in thin-film technology from National University of Singapore in Singapore in 2001, a master's degree in electronics materials and devices from Huazhong University of Science and Technology (HUST) in China in 1998 and a bachelor's degree in physics from Xinyang Normal University in China in 1994.

Mr. Chen Chung Yu has been our senior vice president of operations since June 2010, before which he had served as our vice president of manufacturing since May 2007. Prior to joining us, he was the managing director of Wuxi Lite-On Technology Ltd., an LED company in China, from June 2006 to May 2007. From April 2005 to June 2006, he served as a director of manufacturing at 1st Silicon Sdn. Bhd, a semiconductor wafer foundry company in Malaysia. From September 1991 to March 2005, he worked at Macronix International Ltd., a semiconductor integrated device manufacturer in Taiwan as a department manager in the operation/business management center. Mr. Yu received his master's degree in industrial engineering and management from National Chiao Tung University in Taiwan in 2003 and his bachelor's degree in chemical engineering from Tunghai University in Taiwan in 1989.

Mr. Yu Zhu has been our vice president of project development since January 2010. Previously, he has served as our vice president of business development from September 2008 to January 2010, and as our vice president of procurement from May 2006 to September 2008. From September 2005 to May 2006, he served as the head of our U.S. representative office. Prior to joining us, Mr. Zhu was the founder and the president of Country Road US Co. Ltd., a wireless internet communications company in Nanjing, China, from 2002 to 2005. From 1998 to 2002, he worked at IBM as the global training leader and as a software engineer. Mr. Zhu received his bachelor's degree in engineering from the University of Virginia in 1997.

Mr. Diming Qiu has been the head of our technology committee since January 2006 and has been with our company since June 2002. Prior to joining us, Mr. Qiu was the principal engineer and the deputy manager of Yunnan Semiconductor Device Factory, a Chinese company that engages in the manufacturing of semiconductor and solar power products. In the 1980s, he was involved in the construction of the first vertically-integrated solar power product production line in China. In 2004, Mr. Qiu was in charge of research on the integration of solar power components with construction elements, which was sponsored by the PRC's Ministry of Science and Technology. Mr. Qiu received his bachelor's degree in physics from Sichuan University in 1965.

Ms. Yang Shao has been our Chief Human Resources Officer since September 2010. Prior to joining us, Ms. Shao worked at Colgate-Palmolive (New York) in various roles, including the position of Global Employee Relations & Engagement Director. Prior to Colgate-Palmolive, Ms. Shao worked at Bristol-Myers Squibb and The Dun & Bradstreet Corporation serving roles relating to human resources, marketing and business development. Ms. Shao holds a doctorate degree in social and organizational psychology from Rutgers University and received an Executive Education in Marketing Management at the Graduate School of Business of Columbia University in New York.

B. Compensation of Directors and Executive Officers

Compensation of Directors and Executive Officers

For the year ended December 31, 2010, the aggregate cash compensation that we paid to directors and executive officers was $3.1 million. No executive officer is entitled to any severance benefits upon termination of his or her employment with us. Our directors and executive officers have also been paid pursuant to the share incentive plan in the form of restricted shares and share options.

Share Incentive Plan

In July 2006, our board of directors adopted a share incentive plan to link the personal interests of our board members, employees and consultants to those of our shareholders by providing them with an incentive to generate superior returns for our shareholders, as well as to provide us with the flexibility to motivate, attract and retain the services of these individuals upon whose judgment, interest and special effort the successful conduct of our operations is dependent. Our share incentive plan, as amended by our board of directors in February 2007, May 2008 and August 2010, reserves 352,718,350 shares for issuance.

The following paragraphs describe the principal terms of our share incentive plan.

Administration. Our share incentive plan is administered by our compensation committee or, in its absence, by our board of directors. Our compensation committee will determine the provisions, terms and conditions of our awards, including, but not limited to, vesting schedule, repurchase provisions, forfeiture provisions, form of payment upon settlement of the award, payment contingencies and satisfaction of any performance criteria. The compensation committee may delegate to a committee of one or more members of our board of directors the authority to make grants or amend prior awards to employees, consultants and directors.

Awards. The following briefly describe the principal features of the various awards that may be granted under our share incentive plan.

- *Options.* Options provide for the right to purchase our ordinary shares at a specified price, and usually will become exercisable at the discretion of our compensation committee in one or more installments after the grant date. The option exercise price may be paid in cash, by check, our ordinary shares which have been held by the option holder for such time as may be required to avoid adverse accounting treatment, other property with value equal to the exercise price, through a broker assisted cash-less exercise or such other methods as our compensation committee may approve from time to time.

- *Restricted Shares.* A restricted share award is the grant of our ordinary shares at a price determined by our compensation committee. A restricted share is nontransferable, unless otherwise determined by our compensation committee at the time of award and may be repurchased by us upon termination of employment or service during a restricted period. Our compensation committee shall also determine in the award agreement whether the participant will be entitled to vote the restricted shares or receive dividends on such shares.

- *Restricted Share Units.* Restricted share units represent the right to receive our ordinary shares at a specified date in the future, subject to forfeiture of such right. If the restricted share unit has not been forfeited, then on the date specified in the award agreement we shall deliver to the holder unrestricted ordinary shares, which will be freely transferable.

Termination of Plan. Unless terminated earlier, our share incentive plan will expire in 2016. Our board of directors has the authority to amend or terminate our share incentive plan subject to shareholder approval to the extent necessary to comply with applicable law. However, no such action may impair the rights of any recipient of the awards unless agreed by the recipient and the share incentive plan administrator.

Restricted Shares

As of March 15, 2011, our directors, officers, employees and consultants held an aggregate of 46,288,982 restricted shares in our company. The following paragraphs describe the principal terms of our restricted shares.

Restricted Share Award Agreement. Restricted shares issued under our share incentive plan will be evidenced by a restricted share award agreement that contains, among other things, provisions concerning the purchase price for the shares, if any, vesting and repurchase by us upon termination of employment or consulting arrangement, as determined by our compensation committee.

Vesting Schedule. Restricted shares granted under our share incentive plan vest over a five-year period following a specified grant date, with the exception of restricted shares granted to our independent directors, which vest over a three-year period, and restricted shares granted to our chief executive officer and chief financial officer, which completely vest at grant date. Subject to certain exceptions, our restricted share vest on a yearly basis. For restricted shares granted prior to April 11, 2008, typically, twenty percent of the restricted shares shall vest at the first anniversary of the grant date and the remaining eighty percent shall vest at the second, third, fourth and fifth anniversary of the grant date. For restricted shares granted on or after April 11, 2008, 15%, 15%, 20%, 25% and 25% of the restricted shares, typically, shall vest at the first, second, third, fourth and fifth anniversary of the grant date, respectively. These vesting schedules are subject to the grantee continuing to be an employee on each vesting date. Restricted shares also fully vest upon termination of service due to death or disability.

Transfer Restrictions. Until vested, the restricted shares are not transferable and may not be sold, pledged or otherwise transferred.

Dividend and Voting Rights. The restricted shares will not be entitled to dividends paid on the ordinary shares until such restricted shares are vested. A holder will not be entitled to vote restricted shares until such restricted shares are vested.

Repurchase of Restricted Shares. Following the holder's termination of service with us, except if such termination is a result of death or disability, the restricted shares that are unvested will be repurchased by us for an amount equal to the price paid, if anything, for such shares. Such repurchase must be accomplished within 180 days after the termination of service.

Third-Party Acquisition. If a third party acquires us through the purchase of all or substantially all of our assets, a merger or other business combination, all outstanding awards will be assumed or equivalent awards substituted by the successor corporation or parent or subsidiary of successor corporation. In the event that the successor corporation refuses to assume or substitute for awards, all awards will become fully vested and exercisable immediately so long as the recipient remains an employee, consultant or director on the effective date of the acquisition.

The following table summarizes, as of March 15, 2011, the outstanding restricted shares held by our directors and executive officers and other individuals as a group pursuant to the share incentive plan.

Directors and Executive Officers	Restricted Shares Held	Purchase Price ($ per share)	Date of Grant	End of Vesting Period
Jifan Gao	*	0.00001	April 11, 2008/ May 14, 2009	April 11, 2013/ May 14, 2014
Jerome Corcoran	*	0.00001	January 1, 2007/ October 1, 2007/ January 1, 2010	January 1, 2010/ January 1, 2010/ January 1, 2013
Junfeng Li	*	0.00001	November 9, 2007	November 9, 2010
Peter Mak	*	0.00001	January 1, 2007/ October 1, 2007/ January 1, 2010	January 1, 2010/ January 2, 2010/ January 1, 2013
Liping Qiu	*	0.00001	July 24, 2006/ July 7, 2008	July 24, 2009/ July 7, 2011
Qian Zhao	*	0.00001	October 1, 2007	May 18, 2010
Yeung Kwok On	*	0.00001	August 6, 2010	August 6, 2013
Terry Wang	*	0.00001	January 28, 2008/ May 14, 2009/ November 20, 2009	January 28, 2013/ May 14, 2014/ January 1, 2011
Suping Chen	*	0.00001	November 1, 2008/ May 14, 2009	November 1, 2013/ May 14, 2014
Benjamin Hill	*	0.00001	May 1, 2009	May 1, 2014
Qiang Huang	*	0.00001	November 1, 2008/ May 14, 2009	November 1, 2013/ May 14, 2014
Chen Chung Yu	*	0.00001	August 15, 2007/ April 11, 2008/ May 14, 2009/ October 1, 2009	August 15, 2012/ April 11, 2013/ May 14, 2014/ October 1, 2012
Yu Zhu	*	0.00001	July 24, 2006/ April 11, 2008/ May 14, 2009	July 24, 2011/ April 11, 2013/ May 14, 2014
Diming Qiu	*	0.00001	July 24, 2006/ April 11, 2008/ May 14, 2009	July 24, 2011/ April 11, 2013/ May 14, 2014
Yang Shao	*	0.00001	September 15, 2010	September 15, 2015
Directors and executive officers as a group	15,991,270			
Other individuals as a group	30,297,712	0.00001	July 24, 2006 to February 14, 2011	September 15, 2010 to February 14, 2016

* Less than 1% of outstanding restricted shares.

Share Options

As of March 15, 2011, our directors, officers, employees and consultants held an aggregate of 32,597,839 options in our Company. The following paragraphs describe the principal terms of our options.

Option Agreement. Options granted under our share incentive plan are evidenced by an option agreement that contains, among other things, provisions concerning exercisability and forfeiture upon termination of employment arrangement, as determined by our board.

Vesting Schedule. Options granted under our share incentive plan generally vest over a three-year period following a specified grant date. Our options vest on a yearly basis. One-third of the options granted vest and become exercisable at the first, second and third anniversary of the grant date, subject to the optionee continuing to be an employee on each vesting date.

Option Exercise. The term of options granted under our share incentive plan may not exceed the third anniversary of each respective vesting date.

Termination of Options. Where the option agreement permits the exercise of the options that were vested before the recipient's termination of service with us, or the recipient's disability or death, the options will terminate to the extent not exercised or purchased on the last day of a specified period or the last day of the original term of the options, whichever occurs first. If the recipient's termination of service with us is by reason of cause, the options will terminate concurrently with the termination of service with us.

The following table summarizes, as of March 15, 2011, the outstanding options that we granted to our directors and executive officers and to other individuals as a group under our share incentive plan.

Directors and Executive Officers	Ordinary Shares Underlying Outstanding Options	Exercise Price ($ per ADS)	Date of Grant	Final Expiration Date
Jifan Gao	*	16.275 7.42	April 11, 2008/ May 14, 2009	April 11, 2011/ May 14, 2012
Jerome Corcoran	—	—	—	—
Junfeng Li	—	—	—	—
Peter Mak	—	—	—	—
Liping Qiu	—	—	—	—
Qian Zhao	—	—	—	—
Yeung Kwok On	—	—	—	—

Directors and Executive Officers	Ordinary Shares Underlying Outstanding Options	Exercise Price ($ per ADS)	Date of Grant	Final Expiration Date
Terry Wang	*	21.71 7.42	January 28, 2008/ May 14, 2009	January 28, 2011/ May 14, 2012
Suping Chen	*	7.42	May 14, 2009	May 14, 2012
Benjamin Hill	—	—	—	—
Qiang Huang	*	7.42	May 14, 2009	May 14, 2012
Chen Chung Yu	*	16.275 7.42	April 11, 2008/ May 14, 2009	April 11, 2011/ May 14, 2012
Yu Zhu	*	16.275 7.42	April 11, 2008/ May 14, 2009	April 11, 2011/ May 14, 2012
Diming Qiu	*	16.275 7.42	April 11, 2008/ May 14, 2009	April 11, 2011/ May 14, 2012
Yang Shao	—	—	—	—
Directors and executive officers as a group	16,015,526			
Other individuals as a group	16,582,313		March 2, 2008 to May 19, 2010	March 2, 2011 to May 19, 2013

* Less than 1% of total outstanding options.

C. Board Practices

Board of Directors

Our board of directors consists of seven directors. Our directors are elected by the holders of our ordinary shares. At each annual general meeting, one-third of our directors are subject to re-election. The directors to retire by rotation shall include (so far as necessary to ascertain the number of directors to retire by rotation) any director who wishes to retire and does not offer himself for re-election. Any other directors to retire will be those of the other directors who are longest in office since their last re-election or appointment, or by lot should they be of the same seniority. Our directors have the power to appoint a director to fill a vacancy on our board or as an addition to the existing board. Any director so appointed shall hold office only until the next following annual general meeting and shall then be eligible for re-election. In August 2010, Mr. Jifan Gao and Mr. Qian Zhao were re-elected as directors by our shareholders during the annual general meeting. A director may be removed by ordinary resolution passed by our shareholders before the expiration of such director's term. A director is not required to hold any shares in our company by way of qualification. A director may vote with respect to any contract, proposed contract or arrangement in which he is materially interested. A director may exercise all the powers of the company to borrow money, mortgage its undertakings, property and uncalled capital, and issue debentures or other securities whenever money is borrowed or pledged as security for any obligation of our company or of any third party.

Committees of the Board of Directors

We have three committees under the board of directors: an audit committee, a compensation committee and a corporate governance and nominating committee. We have adopted a charter for each of the three committees.

Audit Committee

Our audit committee consists of Mr. Liping Qiu, Mr. Peter Mak and Mr. Qian Zhao. Mr. Qiu, Mr. Mak and Mr. Zhao satisfy the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange and Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Mr. Peter Mak qualifies as an "audit committee financial expert" as defined in Item 16A of Form 20-F. The audit committee oversees our accounting and financial reporting processes and audits of the financial statements of our company. The audit committee is responsible for, among other things:

- selecting the independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;
- reviewing with the independent auditors any audit problems or difficulties and management's response;
- reviewing and approving all proposed related party transactions, as defined in Item 404 of Regulation S-K under the Securities Act;
- discussing the annual audited financial statements with management and the independent auditors;
- reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of material control deficiencies; and
- meeting separately and periodically with management and the independent auditors.

In 2010, our audit committee held meetings four times.

Compensation Committee

Our compensation committee consists of Mr. Jerome Corcoran, Dr. Yeung Kwok On and Mr. Qian Zhao. Mr. Corcoran, Mr. Li and Mr. Zhao satisfy the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange. The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and recommending to the board the compensation of our directors; and
- reviewing periodically and approving any long-term incentive compensation or equity plans, programs or similar arrangements, annual bonuses, employee pension and welfare benefit plans.

In 2010, our compensation committee held one meeting and passed written resolutions once.

Corporate Governance and Nominating Committee

Our corporate governance and nominating committee consists of Mr. Jerome Corcoran, Dr. Yeung Kwok On and Mr. Peter Mak. Mr. Corcoran, Mr. Li and Mr. Mak satisfy the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange. The corporate governance and nominating committee assists the board of directors in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The corporate governance and nominating committee is responsible for, among other things:

- identifying and recommending qualified candidates to the board for selection of directors nominees for election or re-election to the board of directors, or for appointment to fill any vacancy;
- reviewing annually with the board of directors the current composition of the board of directors with regards to characteristics such as independence, age, skills, experience and availability of service to us;
- advising the board of directors periodically with regard to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board of directors on all matters of corporate governance and on any remedial actions to be taken; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

In 2010, our corporate governance and nominating committee held one meeting and passed resolutions once.

Duties of Directors

Under Cayman Islands law, our directors have a statutory duty of loyalty to act honestly in good faith with a view to our best interests. Our directors also have a duty to exercise the skill they actually possess with the care and diligence that a reasonably prudent person would exercise in comparable circumstances. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association. A shareholder has the right to seek damages if a duty owed by our directors is breached.

Employment Agreements

We have entered into employment agreements with each of our executive officers. Under these agreements, each of our executive officers is employed for a specified time period. We may terminate the employment for cause, at any time, without notice or remuneration, for certain acts of the employee, including but not limited to a conviction or plea of guilty to a felony, negligence or dishonesty to our detriment and failure to perform the agreed-to duties after a reasonable opportunity to cure the failure. An executive officer may terminate his employment at any time without notice or penalty if there is a material reduction in his authority, duties and responsibilities or if there is a material reduction in his annual salary before the next annual salary review. Furthermore, either party may terminate the employment at any time without cause upon advance written notice to the other party. If we terminate the executive officer's employment without cause, the executive officer will be entitled to a severance payment equal to a certain specified number of months of his or her then base salary, depending on the length of his or her employment with us.

Each executive officer has agreed to hold, both during and after the employment agreement expires or is earlier terminated, in strict confidence and not to use, except as required in the performance of his duties in connection with the employment, any confidential information, technical data, trade secrets and know-how of our company or the confidential information of any third party, including our affiliated entities and our subsidiaries, received by us. The executive officers have also agreed to disclose in confidence to us all inventions, designs and trade secrets which they conceive, develop or reduce to practice and to assign all right, title and interest in them to us.

D. Employees

We had 4,604, 7,891 and 12,863 employees as of December 31, 2008, 2009 and 2010, respectively. As of December 31, 2010, we had 12,820 full-time employees, including 11,261 in manufacturing, 343 in research and development, 90 in sales and marketing and 1,126 in administration.

From time to time, we also employ part-time employees and independent contractors to support our research and development, manufacturing and sales and marketing activities. We plan to hire additional employees as we expand.

E. Share Ownership

The following table sets forth information with respect to the beneficial ownership of our shares as of March 15, 2011 by:

- each of our directors and executive officers; and
- each person known to us to own beneficially more than 5% of our shares.

	Ordinary Shares Beneficially Owned [(1)(2)]	%
Directors and Executive Officers:		
Jifan Gao[(3)]	256,036,099	6.44%
Liping Qiu	*	*
Jerome Corcoran	*	*
Junfeng Li	*	*
Peter Mak	*	*
Qian Zhao	*	*
Yeung Kwok On	*	*
Terry Wang	*	*
Suping Chen	*	*
Benjamin Hill	*	*
Qiang Huang	*	*
Cheng Chung Yu	*	*
Yu Zhu	*	*
Diming Qiu	*	*
Yang Shao	*	*
All Directors and Executive Officers as a Group[(4)]	287,916,504	7.24%
Principal Shareholders:		
Wonder World Limited[(5)]	242,587,083	6.31%

* The person beneficially owns less than 1% of our outstanding ordinary shares.

(1) Beneficial ownership is determined in accordance with Rule 13d-3 of the General Rules and Regulations under the Exchange Act and includes voting or investment power with respect to the securities.

(2) The percentage of beneficial ownership is calculated by dividing the number of shares beneficially owned by such person or group by 3,974,454,192 ordinary shares, being the number of shares outstanding as of March 15, 2011.

(3) Includes 2,976,504 ordinary shares issuable upon the exercise of options exercisable within 60 days of the date of this annual report, 242,587,083 ordinary shares held by Wonder World Limited, a Cayman Islands company wholly owned by The Gao Trust, of which Mr. Gao is the settler and the sole member of the management committee, 3,614,388 ordinary shares held by Ms. Chunyan Wu, 292,625 ordinary shares issuable upon the exercise of options held by Ms. Wu exercisable within 60 days of this annual report and 1,194,812 restricted shares held by Ms. Wu. Mr. Gao's business address is No. 2 Tian He Road, Electronics Park, New District, Changzhou, Jiangsu 213031, People's Republic of China.

