

Trina Solar LTD
Form 20-F
April 19, 2016
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, 2015

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)

Teresa Tan, Chief Financial Officer

No. 2 Tian He Road

Electronics Park, New District

Changzhou, Jiangsu 213031

People's Republic of China

Tel: (+86) 519 8548 2008

Fax: (+86) 519 8517 6025

E-mail: ir@trinasolar.com

(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)

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

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.

4,629,129,044 ordinary shares, par value \$0.00001 per share, as of December 31, 2015.

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:

Edgar Filing: Trina Solar LTD - Form 20-F

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

TABLE OF CONTENTS

<u>INTRODUCTION</u>		1
<u>PART I</u>		2
<u>Item 1.</u>	<u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u>	2
<u>Item 2.</u>	<u>OFFER STATISTICS AND EXPECTED TIMETABLE</u>	2
<u>Item 3.</u>	<u>KEY INFORMATION</u>	2
<u>Item 4.</u>	<u>INFORMATION ON THE COMPANY</u>	35
<u>Item 4A.</u>	<u>UNRESOLVED STAFF COMMENTS</u>	61
<u>Item 5.</u>	<u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u>	61
<u>Item 6.</u>	<u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u>	93
<u>Item 7.</u>	<u>MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u>	105
<u>Item 8.</u>	<u>FINANCIAL INFORMATION</u>	107
<u>Item 9.</u>	<u>THE OFFER AND LISTING</u>	107
<u>Item 10.</u>	<u>ADDITIONAL INFORMATION</u>	108
<u>Item 11.</u>	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	119
<u>Item 12.</u>	<u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u>	120
<u>PART II</u>		122
<u>Item 13.</u>	<u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>	122
<u>Item 14.</u>	<u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u>	122
<u>Item 15.</u>	<u>CONTROLS AND PROCEDURES</u>	122
<u>Item 16A.</u>	<u>AUDIT COMMITTEE FINANCIAL EXPERT</u>	123
<u>Item 16B.</u>	<u>CODE OF ETHICS</u>	123
<u>Item 16C.</u>	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	123
<u>Item 16D.</u>	<u>EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>	124
<u>Item 16E.</u>	<u>PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>	124

Edgar Filing: Trina Solar LTD - Form 20-F

<u>Item 16F.</u>	<u>CHANGE IN REGISTRANT S CERTIFYING ACCOUNTANT</u>	124
<u>Item 16G.</u>	<u>CORPORATE GOVERNANCE</u>	124
<u>Item 16H.</u>	<u>MINE SAFETY DISCLOSURE</u>	124
<u>PART III</u>		124
<u>Item 17.</u>	<u>FINANCIAL STATEMENTS</u>	124
<u>Item 18.</u>	<u>FINANCIAL STATEMENTS</u>	124
<u>Item 19.</u>	<u>EXHIBITS</u>	125

Table of Contents

INTRODUCTION

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

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

the avoidance of doubt, excluding shares that have been set aside in relation to any share incentive plan or convertible debt security.

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, 2013, 2014 and 2015.

We make no representation that the Renminbi or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. dollars or Renminbi, as the case may be, at any particular rate or at all. See Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry Fluctuations in exchange rates could adversely affect our business. On April 15, 2016, the noon buying rate was RMB6.4730 to \$1.00.

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

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

Not Applicable.

Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable.

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

The following selected consolidated statement of operations data (other than ADS data) for the years ended December 31, 2013, 2014 and 2015 and the selected consolidated balance sheets data as of December 31, 2014 and 2015 have been derived from our audited financial statements included elsewhere in this annual report. The selected consolidated financial data should be read in conjunction with those financial statements and the accompanying notes and Item 5. Operating and Financial Review and Prospects below. Our consolidated financial statements are prepared and presented in accordance with United States generally accepted accounting principles, or U.S. GAAP. Our historical results do not necessarily indicate our results expected for any future periods.

Our selected consolidated statements of operations data (other than ADS data) for the years ended December 31, 2011 and 2012 and our consolidated balance sheets data as of December 31, 2011, 2012 and 2013 have been derived from our audited consolidated financial statements, which are not included in this annual report.

	Year Ended December 31,				
	2011	2012	2013	2014	2015
	(in thousands, except for share, per share, per ADS, operating data and percentages)				
Consolidated Statement of Operations Data					
Net sales	\$ 2,047,902	\$ 1,296,655	\$ 1,774,971	\$ 2,286,119	\$ 3,035,512
Cost of sales	1,715,260	1,239,412	1,556,777	1,900,547	2,468,879
Gross profit	332,642	57,243	218,194	385,572	566,633
Operating expenses:					
Selling expenses	100,427	118,885	132,824	135,061	178,119

Edgar Filing: Trina Solar LTD - Form 20-F

General and administrative expenses	157,129	176,719	103,523	108,150	132,439
Research and development expenses	44,120	26,511	19,926	22,258	34,099
Provision for settlement of lawsuit with Solyndra					45,000
Total operating expenses	301,676	322,115	256,273	265,469	389,657
Income (loss) from operations	30,966	(264,872)	(38,079)	120,103	176,976
Foreign exchange (loss) gain	(27,435)	908	(13,576)	(21,934)	(25,139)
Interest expense	(35,021)	(51,887)	(48,445)	(34,886)	(52,252)
Interest income	3,056	8,552	3,958	2,793	2,862
Derivatives (loss) gain	(11,393)	8,542	2,180	3,422	4,065
Equity in income (loss) of equity method investees			(746)	(198)	1,741
Other income, net	9,317	6,797	9,442	7,448	7,539
(Loss) income before income taxes	(30,510)	(291,960)	(85,266)	76,748	115,792
Income tax (expense) benefit	(7,310)	25,405	13,030	(15,488)	(29,445)
Net (loss) income	(37,820)	(266,555)	(72,236)	61,260	86,347
Net loss (income) attributable to the non-controlling interests	(1)	(1)	210	(1,922)	(9,832)
Net (loss) income attributable to Trina Solar Limited					
Shareholders	\$ (37,820)	\$ (266,555)	\$ (72,026)	\$ 59,338	\$ 76,515
(Loss) earnings per ordinary share:					
Basic	\$ (0.01)	\$ (0.08)	\$ (0.02)	\$ 0.02	\$ 0.02
Diluted	\$ (0.01)	\$ (0.08)	\$ (0.02)	\$ 0.01	\$ 0.02
Earnings (loss) per ADS:					
Basic	\$ (0.54)	\$ (3.77)	\$ (1.01)	\$ 0.76	\$ 0.91
Diluted	\$ (0.54)	\$ (3.77)	\$ (1.01)	\$ 0.74	\$ 0.86
Weighted average ordinary shares outstanding:					
Basic	3,521,182,416	3,534,829,694	3,553,552,756	3,881,503,977	4,226,950,678
Diluted	3,521,182,416	3,534,829,694	3,553,552,756	4,274,694,832	5,277,943,367
Weighted average ADS outstanding:					
Basic	70,423,648	70,696,594	71,071,055	77,630,080	84,539,014
Diluted	70,423,648	70,696,594	71,071,055	85,493,897	105,558,867
Consolidated Financial Data					
Gross margin(2)	16.2%	4.4%	12.3%	16.9%	18.7%
Net margin(3)	(1.8)%	(20.6)%	(4.1)%	2.7%	2.8%
Consolidated Operating Data					
PV modules shipped (in MW)(4)	1,512.0	1,594.0	2,584.3	3,336.2	4,825.4
Average selling price (\$/W)	\$ 1.33	\$ 0.78	\$ 0.64	\$ 0.63	\$ 0.58

Table of Contents

- (1) The amount of net loss attributable to the non-controlling interest is less than one thousand for the years ended December 31, 2011 and 2012.
- (2) Gross margin represents the result of gross profit divided by net sales.
- (3) Net margin represents the result of net income (loss) divided by net sales.
- (4) Excludes shipment to our solar power projects segment.

	2011	2012	As of December 31, 2013 (in thousands)	2014	2015
Consolidated Balance Sheet Data					
Cash and cash equivalents	\$ 816,780	\$ 807,276	\$ 486,686	\$ 392,892	\$ 465,393
Restricted cash	79,602	110,920	74,720	146,929	194,484
Inventories	249,779	318,504	244,532	350,852	431,994
Build-to-sell project assets	8,861	7,960	73,305	60,105	531,344
Accounts receivable, net	466,537	390,157	435,092	608,149	658,836
Total current assets	1,768,722	1,765,487	1,521,701	1,773,346	2,588,932
Property, plant and equipment, net	919,727	893,340	889,752	1,253,543	1,862,136
Total assets	2,877,448	2,864,857	2,567,229	3,199,566	4,693,954
Short-term borrowings and current portion of long-term borrowings	389,472	875,821	935,590	820,252	916,614
Accounts payable	472,092	423,985	461,148	742,007	1,390,162
Total current liabilities	1,007,435	1,479,155	1,540,543	1,749,803	2,602,559
Accrued warranty costs	58,810	65,780	81,743	103,197	129,478
Long-term borrowings, excluding current portion	520,151	415,150	100,502	22,434	521,982
Total equity	1,145,325	881,785	822,479	1,001,079	1,090,563
Total liabilities and equity	\$ 2,877,448	\$ 2,864,857	\$ 2,567,229	\$ 3,199,566	\$ 4,693,954

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

Table of Contents

D. Risk Factors

Risks Related to Our Company and Our Industry

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

We are affected by solar power markets and industry trends. Weakened global economic conditions may affect the availability of financing, which in turn would slow the demand for photovoltaic, or PV, projects. As a result of global economic conditions, some governments may implement austerity measures that reduce the feed-in tariffs, or FITs, and other incentives designed to benefit the solar industry. In 2008 and 2009, demand for global solar power declined 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 decreasing demand and prices caused a decline in the prices of solar power products. In 2011, a decrease in government payment to solar power producers, which were in the form of FITs and other reimbursements, and a reduction in available financing caused a decrease in the growth in the number of solar power projects in the European markets. Payments to solar power producers decreased as governments in Europe, under pressure to reduce sovereign debt levels, reduced incentives such as FITs, which require public utility companies to pay higher prices for solar power than for power generated through conventional means. Furthermore, many downstream buyers of solar power products were unable to secure sufficient financing for the solar power projects due to the global credit crunch. As a result, many solar power producers that purchase solar power products from manufacturers like us were unable or unwilling to expand their operations. These market conditions were exacerbated by an over-supply of solar power products, primarily driven by an increase in manufacturing capacity that continued through 2011, which adversely affected the prices of solar power products.

In 2012, governments further reduced their support in the European markets that have traditionally relied upon FITs to support demand and fewer markets utilized FITs and power purchase agreements to support demand, which in the aggregate resulted in a marked decline in the global growth rate of demand for solar products. Further, in December 2013, anti-dumping and anti-subsidy duties imposed by the European Commissions on crystalline silicon photovoltaic, or CSPV, cells and modules originating in or consigned from China became effective, motivating a number of Chinese solar product manufacturers, including us, to agree to a price undertaking (which we withdrew from effective December 11, 2015), pursuant to which exporters agreed not to sell more than an agreed amount of solar panels or certain related components into the European Union below a minimum price. Both the FITs reduction and the price undertaking resulted in increased prices and further decreases in demand in European markets. The United Kingdom government further reduced FITs in 2015 and closed the renewable obligation certificates scheme for all new PV projects after March 31, 2016, which may cause a further decrease in demand in Europe in 2016 and 2017. Although increases in demand in other regions, including the United States, Japan and India, as well as many other emerging markets in Asia, the Middle East and Africa, are expected to offset the decline in European demand, we cannot assure you that those increases will continue in the future and fully offset the declining demand in Europe.

The demand for solar power is also influenced by macroeconomic factors such as global economic conditions, the supply and prices of other energy products such as oil, coal and natural gas, and government regulations and policies concerning the electric utility industry. A decrease in oil prices, for example, may reduce demand for investment in alternative energy.

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

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

In 2011, solar panel manufacturing companies in the United States filed anti-dumping and countervailing duty petitions with the U.S. government, which resulted in the institution of anti-dumping and countervailing duty investigations relating to imports into the United States of CSPV cells, whether or not assembled into modules, from China. In December 2012, following completion of those investigations by the U.S. International Trade Commission, or Commission, and the U.S. Department of Commerce, or Commerce, anti-dumping and countervailing duty orders were imposed on imports into the United States covered by the investigation, including imports of our products originating from China. The orders required an effective net cash deposit rate on all imports of these covered products of 23.75%, though Commerce revised the effective net cash deposit rate to 30.61% in July 2015 upon issuing the final results of its first administrative review. This rate will remain effective until the final results of the second administrative review are issued, the preliminary results of which were published in December 2015 and proposed an anti-dumping rate for us of 4.53%, compared to rates for all other Chinese exporters ranging from 7.27% to 11.47%, and a countervailing duty rate for us of 19.62%. The final results of the second administrative review are expected to be published by July of 2016. The actual duty rates at which entries of covered merchandise will be finally assessed may differ from the deposit rates because they are subject to completion of ongoing administrative reviews of the anti-dumping and countervailing duty orders.