(4) The business address of directors and officers is No. 2, Tian He Road, Electronics Park, New District, Changzhou Jiangsu 213031, People's Republic of China.

(5) Wonder World Limited is a company incorporated in the Cayman Islands and wholly owned by The Gao Trust. The management committee of The Gao Trust consists of the settlor, Mr. Jifan Gao. The trustee of The Gao Trust is Merrill Lynch Bank and Trust Company (Cayman) Limited. Mr. Gao's business address is No. 2 Tian He Road, Electronics Park, New District, Changzhou, Jiangsu 213031, People's Republic of China.

As of March 15, 2011, 3,974,454,192 of our ordinary shares were issued and outstanding. Based on a review of the register of members maintained by our Cayman Islands registrar, we believe that 3,583,858,600 ordinary shares, or approximately 90.2% of our issued and outstanding shares, were held by the record shareholders in the United States, represented by 71,677,172 ADSs held of record by The Bank of New York Mellon, the depositary of our ADS program.

None of our shareholders has different voting rights from other shareholders as of the date of this annual report. We are currently not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

Please refer to "Item 6. Directors, Senior Management and Employees—E. Share Ownership."

B. Related Party Transactions

Transactions with Certain Directors, Shareholders and Affiliates

Loans and Guarantees

We had in the past entered into short-term loans with domestic banks, some of which were guaranteed by related parties, but all of which have been fully repaid. The guarantee arrangements that existed during the last three fiscal years include the following:

- In February 2006, Changzhou Fulai Property Development Co., Ltd. entered into an agreement with Bank of Agriculture and us to guarantee up to RMB64.0 million ($9.4 million) for our short-term borrowings that expired in February 2008.

Some of our short-term loans are guaranteed by unrelated parties. A guarantee by an unrelated party is in turn guaranteed by related parties in an arrangement called "counter-guarantee." In January 2008, Changzhou Hengtai Investment Guarantee Co., Ltd. provided a guarantee up to RMB90.0 million ($13.2 million) for our borrowings under a revolving credit facility agreement with Bank of China, which expired on August 15, 2008. Mr. Jifan Gao and Ms. Chunyan Wu, wife of Mr. Jifan Gao, jointly provided a counter-guarantee against the guarantee.

In September 2009, we entered into a five-year credit of approximately $303.3 million with a syndicate of five PRC banks led by the Agricultural Bank of China and Bank of China. Mr. Jifan Gao and Ms. Chunyan Wu jointly provided a guarantee for this facility. As of December 31, 2010, we had drawn down approximately $275.1 million under the facility.

Purchase Contract

In 2008, 2009 and 2010, Trina China entered into wafer purchase contracts for a total price of RMB79.4 million, RMB37.0 million and RMB69.9 million ($10.6 million), respectively, with Changzhou Youze S&T Co., Ltd., a company controlled by the brother-in-law of Mr. Jifan Gao. The purchase price was determined based on the current market price, and the transaction was approved by our audit committee.

In 2010, Trina China purchased equipment maintenance services for a total price of RMB10.8 million ($1.6 million) from Changzhou Junhe Mechanical Co., Ltd., a company controlled by the brother-in-law of Mr. Jifan Gao. The transaction was approved by our audit committee.

In 2010, Trina China provided PV technical consulting services for a total price of RMB3.0 million ($0.5 million) to Shanghai Zhenhe New Energy S&T Development Co., Ltd., a company in which Trina China holds a 20% equity interest. The transaction was approved by our audit committee.

Amounts due to related parties were nil, nil and $0.7 million as of December 31, 2008, 2009 and 2010.

Employment Agreements

See "Item 6. Directors, Senior Management and Employees—Management—Employment Agreements."

Share Incentive Plan

See "Item 6. Directors, Senior Management and Employees—Management—Share Incentive Plan."

Related Party Transaction Policy

After the completion of our initial public offering on December 22, 2006, we adopted an audit committee charter and a related party transaction policy, which require that the audit committee review all related party transactions on an ongoing basis and all such transactions be approved by the committee.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal and Administrative Proceedings

In June 2010, we received a notice of arbitration from Targray CZR s.r.o. in relation to a contract dated August 26, 2008 for the sale of polysilicon raw materials, alleging that the quality of products we supplied to Targray did not meet contracted specifications and claiming $4.1 million in refunds and damages. The arbitration hearing is scheduled for September 2011.

Other than the aforementioned, we are currently not a party to any material legal or administrative proceedings, and we are not aware of threatened material legal or administrative proceedings against us. We may from time to time become a party to various legal or administrative proceedings arising in the ordinary course of our business.

Dividend Policy

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

Our board of directors has complete discretion whether to distribute dividends. Even if our board of directors decides to pay dividends, the form, frequency and amount of our dividends will depend upon our future operations and earnings, capital requirements and surplus, financial condition, contractual restrictions and other factors that our board of directors may deem relevant. If we pay any dividends, we will pay our ADS holders to the same extent as holders of our ordinary shares, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. Cash dividends on our ordinary shares, if any, will be paid in U.S. dollars.

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

Item 9. The Offer and Listing

A. Offering and Listing Details.

Our ADSs are listed on the New York Stock Exchange under the symbol "TSL." From December 19, 2006 to January 19, 2010, each of ADSs represented 100 ordinary shares. Effective on January 19, 2010, we reduced this ratio to 50 ordinary shares to one ADS. All ADS trading prices on the New York Stock Exchange set forth in this annual report, including historical trading and closing prices, have been adjusted to reflect the new ADS to ordinary shares ratio of 50 ordinary shares to one ADS. For the period from December 19, 2006 to April 13, 2011, the trading price of our ADSs on the New York Stock Exchange has ranged from $2.86 to $35.43 per ADS.

The following table provides the high and low trading prices for our ADSs on the New York Stock Exchange for the periods specified.

	Sales Price	
	High	Low
Annual High and Low		
2006 (from December 19, 2006)	$ 10.14	$ 9.45
2007	35.43	9.04
2008	27.51	2.86
2009	27.79	2.98
2010	31.89	10.45
Quarterly High and Low		
First Quarter 2009	6.16	2.98
Second Quarter 2009	13.77	5.46
Third Quarter 2009	17.79	10.64
Fourth Quarter 2009	27.79	14.79
First Quarter 2010	31.19	19.53
Second Quarter 2010	27.57	14.85
Third Quarter 2010	30.59	17.06
Fourth Quarter 2010	31.89	22.05
Monthly High and Low		
September 2010	30.59	25.70
October 2010	31.89	25.77
November 2010	29.84	22.05
December 2010	24.88	22.10
January 2011	29.89	22.90
February 2011	31.08	25.91
April 2011 (through April 13, 2011)	30.43	27.62

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs, each representing 50 ordinary shares, have been listed on the New York Stock Exchange since December 19, 2006 under the symbol "TSL."

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

The following are summaries of material provisions of our amended and restated memorandum and articles of association, as well as the Companies Law, Cap. 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands, which is referred to as the "Companies Law" below, insofar as they relate to the material terms of our ordinary shares. This summary is not complete, and you should read our memorandum and articles of association.

Registered Office and Objects

The Registered Office of our company is at the offices of Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands.

According to Article 3 of our memorandum of association, the objects for which our company is established are unrestricted and shall include, but without limitation: (a) to act and to perform all the functions of a holding company in all its branches and to co-ordinate the policy and administration of any subsidiary company or companies wherever incorporated or carrying on business or of any group of companies of which our company or any subsidiary company is a member or which are in any manner controlled directly or indirectly by our company; (b) to act as an investment company and for that purpose to acquire and hold upon any terms and, either in the name of our company or that of any nominee, shares, stock, debentures, debenture stock, annuities, notes, mortgages, bonds, obligations and securities, foreign exchange, foreign currency deposits and commodities, issued or guaranteed by any company wherever incorporated or carrying on business, or by any government, sovereign, ruler, commissioners, public body or authority, supreme, municipal, local or otherwise, by original subscription, tender, purchase, exchange, underwriting, participation in syndicates or in any other manner and whether or not fully paid up, and to make payments thereon as called up or in advance of calls or otherwise and to subscribe for the same, whether conditionally or absolutely, and to hold the same with a view to investment, but with the power to vary any investments, and to exercise and enforce all rights and powers conferred by or incident to the ownership thereof, and to invest and deal with the moneys of our company not immediately required upon such securities and in such manner as may be from time to time determined.

Board of Directors

See "Item 6.C. Board Practices—Board of Directors."

Ordinary Shares

On September 1, 2009, our shareholders approved to amend the memorandum of association to increase our authorized share capital. As of the date of this annual report, our authorized share capital is $730,000 divided into 73,000,000,000 shares of nominal or par value of $0.00001 each. The following are summaries of material provisions of our currently effective amended and restated memorandum and articles of association and the Companies Law insofar as they relate to the material terms of our ordinary shares.

General. All of our outstanding ordinary shares are fully paid and non-assessable. Certificates representing the ordinary shares are issued in registered form. Our shareholders who are nonresidents of the Cayman Islands may freely hold and vote their shares.

Dividends. The holders of our ordinary shares are entitled to such dividends as may be declared by our shareholders or board of directors subject to the Companies Law.

Voting Rights. Each ordinary share is entitled to one vote on all matters upon which the ordinary shares are entitled to vote. Voting at any meeting of shareholders is by a show of hands unless a poll is demanded as described in our articles of association. A poll may be demanded by (i) the chairman of the meeting, (ii) at least three shareholders present in person or, in the case of a shareholder being a corporation, by its duly authorized representative or by proxy for the time being entitled to vote at the meeting, (iii) any shareholder or shareholders present in person or, in the case of a shareholder being a corporation, by its duly authorized representative or by proxy and representing not less than one-tenth of the total voting rights of all the shareholders having the right to vote at the meeting, or (iv) a shareholder or shareholders present in person or, in the case of a shareholder being a corporation, by its duly authorized representative or by proxy and holding not less than one-tenth of the issued share capital of our voting shares.

A quorum required for a meeting of shareholders consists of at least two shareholders entitled to vote representing not less than one-third of our total outstanding shares present in person or by proxy or, if a corporation or other non-natural person, by its duly authorized representative. Shareholders' meetings are held annually and may be convened by our board of directors on its own initiative. In general, advance notice of at least ten clear days is required for the convening of our annual general meeting and other shareholders' meetings.

An ordinary resolution to be passed by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast in a general meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes cast attaching to the ordinary shares. A special resolution is required for important matters such as a change of name or an amendment to our memorandum or articles of association. Holders of the ordinary shares may effect certain changes by ordinary resolution, including alter the amount of our authorized share capital, consolidate and divide all or any of our share capital into shares of larger amount than our existing share capital, and cancel any unissued shares.

Transfer of Shares. Subject to the restrictions of our articles of association, as more fully described below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or by any other form approved by our board.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our directors may also decline to register any transfer of any ordinary shares unless (a) the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer; (b) the instrument of transfer is in respect of only one class of ordinary shares; (c) the instrument of transfer is properly stamped, if required; (d) in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four; or (e) a fee of such maximum sum as the New York Stock Exchange may determine to be payable, or such lesser sum as our board of directors may from time to time require, is paid to us in respect thereof. There is presently no legal requirement under Cayman Islands law for instruments of transfer for our ordinary shares to be stamped. In addition, our board of directors has no present intention to charge any fee in connection with the registration of a transfer of ordinary shares.

If our directors refuse to register a transfer they shall, within two months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal. The registration of transfers may, on prior notice being given by advertisement in one or more newspapers or by electronic means, be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine; *provided, however,* that the registration of transfers shall not be suspended nor the register closed for more than 30 days in any year.

Liquidation. On a return of capital on winding-up or otherwise (other than on conversion, redemption or purchase of shares), assets available for distribution among the holders of ordinary shares shall be distributed among the holders of the ordinary shares on a pro rata basis. If our assets available for distribution are insufficient to repay all of the paid-up capital, the assets will be distributed so that the losses are borne by our shareholders proportionately.

Calls on Shares and Forfeiture of Shares. Our articles of association permit us to issue our shares, including ordinary shares, nil paid and partially paid. This permits us to issue shares where the payment for such shares has yet to be received. Although our articles give us the flexibility to issue nil paid and partly paid shares, our board has no present intention to do so. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 clear days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid on the specified time are subject to forfeiture.

Redemption of Shares. Subject to the provisions of the Companies Law, the rules of the designated stock exchange, our memorandum and articles of association and to any special rights conferred on the holders of any shares or class of shares, we may issue shares on terms that they are subject to redemption at our option or at the option of the holders, on such terms and in such manner as may be determined by our board of directors. Our currently outstanding ordinary shares and those to be issued in this offering will not be subject to redemption at the option of the holders or our board of directors.

Variations of Rights of Shares. All or any of the special rights attached to any class of shares may, subject to the provisions of the Companies Law, be varied with the sanction of a special resolution passed at a general meeting of the holders of the shares of that class.

Inspection of Register of Members. Pursuant to our articles of association, our register of members and branch register of members shall be open for inspection by shareholders for such times and on such days as our board of directors shall determine, without charge, or by any other person upon a maximum payment of CI$2.50 or such other sum specified by the board, at the registered office or such other place at which the register is kept in accordance with the Companies Law or, upon a maximum payment of CI$1.00 or such other sum specified by the board, at our registered office, unless the register is closed in accordance with our articles of association.

Designations and Classes of Shares. All of our issued shares upon the closing of this offering will be ordinary shares. Our articles provide that our authorized unissued shares shall be at the disposal of our board of directors, which may offer, allot, grant options over or otherwise dispose of them to such persons, at such times and for such consideration and upon such terms and conditions as our board may in its absolute discretion determine, but so that no shares shall be issued at discount. In particular, our board of directors is empowered to authorize from time to time the issuance of one or more classes or series of preferred shares and to fix the designations, powers, preferences and relative, participating, optional and other rights, if any, and the qualifications, limitations and restrictions thereof, if any, including, without limitation, the number of shares constituting each such class or series, dividend rights, conversion rights, redemption privileges, voting powers, full or limited or no voting powers, and liquidation preferences, and to increase or decrease the size of any such class or series, but not below the number of shares of any class or series of preferred shares then outstanding.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company" or elsewhere in this annual report.

D. Exchange Controls

See "Item 4B. Business Overview—Regulation—Foreign Currency Exchange" and "— Dividend Distribution."

E. Taxation

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the Government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or brought within the jurisdiction of the Cayman Islands. There are no exchange control regulations or currency restrictions in the Cayman Islands.

People's Republic of China Taxation

Under the PRC Enterprise Income Tax Law and its Implementation Regulations, or the new EIT law, which became effective January 1, 2008, dividends, interests, rents, and royalties payable by a foreign-invested enterprise in the PRC to its foreign investor who is a non-resident enterprise, as well as gains on transfers of shares of a foreign-invested enterprise in the PRC by such a foreign investor, will be subject to a 10% withholding tax, unless such non-resident enterprise's jurisdiction of incorporation has a tax treaty with the PRC that provides for a reduced rate of withholding tax. The Cayman Islands, where Trina is incorporated, does not have such a tax treaty with the PRC. Therefore, if Trina is considered a non-resident enterprise for purposes of the new EIT law, a 10% withholding tax will be imposed on dividends paid to Trina by its PRC subsidiaries. In such a case, there will be no PRC withholding tax on dividends paid by Trina to investors that are not PRC legal or natural persons or on any gain realized on the transfer of ADSs or shares by such investors. However, PRC income tax will apply to dividends paid by Trina to investors that are PRC legal or natural persons and to any gain realized by such investors on the transfer of ADSs or shares.

Under the new EIT law, an enterprise established outside the PRC with its "de facto management body" within the PRC is considered a "resident enterprise" and will be subject to the enterprise income tax at the rate of 25% on its worldwide income. The "de facto management body" is defined as the organizational body that effectively exercises overall management and control over production and business operations, personnel, finance and accounting, and properties of the enterprise. The State Tax Administration 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. Although SAT Circular 82 only applies to offshore enterprises controlled by PRC enterprises and not those controlled by PRC or foreign individuals or foreign enterprises, the criteria set forth therein may reflect State Tax Administration'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 and adversely affect our cash flow and profitability. Notwithstanding the foregoing provision, the new EIT law also provides that, if a resident enterprise directly invests in another resident enterprise, the dividends received by the investing resident enterprise from the invested enterprise are exempted from income tax, subject to certain conditions. Therefore, if Trina is classified as a resident enterprise, the dividends received from its PRC subsidiary may be exempted from income tax. However, it remains unclear how the PRC tax authorities will interpret the PRC tax resident treatment of an offshore company like Trina, having ownership interest in a PRC enterprise.

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

Pursuant to SAT Circular 698, 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.

United States Federal Income Taxation

The following discussion describes certain U.S. federal income tax consequences to U.S. Holders (as defined below) under present law of an investment in the ADSs or ordinary shares. This discussion applies only to U.S. Holders that hold the ADSs or ordinary shares as capital assets (generally, property held for investment) and that have the U.S. dollar as their functional currency. This discussion is based on the tax laws of the United States as of the date of this annual report and on U.S. Treasury regulations in effect or, in some cases, proposed, as of the date of this annual report, as well as judicial and administrative interpretations thereof available on or before such date. All of the foregoing authorities are subject to change, which change could apply retroactively and could affect the tax consequences described below.

The following discussion neither deals with the tax consequences to any particular investor nor describes all of the tax consequences applicable to persons in special tax situations such as:

- banks;
- certain financial institutions;
- insurance companies;
- regulated investment companies;
- real estate investment trusts;
- broker-dealers;
- traders that elect to mark to market;
- U.S. expatriates;

- tax-exempt entities;
- persons liable for alternative minimum tax;
- persons holding an ADS or ordinary share as part of a straddle, hedging, conversion or integrated transaction;
- persons that actually or constructively own 10% or more of the total combined voting power of all classes of our voting stock;
- persons who acquired ADSs or ordinary shares pursuant to the exercise of any employee share option or otherwise as compensation; or
- partnerships or pass-through entities, or persons holding ADSs or ordinary shares through such entities.

INVESTORS ARE URGED TO CONSULT THEIR TAX ADVISORS ABOUT THE APPLICATION OF THE U.S. FEDERAL TAX RULES TO THEIR PARTICULAR CIRCUMSTANCES AS WELL AS THE STATE, LOCAL, NON-U.S. AND OTHER TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF ADSs OR ORDINARY SHARES.

The discussion below of the U.S. federal income tax consequences to "U.S. Holders" will apply to you if you are the beneficial owner of ADSs or ordinary shares and you are, for U.S. federal income tax purposes,

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in the United States or under the laws of the United States, any State thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

The discussion below assumes the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement have been and will be complied with in accordance with their terms. If you own ADSs, you should be treated as the owner of the underlying ordinary shares represented by those ADSs for U.S. federal income tax purposes.

The U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS may be taking actions that are inconsistent with the beneficial ownership of the underlying security (for example, pre-releasing ADSs to persons that do not have the beneficial ownership of the securities underlying the ADSs). Accordingly, the creditability of any PRC taxes and the availability of the reduced tax rate for dividends received by certain non-corporate U.S. Holders, including individuals U.S. Holders (as discussed below), could be affected by actions taken by intermediaries in the chain of ownership between the holders of ADSs and our company if as a result of such actions the holders of ADSs are not properly treated as beneficial owners of underlying ordinary shares.

Taxation of Dividends and Other Distributions on the ADSs or Ordinary Shares

Subject to the PFIC rules discussed below, the gross amount of any distributions we make to you with respect to the ADSs or ordinary shares generally will be includible in your gross income as dividend income on the date of receipt by the depositary, in the case of ADSs, or by you, in the case of ordinary shares, but only to the extent the distribution is paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Any such dividends will not be eligible for the dividends-received deduction allowed to corporations in respect of dividends received from other U.S. corporations. To the extent the amount of the distribution exceeds our current and accumulated earnings and profits (as determined under U.S. federal income tax principles), such excess amount will be treated first as a tax-free return of your tax basis in your ADSs or ordinary shares, and then, to the extent such excess amount exceeds your tax basis in your ADSs or ordinary shares, as capital gain. We currently do not, and we do not intend to, calculate our earnings and profits under U.S. federal income tax principles. Therefore, a U.S. Holder should expect that a distribution will generally be reported as a dividend even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above.