Table of Contents

On December 31, 2013, SolarWorld Industries America, Inc., or SolarWorld, a U.S. producer of solar cells and panels, filed a separate petition with the U.S. government resulting in the institution of new anti-dumping and countervailing duty investigations against imports from China and Taiwan. These investigations resulted in anti-dumping and countervailing duty orders on Chinese exports of CSPV modules that incorporate non-Chinese CSPV cells and anti-dumping duties on CSPV cells and modules from Taiwan. These anti-dumping and countervailing duty orders exclude from their scope certain products, including any products that are covered by the anti-dumping and countervailing duty orders imposed in 2012. On December 17, 2014, Commerce issued final rulings that imports of certain CSPV cells and modules were dumped in the United States from China and Taiwan and that imports of certain CSPV cells and modules from China received subsidies. On these imports the Company received an anti-dumping rate of 26.71% and a countervailing rate of 49.79%, which will be in effect until the final determination of the first administrative review. On January 21, 2015, the Commission affirmed that imports of certain CSPV cells and modules from mainland China and Taiwan materially injure the domestic industry. The actual duty rates at which entries of covered merchandise will be finally assessed may differ from the announced deposit rates, because they will be subject to completion of administrative reviews of these anti-dumping and countervailing duty orders. In February 2016, the Company filed requests for review of the anti-dumping and countervailing orders on its exports of Chinese modules possessing non-Chinese CSPV cells. The Company expects the first administrative reviews to be completed around the third quarter of 2017.

On September 6, 2012 and November 8, 2012, the European Commission announced the initiation of anti-dumping and anti-subsidy investigations, respectively, concerning imports into the European Union of CSPV modules and key components (i.e., cells and wafers) originating in China. On December 5, 2013, the Council of the European Union announced its final decision imposing anti-dumping and anti-subsidy duties on imports of CSPV cells and modules originating in or consigned from China. Both anti-dumping and anti-subsidy duties are applicable for a period of two years beginning on December 6, 2013 to imports from Chinese solar panel exporters who, like us, cooperated with the European Commission's investigations. However, on the same day, the European Commission accepted a price undertaking by Chinese export producers in connection with the anti-dumping and anti-subsidy proceedings. As a result, imports from Chinese solar panel exporters that are made pursuant to the price undertaking are exempt from the final anti-dumping and anti-subsidy duties imposed by the European Union. We agreed to comply with the minimum price and other conditions set forth in the undertaking so that our exported products were exempt from the anti-dumping and anti-subsidy duties imposed by the European Commission during the period from December 6, 2013 to December 11, 2015. The European Commission monitors compliance on an ongoing basis, and there have been allegations of non-compliance to the price undertaking by certain Chinese export producers. Furthermore, on December 5, 2015, the European Commission announced that it was initiating an expiry review investigation during which the anti-dumping and anti-subsidy duties and the price undertaking measures will remain in force. Effective from December 11, 2015, we have withdrawn from the price undertaking and started to supply EU markets through our tariff-free overseas manufacturing facilities. Currently, production costs at our overseas manufacturing facilities are higher than at our manufacturing facilities in China. If we are unable to produce PV products at our overseas manufacturing facilities and transport them into the EU at a competitive price, or if we cannot otherwise obtain module products at a competitive price, we will be at a competitive disadvantage in the EU markets.

It is also possible that other anti-dumping or countervailing duties or other import restrictive proceedings will be initiated in additional jurisdictions. For example, in November 2012, India initiated anti-dumping investigations against solar cell imports from China, the United States, Malaysia and Taiwan, and in May 2014, India's Department of Commerce recommended imposing duties on electricity produced on solar cell imports from these countries before India's Ministry of Finance decided against imposing any such duties in September 2014. Further, on May 14, 2014, Australia initiated an anti-dumping investigation against certain CSPV modules or panels exported to Australia from China. Although our policy requires that all of our export sales comply with international trade practices, we cannot guarantee that the government agencies in the jurisdictions in which actions are brought will not impose trade remedy actions. Under the anti-dumping and countervailing duty laws, significant additional duties may be imposed on imports of our products into these countries, which increase our costs of accessing these additional markets. As a result of the duties imposed by the relevant authorities, or if duties are imposed on our PRC-manufactured products, we may adjust our business strategy for selling into these jurisdictions. Any change in our business strategy would create a number of operational and legal uncertainties. Any of the above scenarios may materially and adversely impact our sales, thereby limiting our opportunities for growth.

Table of Contents

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

We must defend against legal and administrative actions described in Item 8 of this annual report, Item 8. Financial Information A. Consolidated Statements and Other Financial Information Legal and Administrative Proceedings. These include various trade actions as well as a lawsuit brought by Energy Conversion Devices Liquidation Trust, against which the defendants, including us, filed motions to dismiss the claims in their entirety. The motion to dismiss Energy Conversion Devices Liquidation Trust's lawsuit was granted by the district court, and the plaintiff filed an appeal with the United States Court of Appeals for the Sixth Circuit, which remains pending. We will continue to defend ourselves in this case, although we cannot be certain that we will be successful in these efforts. We also cannot be certain that we will be able to successfully defend ourselves against these claims if this case or any other case is brought to trial. We will consider appealing the outcome of these legal and administrative actions should our initial defense be unsuccessful. Although we will vigorously defend ourselves in these cases, we are currently unable to estimate the possible loss or possible range of loss, if any, associated with the resolution of these legal and administrative actions and disputes. Any unfavorable outcome from these actions and disputes, including an appeal of the judgment or outcome in these actions and disputes, may have a material adverse effect on our consolidated financial position, results of operations, or cash flows in the future. These legal and administrative proceedings may consume a material portion of our cash resources and divert management's attention from the day-to-day operations of our company, all of which could harm our business. There can be no assurance that we will prevail in any such appeal and any adverse outcome of these cases could have a material adverse effect on our business or results of operations.

A significant reduction or elimination of 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 which aim 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. National and local governmental bodies in many of our primary-targeted markets, notably, Germany, Italy, the United Kingdom and other countries in Europe, China, the United States, Australia, India, Japan, as well as other markets in Asia, Africa, the Middle East, Latin America, and the Caribbean Islands have provided economic incentives in the form of capital cost rebates, feed-in tariffs, tax credits and other incentives to end users, distributors, system integrators and manufacturers of solar power products. Policy shifts could reduce or eliminate these government economic incentives altogether.

However, as the solar power industry continues to develop, these government economic incentives have been reduced and could continue to be reduced or be eliminated altogether. For example, in December 2010, the Spanish government reduced the maximum allowable annual operating hours for which PV systems could earn FIT payments. Germany further reduced its FITs in the beginning of 2012 by 15% to up to 24.43 Euro cents per kilowatt hour for rooftop systems and up to 18.76 Euro cents per kilowatt hour for ground-based systems. In September 2012, Germany introduced a further reduction in FITs of 1% monthly for roof-based systems while reducing or eliminating FITs for ground-based systems. Reductions in FIT programs continued in 2013, 2014 and 2015 across Europe, including in the United Kingdom, Germany, Italy, Spain, Romania and Czech. All such reductions may result in a significant fall in the price of PV products in order to support continued demand. 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

Edgar Filing: Trina Solar LTD - Form 20-F

affect the development and commercial acceptance of solar energy. Further, austerity measures being implemented by many countries attempting to lower national spending may reduce incentives to the solar industry. A significant reduction in the scope or discontinuation of government incentive programs, especially those in our target markets, could cause demand for our products and our revenues to decline, and have a material adverse effect on our business, financial condition, results of operations and prospects.

Table of Contents

Demand for our products may be adversely affected by the effects of the credit environment on our customers and seasonal variations.

Europe, the United States and international economies are in the midst of a prolonged period of slow economic growth. In particular, the credit and financial 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 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. If the current economic recovery slows, stalls or reverses, 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. Although 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 may rise soon, which could increase the cost of financing purchases of our products and may reduce our customers' profits and investors' expected returns on investment. 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 demand for our products. If global economic growth remains slow, it could result in a decrease in the demand for our solar power products, which may harm our operating results. These same factors may adversely impact our existing or future sales agreements, including increasing the likelihood of contractual breaches by our counterparties. 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.

Our sales are also affected by seasonal variations in demand linked to construction cycles and weather conditions. Because of this, comparisons of sales and operating results between different periods within a single financial year, or between different periods in different years, are not necessarily meaningful and cannot be relied on as indicators of our performance. Seasonality may cause our working capital and other cash flow requirements to vary depending on the variability in the volume and timing of sales. These factors, among other things, make forecasting more difficult and may reduce our ability to manage working capital and to predict financial results accurately.

Fluctuations in polysilicon prices may affect our margins.

Polysilicon is an essential raw material used in the production of solar cells and modules. Prior to the second half of 2008, there was an industry-wide shortage of polysilicon, primarily as a result of the growing demand for solar power products. In the past, increases in the price of polysilicon have increased our cost of sales and impacted our margins. Polysilicon production capacity expanded rapidly in 2009, which coupled with the global economic downturn, led to an oversupply of high-purity silicon in 2009, which aligned with the oversupply of solar wafers, cells and modules resulting in substantial downward pressure on prices throughout the value chain in 2011 until the second half of 2013.

According to PVinsights, polysilicon spot prices dropped sharply in 2015, particularly in the second and fourth quarters of 2015. According to PVinsights, in 2014 and 2015, some Chinese polysilicon suppliers completed significant capacity expansions, which were not accompanied by the proportional increase in polysilicon demand and led to an oversupply and higher inventory levels of polysilicon resulting in falling prices. Furthermore, China imposed anti-dumping and countervailing duties on polysilicon originating from the U.S. and South Korea in July 2015, which created trade barriers and distorted market prices both in China and abroad. Polysilicon prices fell sharply in the second quarter of 2015 due to seasonal demand slow-down and inventory dumping from traders for tariff-targeted polysilicon ahead of China's implementation of anti-dumping and countervailing duties and the suspension of duty-exempted imports previously allowed for polysilicon used in export-oriented domestic manufacturing. The anti-dumping and countervailing duties led to mild price increases in China during July and August 2015, but the

Edgar Filing: Trina Solar LTD - Form 20-F

effect was quickly offset by the sharp decline of prices outside China, as restricted producers were forced to concentrate all their sales in the overseas markets, leading to serious oversupply and a price slump. As some foreign polysilicon is still imported into the China market, differences between prices inside and outside of China will gradually narrow, bringing down prices on China's spot market. Hence, spot prices in China, despite remaining higher than prices overseas, began to decrease by September, and the global price downtrend accelerated in the fourth quarter of 2015 due to the approaching end of the financial year and producers were forced to offer significant price reductions to clear up their high inventory levels. As a result of the combined effect of oversupply, trade-distorting barriers and inventory pressure, average polysilicon prices in 2015 fell by 28.6% from \$19.16 per kilogram in January 2015 to \$13.69 per kilogram in December 2015. In March 2016, polysilicon prices increased to an average of \$15.50 per kilogram due to production reduction by certain manufacturers outside China as a result of China's anti-dumping and countervailing duties.

Table of Contents

We purchase polysilicon from a limited number of international and domestic suppliers. If the market price of polysilicon increases significantly in the future, we would have to pay more to our suppliers and our cost of sales would increase. Moreover, as the prices of other silicon-based raw materials, including ingots and wafers, are correlated to the price of polysilicon, an increase in the price of polysilicon would likely lead to increases in the prices of other silicon-based raw materials that we source from third parties. We cannot assure you that our polysilicon procurement strategy will be successful in ensuring that we have an adequate supply of polysilicon at commercially viable prices to meet our requirements. Further, if the price of polysilicon increases faster than the increase in the price of PV modules, we may be unable to pass this increase to our customers, or if the price of PV modules decreases more quickly than the decrease in the price of polysilicon, our results of operations could be materially and adversely affected.

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

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

Furthermore, any decrease in the availability of financing may have a significant negative impact on suppliers and manufacturers of raw materials. Suppliers typically require a significant amount of cash to fund their production and operations, to meet contractual obligations arising from previous expansions of manufacturing facilities, as well as for 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 future success depends in part on our ability to expand our business into solar power projects 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 selected solar power projects markets, which we believe are a natural extension of our vertically integrated business model. Historically, the solar module manufacturing business has accounted for the large majority of our net sales but as we continue to expand our business into the solar power projects segment of the industry, we expect that our solar power projects business will continue to contribute a significant portion of our net sales. These expansion plans may include investments in project companies and joint ventures and forming strategic alliances with third parties to balance system technologies, engineering, procurement and construction services, and related financing needs. These plans may require additional 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 entities which we invest in or provide

adequate resources to such entities to maximize the return on our investments. We may not be able to secure the government approvals or licenses required for construction and operation of solar power projects in a timely manner, or at all. In the case of potential 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 operations.

Table of Contents

We cannot assure you that we will be successful in expanding our business into solar power projects 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 projects 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.

We may not be able to locate third party buyers for our solar projects on a timely manner, or at all, or we may not be able to timely renew or replace expiring power purchase agreements, or PPAs, or other contractual arrangements with agreements containing equivalent terms and conditions.

Upon completing solar projects, we either sell them to third party buyers, or operate them under PPAs or other contractual arrangements with utility or grid operators. For those projects we intend to sell, if we are not able to locate third party buyers and agree to a purchase and sales contract on terms and conditions favorable to us and in a timely manner, or at all, our business, financial condition and results of operations could be materially and adversely affected. In addition, substantially all of our build-to-own ground-mounted solar power projects are located in China, where local subsidiaries of the State Grid Corporation of China, or the State Grid, purchase nearly all of the electricity we generate pursuant to PPAs. Our PPAs for projects located in China generally have terms of one to five years and are subject to renewal by the parties when the original term expires. However, the PRC central government guarantees the FIT at a fixed price for all solar power projects approved by China's National Development and Reform Commission, or NDRC, for at least 20 years in principle. If we are unable to renew the PPAs when they expire, we may not be able to replace them with agreements of equivalent terms, or at all, or we may experience significant delays or incur additional costs related to securing replacements. Although the local subsidiaries of the State Grid are required under PRC law to purchase all electricity generated by renewable energy producers within their coverage areas, if, for any reason, the local subsidiaries of the State Grid are unable or unwilling to fulfill their obligations or otherwise terminate agreements prior to their expiration, our business, financial condition and results of operations could be materially and adversely affected.

Solar power projects located in China can only receive subsidies from the PRC government after they are listed in the Renewable Energy Electricity Subsidy Catalog issued by China's Ministry of Finance, the NDRC, and the National Energy Administration from time to time, or the Subsidy Catalog.

Solar power projects located in China can only receive central government subsidies after completing the administrative and perfunctory procedures with the relevant authorities of finance, pricing and energy to be listed in the Subsidy Catalog. In order to be listed in the Subsidy Catalog, ground-mounted projects must submit applications on the national renewable energy website for review with the construction quota and rooftop projects must submit applications to the local grid companies in the area where the projects are located. The Ministry of Finance, the NDRC and the National Energy Administration review the applications of all solar power projects and decide whether to list the projects in the Subsidy Catalog. In 2013, these agencies instituted a number of measures to standardize the approval process and the settlement of subsidies, but there have been significant delays in the listing of projects in the Subsidy Catalog, at times until even after electricity has been sold to the power grid, which has delayed the payment of the government subsidies. As of the date of this annual report, although our build-to-own ground-mounted projects located in China have met all of the measures of the approval process, we have not received national subsidies for those projects due to administrative delays in listing projects in the Subsidy Catalog. If we do not receive subsidies for our projects in a timely manner or at all, our business, cash flows, financial condition and results of operations may be materially and adversely affected.

Table of Contents

Expanding the pipeline of our projects business in several key markets exposes us to a number of risks and uncertainties.

As a greater proportion of our net sales will be derived from our solar power projects business, we will be increasingly exposed to the risks associated with solar power projects. Further, our future success largely depends on our ability to expand our solar power project pipeline. The risks and uncertainties associated with our projects business and our expansion of our solar power project pipeline include:

- the need to raise funds to develop greenfield or purchase late-stage solar power projects, which we may be unable to obtain on commercially reasonable terms or at all;
- the uncertainty of being able to sell the projects, receive full payment for them upon completion, or receive payment in a timely manner;
- delays and cost overruns as a result of a number of factors, many of which are beyond our control, including delays in regulatory approvals, construction, grid-connection and customer acceptance testing;
- delays or denial of required approvals, permits or licenses by relevant government authorities in connection with the construction, grid-connection, and operation of solar power projects;
- failure to negotiate favorable payment terms with components and services suppliers;
- unforeseeable engineering problems, construction or other unexpected delays and contractor performance shortfalls;
- labor, components and materials supply delays, shortages or disruptions, or work stoppages;
- failure to execute PPAs or other arrangements that are commercially acceptable to us;
- diversion of significant management attention and other resources; and

- failure to execute our project pipeline expansion plan effectively.

If we are unable to successfully expand our projects business, and in particular, our solar power project pipeline, we may be unable to expand our business, maintain our competitive position, improve our profitability, and generate the cash flows we have currently forecasted.

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

Manufacturing polysilicon is a highly complex process and our 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 our 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.

Table of Contents

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

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

We must comply with certain financial and other covenants under the terms of our debt instruments and the failure to do so may put us in default under those instruments.

Many of our loan agreements include financial covenants. The financial covenants primarily include current ratios, quick ratios, net external gearing ratio, debt to asset ratios, contingent liability ratios, turnover ratio of current assets and minimum equity requirements, which, in general, govern our existing long-term debt and debt we may incur in the future. These covenants could limit our ability to plan for or react to market conditions or to meet our capital needs in a timely manner and complying with these covenants may require us to curtail some of our operations and growth plans. In addition, any global or regional economic deterioration may cause us to incur significant net losses or force us to assume considerable liabilities, which would adversely impact our ability to comply with the financial and other covenants of our outstanding loans. If our creditors refuse to grant waivers for any non-compliance with these covenants, such non-compliance will constitute an event of default which may accelerate the amounts due under the applicable loan agreements.

We have on occasion failed to comply with certain financial covenants in some of our loan agreements. For example, as of December 31, 2015, Trina China was not in compliance with the net external gearing ratio under a loan from Hong Kong and Shanghai Banking Corporation Limited, or HSBC, and Yunnan Matallurgical New Energy Co., Ltd., or Yunnan Matallurgical, was not in compliance with the asset liability ratio and turnover ratio of current assets under loans from China Development Bank or CDB. On March 1, 2016, Trina China obtained a waiver letter from HSBC waiving its compliance obligations for the net external gearing ratio covenant for the remaining duration of the loan. On March 17, 2016, Yunnan Matallurgical obtained a written confirmation from CDB that CDB would waive the right to declare an event of default for Yunnan Matallurgical's non-compliance with the asset liability ratio and turnover ratio of current assets covenants provided that Yunnan Matallurgical would cure the non-compliance prior to September 17, 2016. We have determined that Yunnan Matallurgical will be able to cure the non-compliance prior to September 17, 2016 and believe that Yunnan Matallurgical will be in compliance with the financial covenants again for the remainder of 2016.

Although we are currently in compliance with or have obtained waivers for non-compliance with all of our existing financial and other covenants under our debt instruments, we cannot assure you that we will be able to remain in compliance with those covenants in the future. We may not be able to cure future violations or obtain a waiver on a timely basis in order to avoid a default. An event of default under any agreement governing our existing or future debt, if not cured by us or waived by our creditors, could have a material adverse effect on our liquidity, financial condition and results of operations.

We have significant outstanding bank borrowings, outstanding convertible senior notes 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 for prepayments or loans to suppliers to secure our polysilicon supply requirements. We also will 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, 2013, 2014 and 2015, our aggregate outstanding borrowings were \$1,036.1 million, \$842.7 million and \$1,438.6 million, respectively, of which approximately \$935.6 million, \$820.3 million and \$916.6 million, respectively, were due within one year. We also had \$172.5 million 3.5% convertible senior notes due 2019 and \$115.0 million 4.0% convertible senior notes due 2019 as of December 31, 2015. As of December 31, 2015, we had \$465.4 million in cash and \$194.5 million in restricted cash.

Table of Contents

We have historically negotiated with our lenders to renew or rollover our loans shortly before they mature. However, we cannot assure you that we will be able to renew or rollover these borrowings upon maturity in the future. In the event that we are unable to renew or rollover these borrowings, or if we are unable to obtain sufficient alternative funding at reasonable terms to fulfill relevant repayment obligation, we will have to repay these borrowings with cash generated by our operating activities. Our business might not generate sufficient cash flow from operations to repay these borrowings, some of which are secured by significant amounts of our assets, and at the same time fund our capital expenditures. If we are unable to make scheduled repayments in connection with our debt or other fixed payment obligations as they become due, we may need to renegotiate the terms and conditions of those obligations or obtain additional equity or debt financing. We cannot assure you that our renegotiation efforts would be successful or timely or that we would be able to refinance our obligations on acceptable terms or at all.

In addition, repaying these borrowings and financing our 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.

Because the markets in which we compete are highly competitive and our competitors may 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 evolves quickly. We face intense competition, which in the past has resulted in price reductions, reduced margins or loss of market share. We compete with other PV module manufacturing companies, including dedicated PV manufacturers such as First Solar Inc., Golden Concord Holdings Limited, or GCL, Canadian Solar, Inc., JinkoSolar Holding Co., Ltd., JA Solar Holdings Co., Ltd. and Xi'an LONGi Silicon Materials Corp. as well as multinational conglomerates such as Mitsubishi Electric Corporation. We may also face competition in the downstream solar power business from competitors such as Canadian Solar Inc., JinkoSolar Holding Co., Ltd., and GCL, as well as the large Chinese state-owned electric utility enterprises in the downstream solar power business in China. Some of our competitors may have a stronger market position than ours, more sophisticated technologies and products, greater resources and better name recognition than we do. Further, some 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. Some mid-stream solar power products manufacturers have been seeking to move downstream to strengthen their position in regional markets. In addition, we may also face new competition from manufacturers developing thin film and other PV technologies that are designed to offer economic or performance advantages, several of which have already announced their intention to start production of solar cells or module products. Decreases in polysilicon prices and increases in PV module production could result in substantial downward pressure on the price of PV modules and intensify the competition we face.

Some of our current and potential competitors have longer operating histories, access to a larger customer base, stronger relationships with customers, access to greater resources, and greater economies of scale, financing, sales and marketing, manufacturing, distribution, research and

Edgar Filing: Trina Solar LTD - Form 20-F

development, technical and other advantages over us. As a result, they may be able to respond more quickly to changing customer demands or market conditions or to devote greater resources to the development, promotion and sales of their products than we can. Our business relies largely on sales of our PV modules and solar power projects, and our competitors with more diversified product offerings may be better positioned to withstand a decline in the demand for PV modules and our projects. New competitors or alliances among existing competitors could emerge and rapidly acquire a significant market share, which would harm our business. Moreover, the key entry barriers to the downstream solar power business at present consist of availability of financing, availability of experienced technicians and executives who are familiar with the industry and the implementation of market access standards. If these barriers disappear or become easier to surmount, new competitors may successfully enter into the market, resulting in increased competition and loss of our market share, which could adversely affect our operating and net margins. If we fail to compete successfully, our business would suffer and we may lose or be unable to gain market share.

Table of Contents

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

We currently sell a significant portion of our PV modules to a limited number of customers. In 2013, 2014 and 2015, sales to our top five customers accounted for approximately 18.7%, 34.7% and 23.3%, respectively, of our total net sales. Our largest customer contributed approximately 5.9% of our net sales in 2015. 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. Some of our overseas credit sales are insured against non-payment by our customers. The amount of insurance coverage for each transaction is based on a rating assigned by the insurer to the customer, based on that customer's credit history. However, we cannot assure you that all of our accounts receivable are sufficiently covered or that the insurer will be able to make payments on our claims. The failure of any of these significant customers to meet their payment obligations would materially and adversely affect our financial position, liquidity and results of operations.

If the practice of requiring customers to make advance payments when they place orders with us declines, we will experience increased needs to finance our working capital requirements and are exposed to increased credit risk.

Edgar Filing: Trina Solar LTD - Form 20-F

We have required our customers to make an advance payment of a certain percentage of their orders, a business practice that has 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. This practice of requiring our customers to make advance payments declined in 2014 in line with market trends. While advance payments from our customers increased in 2015, the practice of requiring advance payments is expected to decline again in 2016, which will pressure us to increase our working capital turnover or obtain additional financing to fund our working capital requirements. In 2015, a majority of our revenues were derived from credit sales, generally with payment schedules due according to negotiated contracts. In addition, some of our customers pay us through drawn upon acceptance, open account and letter of credit terms, which typically take approximately 90 days to 120 days to process in order for us to be paid, although in some instances the settlement period may be longer. Despite the credit 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.

Table of Contents

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

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

We conduct most of our manufacturing in our manufacturing facilities in 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. 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.

We have established manufacturing facilities in Thailand and the Netherlands, and commenced original equipment manufacturing, or OEM, with local partners in Vietnam and Malaysia. As we expand our overseas manufacturing capacities, we are exposed to a number of risks including operational risks and compliance risks in our overseas capacities. The production costs of our overseas capacities are currently higher than those of our PRC subsidiaries. We also face risks in compliance with local environmental, safety, health and other labor laws and regulations in each of the jurisdictions we operate.