With respect to certain non-corporate U.S. Holders, including individual U.S. Holders, for taxable years beginning before January 1, 2013, any dividends may be taxed at the lower capital gains rate applicable to "qualified dividend income," provided (1) either (a) the ADSs are readily tradable on an established securities market in the United States or (b) we are eligible for the benefits of a qualifying income tax treaty with the United States that includes an exchange of information program, (2) we are neither a PFIC nor treated as such with respect to you (as discussed below) for the taxable year in which the dividend was paid and the preceding taxable year, and (3) certain holding period requirements are met. Under U.S. Internal Revenue Service authority, ADSs will be considered for purposes of clause (1) above to be readily tradable on an established securities market in the United States if they are listed on the New York Stock Exchange, as are our ADSs. However, based on existing guidance, it is not entirely clear whether dividends you receive with respect to the ordinary shares will be taxed as qualified dividend income, because the ordinary shares are not themselves listed on a U.S. exchange. If we are treated as a "resident enterprise" for PRC tax purposes under the new EIT Law, we may be eligible for the benefits of the income tax treaty between the United States and the PRC. You should consult your tax advisors regarding the availability of the lower capital gains rate applicable to qualified dividend income for any dividends paid with respect to our ADSs or ordinary shares.

Any dividends will constitute foreign source income for foreign tax credit limitation purposes. If the dividends are taxed as qualified dividend income (as discussed above), the amount of the dividend taken into account for purposes of calculating the foreign tax credit limitation will in general be limited to the gross amount of the dividend, multiplied by the reduced tax rate applicable to qualified dividend income and divided by the highest tax rate normally applicable to dividends. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends distributed by us with respect to the ADSs or ordinary shares will generally constitute "passive category income" but could, in the case of certain U.S. Holders, constitute "general category income."

If PRC withholding taxes apply to any dividends paid to you with respect to our ADSs or ordinary shares, the amount of the dividend would include withheld PRC taxes and, subject to certain conditions and limitations, such PRC withholding taxes generally will be treated as foreign taxes eligible for credit against your U.S. federal income tax liability. The rules relating to the determination of the foreign tax credit are complex, and you should consult your tax advisors regarding the availability of a foreign tax credit in your particular circumstances, including the effects of any applicable income tax treaties.

Taxation of Disposition of ADSs or Ordinary Shares

Subject to the PFIC rules discussed below, you will recognize taxable gain or loss on any sale, exchange or other taxable disposition of an ADS or ordinary share equal to the difference between the amount realized for the ADS or ordinary share and your tax basis in the ADS or ordinary share. The gain or loss generally will be capital gain or loss. If you are a non-corporate U.S. Holder, including an individual U.S. Holder, that has held the ADS or ordinary share for more than one year, you may be eligible for reduced tax rates. The deductibility of capital losses is subject to limitations. Any gain or loss you recognize on a disposition of ADSs or ordinary shares will generally be treated as U.S. source income or loss for foreign tax credit limitation purposes. However, if we are treated as a "resident enterprise" for PRC tax purposes, we may be eligible for the benefits of the income tax treaty between the United States and the PRC. In such event, if PRC tax were to be imposed on any gain from the disposition of the ADSs or ordinary shares, a U.S. Holder that is eligible for the benefits of the income tax treaty between the United States and the PRC may elect to treat the gain as PRC source income for foreign tax credit purposes. You should consult your tax advisors regarding the proper treatment of gain or loss in your particular circumstances, including the effects of any applicable income tax treaties.

Passive Foreign Investment Company

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 PFIC for U.S. federal income tax purposes for our taxable year ended December 31, 2010. However, the application of the PFIC rules is subject to uncertainty in several respects, and we cannot assure you that the U.S. Internal Revenue Service will not take a contrary position. A non-U.S. corporation will be a PFIC for U.S. federal income tax purposes for any taxable year if either:

- at least 75% of its gross income for such year is passive income; or
- 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.

For this purpose, we will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock. In applying this rule, while it is not clear, we believe the contractual arrangements between us and our affiliated entities should be treated as ownership of stock.

A separate determination must be made 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 will generally 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 you hold ADSs or ordinary shares, we generally will continue to be treated as a PFIC with respect to you for all succeeding years during which you hold ADSs or ordinary shares, unless we cease to be a PFIC and you make a "deemed sale" election with respect to the ADSs or ordinary shares. If such election is made, you will be deemed to have sold ADSs or ordinary shares you hold at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain from such deemed sale would be subject to the consequences described in the following two paragraphs. After the deemed sale election, your ADSs or ordinary shares with respect to which the deemed sale election was made will not be treated as shares in a PFIC unless we subsequently become a PFIC.

For each taxable year that we are treated as a PFIC with respect to you, you will be subject to special tax rules with respect to any "excess distribution" you receive and any gain you recognize from a sale or other disposition (including a pledge) of the ADSs or ordinary shares, unless you make a "mark-to-market" election as discussed below. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for the ADSs or ordinary shares will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or recognized gain will be allocated ratably over your holding period for the ADSs or ordinary shares;
- the amount allocated to the current taxable year, and any taxable years in your holding period prior to the first taxable year in which we were a PFIC, will be treated as ordinary income; and
- the amount allocated to each other taxable year will be subject to the highest tax rate in effect for individuals or corporations, as applicable, for each such year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

The tax liability for amounts allocated to taxable years prior to the year of disposition or excess distribution cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale or other disposition of the ADSs or ordinary shares cannot be treated as capital, even if you hold the ADSs or ordinary shares as capital assets.

If we are treated as a PFIC with respect to you for any taxable year, to the extent any of our subsidiaries are also PFICs or we make direct or indirect equity investments in other entities that are PFICs, you may be deemed to own shares in such lower-tier PFICs that are directly or indirectly owned by us in that proportion which the value of the ADSs or ordinary shares you own bears to the value of all of our ADSs or ordinary shares, and you may be subject to the adverse tax consequences described in the preceding two paragraphs with respect to the shares of such lower-tier PFICs that you would be deemed to own. You should consult your tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

A U.S. Holder of "marketable stock" (as defined below) in a PFIC may make a mark-to-market election for such stock to elect out of the PFIC rules described above regarding excess distributions and recognized gains. If you make a mark-to-market election for the ADSs or ordinary shares, you will include in income for each year we are a PFIC an amount equal to the excess, if any, of the fair market value of the ADSs or ordinary shares as of the close of your taxable year over your adjusted basis in such ADSs or ordinary shares. You will be allowed a deduction for the excess, if any, of the adjusted basis of the ADSs or ordinary shares over their fair market value as of the close of the taxable year. However, deductions will be allowable only to the extent of any net mark-to-market gains on the ADSs or ordinary shares included in your income for prior taxable years. Amounts included in your income under a mark-to-market election, as well as gain on the actual sale or other disposition of the ADSs or ordinary shares, will be treated as ordinary income. Ordinary loss treatment will also apply to the deductible portion of any mark-to-market loss on the ADSs or ordinary shares, as well as to any loss realized on the actual sale or other disposition of the ADSs or ordinary shares, to the extent the amount of such loss does not exceed the net mark-to-market gains previously included for such ADSs or ordinary shares. Your basis in the ADSs or ordinary shares will be adjusted to reflect any such income or loss amounts. If you make a mark-to-market election, any distributions we make would generally be subject to the rules discussed above under "—Taxation of Dividends and Other Distributions on the ADSs or Ordinary Shares," except the lower rate applicable to qualified dividend income would not apply.

The mark-to-market election is available only for "marketable stock," which is stock that is regularly traded on a qualified exchange or other market, as defined in applicable U.S. Treasury regulations. Our ADSs are listed on the New York Stock Exchange, which is a qualified exchange or other market for these purposes. Consequently, if the ADSs continue to be listed on the New York Stock Exchange and are regularly traded, and you are a holder of ADSs, we expect the mark-to-market election would be available to you if we were to become a PFIC. Because a mark-to-market election cannot be made for equity interests in any lower-tier PFICs that we own, a U.S. Holder may continue to be subject to the PFIC rules with respect to its indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes. You should consult your tax advisors as to the availability and desirability of a mark-to-market election, as well as the impact of such election on interests in any lower-tier PFICs.

Alternatively, if a non-U.S. corporation is a PFIC, a holder of shares in that corporation may avoid taxation under the PFIC rules described above regarding excess distributions and recognized gains by making a "qualified electing fund" election to include in income its share of the corporation's income on a current basis. However, you may make a qualified electing fund election with respect to your ADSs or ordinary shares only if we agree to furnish you annually with certain tax information, and we currently do not intend to prepare or provide such information.

Under newly enacted legislation, unless otherwise provided by the U.S. Treasury, each U.S. Holder of a PFIC is required to file an annual report containing such information as the U.S. Treasury may require. If we are or become a PFIC, you should consult your tax advisor regarding any reporting requirements that may apply to you.

You are strongly urged to consult your tax advisor regarding the application of the PFIC rules to your investment in ADSs or ordinary shares.

Information Reporting and Backup Withholding

Any dividend payments with respect to ADSs or ordinary shares and proceeds from the sale, exchange or redemption of ADSs or ordinary shares may be subject to information reporting to the U.S. Internal Revenue Service and possible U.S. backup withholding. Backup withholding will not apply, however, to a U.S. Holder that furnishes a correct taxpayer identification number and makes any other required certification or that is otherwise exempt from backup withholding. U.S. Holders that are required to establish their exempt status generally must provide such certification on U.S. Internal Revenue Service Form W-9. U.S. Holders should consult their tax advisors regarding the application of the U.S. information reporting and backup withholding rules.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against your U.S. federal income tax liability, and you may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the U.S. Internal Revenue Service and furnishing any required information in a timely manner.

Additional Reporting Requirements

For taxable years beginning after March 18, 2010, certain U.S. Holders who are individuals are required to report information relating to an interest in our ADSs or ordinary shares, subject to certain exceptions (including an exception for ADSs or ordinary shares held in accounts maintained by certain financial institutions). U.S. Holders should consult their tax advisers regarding the effect, if any, of these rules on their ownership and disposition of the ADSs and ordinary shares.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We have previously filed with the Commission our registration statements on Form F-1 (File Number 333-139144 and File Number 333-142970), as amended, and registration statements on From F-3 (File Number 333-152333 and File Number 333-160826).

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F: (1) within six months after the end of each fiscal year, which is December 31, for fiscal years ending before December 15, 2011; and (2) within four months after the end of each fiscal year for fiscal years ending on or after December 15, 2011. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the Securities and Exchange Commission at Judiciary Plaza, 100 F Street, N.E., Washington, D.C. 20549, and at the regional office of the Securities and Exchange Commission located at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the Commission at 1-800-SEC-0330. The SEC also maintains a web site at *http://www.sec.gov* that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We will furnish The Bank of New York Mellon, the depositary of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depositary from us.

In accordance with the New York Stock Exchange Rules 203.01, we will post this annual report on Form 20-F on our website *http://www.trinasolar.com*. In addition, we will provide hardcopies of our annual report free of charge to shareholders and ADS holders upon request.

I. Subsidiary Information

For a listing of our subsidiaries, see "Item 4C. Information on the Company—Organizational Structure".

Item 11. Quantitative and Qualitative Disclosures About Market Risk

Inflation

According to the National Bureau of Statistics of China, China's overall national inflation rate, as represented by the general consumer price index, was approximately 5.9% in 2008, -0.7% in 2009 and 3.3% in 2010. We have not in the past been materially affected by any such inflation, but we can provide no assurance that we will not be affected in the future.

Foreign Exchange Risk

Transaction Risk

Most of our sales are currently denominated in U.S. dollars and Euros, with the remainder in Renminbi, while a substantial portion of our costs and expenses is denominated in Renminbi, with the remainder in U.S. dollars. Therefore, fluctuations in currency exchange rates could have an adverse impact on our financial stability due to a mismatch among various foreign currency-denominated sales and costs. Fluctuations in exchange rates, particularly among the U.S. dollars, Renminbi and Euros, affect our gross and net profit margins and could result in foreign exchange and operating losses. Our exposure to foreign exchange risk primarily relates to currency gains or losses resulting from timing differences between signing of sales contracts and settling of these contracts. As of December 31, 2008, 2009 and 2010, we held $105.2 million, $288.0 million and $377.3 million in accounts receivable, respectively, most of which were denominated in U.S. dollars and Euros. Had we converted all of our accounts receivable as of either date into Renminbi at an exchange rate of RMB6.6000 for $1.00, the exchange rate as of December 31, 2010, our accounts receivable would have been RMB694.3 million, RMB1,900.5 million and RMB2,490.3 million as of December 31, 2008, 2009 and 2010, respectively. Assuming that Renminbi appreciates by a rate of 10% to an exchange rate of RMB5.94 to $1, we would record a loss in the fair value of our accounts receivable in Renminbi terms. A 10% appreciation of Renminbi would result in our holding Renminbi equivalents of RMB624.8 million, RMB1,710.4 million and RMB2,241.3 million in accounts receivable as of December 31, 2008, 2009 and 2010, respectively. These amounts would therefore reflect a theoretical loss of RMB69.5 million, RMB190.1 million and RMB249.0 million for our accounts receivable as of December 31, 2008, 2009 and 2010, respectively. This calculation model is based on multiplying our accounts receivable, which are held in U.S. dollars, by a smaller Renminbi equivalent amount resulting from an appreciation of Renminbi. This calculation model does not take into account optionality nor does it take into account the use of financial instruments.

In addition, Renminbi is not a freely convertible currency. The SAFE controls the conversion of Renminbi to foreign currencies. The value of the Renminbi is subject to changes of central government policies and international economic and political developments affecting supply and demand in the China foreign exchange trading system market. Our cash and cash equivalents and restricted cash denominated in Renminbi amounted to $71.9 million, $125.6 million and $309.6 million as of December 31, 2008, 2009 and 2010, respectively.

Foreign Currency Translation Risk

We are subject to foreign currency translation risk. The U.S. dollar is our functional and reporting currency. Monetary assets and liabilities denominated in currencies other than the U.S. dollars are translated into U.S. dollars at the rates of exchange ruling at the balance sheet date. Transactions in currencies other than the U.S. dollar during the year are converted into U.S. dollars at the applicable rates of exchange prevailing at the beginning of the month transactions occurred. Transaction gains and losses are recognized in the statements of operations.

Depending on movements in foreign exchange rates, the foreign currency translation may have an adverse impact on our consolidated financial statements. We recorded these exchange gains and losses in the statements of operations. In 2008 and 2010, we had a foreign exchange loss of $11.8 million and $36.1 million, respectively. In 2009, we had a foreign exchange gain of $10.0 million. As some of our sales contracts were denominated in Euros, the depreciation of the Euro against the U.S. dollar, as well as appreciation of the Renminbi against the U.S. dollar in 2008 resulted in our recording of a large exchange loss in 2008.

Risk Management

Our primary objective for holding derivative financial instruments is to manage currency risk. We record derivative instruments as assets or liabilities, measured at fair value.

Starting from October 2008, we have entered into a series of foreign currency forward contracts with commercial banks, to hedge our exposure to foreign currency exchange risk. As of December 31, 2010, we had foreign currency forward contracts with a total contract value of approximately €985.8 million ($1,310.8 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. As at December 31, 2010, we recorded a change in fair value of forward foreign currency exchange contracts of $36.2 million, which was included in the line item "Gain (loss) on change in fair value of derivative" in the consolidated statements of operations. The estimated fair value of forward foreign currency exchange contracts is based on the estimated amount at which they could be settled based on forward market exchange rates. While the use of such foreign currency forward contracts provides us with protection from certain fluctuations in foreign currency exchange, we potentially forgo the benefits that might result from favorable fluctuations in foreign currency exchange. In addition, any default by the counterparties to these transactions could adversely affect our financial condition and results of operations.

Interest Rate Risk

Our exposure to interest rate risk primarily relates to interest expenses incurred by our short-term and long-term borrowings, as well as interest income generated by excess cash invested in demand deposits and liquid investments with original maturities of three months or less. Such interest-earning instruments carry a degree of interest rate risk. We have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. However, our future interest expense may increase due to changes in market interest rates. If market interest rates for short-term demand deposits increase in the near future, such increase may cause the amount of our interest income to rise. A hypothetical 10% increase in the average applicable interest rate for our short-term demand deposits would result in an increase of approximately $0.3 million in interest income from the assumed average cash and cash equivalent balance in 2010. We may use derivative financial instruments, such as interest rate swaps, to mitigate potential risks of interest expense increases due to changes in market interest rates.

Item 12. Description of Securities Other than Equity Securities

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

According to our Deposit Agreement with our ADS depositary, The Bank of New York Mellon, the depositary collects its fees for issuance and cancellation of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions, or by directly billing investors, or by charging the book-entry system accounts of participants acting for them. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

Persons depositing or withdrawing shares must pay:	***For:***
$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	• Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property; or • Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
$.02 (or less) per ADS	• Any cash distribution to you
A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs	• Distribution of securities distributed to holders of deposited securities that are distributed by the depositary to ADS holders
$.02 (or less) per ADSs per calendar year	• Depositary services
Registration or transfer fees	• Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares
Expenses of the depositary	• Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement); or • Converting foreign currency to U.S. dollars
Taxes and other governmental charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes	• As necessary
Any charges incurred by the depositary or its agents for servicing the deposited securities	• As necessary

The fees described above may be amended from time to time.

The depositary has agreed to reimburse us for expenses we incur that are related to establishment and maintenance of the ADR program, including investor relations expenses and stock exchange application and listing fees. There are limits on the amount of expenses for which the depositary will reimburse us, but the amount of reimbursement available to us is not related to the amounts of fees the depositary collects from investors. In 2010, we received $176,940 from the depositary in reimbursements relating to the ADS facility.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

See "Item 10. Additional Information" for a description of the rights of securities holders, which remain unchanged except for the changes disclosed below.

In November 2008, we adopted a shareholder rights plan, or the Rights Plan. One ordinary share purchase right, or a Right, was distributed with respect to each ordinary share outstanding at the close of business on December 1, 2008. Subject to limited exceptions, 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. The exercise price is set at $1.86 per Right to purchase ordinary shares, subject to adjustment when there is a trigger event. Our directors are entitled to redeem the Rights at $0.00001 per Right at any time before a person or group has acquired 15% or more of our voting securities.

In December 2009, our board of directors approved a change in the ratio of one ADS to 100 ordinary shares of our company to one ADS to 50 ordinary shares of our company. Each shareholder of record at the close of business on January 15, 2010 received one additional ADS on January 19, 2010 for every ADS held on the record date. There was no change to the rights and preferences of the underlying ordinary shares.

Use of Proceeds

In August 2009, we completed a follow-on public offering of our ADSs. In this follow-on public offering, we issued and sold 450,000,000 ordinary shares, in the form of ADSs, at $28.75 per ADS on July 28, 2009. On August 17, 2009, we issued and sold additional 67,500,000 ordinary shares, following the exercise in full by the underwriters of their option to purchase additional ADSs. The ordinary shares underlying the ADSs offered and sold were registered pursuant to our automatic shelf registration statement on Form F-3 (File number: 333-160826) filed with the SEC on July 27, 2009. Goldman Sachs (Asia) L.L.C. and Credit Suisse Securities (USA) LLC acted as joint bookrunners, and Piper Jaffray & Co acted as a co-manager for the offering. The aggregate price of the offering amount registered and sold was approximately $148.8 million, of which we received net proceeds of approximately $141.5 million. We have used all of the proceeds from this offering for the purposes indicated in the prospectus of this offering.