We plan to build or acquire new facilities to increase our annualized in-house manufacturing capacity of cells and modules from 3,500 megawatts, or MW, and 5,000 MW, respectively, as of December 31, 2015 to 5,000 MW and 6,000 MW, respectively, as of December 31, 2016. We plan to incur capital expenditures of up to \$250 million to accomplish our 2016 expansion plans in our manufacturing segment. If we fail to implement that plan as expected, experience a delay in the ramp up or fail to achieve our targeted yields, our business and results of operations may be materially and adversely affected.

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

Our products may contain defects that are not detected until after they are shipped or are installed because we cannot test for all possible scenarios. Unlike PV modules, which are subject to certain uniform international standards, solar cells generally are not subject to uniform international standards, and it is often difficult to determine whether solar power product defects are a result of defective solar cells, other defective components of PV modules or other reasons. Furthermore, the solar wafers and other components that we purchase from third-party suppliers are typically sold to us with no or only limited warranties. Also, as many of our customers place orders for bulk deliveries, the large number of items delivered increases the likelihood that a defective or low quality module may be delivered to a customer. We have received in

the past, and may receive from time to time in the future, complaints from certain customers that portions of our PV modules have quality deficiencies. For example, in certain instances in the past, customers raised concerns about the stated versus actual performance output of some of our PV modules. We determined that these concerns resulted from differences in calibration standards we used. However, the corrective actions and procedures that we took may turn out to be inadequate to prevent further similar incidents or to protect against future errors or defects. If we deliver PV module products that do not satisfy our customers' or end users' quality requirements, or if there is a perception that our products are of poor quality, our credibility and the market acceptance and sales of our PV module products could be harmed. We may also incur substantial expense to replace products that do not meet our quality standards.

Table of Contents

PV modules are designed to operate for a long period of time and sometimes in harsh natural conditions. We typically sell our PV modules with a ten 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 and we further guarantee that module power output will not decrease by more than approximately 0.7% per year after the initial year of service. We believe our warranty periods are consistent with industry practice. We only began to sell PV modules in November 2004. Although we conduct accelerated reliability testing of our PV modules, our PV modules have not been and cannot be tested in an environment simulating the 25-year warranty period. As a result, we may be subject to unexpected warranty expense and associated harm to our financial results for as long as 25 years after the sale of our products. Our warranty provisions for the years ended December 31, 2013, 2014 and 2015 were \$16.6 million, \$21.6 million and \$28.1 million, respectively. Any increase in the defect rate of our products would cause us to increase the amount of our warranty reserves and have a correspondingly negative impact on our operating results. Furthermore, widespread product failures may damage our market reputation, reduce our market share and cause our sales to decline.

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

We may develop and produce new products from time to time, such as high-efficiency monocrystalline and multicrystalline modules. In 2012, we introduced our Honey cell technology, which we have used to develop and manufacture a number of new products, and in January 2015 we launched two new high-efficiency multicrystalline and monocrystalline Honey Plus modules that we believe offer significant upgrades on our previous Honey modules. The two modules are expected to become available in select markets in the first half of 2015 with a worldwide launch scheduled in 2016. However, there is no guarantee that we will be able to successfully launch these products or that they, or any other products that we develop, will become commercially successful. We may be unable to generate sufficient customer demand for our new products if we are unable to develop and produce new products that provide the expected performance in a cost-effective manner. If we fail to generate demand for our new products, our business and prospects may be adversely affected and we may be unable to recoup our investment in the development and production of such products.

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

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

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

Table of Contents

If solar power technology is not adopted widely, or sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our revenues may further decline and we may be unable to sustain our profitability.

The solar power market is at a relatively early stage of development, and the extent of acceptance of solar power products is uncertain. Market data on the solar power industry are not as readily available as those for other more established industries where trends can be assessed more reliably from data gathered over a longer period of time. We sell and market our products to a growing number of worldwide markets where government incentives are accelerating the adoption of solar power. In recent years, we have also increased our sales in newer and emerging solar power markets, which include the United Kingdom and India, as well as other markets in Asia, Africa, the Middle East, Latin America, and the Caribbean Islands. Many factors may affect the viability of widespread adoption of solar power technology and demand for solar power products in our targeted markets, including:

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

If solar power technology is not adopted widely or sufficient demand for solar power products does not develop or takes longer to develop than we anticipate, our revenues may suffer and we may be unable to sustain our profitability.

Further technological changes in the solar power industry could render our products uncompetitive or obsolete, which could reduce our market share and cause our sales and profit to decline.

The solar power market is characterized by evolving technologies and standards that result in improved features, such as more efficient and higher power output, improved aesthetics and smaller size. This requires us to develop new solar power products and enhance existing products to keep pace with evolving technologies and changing customer requirements. A variety of competing solar technologies that other companies may develop could prove to be more cost-effective and perform better than our technologies. For example, thin-film technologies are competing technologies in the solar power industry. According to GTM Research, thin-film production was estimated to be 5 gigawatt, or GW, in 2015, compared to approximately 58 GW 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.

Table of Contents

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

In the past, we began constructing and operating facilities without having obtained all of the necessary construction and environmental permits. Although we have subsequently obtained most of the construction and environmental permits and approvals for these facilities, we could be subject to fines or penalties for our past non-compliance and for those permits and approvals that we have not yet obtained.

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 China, South Korea and Germany. 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.

We cannot assure you that we will be able to obtain the permits and approvals necessary for all of our future projects. If we fail to receive any permit or approval, we may be ordered to suspend construction and rectify the non-compliance, be charged a fine and, in the worst case scenario, be required to demolish solar power projects, which may materially and adversely affect our business and financial condition.

The failure to comply with PRC land laws and regulations regarding the lease of government allocated land use rights may materially and adversely affect our business, financial condition, results of operations and prospects.

We lease government allocated land use rights for our 120 MW solar power projects that are currently under construction in Yancheng City, Jiangsu Province. The lease contract was entered into in October 2012 and has a term of 20 years. However, these leases may not meet certain land-related legal requirements under PRC laws and regulations. According to the Interim Measures on Administration of Government Allocated Land Use Right, the lease of government allocated land use rights must first receive approval from the appropriate land administration departments, followed by a series of procedures that the owner of the government allocated land use right must complete, including signing the land use right grant contract and paying the land grant fee. Upon completion of these procedures, the landlord and the lessee must go through the registration formalities in respect of the leasehold interests. Although our lease of government allocated land use rights in Yancheng has been approved by the local land administration department, because we have not yet completed certain statutory procedures, our lease has not been properly registered and thus our leasehold interests may not be legally protected. We are in the process of working with the landlord to complete the required procedures, but we cannot ensure that the registration process will be completed in a timely manner or at all. If because of a failure to complete the registration process we are unable to continue using these lands, our business and financial condition could be materially and

adversely affected.

Our future success substantially depends on our ability to significantly expand both our manufacturing capacity and output and solar power projects development capabilities, 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:

Table of Contents

- the need to raise 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, including overseas, is an integral part of our strategy to achieve a grid parity cost structure during the solar industry consolidation. 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. By expanding some of our module manufacturing outside of the PRC, we also subject ourselves to a number of additional risks, including risks related to interacting with foreign government authorities and foreign laws and regulations.

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

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. In addition, we may encounter higher attrition rates in the future, particularly if China continues to experience strong economic growth and because of the going private transaction proposed by Mr. Jifan Gao, our chairman and chief executive officer, and Shanghai Xingsheng Equity Investment & Management Co., Ltd., a subsidiary of Industrial Bank Co., Ltd. incorporated in the People's Republic of China, or together, the Buyer Group.

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.

Table of Contents

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, particularly the growth of our new operating segment for solar power projects, our business may be adversely affected.

We have experienced a period of rapid growth and expansion, in particular relating to our solar power projects business, which 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 2013, 2014 and 2015, we sold approximately 66.7%, 67.3% and 71.5%, 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.

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.

Table of Contents

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

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

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

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

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 Securities and Exchange Commission, or 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 was effective as of December 31, 2015. See Item 15. Controls and Procedures. If we fail to maintain effective internal control over financial reporting in the future, it could result in the loss of investor confidence in the reliability of our financial statements and negatively impact the trading price of our ADSs. We have incurred and anticipate that we will continue to incur considerable costs, management time and other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act.

Table of Contents

Our independent registered public accounting firm may be temporarily suspended from practicing before the SEC, if it is unable to continue to satisfy SEC investigation requests in the future. If a delay in completion of our audit process occurs as a result, we could be unable to timely file certain reports with the SEC, which may lead to the delisting of our stock.

We have most of our operations in China. Certain of our independent registered public accounting firm's audit documentation related to their audit reports included in this annual report are located in China, and certain audit procedures are taken place within China's borders. The Public Company Accounting Oversight Board, or the PCAOB, is currently unable to conduct inspections in China or review audit documentation located within China without the approval of Chinese authorities.

On January 22, 2014, Judge Cameron Elliot, an SEC administrative law judge, issued an initial decision suspending the Chinese member firms of the Big Four accounting firms, including our independent registered public accounting firm from practicing before the SEC for six months. In February 2014, the initial decision was appealed. In February 2015, the Chinese member firms of the Big Four accounting firms reached a settlement with the SEC over the dispute in relation to access to such accounting firms' audit documents. As part of the settlement, each Chinese member firms of the Big Four accounting firms will pay \$500,000 to the SEC while Chinese member firms of the Big Four accounting firms will not be suspended from practicing before the SEC unless it fails to comply with certain compliance and cooperation requirements from the SEC.

If the settlement terms are not adhered to, our independent registered public accounting firm may be suspended from practicing before the SEC which could in turn delay the timely filing of our financial statements with the SEC. In addition, it could be difficult for us to timely identify and engage another qualified independent auditor to replace our independent auditor. A delinquency in our filings with the SEC may result in the initiation of the delisting procedures, which could adversely harm our reputation and have other material adverse effects on our results of operation and financial condition.

Our independent registered public accounting firm's audit documentation related to their audit reports included in our annual report may include audit documentation located in China. PCAOB currently cannot inspect audit documentation located in China and, as such, you may be deprived of the benefits of such inspection.

Our independent registered public accounting firm issued an audit opinion on the financial statements included in our annual report filed with the SEC. As auditors of companies that are traded publicly in the United States and a firm registered with the PCAOB, our auditor is required by the laws of the United States to undergo regular inspections by the PCAOB. However, work papers located in China are not currently inspected by the PCAOB because the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities.

Inspections of certain other firms that the PCAOB has conducted outside of China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. However, the PCAOB is currently unable to inspect an auditor's audit work related to a company's operations in China and where such documentation of the audit work is located in China. As a result, our investors may be deprived of the benefits of PCAOB's oversight of our auditors through such inspections.

The inability of the PCAOB to conduct inspections of our auditors' work papers in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections.

Investors may consequently lose confidence in our reported financial information and procedures and the quality of our financial statements.

Fluctuations in exchange rates could adversely affect our business.

The value of the Renminbi against the U.S. dollar, Euro and other currencies is affected by, among other things, changes in China's political and economic conditions and China's foreign exchange policies. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the Renminbi to the U.S. dollar. Under the new policy, the Renminbi was permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. This change in policy caused the Renminbi to appreciate approximately 21.5% against the U.S. dollar over the following three years. However, from July 2008 until June 2010, the Renminbi traded stably within a narrow range against the U.S. dollar. In June 2010, the People's Bank of China increased the flexibility of the exchange rate and between June 30, 2010 and December 31, 2013, the value of the Renminbi appreciated approximately 12.0% against the U.S. dollar, although in 2014, the value of the Renminbi depreciated approximately 2.5% against the U.S. dollar. In August 2015, the People's Bank of China changed the way it calculates the mid-point price of Renminbi against the U.S. dollar, requiring the market-makers who submit for reference rates to consider the previous day's closing spot rate, foreign-exchange demand and supply as well as changes in major currency rates. As a result, in 2015, the value of the Renminbi depreciated approximately 5.77% against the U.S. dollar, and from December 31, 2015 through March 25, 2016, the value of the Renminbi further depreciated approximately 0.44% against the U.S. dollar. We cannot predict how government policy will impact the Renminbi exchange rate going forward or whether new policies will be adopted by the PRC government.

Table of Contents

Most of our sales are currently denominated in Renminbi, U.S. dollars, Euros, GBP and Japanese Yen, while a substantial portion of our costs and expenses is denominated in Renminbi, with the remainder in U.S. dollars. Fluctuations in currency exchange rates, particularly among the U.S. dollar, Renminbi, Euros, GBP and Japanese Yen, 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 \$25.1 million in 2015. 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, a significant portion of which are 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.

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, 2015, we had foreign currency forward contracts with a total contract value of approximately \$144.4 million. We do not use foreign currency forward contracts to hedge all of our foreign currency denominated commitments. As with all hedging instruments, there are risks associated with the use of foreign currency forward contracts. While the use of such foreign currency forward contracts provides us with protection from certain fluctuations in foreign currency exchange, we forgo the potential benefits that might result from favorable fluctuations in foreign currency exchange. Any default by the counterparties to these transactions could adversely affect our financial condition and results of operations. Furthermore, these financial hedging transactions may not provide adequate protection against future foreign currency exchange rate fluctuations and, consequently, such fluctuations could adversely affect our financial condition and results of operations. See Item 11. Quantitative and Qualitative Disclosures about Market Risk Foreign Exchange Risk.

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, 2015 and do not expect to become a PFIC for the current taxable year ending December 31, 2016. 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.

A separate determination must be made after the close of each taxable year as to whether we were a PFIC for that year. Changes in the composition of our income and assets or the value of our assets may cause us to become a PFIC for the current year or any subsequent year. The determination of whether we are or will become a PFIC for any taxable year may depend, in part, upon the value of our goodwill and other intangibles not reflected on our balance sheet (which may be determined based upon the market value of the ADSs or ordinary shares from time to time, which may be volatile) and may also be affected by how, and how quickly, we spend our liquid assets and the cash raised in offerings. Among other matters, if our market capitalization is less than anticipated or subsequently declines, we may be or become a PFIC for the current or future taxable years. Further, while we believe our classification methodology and valuation approach is reasonable, it is possible that the IRS may challenge our classification or valuation of our goodwill and other intangibles, which may result in our company being or becoming classified as a PFIC for the current or one or more future taxable years.

Table of Contents

If we are a PFIC for any taxable year during which a U.S. Holder (as defined in Item 10. Additional Information E. Taxation United States Federal Income Taxation) holds an ADS or an ordinary share, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder. See Item 10. Additional Information E. 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.

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

Table of Contents

Solar power projects are highly regulated in China and we may fail to comply with laws and regulations regarding the development, construction and operation of solar power projects.

The development, construction and operation of solar power projects are highly regulated in China. Our operations must comply with various laws and regulations, including those relating to project approvals and filings, land use, planning and construction, environmental protection, fire control and electricity production and transmission. Failing to obtain or make the required approvals, permits, licenses, filings or to comply with the conditions associated therewith could result in fines, sanctions, suspensions, revocations or prevent us from renewing approvals, permits or licenses, or even subject us to criminal penalties, any of which could have a material adverse effect on our business, financial condition and results of operations. In addition, any new government regulations pertaining to solar power projects may result in significant additional expenses to the development, construction and operation of our solar power projects located in China and, as a result, could cause a significant reduction in demand for our solar power projects and services. We cannot assure you that we will be able to promptly and adequately adjust to changes in laws and regulations, which may materially and adversely affect our business, financial condition and results of operations.

The PRC government may determine that the power plant agreements that establish the structure for the acquisition and operation of certain solar power plants before grid connection in China do not comply with PRC regulations.

We are in the business of operating and selling solar power plants, which is subject to a series of national and regional rules and regulations, including *Circular on Regulation of Investment and Development of Solar Energy Electric Power Plants* promulgated by National Energy Bureau on October 28, 2014 [Guo Neng Xin Neng [2014] No. 477], the NEB Circular. The NEB Circular prohibits the transfer of solar power project before connecting the solar power project to the State electric power grid, or the State Grid, and requires the investors to make filings with regulators upon a material change of investors during the construction of the projects. Many provisions of the NEB Circular are uncertain and many of its terms lack clear definitions.

We have entered into power plant agreements with certain project entities that hold quotas and construction permits for downstream solar power projects, or the Project Entities. These power plant agreements enable us, (1) to provide loan financing to the Project Entities for the construction of the power plant, which loan agreements require 100% of the shares of the Project Entities be pledged to us, (2) to acquire 100% of the equity interests of the Project Entity after the completion of construction and connection of the power plants to the State Grid, (3) to have the exclusive rights to select vendors and contractors, as well as to monitor the design and construction of the solar power projects, and (4) to receive all of the income generated from the operation of the solar power plants and consolidate, as variable interest entities, or VIEs, the Project Entities into our consolidated financial statements in accordance with U.S. GAAP and receive dividends from the VIEs. As of December 31, 2014 and 2015, the total number of Project Entities that we consolidated under the power plant agreements were one and 31, respectively.

In the opinion of our PRC counsel, Fangda Partners, the terms contained and transactions contemplated by the power plant agreements are in compliance with existing PRC laws, rules and regulations. However, there are still substantial uncertainties regarding the interpretations and application of current PRC laws, rules and regulations. If the PRC government finds that the arrangements under the power plant agreements do not comply with its laws and regulations, including those under the NEB Circular, then the PRC regulatory authorities, including the local authorities in charge of power plants, would have broad discretion in dealing with such violations or failures, including, without limitation:

- revoking our business and operating licenses in solar power projects;

- discontinuing or restricting our operations of the relevant solar power projects;
- imposing fines or confiscating any of our income that they deem to have been obtained through illegal operations;

Table of Contents

- imposing conditions or requirements with which we or our PRC subsidiary and consolidated entities may not be able to comply;
- requiring us or our PRC subsidiary and consolidated entities to restructure the relevant ownership structure or operations;
- restricting or prohibiting our use of the proceeds from this offering to finance the business and operations of the power plant agreements and their subsidiaries; or
- taking other regulatory or enforcement actions that could be harmful to our business.

Any of these actions could significantly disrupt our business operations, and may materially and adversely affect our business, financial condition and results of operations. In addition, it is unclear what the impact would be on us and our ability to consolidate the financial results of any of the Project Entities in our consolidated financial statements if the PRC government authorities find our legal structure and contractual arrangements violate PRC laws, rules and regulations. If any of these penalties result in our inability to direct the activities of the Project Entities that most significantly impact its economic performance and/or our failure to receive the economic benefits from the Project Entities, we may not be able to consolidate the Project Entities into our consolidated financial statements in accordance with U.S. GAAP.

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 our subsidiaries in the PRC.

We conduct most of our operations in the PRC through PRC subsidiaries. Our ability to make distributions or other payments to our shareholders depends on payments from our subsidiaries in the PRC, 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 and the respective articles of association of our PRC subsidiaries, our PRC subsidiaries are required to set aside at least 10% of its after-tax profit based on PRC accounting standards each year to its general reserves until the accumulative amount of these reserves reaches 50% of its registered capital. These reserves are not distributable as cash dividends. As of December 31, 2015, these general reserves amounted to \$58.6 million, accounting for 5.1% of the registered capital of our PRC subsidiaries. In addition, under the PRC Enterprise Income Tax Law and its Implementation Regulations, or the EIT Law, which became effective January 1, 2008, dividends from Trina China, one of our PRC subsidiaries, to us are subject to a 10% withholding tax to the extent that we are considered a non-resident enterprise under the EIT Law. See The expiration or reduction of tax incentives by the PRC government may have a material adverse effect on our results of operations and Item 4. Information on the Company B. Business Overview Regulation Tax. Furthermore, if our PRC subsidiaries incur debt on its own behalf in the future, the instruments governing the debt may restrict their 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.

Edgar Filing: Trina Solar LTD - Form 20-F

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

Table of Contents

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

If we finance our PRC subsidiaries through additional capital contributions, the MOFCOM in China or its local counterpart must approve the amount of these capital contributions. On August 29, 2008, SAFE promulgated Circular 142, a notice regulating the conversion by a foreign-invested company of foreign currency into Renminbi by restricting how the converted Renminbi may be used. The notice requires that Renminbi converted from the foreign currency-denominated capital of a foreign-invested company may only be used for purposes within the business scope approved by the applicable governmental authority and may not be used for equity investments in the PRC unless otherwise provided by laws and regulations. In addition, SAFE strengthened its oversight of the flow and use of Renminbi funds converted from the foreign currency denominated capital of a foreign-invested company. The use of such Renminbi may not be changed without approval from SAFE, and may not be used to repay Renminbi loans if the proceeds of such loans have not yet been used for purposes within the company's approved business scope. Furthermore, on November 9, 2010, SAFE promulgated a notice on relevant issues concerning strengthening the administration of foreign exchange business, which requires the authenticity of settlement of net proceeds from an offshore offering to be closely examined and the net proceeds to be settled in the manner described in the offering documents. In order to further reform the foreign exchange administration system, SAFE issued the Circular on Reform of Administration Model of the Settlement of Foreign Currency Capital of Foreign-Invested Enterprises on March 30, 2015, or Circular 19, which took effect from June 1, 2015 and replaced the SAFE Circular 142. Circular 19 allows foreign invested enterprises to settle their foreign exchange capital on a discretionary basis according to the actual needs of their business operations and provides procedures by which a foreign-invested company may convert and use equity investments made in foreign currencies. Circular 19 also reiterates, however, the principle that Renminbi converted from the foreign currency-denominated capital of a foreign-invested company may not be used, either directly or indirectly, for purposes beyond its business scope. Thus, it is unclear whether SAFE will permit such capital to be used for equity investments in the PRC in practice.

Violations of Circular 19 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.

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

The EIT Law imposes a uniform tax rate of 25% on all PRC enterprises, including foreign-invested enterprises, and eliminates or modifies most of the tax exemptions, reductions and preferential treatments available under the previous tax laws and regulations. Under the EIT Law, certain enterprises may benefit from a preferential tax rate of 15% if they qualify as high and new technology enterprises strongly supported by the State, subject to certain general factors and conditions described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. In 2011, Trina China renewed its High and New Technology Enterprise Certificate, effective from 2011 to 2013, entitling it to a preferential income tax rate of 15% from 2008 through 2013. Also, in 2011, TST obtained the High and New Technology Enterprise Certificate, effective from 2011 to 2013 and is entitled to a preferential income tax rate of 15%. In 2014, Trina China and TST renewed their High and New Technology Enterprise Certificates, effective from 2014 to 2016, which entitle both of them to a preferential income tax rate of 15% from 2014 through 2016. If either Trina China or TST fails to maintain the high and new technology enterprise qualification, their applicable rate of enterprise income tax, or EIT, may increase to up to 25%, which could have a material adverse effect on our results of operations. We cannot assure you that we will be able to maintain our current effective tax rate in the future. Any discontinuation of preferential tax treatment or any increase of the EIT rate applicable to Trina China could have a material adverse effect on our financial condition and results of operations.

Table of Contents

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

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

Under the EIT Law, an enterprise established outside the PRC with its de facto management body within the PRC is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its worldwide income. The de facto management body is defined as the organizational body that effectively exercises overall management and control over production and business operations, human resources, finance and accounting, and properties of the enterprise. The State Administration of Taxation, or SAT, issued the Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies, or SAT Circular 82, on April 22, 2009. SAT Circular 82 provides certain criteria for determining whether the de facto management body of an offshore-incorporated enterprise controlled by PRC enterprises is located in China. On July 27, 2011, the SAT issued Administrative Measures of Enterprise Income Tax of Chinese-controlled Offshore Incorporated Resident Enterprises (Trial), or Bulletin 45, which became effective on September 1, 2011, to provide further guidance on the implementation of SAT Circular 82. Bulletin 45 further prescribes the rules concerning the recognition, administration and taxation of an enterprise incorporated offshore and controlled by a PRC enterprise or PRC enterprise group. Bulletin 45 provides two ways for determining whether a foreign enterprise controlled by a PRC enterprise or a PRC enterprise group should be treated as a resident enterprise. First, the offshore enterprise may decide on its own whether its de facto management body is located in China based on the criteria set forth in Circular 82, and, if it makes such determination, it must apply to the competent tax bureau to be treated as a resident enterprise. Second, the tax authority may, after investigating, determine that the offshore enterprise is a resident enterprise. 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 the SAT's general position on how the de facto management body test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC or foreign enterprises or individuals. Considering that most of our management is currently located in the PRC, we may be considered a resident enterprise and may therefore be subject to the EIT at 25% on our global income other than dividends from our PRC subsidiaries, which could significantly increase our tax burden and materially adversely affect our cash flow and profitability. Notwithstanding the foregoing provision, the EIT Law also provides that, if a resident enterprise directly invests in another resident enterprise, the dividends received by the investing resident enterprise from the invested enterprise are exempted from income tax, subject to certain conditions. Therefore, if Trina is classified as a resident enterprise, the dividends received from its PRC subsidiary may be exempted from income tax. However, it remains unclear how the PRC tax authorities will interpret the PRC tax resident treatment of an offshore company, like Trina, having ownership interest in a PRC enterprise.