In March 2010, we completed another follow-on offering of our ADSs. In this follow-on public offering, we issued and sold an aggregate of 454,250,000 ordinary shares, in the form of ADSs, at $20.25 per ADS on March 24, 2010. The ordinary shares underlying the ADSs offered and sold were registered pursuant to our automatic shelf registration statement on Form F-3 (File number: 333-160826) filed with the SEC on July 27, 2009. Credit Suisse Securities (USA) LLC, Goldman Sachs (Asia) L.L.C. and Barclays Capital Inc. acted as bookrunners of the offering. The aggregate price of the offering amount registered and sold was approximately $184.0 million, of which we received net proceeds of approximately $176.3 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by our company. The net proceeds from this follow-on public offering were allocated as follows:

- approximately $100 million for capacity expansion;
- approximately $50 million for research and development purposes, including the expansion of our research and development center; and
- the remaining amount for general corporate purposes.

As of December 31, 2010, our cash resources amounted to $725.7 million, comprising of cash on hand and demand deposits.

Item 15. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of the effectiveness of our disclosure controls and procedures, which is defined in Rules 13a-15(e) of the Exchange Act, as of the period covered by this annual report. Based on that evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such item is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, for our company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with U.S. GAAP and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management has conducted an assessment, including testing of the design and the effectiveness of our internal control over financial reporting as of December 31, 2010. In making its assessment, management used the criteria in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2010.

Attestation Report of the Registered Public Accounting Firm

The effectiveness of internal control over financial reporting as of December 31, 2010 has been audited by Deloitte Touche Tohmatsu CPA Ltd., an independent registered public accounting firm, who has also audited our consolidated financial statements for the year ended December 31, 2010. The attestation report issued by Deloitte Touche Tohmatsu CPA Ltd. can be found on page F-3 of this annual report.

Changes in Internal Controls

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

Mr. Peter Mak qualifies as an "audit committee financial expert" as defined in Item 16A of Form 20-F. All the members of our audit committee, namely, Mr. Liping Qiu, Mr. Peter Mak and Mr. Qian Zhao, satisfy the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange and Rule 10A-3 under the Exchange Act.

Item 16B. Code of Ethics

Our board of directors has adopted a code of ethics that applies to our directors, officers, employees and agents, including certain provisions that specifically apply to our chief executive officer, chief financial officer, chief operating officer, chief technology officer, vice presidents and any other persons who perform similar functions for us. We have filed our code of business conduct and ethics as an exhibit to Exhibit 99.1 of our registration statement on Form F-1 (file No. 333-139144) filed with the Securities and Exchange Commission on December 19, 2006 and posted the code on our website *http://www.trinasolar.com*. We hereby undertake to provide to any person without charge, a copy of our code of business conduct and ethics within ten working days after we receive such person's written request.

Item 16C. Principal Accountant Fees and Services

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Deloitte Touche Tohmatsu CPA Ltd., our principal external auditors, for the periods indicated. We did not pay any tax related or other fees to our auditors during the periods indicated below.

	2009	2010
Audit fees [1]	$ 973,902	$ 1,184,260
Audit-related fees[2]	$ 151,103	$ 150,543
Tax fees[3]	$ 185,552	$ 201,810
All other fees	—	—

(1) "Audit fees" means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for the audit of our annual financial statements.

(2) "Audit-related fees" means the aggregate fees billed in each of the fiscal years listed for assurance and related services by our principal auditors that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "Audit fees." Services comprising the fees disclosed under the category of "Audit-related fees" in 2009 involve principally the issuance of a comfort letter, providing listing advice in connection with our follow-on public offering. Services comprising the fees disclosed under the category of "Audit-related fees" in 2010 involve principally the issuance of a comfort letter, providing listing advice in connection with our public offering of ADSs in March 2010.

(3) "Tax fees" means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for tax compliance, tax advice, and tax planning.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by Deloitte Touche Tohmatsu CPA Ltd., including audit services, audit-related services, tax services and other services as described above, other than those for *de minimus* services which are approved by the Audit Committee prior to the completion of the audit.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

We believe that there are no significant differences between our corporate governance practices and those of U.S. domestic companies under the listing standards of the New York Stock Exchange.

PART III

Item 17. Financial Statements

We have elected to provide financial statements pursuant to Item 18.

Item 18. Financial Statements

The consolidated financial statements of Trina, its subsidiaries and its variable interest entity are included at the end of this annual report.

Item 19. Exhibits

1.1	Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated by reference to Exhibit 1.1 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 17, 2010)
2.1	Registrant's Form American Depositary Receipt (included in Exhibit 2.3)
2.2	Registrant's Specimen Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.2 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
2.3	Deposit Agreement among the Registrant, the depositary and holder of the American Depositary Shares (incorporated by reference to Exhibit 1 of our Post-Effective Amendment No. 1 to the Registration Statement on Form F-6 (file No. 333-139161) filed with the Securities and Exchange Commission on November 21, 2008)
2.4	Form of Share Transfer Agreement relating to Trina China between the Registrant and other parties therein dated March 28, 2006 (incorporated by reference to Exhibit 4.4 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
2.5	Amended and Restated Series A Preferred Share Purchase Agreement among the Registrant, Trina China and other parties therein dated May 19, 2006 (incorporated by reference to Exhibit 4.5 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
2.6	Amended and Restated Shareholders Agreement among the Registrant, Trina China and other parties therein dated May 30, 2006 (incorporated by reference to Exhibit 4.6 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
2.7	Amendment to the Amended and Restated Shareholders Agreement among the Registrant, Trina China and other parties therein dated December 7, 2006 (incorporated by reference to Exhibit 4.7 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
2.8	First Supplemental Indenture dated as of July 23, 2008 between Wilmington Trust Company and the Registrant (incorporated by reference to Exhibit 4.1 of the Report of Foreign Private Issuer on Form 6-K filed by Trina Solar Limited on July 23, 2008).
2.9	Rights Agreement dated as of November 21, 2008 between Trina Solar Limited and The Bank of New York Mellon, as Rights Agent (incorporated by reference to Exhibit 4.1 of the Report of Foreign Private Issuer on Form 6-K filed by Trina Solar Limited on November 21, 2008).
4.1	Amended and Restated Share Incentive Plan (incorporated by reference to Exhibit 10.1 of our Registration Statement on Form S-8 (file No. 333-157831) filed with the Securities and Exchange Commission on March 11, 2009)
4.2	Form of Indemnification Agreement between the Registrant and its officers and directors (incorporated by reference to Exhibit 10.2 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)

4.3	Form of Employment Agreement between the Registrant and a Senior Executive Officer of the Registrant (incorporated by reference to Exhibit 10.3 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
4.4	Form of Tax Indemnification Agreement between the Registrant and Former Shareholders dated as of September 15, 2006 (incorporated by reference to Exhibit 10.4 of our Registration Statement on Form F-1 (file No. 333-142970) filed with the Securities and Exchange Commission on May 15, 2007)
4.5	Equipment Supply Contract between Trina China and Meyer Burger AG dated May 30, 2007 and the amendment dated September 17, 2007 (incorporated by reference to Exhibit 4.17 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on June 26, 2008)
4.6	Equipment Supply Contract between Trina China and Meyer Burger AG dated August 8, 2007 and the amendment dated September 17, 2007 (incorporated by reference to Exhibit 4.18 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on June 26, 2008)
4.7	Polysilicon Supply Agreement between Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. and Trina China dated March 29, 2008 (incorporated by reference to Exhibit 4.19 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on June 26, 2008)
4.8	Supplemental Polysilicon Supply Agreement between Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. and Trina China dated August 19, 2008 (incorporated by reference to Exhibit 4.20 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 30, 2009)
4.9	ADS Lending Agreement, dated July 17, 2008, among Credit Suisse Securities (Europe) Limited, Credit Suisse, London Branch, and the Registrant (incorporated by reference to Exhibit 99.1 of the Report of Foreign Private Issuer on Form 6-K filed by Trina Solar Limited on July 23, 2008).
4.10	Standstill Agreement dated as of November 21, 2008 between the Registrant and Jifan Gao (incorporated by reference to Exhibit 4.2 of the Report of Foreign Private Issuer on Form 6-K filed by Trina Solar Limited on November 21, 2008).
4.11	Supplemental Polysilicon Supply Agreement II between Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. and Trina China dated August 24, 2009 (incorporated by reference to Exhibit 4.23 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 17, 2010)
4.12	Syndicated Loan Agreement among Trina China, Agricultural Bank of China and various parties mentioned therein dated September 28, 2009 (incorporated by reference to Exhibit 4.24 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 17, 2010)
4.13	Maximum Amount Property Mortgage Contract between Trina China and Agricultural Bank of China dated September 28, 2009 (incorporated by reference to Exhibit 4.25 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 17, 2010)
4.14	Letter of Guarantee and Undertaking entered into among Trina, Agricultural Bank of China and various parties mentioned therein dated September 28, 2009 (incorporated by reference to Exhibit 4.26 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 17, 2010)
4.15	Letter of Guarantee entered into among Jifan Gao, Chunyan Wu, Agricultural Bank of China and various parties mentioned therein dated September 28, 2009 (incorporated by reference to Exhibit 4.27 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 17, 2010)
8.1*	Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated by reference to Exhibit 99.1 of our Registration Statement on Form F-1 (file No. 333-139144) filed with the Securities and Exchange Commission on December 19, 2006)
12.1*	CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*	CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1*	CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2*	CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*	Consent of Deloitte Touche Tohmatsu CPA Ltd.

* Filed with this annual report on Form 20-F

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Trina Solar Limited

By: /s/ Jifan Gao

Name: Jifan Gao

Title: Chairman and Chief Executive Officer

Date: April 18, 2011

EXHIBIT INDEX

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12.1*	CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*	CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1*	CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2*	CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*	Consent of Deloitte Touche Tohmatsu CPA Ltd.

* Filed with this annual report on Form 20-F

TRINA SOLAR LIMITED

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Reports of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2008, 2009 and 2010	F-4
Consolidated Statements of Operations for the Years Ended December 31, 2008, 2009 and 2010	F-6
Consolidated Statements of Shareholders' Equity and Comprehensive Income for the Years Ended December 31, 2008, 2009 and 2010	F-7
Consolidated Statements of Cash Flows for the Years Ended December 31, 2008, 2009 and 2010	F-8
Notes to Consolidated Financial Statements	F-10
Additional Information – Financial Statement Schedule I	F-53

TRINA SOLAR LIMITED

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

Trina Solar Limited

We have audited the accompanying consolidated balance sheets of Trina Solar Limited and subsidiaries (the "Company") as of December 31, 2008, 2009, and 2010, and the related consolidated statements of operations, shareholders' equity and comprehensive income, and cash flows for each of the three years in the period ended December 31, 2010 and the related financial statement schedule included in Schedule I. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Trina Solar Limited and subsidiaries as of December 31, 2008, 2009, and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2010, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 18, 2011 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE TOUCHE TOHMATSU CPA LTD.

Shanghai, China

April 18, 2011

TRINA SOLAR LIMITED

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of

Trina Solar Limited

We have audited internal control over financial reporting of Trina Solar Limited and subsidiaries (the "Company") as of December 31, 2010, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on that risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and the related financial statement schedule as of and for the year ended December 31, 2010, of the Company and our report dated April 18, 2011 expressed an unqualified opinion on those financial statements and financial statement schedule.

/s/ DELOITTE TOUCHE TOHMATSU CPA LTD.

Shanghai, China

April 18, 2011

TRINA SOLAR LIMITED

CONSOLIDATED BALANCE SHEETS
(In U.S. dollars, except share and per share data)

	As of December 31,		
	2008	2009	2010
ASSETS			
Current assets:			
Cash and cash equivalents	132,223,776	406,057,906	752,747,586
Restricted cash	44,991,233	72,005,449	38,035,171
Investment in securities	—	4,034,296	295,715
Inventories	85,687,407	81,153,759	79,126,066
Project assets	—	1,938,519	34,979,030
Accounts receivable, net of allowance for doubtful accounts of $1,810,284, $13,859,407 and $19,295,063 as of December 31, 2008, 2009 and 2010, respectively	105,192,782	287,950,162	377,317,525
Current portion of advances to suppliers, net of allowance of $7,944,150, 5,980,338 and $6,143,783 as of December 31, 2008, 2009 and 2010, respectively	42,247,209	41,303,271	81,230,496
Deferred tax assets	2,109,095	5,543,246	10,258,325
Prepaid expenses and other current assets	7,431,877	27,530,847	41,149,147
Total current assets	419,883,379	927,517,455	1,415,139,061
Advances to suppliers	130,351,513	105,188,020	93,248,404
Property, plant and equipment, net	357,593,802	476,857,803	571,466,625
Prepaid land use right	26,915,217	27,422,386	37,047,547
Deferred tax assets	2,807,488	9,926,063	14,667,435
Other noncurrent assets	2,564,428	1,786,358	520,360
TOTAL ASSETS	940,115,827	1,548,698,085	2,132,089,432

(Continued)

TRINA SOLAR LIMITED

CONSOLIDATED BALANCE SHEETS
(In U.S. dollars, except share and per share data)

	As of December 31,		
	2008	2009	2010
	As adjusted (Note 20)	As adjusted (Note 20)	
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Short-term borrowings, and current portion of long-term bank borrowings	248,557,724	267,427,776	158,652,178
Accounts payable	62,503,917	186,535,492	188,000,260
Amount due to related parties	—	—	668,983
Income tax payable	3,648,772	12,873,979	34,156,619
Accrued expenses and other current liabilities	21,003,231	48,564,078	82,328,955
Convertible notes	—	—	136,262,524
Total current liabilities	335,713,644	515,401,325	600,069,519
Long-term bank borrowings	14,631,434	182,516,037	299,977,412
Convertible notes	129,803,300	133,035,624	—
Accrued warranty costs	12,473,142	21,023,381	38,710,874
Other noncurrent liabilities	10,993,042	17,409,664	19,684,535
Total liabilities	503,614,562	869,386,031	958,442,340
Commitments and contingencies (Note 17)			
Shareholders' equity:			
Ordinary shares ($0.00001 par value; 73,000,000,000 shares authorized, 2,958,183,059, 3,486,901,296 and 3,964,085,356 shares issued and outstanding as of December 31, 2008, 2009 and 2010, respectively)	29,581	34,869	39,641
Additional paid-in capital	312,964,326	459,519,178	642,829,691
Retained earnings	112,091,214	208,317,651	519,770,631
Accumulated other comprehensive income	11,416,144	11,440,356	11,007,129
Total shareholders' equity	436,501,265	679,312,054	1,173,647,092
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	940,115,827	1,548,698,085	2,132,089,432

See notes to consolidated financial statements.

TRINA SOLAR LIMITED

CONSOLIDATED STATEMENTS OF OPERATIONS
(In U.S. dollars, except share and per share data)

	Year ended December 31,		
	2008	2009	2010
	As adjusted (Note 20)	As adjusted (Note 20)	
Net revenues	831,900,852	845,135,575	1,857,689,274
Cost of revenues	667,459,287	607,981,677	1,273,328,214
Gross profit	164,441,565	237,153,898	584,361,060
Selling expenses	20,302,251	30,939,366	75,677,623
General and administrative expenses	41,113,257	65,406,239	72,710,154
Research and development expenses	3,039,154	5,438,909	18,624,846
Total operating expenses	64,454,662	101,784,514	167,012,623
Income from operations	99,986,903	135,369,384	417,348,437
Foreign exchange (loss) gain	(11,801,559)	9,957,597	(36,155,829)
Interest expense	(24,557,701)	(27,095,079)	(33,952,126)
Interest income	2,943,611	1,666,878	2,590,210
(Loss) gain on change in fair value of derivative	(1,067,079)	(1,590,098)	9,475,794
Other (expense) income, net	(155,614)	2,613,586	215,692
Income before income taxes	65,348,561	120,922,268	359,522,178
Income tax expense	4,609,535	24,695,831	48,069,198
Net income	60,739,026	96,226,437	311,452,980
Earnings per ordinary share			
Basic	0.02	0.04	0.09
Diluted	0.02	0.03	0.08
Weighted average ordinary shares outstanding			
Basic	2,501,202,680	2,724,185,761	3,402,701,503
Diluted	2,690,723,390	3,131,505,181	3,833,713,796

See notes to consolidated financial statements

TRINA SOLAR LIMITED

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME
(In U.S. dollars, except share data)

	Ordinary shares		Additional paid-in capital	Retained earning	Accumulated other comprehensive income	Total shareholders' equity	Comprehensive income
	Shares	Amount					
Balance at January 1, 2008	2,553,367,783	25,533	304,877,619	51,352,188	11,233,465	367,488,805	45,123,216
Share-based compensation	—	—	4,024,780	—	—	4,024,780	—
Issuance of restricted shares to employees	17,866,289	179	—	—	—	179	—
Repurchase of restricted shares	(20,370,413)	(204)	—	—	—	(204)	—
Issuance of ordinary shares under share lending facility	407,319,400	4,073	4,061,927	—	—	4,066,000	
Net income				60,739,026		60,739,026	60,739,026
Foreign currency translation adjustments					182,679	182,679	182,679
Balance at December 31, 2008, as adjusted (Note 20)	2,958,183,059	29,581	312,964,326	112,091,214	11,416,144	436,501,265	60,921,705
Share-based compensation	—	—	4,278,502	—	—	4,278,502	—
Issuance of restricted shares to employees	12,171,467	122	—	—	—	122	—
Issuance of ordinary shares pursuant to share option plan	2,137,800	22	744,710	—	—	744,732	—
Repurchase of restricted shares	(3,091,030)	(31)	—	—	—	(31)	—
Issuance of ordinary shares, net of issue costs	517,500,000	5,175	141,531,640	—	—	141,536,815	—
Net income				96,226,437	—	96,226,437	96,226,437
Foreign currency translation adjustments					24,212	24,212	24,212
Balance at December 31, 2009, as adjusted (Note 20)	3,486,901,296	34,869	459,519,178	208,317,651	11,440,356	679,312,054	96,250,649
Share-based compensation	—	—	5,955,047	—	—	5,955,047	—
Issuance of restricted shares to employees	27,528,391	275	—	—	—	275	—
Issuance of ordinary shares pursuant to share option plan	4,503,300	45	1,088,931	—	—	1,088,976	—
Repurchase of restricted shares	(9,097,633)	(91)	—	—	—	(91)	—
Issuance of ordinary shares, net of issue costs	454,250,000	4,543	176,266,535	—	—	176,271,078	—
Net income				311,452,980	—	311,452,980	311,452,980
Foreign currency translation adjustments					(433,227)	(433,227)	(433,227)
Balance at December 31, 2010	3,964,085,354	39,641	642,829,691	519,770,631	11,007,129	1,173,647,092	311,019,753

See notes to consolidated financial statements.