Edgar Filing: Trina Solar LTD - Form 20-F

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

Table of Contents

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

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

The State Administration of Taxation has promulgated several rules and notices to tighten the scrutiny over acquisition transactions in recent years, including the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises in 2009 with retroactive effect from January 1, 2008, or SAT Circular 698, the Notice on Several Issues Regarding the Income Tax of Non-PRC Resident Enterprises in 2011, or SAT Circular 24, and the Notice on Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-PRC Resident Enterprises in February 2015, or SAT Circular 7. Pursuant to these rules and notices, if a non-PRC resident enterprise transfers its equity interests in a PRC tax resident enterprise, this non-PRC resident transferor must report to the tax authorities at the place where the PRC tax resident enterprise is located and will be subject to a PRC withholding tax of up to 10%. In addition, if a non-PRC resident enterprise indirectly transfers so-called PRC Taxable Properties, referring to properties of an establishment or a place of business in China, real estate properties in China and equity investments in a PRC tax resident enterprise, by disposition of the equity interests in an overseas non-public holding company without a reasonable commercial purpose and resulting in the avoidance of PRC EIT, the transfer will be re-characterized as a direct transfer of the PRC Taxable Properties and gains derived from the transfer may be subject to a PRC withholding tax of up to 10%. SAT Circular 7 has listed several factors to be taken into consideration by the tax authorities in determining if an indirect transfer has a reasonable commercial purpose. However, despite these factors, an indirect transfer satisfying all the following criteria will be deemed to lack reasonable commercial purpose and be taxable under the PRC laws: (i) 75% or more of the equity value of the intermediary enterprise being transferred is derived directly or indirectly from PRC Taxable Properties; (ii) at any time during the one year period before the indirect transfer, 90% or more of the asset value of the intermediary enterprise (excluding cash) is comprised directly or indirectly of investments in the PRC, or 90% or more of its income is derived directly or indirectly from the PRC; (iii) the functions performed and risks assumed by the intermediary enterprise and any of its subsidiaries that directly or indirectly hold the PRC Taxable Properties are limited and are insufficient to prove their economic substance; and (iv) the foreign tax payable on the gain derived from the indirect transfer of the PRC Taxable Properties is lower than the potential Chinese tax on the direct transfer of those assets. Nevertheless, the indirect transfers falling into the scope of the safe harbor under SAT Circular 7 may not be subject to PRC tax. The safe harbor includes qualified group restructurings, public market trades and exemptions under tax treaties.

Under SAT Circular 7 and other PRC tax regulations, in case of an indirect transfer, entities or individuals obligated to pay the transfer price to the transferor must act as withholding agents and are required to withhold the PRC tax from the transfer price. If they fail to do so, the seller is required to report and pay the PRC tax to the PRC tax authorities. If neither party complies with the tax payment or withholding obligations under SAT Circular 7, the tax authority may impose penalties such as late payment interest on the seller. In addition, the tax authority may also hold the withholding agents liable and impose a penalty of 50% to 300% of the unpaid tax on them. The penalty imposed on the purchasers may be reduced or waived if the withholding agents have submitted the relevant materials in connection with the indirect transfer to the PRC tax authorities in accordance with SAT Circular 7.

However, as these rules and notices are relatively new, there is uncertainty as to their implementation and future development. As a result, we may become at risk of being taxed under these rules and notices and we may be required to expend valuable resources to comply with or to establish that we should not be taxed under these rules and notices, which may

materially adversely affect our financial condition and results of operations or those non-PRC resident investors investments in us.

Table of Contents

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

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

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

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

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

On February 3, 2011, the State Council promulgated Circular No. 6, a notice on the establishment of the security review system for mergers and acquisitions of domestic enterprises by foreign investors, which became effective on March 3, 2011. To implement Circular No. 6, the MOFCOM promulgated the MOFCOM Security Review Rules on August 25, 2011 which became effective on September 1, 2011. According to Circular No. 6 and the MOFCOM Security Review Rules, a national security review is required for certain mergers and acquisitions by foreign investors of enterprises relating to national defense and certain mergers and acquisitions by which foreign investors may acquire de facto control of domestic enterprises raising national security concerns. When deciding whether a specific merger or acquisition of a domestic enterprise by foreign investors is subject to the national security review, the MOFCOM will review the substance and actual impact of the

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

Table of Contents

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 SAFE Circular 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.

On July 4, 2014, SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular 37, which replaced the SAFE Circular 75. SAFE Circular 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular 37 as a special purpose vehicle. The term control under SAFE Circular 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the PRC subsidiaries of that special purpose vehicle may be prohibited from distributing profits to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its PRC subsidiary. Moreover, failure to comply with the various SAFE registration requirements described above could result in liability under PRC law for evasion of foreign exchange controls.

While we believe our shareholders who have confirmed to us that they are PRC residents have taken actions available to them to comply with SAFE Circular 75 and they are still in the process of updating their SAFE registration to reflect the recent changes to our group structure, we have urged relevant shareholders and beneficial owners to make the necessary applications, filings and amendments as required under SAFE Circular 37 and other related rules. We cannot assure you that our current shareholders and/or beneficial owners or their shareholders or beneficial owners can successfully comply with registration requirements under SAFE Circular 37 and subsequent implementation rules in a timely fashion or at all. 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 these regulations could subject our company to fines or sanctions imposed by the PRC government, including restrictions on our PRC subsidiaries' ability to pay dividends or make distributions to us and our ability to increase our investment in or to provide loans to such PRC subsidiaries.

Furthermore, it is unclear how these regulations, and any future regulation concerning offshore or cross-border transactions, will be interpreted, amended and implemented by the relevant government authorities. We cannot predict how these regulations will affect our business operations or future strategy. For example, we may be subject to a more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign-currency-denominated borrowings, which may adversely affect our financial condition and results of operations.

On December 25, 2006, the People's Bank of China promulgated the Measures for Administration of Individual Foreign Exchange. On January 5, 2007, the SAFE promulgated Implementation Rules for those measures and on February 15, 2012, the SAFE promulgated the notice on issuers concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Listed Company which terminated the Operating Procedures on Administration of Foreign Exchange regarding PRC individuals' Participation in

Edgar Filing: Trina Solar LTD - Form 20-F

Employee Share Ownership Plans and Employee Stock Option Plans of Overseas Listed Company issued by SAFE on March 28, 2007 (collectively, referred to as the Individual Foreign Exchange Rules). According to the Individual Foreign Exchange Rules, PRC citizens who are granted shares or share options by a company listed on an overseas stock market according to its employee share option or share incentive plan are required to register with the SAFE or its local counterparts by following certain procedures. We and our employees who are PRC citizens and individual beneficiary owners, or have been granted restricted shares or share options, are subject to the Individual Foreign Exchange Rules and its relevant implementation regulations. The failure of our PRC individual beneficiary owners and the restricted holders to complete their SAFE registrations pursuant to the SAFE Jiangsu Branch's requirement or the Individual Foreign Exchange Rules may subject these PRC citizens to fines and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries, limit our PRC subsidiaries' ability to distribute dividends to us or otherwise materially adversely affect our business.

Table of Contents

In addition, the Ministry of Finance and the SAT have issued circulars concerning individual income taxes relating to employee share options. Under these circulars, our employees working in the PRC who exercise share options will be subject to PRC individual income tax. The tax base for the employment income would be the fair market value of the received shares at the time of vesting minus the corresponding consideration paid by the employees for the shares. Our PRC subsidiaries have obligations to file documents related to employee share options with relevant tax authorities and to withhold individual income taxes of those employees who exercise their share options. If our employees fail to pay or we fail to withhold their income taxes according to applicable PRC laws and regulations, we may face fines ranging from 50% to 300% of the overdue taxes.

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

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

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

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. There have been reports on the occurrences of avian flu in various parts of China, including a few confirmed human cases and deaths. In 2009, an outbreak of swine flu occurred in Mexico and the United States and 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.

Table of Contents

Risks Related to Our Ordinary Shares and ADSs

Uncertainty concerning the proposed going private transaction may adversely affect our business and the market price of our ADSs.

Our board of directors received a preliminary non-binding proposal letter dated December 12, 2015 from the Buyer Group, to acquire all of our outstanding ordinary shares not owned by them in a going private transaction for \$0.232 in cash per ordinary share, or \$11.6 in cash per ADS. Our board of directors formed a special committee consisting of two independent directors, Messrs. Sean Shao and Qian Zhao, on December 13, 2015 to consider the proposal.

In order for the proposed going private transaction to be consummated, we must first enter into a merger agreement with the Buyer Group that is approved by our board of directors and later by our shareholders. If the going private transaction is consummated, it would cause us to be delisted from the New York Stock Exchange and become a private company, in which event our shareholders, other than those in the Buyer Group, would not be able to participate in our future growth. If the proposed going private transaction is not approved by either our directors or our shareholders or is for any other reason not consummated, it could adversely affect the market price of our ADSs. Whether consummated or not, the proposed going private transaction risks diverting management focus, employee attention and other resources from strategic opportunities and from operational matters. Also, as the going private transaction develops, certain events such as the execution of any merger agreement, completion of the merger or an amendment to or termination of any merger agreement, may increase the volatility of the trading price of our ADSs. Furthermore, we could be subject to potential lawsuits in connection with the proposed going-private transaction.

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

The market price of 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 companies;
- addition or departure of our executive officers and key research personnel;
- financial blogs, Internet chat room or other media forms which publish unsubstantiated opinions or claims in support of undisclosed trades, including short selling, of our ADSs;
- announcements regarding patent litigation or the issuance of patents to us or our competitors;
- conditions affecting general economic performance in the United States;
- fluctuations in the exchange rates between the U.S. dollar, the Euro and Renminbi;

Table of Contents

- release or expiry of lock-up or other transfer restrictions on our outstanding ordinary shares;
- patent litigation and other intellectual property disputes;
- litigation and other disputes with our long-term suppliers;
- SEC investigation or private securities litigation;
- the release or expiration of lock-up or other transfer restrictions on our outstanding ADSs;
- sales or anticipated sales of additional ADSs; and
- the proposed acquisition of all of our outstanding shares not currently owned by the Buyer Group in a going private transaction.

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 and adverse effect on the market price of our ADSs.

Changes in the accounting guidelines relating to the borrowed ADS could decrease our earnings per share and potentially the ADS price.

We have entered into ADS lending agreements with the underwriters of our ADS offering registered on prospectus supplement dated September 30, 2014 and the accompanying prospectus dated June 4, 2014. We entered into these ADS lending agreements to facilitate transactions by which investors in our convertible senior notes may hedge their investment. Subject to certain terms of the ADS lending agreements, these borrowed ADSs must be returned to us by October 15, 2019 or earlier in certain circumstances. The borrowed ADSs will be legally issued, but will not be considered outstanding for accounting purposes under U.S. GAAP. If these guidelines were to change in the future, we may be required to treat the borrowed ADSs as outstanding for purpose of computing earnings per share, our earnings per share would be reduced and the ADS price could decrease, possibly significantly.

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 directly. 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 may 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 have the potential to 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.

Table of Contents

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.

You may face difficulties in protecting your interests because we are incorporated under Cayman Islands law.

Edgar Filing: Trina Solar LTD - Form 20-F

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 depository, which is treated as the holder of the shares underlying our ADSs.

Table of Contents

You may have difficulty enforcing judgments obtained against us.

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

Item 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Our legal and commercial name is Trina Solar Limited. Our predecessor company, Trina China, was incorporated in December 1997. In anticipation of our initial public offering, we incorporated Trina, a listing vehicle, as an exempted company limited by shares under the laws of the Cayman Islands 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 most of our operations through Trina China and other subsidiaries in the PRC. 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, all of which we redeemed, together with all accrued but unpaid interest, as of the maturity date on July 15, 2013, and 8,146,388 ADSs for a related ADS borrowing facility. In August 2009, we completed a follow-on public offering of 5,175,000 ADSs. In March 2010, we completed another follow-on public offering of 9,085,000 ADSs. In June 2014, we completed a private placement of \$172.5 million aggregate principal amount of 3.5% convertible senior notes due 2019, and a concurrent follow-on public offering of 10,120,000 ADSs. In October 2014, we completed a private placement of \$115 million aggregate principal amount of 4.0% convertible senior notes due 2019, and a concurrent follow-on public offering of 10,333,785 ADSs, 2,504,000 ADSs of which were sold by us and 7,829,785 ADSs of which were loaned pursuant to an ADS borrowing facility related to the concurrent private placement of senior notes.

Our board of directors received a preliminary non-binding proposal letter dated December 12, 2015 from the Buyer Group to acquire all of our outstanding ordinary shares not owned by them in a going private transaction for \$0.232 in cash per ordinary share, or \$11.6 in cash per ADS. Our board of directors formed a special committee consisting of two independent directors, Messrs. Sean Shao and Qian Zhao, on December 13, 2015 to consider the proposal. See Item 3. Key Information D. Risk Factors Risks Related to Our Ordinary Shares and ADSs Uncertainty concerning the proposed going private transaction may adversely affect our business and the market price of our 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 8517-6025. Our registered office in the Cayman Islands is located at the offices of Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands.

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

Table of Contents

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 and solar system developer based in China with a global distribution network covering Europe, Asia, North America, Australia and Africa. 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 also develop, design, construct, operate and sell solar power projects that primarily use the solar modules we manufacture. Beginning in 2014, we have two reportable operating segments consisting of the manufacturing segment and the solar power projects segment.

We produce standard monocrystalline PV modules ranging from between 215 watts, or W, and 230 W to between 275 W and 295 W in power output for 60 cell and between 325 W and 350 W for 72 cell and multicrystalline PV modules ranging from between 260 W and 270 W to between 305 W to 320 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 China and the United States, where government incentives have accelerated the adoption of solar power. In recent years, we have also increased our sales in newer and emerging solar power markets, which include the United Kingdom and India, as well as other markets in Asia, Africa, the Middle East, Latin America, and the Caribbean Islands. We have established regional headquarters and offices located in Europe, North America and Asia to target sales and distribution in those markets. We primarily sell our products to wholesalers, power plant developers and operators and PV system integrators, including NVT, LLC dba SunEdison, Sanshin Electronics Co., Ltd., Solar City, SunEnergy1, FLS Energy, Welspun Energy Private Limited, Vivint Solar Developer, LLC, Bluefield SIF Investments Limited, Consolidated Edison Development, TBEA Xinjiang Sunoasis Co., Ltd.

We have expanded into the downstream solar power projects market. In 2015, we completed and connected 425.0 MW of build-to-own projects in China, completed and connected 210.9 MW of build-to-sell projects in China, and completed and sold 50.0 MW of build-to-sell projects in Europe. We anticipate completing between 750 MW and 850 MW of projects during 2016, including significant projects in China and globally. Our integrated manufacturing model and experience as a provider of high quality solar solutions have allowed us to successfully grow our solar power project business and develop a strong solar project pipeline to support future expansion.

As of December 31, 2015, we had an annualized in-house manufacturing capacity of ingots of approximately 2,300 MW, wafers of approximately 1,800 MW, cells of approximately 3,500 MW and modules of approximately 5,000 MW. In order to fill the gap between our needs for PV cells and our ingots and wafer manufacturing capacities that was created by strong market demand, and to achieve export cost advantages to certain markets, we contract toll services from third party manufacturers to process ingots and wafers and source wafers from our suppliers and strategic partners.

Subsequently, we have developed relationships with various domestic and international suppliers of ingots and wafers.

We purchase polysilicon from our network of over ten suppliers, including several leading global producers of polysilicon, and have developed strong relationships with our suppliers. To reduce raw material costs, we continue to focus our research and development on improving solar cell conversion efficiency and enhancing manufacturing yields. Our research and development platform has been further enhanced by our research and development laboratory that we were 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 using the research and development laboratory in PV Park, or the PV Park Lab, in March 2012 and in November 2013, it was accredited by China's Ministry of Science and Technology.

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. We began to develop solar power projects in 2009, and strategically entered the solar power project market in 2013. In 2013, 2014 and 2015, we generated net sales of \$1,775.0 million, \$2,286.1 million and \$3,035.5 million, respectively. We recorded a net loss of \$72.2 million, a net income of \$61.3 million, and a net income of \$86.3 million in 2013, 2014 and 2015, respectively.

Table of Contents

Products and Projects

Beginning in 2014, we have two reportable operating segments:

- ***Manufacturing segment.*** We design, develop, manufacture and sell high efficiency PV modules world-wide, and integrate the manufacturing of ingots, wafers and solar cells for use in our PV module production.
- ***Solar power projects segment.*** We design, construct, sell and/or operate solar power projects in China and overseas.

Our manufacturing segment designs, develops, manufactures and sells high efficiency PV modules world-wide. The manufacturing segment is comprised of the production of mono- and multi-crystalline silicon ingots, wafers, cells and related products and the subsequent assembly and marketing of PV modules. PV modules are arrays of interconnected solar cells encased in a weatherproof frame. We produce standard monocrystalline PV modules ranging from between 215 W and 230 W to between 275 W and 295 W in power output for 60 cell and between 325 W and 350 W for 72 cell and multicrystalline PV modules ranging from between 260 W and 270 W to between 305 W to 320 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. 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.

Our solar power projects segment designs, constructs, operates and sells solar power projects in China, the United Kingdom, the U.S. and other European and Asian countries. We engage in the full life-cycle of solar projects development including project selection, design, financing, permitting, engineering, procurement, construction, installation, monitoring, operation and maintenance. We either sell completed solar projects to third party buyers, or operate them under the PPAs, or other contractual arrangements with utility or grid operators. In December 2015, we split our solar power project business unit, or SBU, into two separate units: a China SBU and an international SBU, which are still under the same management. The China SBU focuses on PV power plants in China, including the development and sales, engineering, procurement and construction, or EPC, and operation & maintenance, and the international SBU focuses on developing PV power plants in key international markets.

Manufacturing Segment

We manufacture ingots, wafers, cells and modules. We plan to build or acquire new facilities to increase our annualized in-house manufacturing capacity of cells and modules from 3,500 MW and 5,000 MW, respectively, as of December 31, 2015 to 5,000 MW and 6,000 MW, respectively, as of December 31, 2016. This increase will take place as we improve the efficiency of our current facilities and build new greenfield facilities. We also seek for opportunities to access new production capacity that will strategically complement our current capacity through acquisitions or partnerships. We plan to incur capital expenditures of up to \$250.0 million to accomplish our 2016 expansion plans in our manufacturing segment. The following table sets forth our manufacturing capacity and production output in MW equivalent of module

production as a result of our expansion for each of our facilities.

Table of Contents

Manufacturing Facility	Manufacturing Commencement Date	Annualized In-House Manufacturing Capacity as of December 31, 2015	Production Output for the Year Ended December 31, 2015	Estimated Maximum Annualized In-House Manufacturing Capacity as of December 31, 2016
Silicon ingots	August 2005	2,300 MW ⁽¹⁾	2,501 MW ⁽²⁾	2,300 MW
Silicon wafers	February 2006	1,800 MW ⁽¹⁾	2,492 MW ⁽²⁾	1,800 MW
Solar cells	April 2007	3,500 MW ⁽¹⁾	3,884 MW ⁽²⁾	5,000 MW
PV modules	November 2004	5,000 MW ⁽¹⁾	5,873 MW ⁽²⁾⁽³⁾	6,000 MW

(1) Approximate figures.

(2) The amount by which production output exceeds manufacturing capacity is largely attributable to our arrangements with original equipment manufacturers.

(3) Includes modules produced but not shipped as of December 31, 2015.

The key components of our manufacturing process are as follows:

- Silicon feedstock.* We purchase polysilicon from various suppliers, including silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies. 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 2015, we had an average silicon usage of approximately 5.1 grams per watt, compared to approximately 5.3 grams per watt in the fourth quarters of both 2014 and 2013.

- Ingots.* We began commercial production of multicrystalline ingots in November 2007. As of December 31, 2015, we had 184 directional solidification system, or DSS, furnaces for the manufacturing of multicrystalline ingots, which can yield 2,300 MW of modules annually based on current manufacturing processes. 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 thickness of approximately 185 microns, 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, while the unusable parts are melted down for reuse. 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, 2015 was approximately 1,800 MW based on current manufacturing processes.

We fulfill some of our wafer requirements by sourcing from strategic partners. We will continue to source wafers through long-term supply agreements in order to fill the gap between our PV cell and module manufacturing capacity and our wafer manufacturing capacity and to achieve import cost advantages to certain markets. As a result, we have developed relationships with various domestic and international suppliers of wafers. From time to time, we also fulfilled some of our ingot and wafer requirements through toll services from our strategic partners. We will continue to contract toll services from third party manufacturers to process ingots and wafers in the future.

Table of Contents

- *Solar cells.* We currently produce our own solar cells for use in our PV modules. 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 20% as of December 31, 2015 on a test production line basis. In November 2007, we began producing multicrystalline cells and achieved a conversion efficiency of up to 18.3% as of December 31, 2015 on a mass production basis. As of December 31, 2015, we had 79 production lines with a total annualized in-house manufacturing capacity of approximately 3,500 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 agreements to both purchase and sell solar cells with commercially favorable terms to meet the fluctuations in PV module demand, or to achieve import cost advantages to certain markets.

- *PV modules.* We began module manufacturing in November 2004. We increased our annualized in-house manufacturing capacity of modules from approximately 6 MW per year as of November 2004 to approximately 5,000 MW per year as of December 31, 2015.

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.

We are in close proximity to Chinese solar equipment manufacturers that offer much of the solar manufacturing equipment we require at competitive prices compared to similar machinery offered by international solar equipment manufacturers.

Solar Power Projects Segment

We design and construct solar power projects in China, the United Kingdom, Japan, the Middle East and India. Once construction is complete we either hold and operate the project or sell it to a third party. This segment enables us to capture additional portions of the value chain in the solar industry. We engage in the full life-cycle of developing and operating solar power projects, including project selection, design, permitting, engineering, procurement, construction,

installation, monitoring, operation and maintenance. We began to develop solar power projects in 2009, and strategically entered the solar power project market in 2013. Our solar power projects segment has grown significantly in the past three years. The solar power projects business is growing quickly in China, supported by favorable government policies, and we expect this segment to be strategically important to us and continue to grow.

Solar Power Projects Development Process

Our solar power projects development process primarily consists of the following stages:

- *Project selection.* We search for project opportunities inside and outside of China. Our business team closely monitors the solar power projects market and gathers market intelligence to identify project development opportunities. We engage reputable law firms and consulting firms led by our internal due diligence team to conduct feasibility studies of the potential projects and select projects based on such studies. As we consider undertaking new solar power projects, we weigh a number of factors including location, local policies and regulatory environment, the availability of funding for both us and prospective purchasers and potential internal rate of returns.

Table of Contents

- *Project financing.* We typically include project financing plans in our feasibility studies and implement those plans after obtaining internal approval for the projects. Usually we finance 25% to 30% of our projects using our own funds and 70% to 75% through external financing, such as short-term bridge debt financing or long-term project loans collateralized by project assets.
- *Permitting and approval.* We generally obtain permits and approvals for solar projects using our internal team and collaborating with other developers. We may also acquire projects that are in various stages of the permitting and approval process. The permits and approvals required for solar power projects vary depending on project location. In certain instances, in order to avoid some of uncertainties surrounding the regulations governing the permitting and approval process, we have entered into power plant agreements with unrelated project entities that have already obtained the required permits and approvals. These power plant agreements enable us to provide financing to the solar projects and then acquire the equity interests in the project entities after the project has completed construction and is connected to the State Grid. For a discussion of the risks associated with power plant agreements, see Item 3. Key Information D. Risk Factors Risks Related to Doing Business in China The PRC government may determine that the power plant agreements that establish the structure for the acquisition and operation of certain solar power plants before grid connection in China do not comply with PRC regulations.
- *Project design, engineering, procurement and construction.* Our engineering team generally designs solar power projects with the goal of optimizing the performance of our projects while minimizing construction and operational costs and risks. We hire independent third-party contractors to construct our solar projects and we screen them based on their experience, reputation, credibility, safety and compliance record and other criteria. We use solar modules that we produce and procure inverters and other equipment from third party suppliers.
- *Build-to-sell projects.* We usually determine whether a project is a build-to-sell project before commencing construction. Most of our overseas projects and some of our projects in China are build-to-sell projects. We actively market our build-to-sell projects throughout the development process, and usually are able to identify and engage purchasers before the completion of construction.
- *Operation and Maintenance for build-to-own projects.* Most of our build-to-own projects are located in China. We operate and maintain our build-to-own projects after they start operating, which requires signing grid-connection agreements and/or PPAs with the local grid companies. After the project is connected to the grid, we are responsible for operation and maintenance of the project, which we supply internally or sub-contract to external service providers.

Our Project Portfolio

Edgar Filing: Trina Solar LTD - Form 20-F

In 2015, we completed and connected 425.0 MW of build-to-own projects in China, completed and connected 210.9 MW of build-to-sell projects in China, and completed and sold 50.0 MW of build-to-sell projects in Europe.

As of December 31, 2015, our completed and connected projects consisted of 26 build-to-own projects with a total designed capacity of 658.3 MW located in China, Greece, Italy and the United States and 21 build-to-sell projects with a total designed capacity of 210.9 MW in China. Our completed but not yet connected projects consisted of a 40.0 MW project located in China. Our projects under construction included 27 projects with a total designed capacity of 537.9 MW, including 25 build-to-sell projects with a total designed capacity of 423.4 MW located in China, the United Kingdom and Japan and two build-to-own projects with a total designed capacity of 114.5 MW located in China, all of which are expected to be completed and connected to the grid in 2016. Our projects in pipeline as of December 31, 2015 included 46 projects with a total designed capacity of 1,036.9 MW, including 774.4 MW build-to-sell projects and 262.5 MW build-to-own projects. Projects in pipeline are those projects that have been internally approved to start the permitting process but have not started construction.