TRINA SOLAR LIMITED

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In U.S. dollars)

	Year ended December 31,		
	2008	2009	2010
	As adjusted (Note 20)	As adjusted (Note 20)	
Operating activities:			
Net income	60,739,026	96,226,437	311,452,980
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation	20,139,856	34,120,465	52,279,855
Share-based compensation	4,024,780	4,278,502	5,955,047
(Gain) loss on change in fair value of investment in securities	—	(484,008)	812,929
Loss (gain) on change in fair value of derivative	1,067,079	1,590,098	(9,475,794)
Loss on disposal of property, plant and equipment	341,911	210,039	1,772,161
Allowance for accounts receivable, net of recoveries	1,467,471	12,307,522	5,435,656
Allowance for other receivables	118,567	2,708,554	1,542,083
Inventory write-down	21,516,138	23,127,176	10,195,272
Allowance for (recovery of) advances to suppliers	5,866,999	(1,963,812)	163,445
Amortization of convertible bond issuance costs	1,783,387	3,905,195	3,899,771
Changes in operating assets and liabilities:			
Inventories	(48,656,015)	(18,593,528)	(8,167,579)
Project assets	—	—	(33,040,511)
Accounts receivable	(34,304,622)	(195,064,903)	(94,803,019)
Prepaid expenses and other current assets	(3,069,452)	(26,230,849)	(4,935,390)
Investment in securities	—	380,331	2,925,652
Advances to suppliers	(81,775,315)	24,140,624	(28,151,054)
Amount due from related parties	613,925	—	—
Accounts payable	4,503,708	106,769,263	(2,406,437)
Accrued expenses and other current liabilities	7,110,807	27,560,847	33,764,877
Accrued warranty costs	7,987,007	8,550,239	17,687,493
Other noncurrent liabilities	803,699	(1,060,183)	(5,179,337)
Income tax payable	2,242,882	9,225,207	21,282,640
Deferred taxes	(3,442,023)	(10,552,726)	(9,456,451)
Prepaid land use right	—	—	(9,625,161)
Net cash (used in) provided by operating activities	(30,920,185)	101,150,490	263,929,128
Investing activities:			
Purchases of property, plant and equipment	(165,420,697)	(136,482,581)	(144,124,272)
Prepaid land use right	(21,675,312)	(507,169)	—
Subsidies of government for property, plant and equipment	10,189,345	7,476,804	7,454,208
Proceeds from disposal of property, plant and equipment	—	150,388	3,622
Increase in investments in affiliates	—	—	(155,888)
Decrease (increase) in restricted cash	58,384,248	(27,014,216)	33,970,278
Net cash used in investing activities	(118,522,416)	(156,376,774)	(102,852,052)

(Continued)

TRINA SOLAR LIMITED

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In U.S. dollars)

	Year ended December 31,		
	2008	2009	2010
	As adjusted (Note 20)	As adjusted (Note 20)	
Financing activities:			
Proceeds from exercise of share options	—	744,732	1,088,976
Proceeds from issuance of ordinary shares, net of issuance costs	—	141,536,815	176,271,078
Proceeds from issuance of convertible notes, net of issuance costs of $7,624,301	130,375,699	—	—
Proceeds from short-term bank borrowings	191,281,784	536,530,305	375,979,373
Repayment of short-term bank borrowings	(106,287,149)	(532,291,687)	(484,754,971)
Proceeds from long-term bank borrowings	6,417,432	182,516,037	117,461,375
Net cash provided by financing activities	221,787,766	329,036,202	186,045,831
Effect of exchange rate changes	182,679	24,212	(433,227)
Net change in cash and cash equivalents	72,527,844	273,834,130	346,689,680
Cash and cash equivalents at the beginning of the year	59,695,932	132,223,776	406,057,906
Cash and cash equivalents at the end of the year	132,223,776	406,057,906	752,747,586
Supplemental disclosure of cash flow information:			
Interest paid, net of amounts capitalized	20,199,372	25,896,059	29,825,019
Income taxes paid	6,605,810	26,023,351	33,410,763
Supplemental schedule of non-cash investing activities:			
Purchases of property, plant and equipment included in accounts payable	33,880,879	51,143,192	46,603,004
Settlement of advances to suppliers in exchange for investment in securities	—	3,930,619	—

See notes to consolidated financial statements.

TRINA SOLAR LIMITED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2008, 2009 AND 2010

(In U.S. dollars)

1. ORGANIZATION AND PRINCIPAL ACTIVITIES

Trina Solar Limited ("Trina") was incorporated under the laws of the Cayman Islands on March 14, 2006. As of December 31, 2010, the major subsidiaries of Trina are included in Appendix 1.

Trina Solar Limited, its subsidiaries and variable interest entities ("VIE") (collectively the "Company") are principally engaged in the manufacturing and selling of solar modules in the People's Republic of China (the "PRC") and overseas.

In 2009, Trina began entering into arrangements to develop commercial solar power systems ("project assets"). For each project, a special purpose vehicle ("SPV") is established for the purpose of holding the project assets and is funded via a nominal equity contribution by an engineering procurement and construction contractor. Trina, through a series of contractual arrangements, among other things, (i) supplies all solar modules and other related products to the SPV, which are a significant component of project asset cost, (ii) has substantive management rights and oversight in the SPV and the construction process, and (iii) is contractually required to acquire the project assets upon construction completion. As a result, Trina has a controlling financial interest in the SPVs and is deemed their primary beneficiary and, accordingly, the financial position and results of operations, if any, of the SPVs are included in the consolidated financial statements of the Company. The details of the project assets are discussed in Note 2(j). All SPVs are included in Appendix 1.

On January 19, 2010, the Company changed the ratio of its ordinary shares to American Depositary Shares ("ADSs") from one hundred (100) ordinary shares to one ADS to fifty (50) ordinary shares to one ADS. Such transaction has been retroactively reflected for all periods presented.

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES

(a) Basis of presentation

The consolidated financial statements are prepared and presented in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and include the accounts of Trina, its subsidiaries and VIEs. The Company has eliminated all inter-company transactions and balances during consolidation.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(b) Use of estimates

The preparation of the consolidated financial statements in conformity with US GAAP requires the Company to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant accounting estimates reflected in the Company's consolidated financial statements include the allowance for doubtful accounts and advances to suppliers, inventory valuation, the economic useful lives of long-lived assets, asset impairments, fair value of foreign currency derivatives, provision for uncertain tax positions and tax valuation allowances, accrued warranty expenses, and certain assumption used in the computation of share-based compensation and related forfeiture rates.

(c) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and demand deposits, which are unrestricted as to withdrawal and use, and which have maturities of three months or less when purchased.

(d) Restricted cash

Restricted cash is comprised of bank deposits held as collateral for letters of credit, commercial paper, bank drafts and bank borrowings as well as amounts held by counterparties under forward contracts. These deposits carry fixed interest rates and will be released when the bank borrowings are repaid or the related letters of credit are settled by the Company. The Company considers the restricted cash balances as equivalent to an investment whose return of principal requires the satisfaction of conditions (i.e., repayment of bank borrowings or settlement of letters of credit) rather than a withdrawal demand. Therefore, deposits and withdrawals of principal balances in restricted cash accounts represent the creation or return of investment and, accordingly, the Company has presented such deposits and withdrawals as investing activities in the consolidated statements of cash flows.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(e) Fair value of financial instruments

The Company estimates fair value of financial assets and liabilities as the price that would be received from the sale of an asset or paid to transfer a liability (an exit price) on the measurement date in an orderly transaction between market participants. The fair value measurement guidance establishes a three-level fair value hierarchy that prioritizes the inputs into the valuation techniques used to measure fair value.

• Level 1 — Valuation techniques in which all significant inputs are unadjusted quoted prices from active markets for assets or liabilities that are identical to the assets or liabilities being measured.

• Level 2 — Valuation techniques in which significant inputs include quoted prices from active markets for assets or liabilities that are similar to the assets or liabilities being measured and/or quoted prices for assets or liabilities that are identical or similar to the assets or liabilities being measured from markets that are not active. Also, model-derived valuations in which all significant inputs and significant value drivers are observable in active markets are Level 2 valuation techniques.

• Level 3 — Valuation techniques in which one or more significant inputs or significant value drivers are unobservable. Unobservable inputs are valuation technique inputs that reflect the Company's own assumptions about the assumptions that market participants would use to price an asset or liability.

When available, the Company uses quoted market prices to determine the fair value of an asset or liability. If quoted market prices are not available, the Company measures fair value using valuation techniques that use, when possible, current market-based or independently-sourced market parameters, such as interest rates and currency rates.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(f) Investment in securities

Investment in securities represents marketable securities acquired principally for the purpose of sale in the near term and, as a result, is classified as a trading security. The investment is reported at fair value, with gains or losses resulting from changes in fair value recognized in earnings.

(g) Investment in equity affiliates

Affiliated companies are entities over which the Company has significant influence, but which it does not control. The Company generally considers an ownership interest of 20% or higher to represent significant influence. Investments in equity affiliates are accounted for by the equity method of accounting. Under this method, the Company's share of the profits or losses of affiliated companies is recognized in the income statement and its shares of movements in other comprehensive income are recognized in other comprehensive income. Unrealized gains on transactions between the Company and its affiliated companies are eliminated to the extent of the Company's interest in the affiliated companies; unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. When the Company's share of losses in an affiliated company equals or exceeds its interest in the affiliated company, the Company does not recognize further losses, unless the Company has incurred obligations or made payments on behalf of the affiliated company. An impairment loss is recorded when there has been a loss in value of the investment that is other-than-temporary. As of December 31, 2010, the Company has equity investment in affiliates with a carrying amount of $155,888.

(h) Receivables and Allowance for Doubtful Accounts.

The Company maintains allowances for doubtful accounts for uncollectible accounts receivable. Estimated anticipated losses from doubtful accounts are based on days past due, historical collection history, and other factors.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(i) Inventories

The Company reports inventories at the lower of cost or market. The Company determines cost on a weighted-average basis. These costs include direct material, direct labor, tolling manufacturing costs, and fixed and variable indirect manufacturing costs, including depreciation and amortization.

The Company regularly reviews the cost of inventory against its estimated fair market value and records a lower of cost or market write-down if any inventories have a cost in excess of estimated market value. In addition, the Company regularly evaluates the quantity and value of its inventory in light of current market conditions and market trends and record write-downs for any quantities in excess of demand and for any product obsolescence. This evaluation considers historic usage, expected demand, anticipated sales price, new product development schedules, the effect new products might have on the sale of existing products, product obsolescence, customer concentrations, product merchantability and other factors. The Company also writes off silicon materials that may not meet its required specifications for inclusion in its manufacturing process. These materials are periodically sold for scrap.

The Company has outsourced portions of its manufacturing process, including cutting ingots into wafers, and converting wafers into solar cells, to various third-party manufacturers. These outsourcing arrangements may or may not include transfer of title of the raw material inventory (silicon, ingots, wafers or cells) to the third-party manufacturers.

For those outsourcing arrangements in which title does not transfer, the Company maintains the inventory in the balance sheet as raw materials inventory while it is in physical possession of the third-party manufacturers. Upon receipt of the processed inventory from the third-party manufacturers, it is reclassified to work-in-progress inventory with the processing fee capitalized as cost of inventory.

For those outsourcing arrangements in which title (including risk of loss) does transfer to the third-party manufacturer, the Company is contractually obligated to repurchase the processed inventory. To accomplish this, it enters into raw material sales agreements and processed inventory purchase agreements simultaneously with the third-party manufacturer. In such instances, where they are, in substance tolling arrangements, the Company retains the inventory in the consolidated balance sheets while it is in the physical possession of the third-party manufacturer. The cash received from the third-party manufacturer is recorded as a current liability on the balance sheet rather than revenue or deferred revenue. Upon receipt of the processed inventory, it is reclassified from raw materials to work-in-progress inventory and the processing fee paid to the third-party manufacturer is added to inventory cost.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(j) Project assets

Project assets consist primarily of costs relating to solar power projects in various stages of development that are capitalized prior to the sale of the solar power project. These costs include modules, installation and other development costs, such as legal, consulting and permitting. Once the Company enters into a definitive sales agreement, the project assets are reclassified to deferred project costs on the consolidated balance sheets until all criteria for sale recognition have been met. While the project assets are not constructed for a specific customer, the Company intends to sell the project assets upon their completion.

Project assets consisted of the following at December 31, 2009 and 2010:

	December 31, 2009	December 31 2010
	$	$
Project assets — Module cost	1,669,040	13,350,157
Project assets — Development	—	19,609,382
Project assets — Others	269,479	2,019,491
Total project assets	1,938,519	34,979,030
Total current liabilities	—	12,684,581
Total liabilities	—	12,684,581

The Company reviews project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In determining whether or not the project assets are recoverable, the Company considers a number of factors, including changes in environmental, ecological, permitting, or regulatory conditions that affect the project. Such changes may cause the cost of the project to increase or the selling price of the project to decrease.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(k) Property, plant and equipment, net

The Company reports its property, plant and equipment at cost, less accumulated depreciation. Cost includes the prices paid to acquire or construct the assets, interest capitalized during the construction period and any expenditure that substantially extends the useful life of an existing asset. The Company expenses repair and maintenance costs when they are incurred. A summary of interest costs incurred is as follows:

	Year ended December 31,		
	2008	2009	2010
	$	$	$
Total interest incurred	26,025,305	28,527,579	35,754,067
Less: Interest capitalized	1,467,604	1,432,500	1,801,941
Interest expenses	24,557,701	27,095,079	33,952,126

The Company computes depreciation expense using the straight-line method over the estimated useful lives of the assets presented below.

	Years
Buildings	10–20
Plant and machinery	5–10
Motor vehicles	3–5
Electronic equipment, furniture and fixtures	3–5

(l) Prepaid land use right

The Company's prepaid land use rights are reported at cost and are charged to income ratably over 50 years, in accordance with the term of the land use right agreement.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(m) Long-lived assets

The Company evaluates its long-lived tangible assets and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. These events include but are not limited to significant current period operation or cash flow losses associated with the use of a long-lived asset or group of assets combined with a history of such losses, significant changes in the manner of use of assets and significant negative industry or economic trends. When these events occur, the Company measures impairment by comparing the carrying amount of the assets to future undiscounted net cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, the Company would recognize an impairment loss equal to the excess of the carrying amount over the fair value of the assets. No impairments were recorded during the years ended December 31, 2008, 2009 and 2010.

(n) Income taxes

The Company accounts for income taxes using the asset and liability method whereby the Company calculates the deferred tax asset or liability account balances at the balance sheet date using tax laws and rates expected to apply to taxable income in the periods in which deferred tax assets or liabilities are expected to be realized or settled. The Company establishes valuation allowances, when necessary, to reduce deferred tax assets to the extent it is more likely than not that such deferred tax assets will not be realized. The Company does not provide deferred taxes related to the U.S. GAAP basis in excess of the tax basis in the investment in the Company's foreign subsidiaries to the extent such amounts relate to permanently reinvested earnings and profits of such foreign subsidiaries.

Income tax expense includes (i) deferred tax expense, which generally represents the net change in the deferred tax asset or liability balance during the year plus any change in valuation allowances and (ii) current tax expense, which represents the amount of tax currently payable to or receivable from a taxing authority. The Company only recognizes tax benefits related to uncertain tax positions when such positions are more likely than not of being sustained upon examination. For such positions, the amount of tax benefit that the Company recognizes is the largest amount of tax benefit that is more than fifty percent likely of being sustained upon the ultimate settlement of such uncertain tax position.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(o) Revenue recognition

The Company recognizes revenue for product sales when persuasive evidence of an arrangement exists, delivery of the product has occurred and title and risk of loss has passed to the customer, the sales price is fixed or determinable and the collectability of the resulting receivable is reasonably assured. Its sales agreements typically contain customary product warranties but do not contain any post-shipment obligations nor any return or credit provisions.

The Company recognizes sales of its solar modules based on the terms of the specific sales. Generally, it recognizes sales when the modules have been delivered to the customers' designated point of shipment, which may include commercial docks or commercial shipping vessels. The Company extends credit terms of up to 90 days to customers with good creditworthiness as determined by the Company's credit assessment. For limited sales transactions with customers whose creditworthiness is doubtful, the Company requests cash payment before delivery and records such receipts as advances from customers. For customers to whom credit terms are extended, the Company only recognizes revenue when collectability is reasonably assured. The Company assesses collectability based on a number of factors, including past customer transaction history and customer credit analysis.

The Company recognizes revenue related to long-term solar systems integration on the percentage-of-completion method. The Company estimates its revenues by using the cost-to-cost method, whereby it derives a ratio by comparing the costs incurred to date to the total costs expected to be incurred on the project. The Company applies the ratio computed in the cost-to-cost analysis to the contract price to determine the estimated revenues earned in each period. With respect to its short-term solar systems integration, the Company recognizes the sales on a completed-contract method. The completed-contract method recognizes income only when the contract is completed, or substantially so. Accordingly, costs of contracts in process and current billings are accumulated but there are no interim charges or credits to income other than provisions for losses. A contract may be regarded as substantially completed if remaining costs are not significant in amount. When the Company determines that total estimated costs will exceed total revenues under a contract, it records a loss accordingly.

The Company may enter into multiple element arrangements which can include, in addition to solar modules, installation or training, product manuals and materials and limited technical maintenance support. The Company is not contractually obligated to provide returns or refunds in the event these additional elements are not delivered. To date, these additional elements have been deemed to be inconsequential or perfunctory and the Company has recognized revenue upon the delivery of the solar modules, the predominant deliverable in the total contract, provided all other revenue recognition criteria have been met. Addition, the Company accrues the estimated cost of the unperformed obligations.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(p) Shipping and handling costs

Payments received from customers for shipping and handling costs are included in net revenues. Shipping and handling costs relating to solar module sales of $5,951,760, $11,950,752 and $39,159,748 are included in selling expenses for the years ended December 31, 2008, 2009 and 2010, respectively. Shipping and handling costs relating to inventory purchases of $2,689,445, $844,385 and $810,783 are included as a component of cost of revenues for the years ended December 31, 2008, 2009 and 2010, respectively.

(q) Research and development

Research and development costs are incurred during the period the Company is developing new products or refining existing products or technologies. Its research and development costs consist primarily of compensation and related costs for personnel, material, supplies, equipment depreciation and laboratory testing costs. These costs are expensed as incurred until the products have been developed and tested and are ready for production and sale.

(r) Government grants

The Company periodically qualifies for grants from the PRC government for achieving certain research and development milestones. It records these grants as an offset to its research and development expenses in the periods in which the Company earns them. Grants that it receives prior to when the Company achieves the specified milestone are reported as a liability. The Company recorded $975,824, $581,298 and $699,228 of earned grants as reductions of research and development expenses for the years ended December 31, 2008, 2009 and 2010, respectively. Government grants related to assets are recorded as deferred liabilities and are recognize as an offset to depreciation expense on a straight-line basis over the useful life of the associated asset. The Company received government grant for assets of $10,189,345, $7,476,804 and $7,454,208 during the years ended December 31, 2008, 2009 and 2010, respectively, and recognized $27,161, $1,160,699 and $4,480,108 as an offset to depreciation expense for the years ended December 31, 2008, 2009 and 2010, respectively.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(s) Product warranties

The Company provides a limited warranty to the original purchasers of its solar modules for two or five years, in relation to defects in materials and workmanship, and 25 years in relation to minimum power output. The Company accrues warranty costs when recognizing revenue and recognizes such costs as a component of selling expense. Warranty costs primarily consist of replacement costs for parts and materials and labor costs for maintenance personnel. Due to its limited solar module manufacturing history, the Company does not have a significant history of warranty claims. Based on its best estimates of both future costs and the probability of incurring warranty claims, the Company currently accrues for product warranties at 1% of solar module sales. The Company derives its estimates from a number of factors, including (1) an analysis of actual historical costs incurred in connection with its warranty claims, (2) an assessment of competitors' accrual and claim history and (3) results from academic research, including industry-standard accelerated testing, and other assumptions that the Company believes to be reasonable under the circumstances. The Company acknowledges that such estimates are subjective and will continue to analyze its claim history and the performance of its products compared to its competitors and academic research results to determine whether the accrual is adequate. Should the Company begin to experience warranty claims different from its accrual rate, the Company will prospectively revise the warranty accrual rate.

(t) Foreign currency translation and foreign currency risk

The United States dollar ("US dollar"), the currency in which a substantial portion of the Company's transactions are denominated, is used as the functional and reporting currency of the Company. Monetary assets and liabilities denominated in currencies other than the US dollar are translated into US dollar at the rates of exchange ruling at the balance sheet date. Transactions in currencies other than the US dollar during the year are converted into the US dollar at the applicable rates of exchange prevailing on the date the transactions occurred. Transaction gains and losses are recognized in the statements of operations.

Prior to January 1, 2008, the financial records of the Company's principal operating subsidiary in the PRC, Trina China, were maintained in Renminbi ("RMB"), the local currency To respond to the significant changes in economic facts and circumstances, Trina China changed its functional currency from RMB to the US dollar, effective January 1, 2008.

The financial records of the Company's subsidiaries are maintained in local currencies other than US dollar, such as RMB and Euro, which are their functional currencies. Assets and liabilities are translated at the exchange rates at the balance sheet date, equity accounts are translated at historical exchange rates and revenues, expenses, gains and losses are translated using the average rate for the year. Translation adjustments are reported as cumulative translation adjustments and are shown as a separate component of accumulated other comprehensive income in the statement of shareholders' equity.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(t) Foreign currency translation and foreign currency risk — continued

The RMB is not a freely convertible currency. The PRC State Administration for Foreign Exchange, under the authority of the PRC government, controls the conversion of RMB to foreign currencies. The value of the RMB is subject to changes of central government policies and international economic and political developments affecting supply and demand in the China foreign exchange trading system market. The Company's cash and cash equivalents and restricted cash denominated in RMB amounted to $71,936,716, $125,551,705 and $309,578,293 as of December 31, 2008, 2009 and 2010, respectively.

(u) Concentrations of credit risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of accounts receivable and advances to suppliers. The Company conducts credit evaluations of its customers and requires customers to post letters of credit to secure payment or to make significant down payments. The Company generally has not required collateral or other security interests from its suppliers but it performs ongoing credit evaluations of the suppliers' financial condition. The Company raises an allowance for doubtful accounts primarily based on the age of the receivables or advances to suppliers, previous loss history and the counterparties' current ability to fulfill its obligation.

The Company assesses creditworthiness of customers before conducting business with them. This assessment is primarily based on historical collection records, customer onsite visits by senior management and information provided by third parties, such as Dun & Bradstreet and the insurance company that ultimately insures us against customer credit default. Using this information, the Company further evaluates the potential effect of a delay in financing on the customers' liquidity and financial position, their ability to draw down financing as well as their ability and intention to pay should it not obtain the related financing. Based on this analysis, the Company determines what credit terms, if any, to offer to each customer individually. If the assessment indicates a likelihood of collection risk, the Company will not sell the products or sell on a cash or prepayment basis. Therefore, based on the strict credit assessment, the Company attempts to conduct business with those customers having the ability and intent to pay. The Company has not had significant collections issues for receivables generated from sales of products or significant default issues related to advance to suppliers.

(v) Share-based compensation

The Company's share-based payment transactions with employees, such as restricted shares and share options, are measured based on the grant-date fair value of the equity instrument issued. The fair value of the award is recognized as compensation expense, net of estimated forfeitures, over the period during which an employee is required to provide service in exchange for the award, which is generally the vesting period.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(w) Derivative financial instruments

The Company's primary objective for holding derivative financial instruments is to manage currency risk. The Company records derivative instruments as assets or liabilities, measured at fair value. The recognition of gains or losses resulting from changes in fair values of those derivative instruments is based on the use of each derivative instrument and whether it qualifies for hedge accounting.

The Company entered into certain forward foreign exchange contracts to protect against volatility of future cash flows caused by the changes in foreign exchange rates associated with outstanding accounts receivable. The foreign exchange hedge contracts do not qualify for hedge accounting and, as a result, the changes in fair value of the foreign currency hedge contracts are recognized in the statement of operations. During the years ended December 31, 2008, 2009 and 2010, the Company recorded change in fair value of forward foreign currency exchange contracts of $(1,067,079), $(1,590,098) and $9,475,794, respectively, which has been recorded in (loss) gain on change in fair value of derivatives in the consolidated statements of operations.

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(x) Earnings per share

Basic earnings per share is computed by dividing net income by the weighted average number of ordinary shares outstanding during the period. Diluted earnings per ordinary share reflects the potential dilution that could occur if securities or other contracts to issue ordinary shares were exercised or converted into ordinary shares. Ordinary share equivalents are excluded from the computation in loss periods as their effects would be anti-dilutive.

The following table sets forth the computation of the basic and diluted income from operations per share for the periods indicated:

	Year ended December 31,		
	2008	2009	2010
	As adjusted	As adjusted	
	$	$	$
Net income from operations attributable to ordinary shareholders — basic	60,739,026	96,226,437	311,452,980
Finance charge related to convertible notes	4,003,500	9,425,195	9,419,771
Net income from operations attributable to ordinary shareholders — diluted	64,742,526	105,651,632	320,872,751
Weighted average number of ordinary shares outstanding — basic	2,501,202,680	2,724,185,761	3,402,701,503
Nonvested restricted shares	3,158,126	—	16,977,041
Share options	—	—	6,715,832
Convertible notes	186,362,584	407,319,420	407,319,420
Weighted average number of ordinary shares outstanding — diluted	2,690,723,390	3,131,505,181	3,833,713,796
Earnings per ordinary share from operations — basic	0.02	0.04	0.09
Earnings per ordinary share from operations — diluted	0.02	0.03	0.08

TRINA SOLAR LIMITED

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES — continued

(x) Earnings per share — continued

Diluted income per share for the year ended December 31, 2008, 2009 and 2010 excludes 12,642,079, 24,337,277 and 27,113,457 shares issuable upon exercise of share options, respectively, as their inclusion would have been anti-dilutive.

The call option on the Loaned Shares (see Note 11) has been excluded in the computation of basic EPS as the Company has concluded that the Loaned Shares are not considered issued for accounting purposes as existing shareholders are not expected to be affected by the issuance due to (a) the existence of the collateral arrangement and (b) the requirement that the holders of the Loaned Shares return any dividends received. The call option on the Loaned Shares has been considered in the computation of diluted EPS using the treasury stock method with the fair value of the collateral representing the assumed proceeds for the issuance of the underlying shares. For the year ended December 31, 2008, 2009 and 2010, there were no incremental shares included in the diluted EPS computation in regard to the Loaned Shares.

(y) Recently issued accounting pronouncements

In December 2010, the FASB issued ASU 2010-29, Disclosure of Supplementary Pro Forma Information for Business Combinations. This ASU specifies that if a public company presents comparative financial statements, the entity should only disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period. ASU 2010-29 is effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010, with early adoption permitted. The adoption of ASU 2010-29 will not impact the Company's financial position, results of operations, or cash flows, as its requirements only pertain to financial statement footnote disclosure.

TRINA SOLAR LIMITED

3. ALLOWANCE FOR DOUBTFUL RECEIVABLES

Allowance for doubtful receivables are primarily comprised of allowances for account receivables and advances to suppliers. An analysis of allowance for doubtful receivables for the years ended December 31, 2008, 2009 and 2010 is as follows:

	At December 31		
	2008	2009	2010
	$	$	$
Balance, beginning of the year	342,813	1,810,284	13,859,407
Allowance made during the year	1,467,471	12,694,191	5,435,656
Recoveries	—	(386,668)	—
Amount written-off against allowance	—	(258,400)	—
Balance, end of the year	1,810,284	13,859,407	19,295,063

An analysis of allowance for other receivables for the years ended December 31, 2008, 2009 and 2010 is as follows:

	At December 31		
	2008	2009	2010
	$	$	$
Balance, beginning of the year	125,399	243,966	2,952,520
Allowance made during the year	118,567	2,708,554	1,542,083
Recoveries	—	—	—
Balance, end of the year	243,966	2,952,520	4,494,603

An analysis of allowance for advances to suppliers for the years ended December 31, 2008, 2009 and 2010 is as follows:

	At December 31		
	2008	2009	2010
	$	$	$
Balance, beginning of the year	2,077,151	7,944,150	5,980,338
Allowance made during the year	5,866,999	262,283	163,445
Recoveries	—	(2,226,095)	—
Balance, end of the year	7,944,150	5,980,338	6,143,783

TRINA SOLAR LIMITED

4. INVENTORIES

Inventories consisted of the following:

	At December 31		
	2008	2009	2010
	$	$	$
Raw materials	30,697,470	11,099,173	20,245,059
Work in progress	26,796,504	22,649,446	32,752,761
Finished goods	28,193,433	47,405,140	26,128,246
Total	85,687,407	81,153,759	79,126,066

In 2008, 2009 and 2010, inventory was written down by $21,516,138, $23,127,176 and $10,195,272, respectively, to reflect the lower of cost or market.

5. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net consisted of the following:

	At December 31		
	2008	2009	2010
	$	$	$
Buildings	33,815,202	85,720,215	91,339,302
Plant and machinery	233,846,906	314,607,086	473,066,882
Motor vehicles	1,132,838	1,487,518	1,994,773
Electronic equipment, furniture and fixtures	27,277,314	46,811,898	59,886,131
	296,072,260	448,626,717	626,287,088
Less: Accumulated depreciation	(27,453,759)	(61,442,832)	(115,637,197)
	268,618,501	387,183,885	510,649,891
Construction in progress	88,975,301	89,673,918	60,816,734
Property, plant and equipment, net	357,593,802	476,857,803	571,466,625

Depreciation of property, plant and equipment was $20,139,856, $34,120,465 and $52,279,855 for the years ended December 31, 2008, 2009 and 2010, respectively.

Construction in progress primarily represents the construction of new plants that include several new production lines and the machinery under installation.

As of December 31, 2008, 2009, and 2010, the Company has pledged property, plant and equipment with a total carrying amount of $218,490,834, $203,740,504 and $187,981,989 respectively, to secure short-term bank borrowings (see Note 10).

TRINA SOLAR LIMITED

6. PREPAID LAND USE RIGHT

Prepaid land use right represented land use rights for the Company's business operations. Amounts recognized in profit and loss related to the prepaid land use rights were $221,624, $558,888 and $632,698 for the years ended December 31, 2008, 2009 and 2010, respectively.

At December 31, 2008, 2009 and 2010, the land use right certificates for a certain portion of the Company's land use rights amounting to $nil, $6,396,732 and $nil, respectively, had not been obtained.

As of December 31, 2008, 2009 and 2010, land use rights of $2,557,672, $27,422,386 and $7,748,019 were pledged as collateral to secure the bank borrowings respectively. (see Note 10).

7. DERIVATIVE FINANCIAL INSTRUMENTS

The following tables present the fair values of derivative instruments included in the Company's consolidated balance sheets as of December 31, 2008, 2009 and 2010:

	December 31, 2008	
	Other Assets - Current	Other Liabilities - Current
Derivatives not designated as hedging instruments:		
Foreign exchange forward contracts	$ —	$ 1,067,079
Total derivative instruments	$ —	$ 1,067,079

	December 31, 2009	
	Other Assets - Current	Other Liabilities - Current
Derivatives not designated as hedging instruments:		
Foreign exchange forward contracts	$ 7,307,485	$ —
Total derivative instruments	$ 7,307,485	$ —

	December 31, 2010	
	Other Assets - Current	Other Liabilities - Current
Derivatives not designated as hedging instruments:		
Foreign exchange forward contracts	$ 8,131,716	$ 15,988,091
Total derivative instruments	$ 8,131,716	$ 15,988,091

See Note 8. "Fair Value Measurement," to the Company's consolidated financial statements for information about the techniques the Company uses to measure the fair value of its derivative instruments.

TRINA SOLAR LIMITED

7. DERIVATIVE FINANCIAL INSTRUMENTS — continued

The following tables present the amounts related to derivative instruments affecting the Company's consolidated statements of operations for the years ended December 31, 2008, 2009 and 2010:

Derivative Type	Amount of Gain (Loss) on Derivatives Recognized in Income Year Ended December 31, 2008	Location of Gain (Loss) Recognized in Income on Derivatives
Derivatives not designated as hedging instruments:		
Foreign exchange forward contracts	$ (1,067,079)	Gain (loss) on change in fair value of derivative

Derivative Type	Amount of Gain (Loss) on Derivatives Recognized in Income Year Ended December 31, 2009	Location of Gain (Loss) Recognized in Income on Derivatives
Derivatives not designated as hedging instruments:		
Foreign exchange forward contracts	$ (1,590,098)	Gain (loss) on change in fair value of derivative

Derivative Type	Amount of Gain (Loss) on Derivatives Recognized in Income Year Ended December 31, 2010	Location of Gain (Loss) Recognized in Income on Derivatives
Derivatives not designated as hedging instrument:		
Foreign exchange forward contracts	$ 9,475,794	Gain (loss) on change in fair value of derivative

TRINA SOLAR LIMITED

8. FAIR VALUE MEASUREMENT

The Company does not have any assets or liabilities measured at fair value on a non-recurring basis for the years ended December 31, 2008, 2009 and 2010.

As of December 31, 2008, 2009 and 2010, information about inputs into the fair value measurements of the Company's assets and liabilities that are measured at fair value on a recurring basis in periods subsequent to their initial recognition is as follows:

		Fair Value Measurements at December 31, 2008 Using		
	Total Fair Value and Carrying Value on the Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	$	$	$	$
Liabilities:				
Foreign exchange forward contract	1,067,079	—	1,067,079	—
Total liabilities	1,067,079	—	1,067,079	—

		Fair Value Measurements at December 31, 2009 Using		
	Total Fair Value and Carrying Value on the Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	$	$	$	$
Assets:				
Investment in securities	4,034,296	4,034,296	—	—
Foreign exchange forward contract	7,307,485	—	6,711,233	596,251
Total assets	11,341,781	4,034,296	6,711,233	596,251

TRINA SOLAR LIMITED

8. FAIR VALUE MEASUREMENT — continued

		Fair Value Measurements at December 31, 2010 Using		
	Total Fair Value and Carrying Value on the Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	$	$	$	$
Assets:				
Investment in securities	295,715	295,715	—	—
Foreign exchange forward contract	8,131,716	—	5,622,316	2,509,400
Liabilities:				—
Foreign exchange forward contract	(15,988,091)	—		(15,988,091)
Net liabilities	(7,560,660)	295,715	5,622,316	(13,478,691)

A summary of changes in Level 3 foreign exchange forward contracts for the year ended December 31, 2009 and 2010 is as follows:

	As of December 31		
	2008	2009	2010
Beginning balance	$ —	—	596,251
Total gain or losses (realized/unrealized)	—		—
Included in earnings	—	596,251	(13,478,691)
Including in other comprehensive income	—	—	—
Settlements	—	—	(596,251)
Transfer in and/or out of level 3	—	—	—
Ending balance	$ —	596,251	(13,478,691)
The amount of total gains (losses) for the year included in earnings attributable to the change in unrealized gains (losses) relating to assets and liabilities still held at the reporting date	$ —	596,251	(13,478,691)

Following is a description of the valuation techniques that the Company uses to measure the fair value of assets and liabilities measured at fair value on a recurring basis under the fair value measurement guidance as well as the basis for classification of such instruments pursuant to the valuation hierarchy established under the guidance:

• Investment in trading securities — Investment in trading securities consist of marketable equity shares that are measured using the closing stock prices from the exchange market on which they are traded. Such investments are classified as Level 1 in the hierarchy.

TRINA SOLAR LIMITED

8. FAIR VALUE MEASUREMENT — continued

• Derivative assets and liabilities — The Company's derivative assets and liabilities relate to foreign exchange contracts involving major currencies. Since its derivative assets and liabilities are not traded on an exchange, the Company values them using valuation models. The valuation of certain foreign currency contracts used interest rate yield curves and foreign exchange rates as the significant inputs in the valuation models. These inputs are observable in active markets over the terms of the instruments the Company holds, and accordingly, such contracts are classified as Level 2 in the hierarchy. The fair value of the remaining foreign currency contracts are computed using the Monte Carlo pricing method based on assumptions supported by quoted market prices or rates, adjusted for the specific features of these instruments. Such contracts are classified as Level 3 in the hierarchy. The Company considers the effect of its own credit standing and that of its counterparties in valuations of its derivative financial instruments.

• Fair value of other assets and liabilities — The fair value of the Company's non-current portion of advance to suppliers as of December 31, 2010 is estimated by discounted future cash flow technique using an interest rate corresponding to debt with similar maturities on the measurement date. The fair value of the Company's convertible notes is estimated based on the quoted price from an over-the-count market on the valuation date.

The estimated fair value of the Company's other assets and liabilities, including accounts receivables, current portion of advances to suppliers, accounts payable, income tax payable, accrued expenses and short-term borrowings, approximates their carrying value at December 31, 2008, 2009 and 2010 due to their short-term nature. The carrying value of the Company's bank borrowings and long-term payables approximates their fair value as the balances were recently entered into and market rates had not fluctuated significantly prior to the balance sheet dates.

The following table presents the financial instruments for which fair value does not approximate carrying value as of December 31, 2008, 2009 and 2010:

	As of December 31, 2008		As of December 31, 2009		As of December 31, 2010	
	Carrying Value	Fair Value	Carrying Value	Fair Value	Carrying Value	Fair Value
Non-current portion of advance to suppliers	$ 130,351,513	$ 126,885,880	$ 105,188,020	$ 101,528,564	$ 93,248,404	$ 91,059,441
Convertible debt	129,803,300	69,000,000	133,035,624	244,000,000	136,262,524	212,387,520

TRINA SOLAR LIMITED

9. INVESTMENT IN SECURITIES

Trading securities outstanding at fiscal year-end were as following:

	December 31, 2010	
	Cost	Fair Value
	$	$
Marketable securities	975,636	295,715
Total	975,636	295,715

10. BANK BORROWINGS

The Company's bank borrowings consisted of the following:

	At December 31		
	2008	2009	2010
	$	$	$
Bank borrowings			
Short-term	248,557,724	234,329,742	117,055,761
Long-term, current portion	—	33,098,034	41,596,417
Total current	248,557,724	267,427,776	158,652,178
Long-term, non-current portion	14,631,434	182,516,037	299,977,412
Total	263,189,158	449,943,813	458,629,590

Short-term borrowings

The Company's short-term bank borrowings consisted of the following:

	At December 31		
	2008	2009	2010
	$	$	$
Short-term borrowings guaranteed by Trina	31,047,999	78,989,279	15,000,000
Short-term borrowings secured by restricted cash	20,846,779	1,990,098	—
Short-term borrowings secured by plants and machinery of Changzhou Trina Solar Energy Co., Ltd.	72,499,574	114,085,704	77,455,761
Unsecured short-term borrowings	64,569,207	39,264,661	24,600,000
Short-term borrowings guaranteed by third parties	57,794,165	—	—
Short-term borrowings secured by accounts receivable	1,800,000	—	—
Total	248,557,724	234,329,742	117,055,761

TRINA SOLAR LIMITED

10. BANK BORROWINGS — continued

The average interest rate on short term borrowings was 7.11%, 5.14% and 4.04% per annum for the years ended December 31, 2008, 2009 and 2010, respectively. The funds borrowed under the above short-term arrangements have no covenants or restrictions, and are repayable within one year.

The Company has short-term bank facilities of $483,851,907, $590,622,009 and $1,741,578,929 with various banks, of which $282,496,077, $327,899,446 and $650,880,259 had been drawn down and $201,355,830, $262,722,563 and $1,090,698,670 were available as of December 31, 2008, 2009 and 2010, respectively. Those short-term bank facilities are renewable annually by mutual agreement between the parties.

Long term borrowings

In 2008, the Company obtained $6,417,432 in new long-term bank loans, secured by building and machinery of Trina China, due 2011. The balance outstanding as of December 31, 2008 was $14,631,434. During the year ended December 31, 2008, the average interest rate was approximately 7.12% per annum.

On September 8, 2009, Trina China entered into a five-year credit facility (the "Facility") with a syndicate of banks for $303,279,927, of which $269,215,313 is designated solely for the expansion of the Company's production capacity with the remaining to be used to supplement working capital requirements once the capacity expansion is completed. The facility can be drawn down either in RMB or US dollar. As of December 31, 2010, the Company had drawn down $275,086,596 under the Facility. The remaining Facility can only be drawn down on or after completion of capacity expansion. The weighted average interest rate for borrowings under the Facility was 5.53%. Interest is payable quarterly or biannually in arrears for loans denominated in RMB and US dollars, respectively. The interest rate on RMB-denominated borrowings is 110% of the rate stipulated by the Chinese central bank for loans of similar duration. The interest rate on US dollar-denominated borrowings is the six month London Interbank Offered Rate plus 300 basis points. The Facility is guaranteed by Trina as well as the Company's chief executive officer and his wife and is further collateralized by the property, plant and equipment for which the Facility will be used to construct, and the related land use right. Borrowings outstanding as of December 31, 2010 are payable on a biannual basis, commencing October 27, 2011. For purposes of the expansion, the Company is required to match Facility draws with an equal amount of cash from sources other than the Facility. The Facility contains certain financial covenants which require that specified debt to total assets ratio, return on net equity and income to interest ratio be maintained. The Company was in compliance with the covenants as of December 31, 2010.

On January 11, 2010, Trina Solar (Luxembourg) S.A.R.L and Chinese Country Development Bank ("CDB") entered into a fifteen-year credit facility (the "CDB Facility") for EUR 100.0 million, which is designated solely for the construction of 28.8MW in project assets. As of December 31, 2010, the Company had drawn down EUR 50.0 million ($66.5 million) under the CDB Facility. The weighted-average interest rate for the borrowings was 4.00% for the year ended December 31, 2010 and is computed as the 6-month EURIBOR plus 300 basis points. The facility is guaranteed by Trina China. The Company is required to match the Facility draws with the construction of the solar plants.

TRINA SOLAR LIMITED

10. BANK BORROWINGS — continued

Future principal payments under the above long-term borrowings as of December 31, 2010 are as follows:

Fiscal Years Ending December 31,	$
2011	41,596,417
2012	80,685,071
2013	98,510,083
2014	96,514,418
Thereafter	24,267,840
Total	341,573,829

11. CONVERTIBLE SENIOR NOTES

On July 23, 2008, the Company issued $138 million of 4% Convertible Senior Notes (the "Notes"). The Notes mature on July 15, 2013 and bear interest at a rate of 4.00% per annum, payable in arrears semi-annually on January 15 and July 15, beginning January 15, 2009.

Conversion. The initial conversion rate is 59.0318 ADSs per $1,000 initial principal amount, which represents an initial conversion price of approximately $16.94 per American Depository Share ("ADS"). The Notes are convertible at any time prior to maturity. The conversion rate is subject to change for certain anti-dilution events and upon a change in control ("a Fundamental Change"). If the holders elect to convert the Notes upon a Fundamental Change, the conversion rate will increase by a number of additional shares as determined by reference to an adjustment schedule based on the date on which the change in control becomes effective and the price paid per ADS in the transaction (referred to as the "Fundamental Change Make-Whole Premium"). However, the conversion rate, including any additional ADSs added to the conversion rate in connection with a Fundamental Change, will not exceed 71.4286 ADSs (which is equal to a conversion price of $14.00 per ADS).

Redemption. The holders may require the Company to repurchase all or portion of the Notes for cash on July 15, 2011, or upon a Fundamental Change, at a repurchase price equal to 100% of the principal amount, plus accrued and unpaid interest. In the event of default, as defined in the agreement, the holders of 25% or more of the Notes may immediately require the Company to redeem the Notes and associated interest. As of December 31, 2010, the Company classified the Notes as a current liability on the consolidated balance sheets as the holders have the option to redeem the Notes on July 15, 2011. As of December 31, 2010, the Company classified the Notes as a current liability on the consolidated balance sheets as the holders have the option to redeem the Notes on July 15, 2011.

Proceeds to the Company were $132,392,740, net of issuance costs of $5,607,260, which are being amortized over the period from July 23, 2008, the date of issuance, to July 15, 2011, the earliest redemption date, using the effective interest method. Amortization expense for the year ended December 31, 2008, 2009 and 2010 was $1,783,387, $3,905,195 and $3,899,771, respectively.

TRINA SOLAR LIMITED

11. CONVERTIBLE SENIOR NOTES — continued

Share Lending Agreement. Concurrent with the offering of the Notes, the Company issued 8,146,388 ADSs at a price equal to par, or $0.0005 per ADS (the "Loaned Shares"), to one of the underwriters of the Notes ("Underwriter"). The purpose of the Loaned Shares is facilitating privately negotiated transactions in which the ultimate holder of the Notes (the "ADS Borrower") may elect to hedge their investment in the Notes.

The Loaned Shares must be returned to the Company by the earliest of (a) the maturity date of the Notes, July 15, 2013, (b) upon the Company's election to terminate the Share Lending Agreement at any time after the later of (x) the date on which the entire principal amount of the Notes ceases to be outstanding, and (y) the date on which the entire principal amount of any additional convertible securities that the Company has in writing consented to permit the ADS Borrower to hedge under the Share Lending Agreement ceases to be outstanding, in each case, whether as a result of conversion, redemption, repurchase, cancellation or otherwise; and (c) the termination of the Share Lending Agreement. The Company is not required to make any payment to the Underwriter or ADS Borrower upon the return of the Loaned Shares.

The Underwriter has agreed to post collateral, either in cash or other assets, having a market value equal to at least 100% of the market value of the Loaned Shares during the term of the Share Lending Agreement. The Company may notify the Underwriter if the fair value of such collateral is lower than the fair value of the Loaned Shares by more than $100,000. The Company has no right to sell or re-pledge the collateral. If the Underwriter is unable to return the Loaned Shares when required by the terms of the Share Lending Agreement, the Company may take delivery of the collateral equal to the fair value of the Loaned Shares.

The Underwriter is required to remit to the Company any dividends paid to the holders of the Loaned Shares. The Underwriter has agreed not to vote the Loaned Shares to the extent it is the shareholder of record. An ADS Borrower has the ability to vote without restriction.

The Company has accounted for the Share Lending Agreement at fair value and recognized it as an issuance cost associated with the convertible debt offering (see Note 20). As a result, additional debt issuance costs of $4.1 million were recorded on the issuance date with a corresponding increase to additional paid-in capital. The debt issuance costs are amortized over the life of the Notes using the effective interest method.

Although legally issued, the Company has not considered the Loaned Shares issued for accounting purposes. As a result, any cash collateral, to the extent posted by the ADS Borrower, is not considered attributable to the issuance of shares. To the extent cash collateral is posted, the Company will record the cash as an asset on its balance sheet with an offsetting liability recorded to reflect the collateral receipt as the proceeds of a borrowing. To the extent the ADS Borrower is in default under the Share Lending Agreement, non-cash collateral would likewise be recorded on the Company's consolidated balance sheet. As of December 31, 2010, the ADS Borrower has posted non-cash collateral and the ADS Borrower is not in default.

TRINA SOLAR LIMITED

12. ACCRUED WARRANTY COSTS

The movement of the Company's accrued warranty costs is summarized below:

	For the year ended December 31,		
	2008	2009	2010
	$	$	$
Beginning balance	4,486,135	12,473,142	21,023,381
Warranty provision	7,987,007	8,550,239	17,895,942
Warranty costs incurred	—	—	(208,449)
Ending balance	12,473,142	21,023,381	38,710,874

13. SHARE-BASED COMPENSATION

The Company measures share-based compensation cost on the grant date at the fair value of the award and recognizes this cost as an expense over the grant recipients' requisite service periods.

The following table presents the Company's share-based compensation expense by type of award:

	2008	2009	2010
	$	$	$
Share options	483,546	1,041,868	1,882,511
Restricted shares	3,541,234	3,236,634	4,072,536
Total share-based compensation expense	4,024,780	4,278,502	5,955,047

Restricted shares

In July 2006, the Company adopted the Share Incentive Plan (the "Share Incentive Plan") upon which the Compensation Committee (the "Committee") of the Board of Directors can authorize to make awards of Restricted Shares to any participant selected by the Committee in such amounts under terms and conditions as determined by the Committee. Restricted Shares shall be subject to restrictions on transferability and other restrictions as the Committee may impose (including, without limitation, limitations on the right to vote Restricted Shares or the right to receive dividends on the Restricted Share). These restrictions may lapse separately or in combination at such times, pursuant to such circumstances, in such installments, or otherwise, as the Committee determines at the time of the grant of the Award or thereafter.

TRINA SOLAR LIMITED

13. SHARE-BASED COMPENSATION — continued

The following is a summary of activities under the Plan:

	Number of shares	Weighted average grant date fair value
Non-vested at January 1, 2010	41,139,713	$ 0.28
Granted	27,528,391	$ 0.41
Vested	(12,028,839)	$ 0.25
Repurchased	(9,057,633)	$ 0.36
Nonvested at December 31, 2010	47,581,632	$ 0.35

The fair value of the restricted shares was based on the market price on the date of grant.

As of December 31, 2010 there was $13,474,510 of total unrecognized compensation cost related to nonvested share-based compensation arrangements, which is expected to be recognized over a weighted-average period of 3.50 years. The total fair value of shares vested during the years ended December 31, 2008, 2009, and 2010 was $5,723,692, $8,960,326 and $13,032,862, respectively.

In June and July 2008, the Company accelerated the vesting of 1,365,397 restricted shares upon the resignation of two senior executives. The modification gave rise to incremental compensation cost of $417,791 which was recognized as compensation expense in 2008.

Share Options

In May 2008, the Company revised the Share Incentive Plan and introduced stock options as a compensation instrument to its employees. Under the terms of the revised Share Incentive Plan, share options are granted to employees at exercise prices equal to the Company's share price on the grant date. The Company's stock options expire five years from their grant date and generally vest one third per annum on the anniversary of the grant date.

During 2008, 2009 and 2010, the Company granted 14,512,157, 15,419,650 and 21,630,267 share options, respectively, to its board of directors and employees. Those share options will vest one third per annum on the anniversary of the grant date.

TRINA SOLAR LIMITED

13. SHARE-BASED COMPENSATION — continued

Share Options — continued

A summary of the option activity is as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Options outstanding at January 1, 2010	24,337,277	0.22		
Granted	21,630,267	0.46		
Exercised	(4,503,300)	0.24		
Cancelled or Forfeited	(6,192,521)	0.33		
Options outstanding at December 31, 2010	35,271,723	0.35	6.70	4,290,081
Options vested or expected to vest at December 31, 2010	29,452,248	0.35	6.75	3,347,285
Options exercisable at December 31, 2010	4,776,616	0.26	5.71	985,768

Total intrinsic value of options exercised for the years ended December 31, 2008, 2009 and 2010 were $nil, $409,039 and $1,020,370, respectively. The weighted-average grant date fair value of options granted during the years ended December 31, 2008, 2009 and 2010 was $0.21, $0.11 and $0.17, respectively, computed using the Black-Scholes-Merton closed-form option valuation model using the following weighted average assumptions:

	2008	2009	2010
Risk free rate of return	2.03%	1.30%	1.26%
Expected life	3.50	3.50	3.50
Volatility ratio	70.7%	88.9%	81.80%
Dividend yield	—	—	—

The Company estimated the expected life, which represents its best estimate of the period of time from the grant date that it expects the stock options to remain outstanding, using the simplified method. Under this method, the Company estimates the expected life of its stock options as the mid-point between their time to vest and their contractual term. The Company applied the simplified method because it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected life due to the limited period of time that has elapsed since its first option grant.

The Company estimated the expected volatility upon historical volatility of its own stock price. The Company used U.S. Treasury rates in effect at the time of the grants for the risk-free rates.

As of December 31, 2010, the Company had $3,324,289 of unrecognized share-based compensation cost related to unvested share options, which it expects to recognize over a weighted-average period of 2.07 years.

TRINA SOLAR LIMITED

14. TAX EXPENSE

The Company mainly operates in PRC, Singapore, Switzerland, United States, Japan and Hong Kong. In 2010, the Company established several entities in various jurisdictions.

Cayman Islands

Under the current laws of the Cayman Islands, the Company is not subject to tax on income or capital gain.

Hong Kong

The Company's fully-owned subsidiary, Mutual Luck Enterprises Limited ("TML") was subject to Hong Kong profit tax at a rate of 17.5%, 16.5% and 16.5% in 2008, 2009 and 2010, respectively. No Hong Kong profit tax has been provided as TML has not had assessable profit that was earned in or derived from Hong Kong during the years presented.

Singapore

The Company's fully-owned subsidiary, Trina Solar Singapore Pte. Ltd. ("TSI") and Trina Solar Energy Development Pte. Ltd. ("TED") were subject to Singapore profit tax at a rate of 17% in 2009 and 2010. No Singapore profit tax has been provided as TSI and TED did not have assessable profit that was earned in or derived from Singapore during the year presented.

Switzerland

The Company's fully owned subsidiary, Trina Solar (Switzerland) Ltd ("TSW") was subject to Switzerland profit tax at an effective rate of 10.12% in 2010.

United States

The Company's fully owned subsidiaries, Trina Solar (U.S.) Inc. ("TUS"), Trina Solar (U.S.) Development LLC ("TUP") and TP-CA-SOUTH LLC ("TP-CA") were subject to United States profit tax at a rate of 40% in 2010.

Japan

The Company's fully owned subsidiary, Trina Solar (Japan) Limited ("TJP") was subject to Japan profit tax at a rate of 40% in 2010.

TRINA SOLAR LIMITED

14. TAX EXPENSE — continued

PRC

Under PRC's Enterprise Income Tax Law ("New EIT Law"), effective from January 1, 2008, domestically-owned enterprises and FIEs are subject to a uniform tax rate of 25%. In April 2009, the Company received notification from a PRC tax authority which revoked a previous approval for the tax holiday on taxable income related to registered capital contributions made in 2008. As a result, during the year ended December 31, 2009, the Company recorded additional income tax expense of $6,513,160 for taxable profit arising from Trina China subsequent to January 1, 2008.

Under the New EIT Law, the EIT rate shall be reduced to 15% for stated-encouraged High and New Technology Enterprises ("HNTE"). Trina China obtained a HNTE certificate in 2008 and was therefore entitled to a reduced EIT rate of 15% from 2008 to 2010.

The Company makes an assessment of the level of authority for each of its uncertain tax positions (including the potential application of interests and penalties) based on their technical merits, and has measured the unrecognized benefits associated with such tax positions. At December 31, 2010, the amounts of gross unrecognized tax benefits were $2,348,032. The aforementioned liability is recorded in liability for uncertain tax positions in the consolidated balance sheet. In accordance with the Company's policies, it accrues and classifies interest and penalties related to unrecognized tax benefits as a component of the income tax provision. The Company does not anticipate any significant increase to its liability for unrecognized tax benefit within the next 12 months.

There is no unrecognized tax benefit for the years ended December 31, 2008 and 2009. The following table indicates the changes to the Company's unrecognized tax benefits for the year ended December 31, 2010.

	$
Beginning balance	—
Gross increases — additions for tax positions for the year	2,348,032
Ending balance	2,348,032

TRINA SOLAR LIMITED

14. TAX EXPENSE — continued

According to the PRC Tax Administration and Collection Law, the statute of limitations is three years if the underpayment of income taxes is due to computational errors made by the taxpayer. The statute of limitations will be extended to five years under special circumstances, which are not clearly defined, but an underpayment of income tax liability exceeding RMB100,000 is specifically listed as a special circumstance. In the case of a transfer pricing related adjustment, the statute of limitations is ten years. There is no statute of limitations in the case of tax evasion. The Company's PRC subsidiaries are therefore subject to examination by the PRC tax authorities from 2005 through 2010 on non-transfer pricing matters, and from 2000 through 2010 on transfer pricing matters.

The provision for income taxes by tax jurisdictions for the years ended December 31, 2008, 2009 and 2010 is as follows:

	Years ended December 31,		
	2008	2009	2010
	As adjusted	As adjusted	
	$	$	$
Profit (loss) from operations before income tax:			
PRC	77,879,740	135,683,290	181,458,007
Switzerland	—	—	200,309,460
United States	—	—	7,704,044
Other jurisdictions	(12,531,179)	(14,761,022)	(29,949,333)
Total profit before income tax	65,348,561	120,922,268	359,522,178
Current tax expense (benefit):			
PRC	8,051,558	35,248,557	32,166,137
Switzerland	—	—	21,802,460
United States	—	—	3,457,769
Others	—	—	99,283
Deferred tax benefit:			
PRC	(3,442,023)	(10,552,726)	(9,011,416)
Switzerland	—	—	(68,883)
United States	—	—	(376,152)
Total income tax expense	4,609,535	24,695,831	48,069,198

TRINA SOLAR LIMITED

14. TAX EXPENSE — continued

A reconciliation between the provision for income tax computed by applying the applicable enterprise income tax rate to income before income taxes and the actual provision for income taxes is as follows:

	Years ended December 31,		
	2008	2009	2010
Applicable enterprise income tax rate	25.0%	25.0%	25.0%
Different tax rate in other jurisdiction	4.8%	2.9%	-5.5%
Effect of reduced tax rate	-21.1%	-11.1%	-5.2%
Tax credits for purchase of domestic equipment	-1.1%	—%	—%
Effect of different reversal rate	-9.4%	-1.6%	-2.4%
Effect of change in valuation allowance	8.9%	0.8%	0.8%
Cancellation of preferential tax rate	—	4.7%	—%
Tax effect of permanent differences	—	-0.3%	0.0%
Unrecognized tax benefits	—	—	0.7%
	7.1%	20.4%	13.4%

The aggregate amount and per share effect of the tax holiday are as follows:

	Years ended December 31,		
	2008	2009	2010
	$	$	$
The aggregate effect	$ 13,896,436	—	—
Per share effect—basic	$ 0.01	—	—
Per share effect—diluted	$ 0.01	—	—

TRINA SOLAR LIMITED

14. TAX EXPENSE — continued

The principal components of its deferred income tax assets are as follows:

	Years ended December 31,		
	2008	2009	2010
	$	$	$
Deferred tax assets:			
Bad debts provision and others	240,994	1,759,248	7,673,965
Deferred revenues	408,378	2,693,787	1,005,139
Accrued expenses	1,641,155	3,678,010	6,147,803
Long-term payables	—	4,352,416	4,921,134
Inventory write-down	4,842,997	4,086,801	4,049,350
Advance to suppliers provision	1,374,293	1,051,551	1,793,446
Warranty provision	2,807,489	5,255,845	9,677,718
Total deferred tax assets	11,315,306	22,877,658	35,268,555
Valuation allowance on deferred tax assets	(6,398,723)	(7,408,349)	(10,342,795)
Net deferred tax assets	4,916,583	15,469,309	24,925,760
Analysis as:			
Current	2,109,095	5,543,246	10,258,325
Noncurrent	2,807,488	9,926,063	14,667,435
Total	4,916,583	15,469,309	24,925,760

Valuation allowances have been established for deferred tax assets based on a more likely than not threshold. As of December 31, 2010, a valuation allowance of $10,342,795 has been recorded in order to measure only the portion of the deferred tax asset that more likely than not will be realized.

Undistributed earnings of the Company's subsidiaries of approximately $551.5 million at December 31, 2010 are considered to be indefinitely reinvested and accordingly, no provision for income taxes has been provided.

TRINA SOLAR LIMITED

15. DISTRIBUTION OF PROFIT

Pursuant to the relevant laws and regulations for foreign investment enterprises in the PRC and the articles of association of Trina China, the Company is required to maintain two statutory non-distributable reserves, a general reserve fund and a staff welfare and bonus fund. Appropriations to such reserves are made out of net profit after taxation of Trina China. Trina China is required to transfer 10% of its profit after taxation, as reported in its PRC statutory financial statements, to the general reserve fund until the balance reaches 50% of its registered capital. The general reserve fund may be used to make up prior year losses incurred and, with approval from the relevant government authority, to increase paid-in capital. Trina China is also required to allocate a portion of its net profit after taxation to its staff welfare and bonus fund. However, the amount to be allocated to the staff welfare and bonus fund is at the sole discretion of the board of directors. PRC regulations currently permit payment of dividends out of Trina China's accumulated profits only as determined in accordance with PRC accounting standards and regulations. As a result of these PRC laws and regulations, Trina China is restricted in its ability to transfer a portion of net profit in the form of dividends.

The amount of the non-distributable general reserve fund was $14,212,644, $25,311,389 and $41,302,496 as of December 31, 2008, 2009 and 2010, respectively. The amount of the welfare fund and bonus fund was $Nil as of December 31, 2008, 2009 and 2010, respectively, as the Board of Directors elected not to make any appropriations to this fund.

The amount that is not subject to restrictions, and which may be transferred from Trina China in the form of dividends, loans or advances, is $126,192,486, $226,081,199 and $370,001,161 as of December 31, 2008, 2009 and 2010, respectively.

As a result of these PRC laws and regulations, the Company's PRC subsidiary is restricted in its ability to transfer the registered capital and general reserve fund to Trina in the form of dividends, loans or advances and the restricted portion amounted to $204,212,644, $410,311,389 and $497,302,496 as of December 31, 2008, 2009 and 2010, respectively.

TRINA SOLAR LIMITED

16. RELATED PARTY TRANSACTIONS AND BALANCES

Related party balances

The amounts due to related parties is $nil, $nil and $668,983 as of December 31, 2008, 2009 and 2010, respectively, include payable to Changzhou Youze S&T Co., Ltd and Changzhou Junhe mechanical Co., Ltd. controlled by Mr. Weizhong Wu and Mr. Weifeng Wu, respectively, the brother of Ms. Chunyan Wu, for Trina China's purchase of wafers.

Related party transactions

In 2008, 2009 and 2010 Trina China purchased wafers for a total price of RMB79,416,882 (US$11,500,242), RMB36,980,734 (US$5,415,446) and RMB 69,890,654 (US$10,553,196), respectively, from Changzhou Youze S&T Co., Ltd., a company controlled by Mr. Weizhong Wu, the brother of Ms. Chunyan Wu. The transactions were approved by the audit committee.

In 2009, Mr. Jifan Gao and his wife, Ms Chunyan Wu, have guaranteed repayment of the Facility (see Note 10), under which $275,086,596 was outstanding as of December 31, 2010.

In 2010, Trina China purchased equipment maintenance services for a total price of RMB10,811,133 (US$1,611,704) from Changzhou Junhe mechanical Co., Ltd., a company controlled by Mr. Weifeng Wu, the brother of Ms. Chunyan Wu.

In 2010, Trina China provided PV technical consulting services for a total price of RMB 3,000,000 (US$452,987) to Shanghai Zhenhe New Energy S&T Development Co., Ltd., a company invested by Trina China with 20% shares. The transactions were approved by the audit committee.

17. COMMITMENTS AND CONTINGENCIES

a) Capital commitments

As of December 31, 2010, the Company's commitments to purchase property, plant and equipment is approximately $177.6 million associated with the expansion of the Company's solar module business.

b) Materials purchase commitments

As of December 31, 2010, the Company had entered into certain long-term silicon procurement contracts, under which the Company agreed to purchase silicon materials in an aggregate amount of approximately $14.6 billion over the next four to seven years.

TRINA SOLAR LIMITED

17. COMMITMENTS AND CONTINGENCIES — continued

c) Operating lease commitments

The Company had operating lease agreements principally for its office properties in the PRC. The Company's lease expense was $279,733, $827,707 and $1,988,081 for the years ended December 31, 2008, 2009 and 2010, respectively.

Future minimum lease payments are as follows:

Year ending December 31	
2011	885,933
2012	1,102,148
Total	1,988,081

d) Contingencies

In July 2010 the Company was brought aware of a contingent liability in the form of legal action brought against its Hong Kong subsidiary, Top Energy International Limited ("TEI"). The action stems from a 2008 transaction involving the exchange of silicon materials and subsequent claims involving material qualities. Given the claims were made outside contractual time limitations and upon disputed testing methodology, the Company believes the claimant would be unlikely to prevail. If, however, the claimant proved successful in such legal actions, the Company may become obligated to incur damages of up to approximately $4.0 million.

TRINA SOLAR LIMITED

18. SEGMENT INFORMATION

The Company operates in a single reportable business segment which is comprised of the production of mono- and multi-crystalline silicon ingots, wafers, cells and related products and the subsequent assembly and marketing of solar modules, which are panels packed with interconnected solar cells that convert sunlight into electricity. The Company's chief operating decision maker is the chief executive officer of the Company. The basis for attributing revenue from external customers to individual countries is the customers' country of incorporation.

The following table summarizes the Company's net revenues generated from different geographic locations:

	Years ended December 31,		
	2008	2009	2010
	$	$	$
Europe:			
- Germany	198,529,460	286,219,970	447,315,689
- Spain	270,548,479	101,849,024	404,130,517
- Italy	149,684,950	166,062,299	409,560,784
- Belgium	114,418,063	173,422,962	87,327,868
- Others	22,222,876	60,598,197	87,786,895
Europe Total	755,403,828	788,152,452	1,436,121,753
China	30,390,236	24,434,338	70,782,741
Mongolia	—	79,848	—
United States	14,699,248	13,238,207	262,300,116
Others	31,407,540	19,230,730	88,484,664
Total net revenues	831,900,852	845,135,575	1,857,689,274

All the identifiable long-lived assets of the Company are located in the PRC.

TRINA SOLAR LIMITED

19. MAJOR CUSTOMERS AND SUPPLIERS

The following table summarizes a customer which contributed greater than 10% of net revenue or accounts receivable:

	Net revenue			Accounts receivable		
	Year ended December 31,			December 31,		
	2008	2009	2010	2008	2009	2010
	$	$	$	$	$	$
Company A	58,430,433	80,339,735	26,553,606	55,796,138	35,086,664	13,326,109

The following table summarizes suppliers which contributed to greater than 10% of total advances to suppliers:

	Advance to suppliers		
	December 31,		
	2008	2009	2010
	$	$	$
Company I	62,810,715	60,909,170	55,231,207
Company II	16,111,053	15,867,279	35,987,103
Company III	24,000,000	21,600,000	15,593,040
Company IV	15,907,300	14,269,020	6,450,121
Company V	5,875,000	—	—
Company VI	—	17,744,468	10,611,000

TRINA SOLAR LIMITED

20. CHANGE IN METHOD OF SHARE LENDING FACILITIES AGREEMENT

On January 1, 2010, the Company adopted ASC 470-20 (former EITF 09-1, "Accounting for Own-Share Lending Arrangements in Contemplation of Convertible debt Issuance or Other Financing"). Accordingly, the share lending arrangement has been measured at fair value and recognized as an issuance cost associated with the convertible debt offering. As a result, additional debt issuance costs of $4.1 million were retrospectively recorded on the issuance date with a corresponding increase to additional paid-in capital. The debt issuance costs have also been retrospectively amortized over the life of the convertible notes. The adoption of ASC 470-20 resulted in additional interest expenses of $621,246 and $1,357,813 in year 2008 and 2009, respectively. Fair value of the loan shares as of December 31, 2010 is $190,788,407. The unamortized amount of the issuance cost associated with the share lending arrangement as of December 31, 2010 is $729,127. The issuance cost associated with the share lending arrangement as of December 31, 2010 was included in convertible notes in the liabilities of the consolidated balance sheet.

Consolidated Statement of Operations — 2008

	As previously reported	As adjusted	Effect of change
	$	$	$
Interest expenses	(23,936,455)	(24,557,701)	(621,246)
Income before tax	65,969,807	65,348,561	(621,246)
Net Income	61,360,272	60,739,026	(621,246)

Consolidated Statement of Operations — 2009

	As previously reported	As adjusted	Effect of change
	$	$	$
Interest expenses	(25,737,266)	(27,095,079)	(1,357,813)
Income before tax	122,280,081	120,922,268	(1,357,813)
Net Income	97,584,250	96,226,437	(1,357,813)

TRINA SOLAR LIMITED

20. CHANGE IN METHOD OF SHARE LENDING FACILITIES AGREEMENT — continued

Consolidated Balance Sheet — December 31, 2008

	As previously reported	As adjusted	Effect of change
	$	$	$
Convertible notes	133,248,054	129,803,300	(3,444,754)
Total liabilities	507,059,316	503,614,562	(3,444,754)
Additional paid in capital	308,898,326	312,964,326	4,066,000
Retained earnings	112,712,460	112,091,214	(621,246)
Total shareholder's equity	433,056,511	436,501,265	3,444,754

Consolidated Balance Sheet — December 31, 2009

	As previously reported	As adjusted	Effect of change
	$	$	$
Convertible notes	135,122,565	133,035,624	(2,086,941)
Total Liabilities	871,472,972	869,386,031	(2,086,941)
Additional paid in capital	455,453,178	459,519,178	4,066,000
Retained earnings	210,296,710	208,317,651	(1,979,059)
Total shareholder's equity	677,225,113	679,312,054	2,086,941

Consolidated Statement of Cash Flow — 2008

	As previously reported	As adjusted	Effect of change
	$	$	$
Net income	61,360,272	60,739,026	(621,246)
Amortization of convertible bonds	1,162,141	1,783,387	621,246
Net cash used in operating activities	(30,920,185)	(30,920,185)	—

Consolidated Statement of Cash Flow — 2009

	As previously reported	As adjusted	Effect of change
	$	$	$
Net income	97,584,250	96,226,437	(1,357,813)
Amortization of convertible bonds	2,547,382	3,905,195	1,357,813
Net cash provided by operating activities	101,150,490	101,150,490	—

TRINA SOLAR LIMITED

Appendix 1 — Subsidiaries of Trina

The following table sets forth information concerning Trina's subsidiaries:

Name of company	Place and date of incorporation/ establishment	Attributable equity interest held	Principal activity
Changzhou Trina Solar Energy Co., Ltd.	PRC December 26, 1997	100%	Manufacturing and trading solar modules
Top Energy International Limited	Hong Kong July 18, 2006	100%	Procuring silicon and and arranging tolling manufacturing
Trina Solar Korea Limited	Korea September 22, 2008	100%	Sales and marketing modules in Korea
Trina Solar (Singapore) Pte. Ltd.	Singapore August 5, 2009	100%	Investment holding
Trina Solar (Luxembourg) Holdings S.A.R.L.	Luxembourg August 6, 2009	100%	Investment holding
Trina Solar (U.S.) Inc.	U.S.A September 3, 2009	100%	Sales and marketing modules in United States of America
Trina Solar (U.S.) Holding Inc.	U.S.A September 8, 2009	100%	Investment holding
Trina Solar (Germany) GmbH	Germany September 28, 2009	100%	Sales and marketing modules in Germany
Trina Solar (Schweiz) AG	Switzerland October 29, 2009	100%	European sales center
Trina Solar (Luxembourg) S.A.R.L.	Luxembourg November 6, 2009	100%	Investing and trading solar power projects
Trina Solar (Spain) S.L.	Spain December 15, 2009	100%	Sales and marketing modules in Spain
Trina Solar (Italy) S.r.l.	Italy December 21, 2009	100%	Sales and marketing modules in Italy

TRINA SOLAR LIMITED

Appendix 1 — Subsidiaries of Trina — continued

Name of company	Place and date of incorporation/ establishment	Attributable equity interest held	Principal activity
Trina Solar (Japan) Limited	Japan February 8, 2010	100%	Sales and marketing modules in Japan
Trina Solar Energy Development Pte. Ltd.	Singapore April 28, 2010	100%	Trading solar modules (including import and export)
Mutual Luck Enterprises Limited,	Hong Kong June 6, 2010	100%	Sales and marketing modules in Hong Kong.
Trina Solar (Changzhou) Science and Technology Co., Ltd	PRC June 23, 2010	100%	Manufacturing and trading solar modules
Trina Solar Energy (Shanghai) Co., Ltd,	PRC July 5, 2010	100%	Sales and marketing modules in China
Trina Solar (U.S.) Development LLC	U.S.A August 27, 2010	100%	Developing solar power project Entity.
TP-CA-SOUTH LLC	U.S.A August 27, 2010	100%	Sales and developing solar power project
Fotosolare Quarta S.r.l,	Italy December 5, 2008	Variable interest	Developing solar power project Entity
Manduria Uno S.r.l.	Italy January 28, 2010	Variable interest	Developing solar power project Entity
Avetrana Tre S.r.l.	Italy January 28, 2010	Variable interest	Developing solar power project Entity
Carmiano Due S.r.l.	Italy January 28, 2010	Variable interest	Developing solar power project Entity
Carmiano Cinque S.r.l.	Italy January 28, 2010	Variable interest	Developing solar power project Entity
Lucania S.r.l	Italy July 16, 2010	Variable interest	Developing solar power project Entity
Lucania Pomarico Uno S.r.l	Italy September 17, 2010	Variable interest	Developing solar power project Entity
Lucania Pomarico Due S.r.l	Italy September 17, 2010	Variable interest	Developing solar power project Entity
Lucania Pomarico Tre S.r.l	Italy September 17, 2010	Variable interest	Developing solar power project Entity

Schedule

TRINA SOLAR LIMITED

Additional Information — Financial Statement Schedule I
These financial statements have been prepared in conformity with Accounting Principles

Generally Accepted in the United States

TRINA SOLAR LIMITED

NOTES TO SCHEDULE I

Schedule I has been provided pursuant to the requirements of Rule 12-04(a) and 4-08(e)(3) of Regulation S-X, which require condensed financial information as to financial position, changes in financial position and results of operations of a parent company as of the same dates and for the same periods for which audited consolidated financial statements have been presented as the restricted net assets of Trina's consolidated and unconsolidated subsidiaries not available for distribution to Trina as of December 31, 2008, 2009 and 2010 of $204,212,644, $410,311,389 and $497,302,496 respectively, exceeded the 25% threshold. The condensed financial information has been prepared using the same accounting policies as set out in the accompanying consolidated financial statements except that the equity method has been used to account for investments in its subsidiaries.

Guarantee

As of December 31, 2010, Trina Solar Limited ("TSL") was the guarantor for Trina China's five-year Facility, which amounted to $275.1 million as of December 31, 2010 (see Note 10).

TRINA SOLAR LIMITED

BALANCE SHEETS
(In U.S. dollars)

	As of December 31,		
	2008	2009	2010
	As adjusted	As adjusted	
ASSETS			
Current assets:			
Cash and cash equivalents	976,882	100,836,223	99,283,656
Investment in securities	—	4,034,296	295,715
Other receivables	574,718	481,417	240,080
Total current assets	1,551,600	105,351,936	99,819,451
Deferred convertible bond issuance cost	1,710,214	1,160,999	493,728
Amount due from group companies	223,938,675	63,665,428	160,680,006
Investment in subsidiaries	343,897,225	651,028,292	1,053,946,999
TOTAL ASSETS	571,097,714	821,206,655	1,314,940,184
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Accrued expenses	4,793,149	8,858,977	5,030,568
Convertible notes	—	—	136,262,524
Total current liabilities	4,793,149	8,858,977	141,293,092
Convertible notes	129,803,300	133,035,624	—
Total liabilities	134,596,449	141,894,601	141,293,092
Shareholders' equity:			
Ordinary shares ($0.00001 par value; 73,000,000,000 shares authorized, 2,958,183,059, 3,486,901,296 and 3,964,085,354 shares issued and outstanding as of December 31, 2008, 2009 and 2010, respectively)	29,581	34,869	39,641
Additional paid-in capital	312,964,326	459,519,178	642,829,691
Retained earnings	112,091,214	208,317,651	519,770,631
Accumulated other comprehensive income	11,416,144	11,440,356	11,007,129
Total shareholders' equity	436,501,265	679,312,054	1,173,647,092
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	571,097,714	821,206,655	1,314,940,184

TRINA SOLAR LIMITED

STATEMENTS OF OPERATIONS
(In U.S. dollars)

	Year ended December 31,		
	2008	2009	2010
	As adjusted	As adjusted	
Revenue	—	—	331,563
Operating expenses			
Selling expenses	1,742,429	2,722,092	1,957,545
General and administrative expenses	7,156,768	8,337,343	10,760,015
Research and development expenses	257,948	396,239	438,181
Total operating expenses	9,157,145	11,455,674	13,155,741
Operating loss	(9,157,145)	(11,455,674)	(12,824,178)
Interest expense	(4,361,453)	(9,307,330)	(9,419,771)
Interest income	544,325	113,857	291,006
Equity in earnings of subsidiaries	73,713,299	116,875,584	331,756,996
Other income	—	—	1,650,607
Income before income taxes	60,739,026	96,226,437	311,454,660
Tax expense	—	—	(1,680)
Net income	60,739,026	96,226,437	311,452,980

TRINA SOLAR LIMITED

STATEMENTS OF CASH FLOWS
(In U.S. dollars)

	Year ended December 31,		
	2008	2009	2010
	As adjusted	As adjusted	
Operating activities:			
Net income	60,739,026	96,226,437	311,452,980
Equity in earnings of subsidiaries	(73,713,299)	(116,875,584)	(331,756,996)
Adjustments to reconcile net income to net cash used in operating activities:			
Share-based compensation	4,024,780	4,278,502	5,955,047
Amortization of convertible bond issuance costs	1,783,387	3,905,195	3,899,771
Changes in operating assets and liabilities:			
Other payable	(1,220,549)	6,782,686	(2,958,521)
Other receivable	(272,651)	(30,264)	235,920
Accrued expenses	3,823,128	(2,716,858)	(869,889)
Net cash used in operating activities	(4,836,178)	(8,429,886)	(14,041,688)
Investing activities:			
Investment in subsidiaries, net of cash acquired	(77,200,000)	(190,807,123)	(67,856,355)
Amounts due from group companies	(68,111,701)	156,814,803	(97,014,578)
Net cash used in investing activities	(145,311,701)	(33,992,320)	(168,870,933)
Financing activities:			
Proceeds from issuance of convertible notes payable, net of issuance costs	130,375,699	—	—
Proceeds from issuance of restricted shares to employees	—	744,732	1,088,976
Proceed from issuance of ordinary shares, net of issuance costs	—	141,536,815	176,271,078
Net cash provided by financing activities	130,375,699	142,281,547	177,360,054
Net change in cash and cash equivalents	(19,772,180)	99,859,341	(1,552,567)
Cash and cash equivalents at the beginning of the year	20,749,062	976,882	100,836,223
Cash and cash equivalents at the end of the year	976,882	100,836,223	99,283,656

* * * * *

EXHIBIT 8.1

List of Subsidiaries of Trina Solar Limited (the "Registrant")

Wholly-Owned Subsidiaries

1. Top Energy International Limited, a Hong Kong company
2. Changzhou Trina Solar Energy Co., Ltd., a PRC company
3. Trina Solar Korea Limited, a South Korean company
4. Trina Solar (Singapore) Pte. Ltd., a Singapore company
5. Trina Solar (Hong Kong) Enterprise Limited, a Hong Kong company
6. Trina Solar (Luxembourg) Holdings S.à.r.l, a Luxembourg company
7. Trina Solar (Luxembourg) S.à.r.l, a Luxembourg company
8. Trina Solar (Japan) Limited, a Japan company
9. Trina Solar (Italy) S.R.L., an Italy company
10. Trina Solar (Spain), Sociedad Limitada, a Spain company
11. Trina Solar (Switzerland) Ltd., a Switzerland company
12. Trina Solar (U.S.) Holding Inc., a U.S. company
13. Trina Solar (U.S.), Inc., a U.S. company
14. Trina Solar (Germany) GmbH, a Germany company
15. Trina Solar Energy Development Pte. Ltd., a Singapore company
16. Trina Solar Energy (Shanghai) Co., Ltd., a PRC company
17. Trina Solar (U.S.) Development LLC, a U.S. company
18. TP-CA-South LLC, a U.S. company
19. Trina Solar (Changzhou) Science and Technology Co., Ltd., a PRC company

EXHIBIT 12.1

CERTIFICATIONS

I, Jifan Gao, certify that:

1. I have reviewed this annual report on Form 20-F of Trina Solar Limited. (the "Company");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and

5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 18, 2011

By: /s/ Jifan Gao

Name: Jifan Gao

Title: Chairman and Chief Executive Officer

EXHIBIT 12.2

CERTIFICATIONS

I, Terry Wang, certify that:

1. I have reviewed this annual report on Form 20-F of Trina Solar Limited (the "Company");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the Company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and

5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent function):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 18, 2011

By: /s/ Terry Wang

Name: Terry Wang
Title: Chief Financial Officer

EXHIBIT 13.1

CERTIFICATIONS

In connection with the Annual Report of Trina Solar Limited (the "Company") on Form 20-F for the year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jifan Gao, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 18, 2011

By: /s/ Jifan Gao

Name: Jifan Gao

Title: Chairman and Chief Executive Officer

EXHIBIT 13.2

CERTIFICATIONS

In connection with the Annual Report of Trina Solar Limited (the "Company") on Form 20-F for the year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Terry Wang, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 18, 2011

By: /s/ Terry Wang

Name: Terry Wang

Title: Chief Financial Officer

Exhibit 15.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-160826 on Form F-3 and Nos. 333-144445 and 333-157831 on Form S-8 of our reports dated April 18, 2011, relating to the financial statements and financial statement schedule of Trina Solar Limited, and the effectiveness of Trina Solar Limited's internal control over financial reporting, appearing in this Annual Report on Form 20-F of Trina Solar Limited for the year ended December 31, 2010.

/s/ DELOITTE TOUCHE TOHMATSU CPA LTD.

Shanghai China

April 18, 2011