Table of Contents

As of December 31, 2015, our build-to-sell project portfolio mainly consisted of:

- 21 completed and connected projects with a total designed capacity of 210.9 MW, which included six ground-mounted solar power projects with a total capacity of 90.0 MW and 15 industrial rooftop solar power projects with a total capacity of 120.9 MW in China;
- 25 projects under construction with a total designed capacity of 423.4 MW located in China, the United Kingdom, and Japan; and
- 42 projects in pipeline with a total designed capacity of 774.4 MW, including 547.9 MW of projects located in China, 218.1 MW of projects located in Japan and 8.4 MW of projects located in Chile.

As of December 31, 2015, our build-to-own project portfolio mainly consisted of:

- 26 completed and connected projects with a total designed capacity of 658.3 MW, including seven ground-mounted solar power projects with a total capacity of 555.5 MW and 14 industrial rooftop solar power projects with a total capacity of 80.6 MW in China, two solar power projects in Greece with a total designed capacity of 16.0 MW, a 2.0 MW solar power project in Italy, and two solar power projects in the United States with a total designed capacity of 4.2 MW. The 22.2 MW of overseas projects were completed and connected to the grid in 2013. 555.5 MW of ground-mounted solar power projects and 80.6 MW of industrial rooftop solar power projects located in China were connected to the grid in 2014 and 2015;
- one 40.0 MW completed but not yet connected project located in China;
- two projects under construction with a total designed capacity of 114.5 MW, which are located in China and are expected to be completed in 2016. In August 2014, we entered into a share purchase agreement to acquire 90% of the equity interest in Yunnan Metallurgical New Energy, which held a 300.0 MW project in southern Yunnan Province, or the Yunnan Project. We completed the share transfer registration with the Yunnan Administration for Industry and Commerce in September 2014. The Yunnan Project has connected 245.5 MW as of December 31, 2015, and plans to complete grid connection with full capacity before June 2016; and

Edgar Filing: Trina Solar LTD - Form 20-F

- four projects in pipeline with a total designed capacity of 262.5 MW, including three solar power projects with a total designed capacity of 250.0 MW located in China and one 12.5 MW solar power project located in India.

The following table sets forth our project portfolio in our strategic markets as of December 31, 2015:

	Completed Projects			Build-to-sell	Projects Under Construction		Projects in Pipeline		
	Build-to-sell	Build-to-own	Sub-total		Build-to-own	Sub-total	Build-to-sell	Build-to-own	Sub-total
China	210.9	676.1(1)	887(2)	394.7	114.5	509.2	547.9	250	797.9
Europe		18	18	24.3		24.3			
Japan				4.4		4.4	218.1		218.1
Others		4.2	4.2				8.4	12.5	20.9
Total	210.9	698.3	909.2	423.4	114.5	537.9	774.4	262.5	1,036.9

(1) Consists of 636.1 MW of projects completed and connected and a 40.0 MW project completed and not yet connected.

(2) Consists of 847.0 MW of projects completed and connected and a 40.0 MW project completed and not yet connected.

Table of Contents

Suppliers and Contractors

Manufacturing Segment

Our manufacturing business depends on our ability to obtain silicon-based raw materials, including polysilicon, ingots and wafers. We procure polysilicon primarily from domestic and international manufacturers. In addition to our headquarters, we have two offices located in Japan 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-based raw materials from various sources will enable us to better control the silicon supply chain, increase manufacturing efficiency, and reduce margin pressure.

We have entered into medium-term and long-term supply contracts to procure silicon feedstock of different grades with Chinese and international suppliers. These medium-term and long-term suppliers include Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd., or Jiangsu Zhongneng, and Changzhou GCL Photovoltaic Technology Co., Ltd., or GCL (Changzhou), both of which are subsidiaries of GCL. Our medium-term and long-term contracts have delivery terms up to 2020 with variable prices. Generally we negotiate purchase quantities annually. These contracts also require us to make an advance payment of a certain negotiated amount.

To secure sufficient feedstock to support our planned sales growth, in March 2008, we entered into an eight-year framework polysilicon supply agreement with Jiangsu Zhongneng, a supplier of polysilicon based in Jiangsu, China. In August 2008, we expanded the scope of the supply of polysilicon under this agreement to wafers. In August 2009, we extended the term of this supply agreement by another five years. In December 2010, Jiangsu Zhongneng assigned all of its obligations and rights under this supply agreement with respect to the wafer supply to GCL (Changzhou), a wafer supplier based in Jiangsu, China. Under a supplemental framework long-term agreement we entered into in March 2010 with Jiangsu Zhongneng, Jiangsu Zhongneng has agreed to supply to us up to an aggregate of 27,220 tons of polysilicon through 2020. Under a supplemental framework long-term wafer supply agreement we entered into with GCL (Changzhou) in January 2011, GCL (Changzhou) has agreed to supply to us wafers sufficient to produce up to an aggregate of 19,737 MW of PV modules over ten years from January 2011 to December 2020, and we have agreed to procure not less than 50% of our outsourced wafer requirement from GCL (Changzhou) each year during the term of the agreement. Under our agreements with GCL (Changzhou) and Jiangsu Zhongneng, the prices of the polysilicon and wafers were initially predetermined subject to periodic adjustments. Due to the volatility of polysilicon prices, we have negotiated actual polysilicon and wafer purchase amounts and prices under our long-term framework agreement with GCL (Changzhou) from time to time. For example, in January 2014, February 2015 and January 2016, we entered into supplemental agreements with GCL (Changzhou) and Jiangsu Zhongneng to modify our total wafer and polysilicon purchase quantities for 2014, 2015 and 2016, respectively, among other things. We expect to further negotiate our purchase commitments in the future taking into account market conditions.

In recent years, we have sourced ingots for wafer slicing, silver paste for cell production, and ribbon for module assembly from the new production facilities established by our key suppliers in the PV Park adjacent to our headquarters. Sourcing from suppliers located within the PV Park and expanding our close-in supply system to cover a greater number of vendors allows us to collaborate with our vendors for better inventory and production management control, better monitoring of supply quality and easy access to onsite inventory.

Solar Power Projects Segment

We use solar modules that we produce in our solar power projects, which generally constitute a substantial portion of the average total costs. We procure inverters and other equipment of solar power projects from a broad range of reputable suppliers. We hire and supervise reputable local third-party contractors to construct solar power projects. Our internal engineering team typically designs, operates and maintains our solar power projects located in China, and we engage third-party service providers to provide design, operation and maintenance services for our solar power projects located overseas. We employ a number of measures to manage and monitor the performance of our contractors in terms of both quality and delivery schedule, including on-site supervisors, periodic inspections and reports. Under the construction agreements, we are generally entitled to compensation if our contractors fail to meet the prescribed quality requirements and deadlines.

Table of Contents

Quality Assurance

Manufacturing Segment

We have an experienced quality management team that includes new product introduction planning, manufacturing quality control, supply chain quality management, customer quality support, quality reliability assurance, quality assurance system, calibration center and continual improvement office. We have established and maintain quality management systems in accordance with the requirements of ISO9001:2008 and reliability assurance systems in accordance with the requirements of JIS Q8901:2012. We have also obtained RoHS and REACH certification. We own one of the key national laboratories for PV science and technology, which has obtained ISO/IEC17025 certification from China National Accreditation Service for Conformity Assessment and test capabilities in the key laboratory that satisfy IEC61215/IEC61730 and UL1703 test requirements. Our products have obtained certification in accordance with the standards of IEC61215:2005, IEC61730:2004 and UL1703:2012. In 2014, we won the Changzhou Mayor Award for Quality and the Rheinland Star Photovoltaic Module Award granted by TÜV Rheinland. In 2015, we won the Jiangsu Province Quality Management Excellence Award.

In May 2010, we entered into a strategic partnership agreement with TÜV Rheinland Group, or TÜV Rheinland, Underwriters Laboratories Inc., or Underwriters Laboratories, and China General Certification Center, three of the leading certification bodies. Under the agreement, TÜV Rheinland, Underwriters Laboratories and China General Certification Center 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. In October 2012, the testing center for key national laboratory of PV science and technology at Trina Solar received the official certification issued by Underwriters Laboratories, which recognizes our testing center as Underwriters Laboratories first global PV customer data program testing center. In 2013, Trina Solar was awarded the Top Brand PV seal in the Modules category in Germany by EuPD Research.

Our outstanding quality management team, advanced quality management systems, international first-class quality management hardware and environmental protection initiatives ensure our products are continually of a high quality to satisfy our customers, while also achieving our sustainable development goals.

The following table sets forth the major certifications we have received and major test standards our products have met as of December 31, 2015.

Certification Test Date	Certification or Test Standard	Relevant Products
January 2016	ISO 9001:2008 quality management system certification	Design, manufacture and sales of ingots, casting, silicon wafers, solar cells and PV solar modules; design, sales and service of PV application product; design, sales, installation and service of PV system
December 2015	ISO 14001:2004 environmental management system	Design, manufacture and sales of ingots, casting, silicon wafers, solar cells and PV solar modules; design, sales and service of PV

Edgar Filing: Trina Solar LTD - Form 20-F

		application product; Design, sales, installation and service of PV system
December 2015	OHSAS18001 occupational health and safety management system	Design, manufacture and sales of ingots, casting, silicon wafers, solar cells and PV solar modules; design, sales and service of PV application product; Design, sales, installation and service of PV system.

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

Certification Test Date	Certification or Test Standard	Relevant Products
May 2015	ISO 14064-1:2006 Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals	Design, manufacture and sales of silicon, ingots, casting, silicon wafers, solar cells and PV solar modules
August 2015	ISO50001 EnMS certification regarding energy consumption	Energy management activities involved in the design, development and production of polycrystalline ingot, silicon wafers, cells and modules.
November 2014	PAS2050:2011 product carbon footprint certification	TSM-PC05A PV modules TSM-PC14 PV modules TSM-PDG5 PV modules
November 2014	ISO/TS 14067:2013	TSM-PC05A PV modules TSM-PC14 PV modules TSM-PDG5 PV modules
December 2014	JIS Q 8901 Certification from TÜV Rheinland	PV modules
December 2009	RoHS certification	PV modules
June 2014	REACH certification	PV modules
June 2013	ISO/IEC17025 CNAS laboratory accreditation certification	PV product testing center
October 2015	TÜV Rheinland product certification	PV modules sold in Europe
February 2015	TÜV SÜD product certification	PV modules sold in Europe
December 2015	MCS certification	PV modules sold in the United Kingdom
December 2015	CGC	PV modules sold in China
February 2015	JET product certification	PV modules sold in Japan
February 2015	JET product certification	PV modules sold in Japan
December 2015	Clean Energy Council (CEC)	PV modules sold in Australia
February 2015	SII product certification	PV modules sold in Israel
April 2015	UL 1703 certification	PV modules sold in North America

Table of Contents

Certification Test Date	Certification or Test Standard	Relevant Products
June 2015	CSA certification(UL1703)	PV modules sold in North America
October 2015	Ammonia test	Special requirement from customer
October 2015	Salt mist test	Special requirement from customer
December 2015	Sand blast test	PV modules
September 2015	PID testing	PC05, PC14
July 2015	UL1500V certification	TSM-PE05A and TSM-PE14A polycrystalline modules
July 2015	IEC 1500V certification	TSM-PE05A and TSM-PE14A polycrystalline modules
September 2015	Brazil Listing	PV modules PC14
December 2015	CEC CA	PV modules

Solar Power Projects Segment

We have strict and comprehensive quality control standards and measures in every stage of the solar projects development process. We conduct comprehensive market due diligence to identify solar projects that have projected internal returns that meet our standards. Our experienced and qualified engineering team designs the projects with technical specifications that provide for the quality and performance of our solar power plants. PV modules used in our solar power projects are from our manufacturing business that have the certifications and meet test standards discussed above. Our PV modules typically come with a ten-year warranty for defects in material and workmanship and a minimum power output warranty of up to 25 years following the date of purchase or installation. We further guarantee that module power output will not decrease by more than approximately 0.7% per year after the initial year of service. We closely monitor and supervise construction contractors as part of the quality control process, who also typically provide warranties and performance guarantees of up to five years. Our operating and maintenance team and third party service providers tests, checks and continuously monitors the quality and performance of our operating solar power projects.

Customers and Markets***Manufacturing Segment***

In our manufacturing segment, we currently sell our PV modules primarily to power plant developers and operators, wholesalers and PV system integrators. We focus on different types of clients depending largely upon the demand in specific markets. We work with solar power plant

Edgar Filing: Trina Solar LTD - Form 20-F

developers and operators, who tend to be large volume purchasers, by supplying PV modules for 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 in 2015 included NVT, LLC dba SunEdison, Sanshin Electronics Co., Ltd., Solar City, SunEnergy1, FLS Energy, Welspun Energy Private Limited, Vivint Sloar Developer, LLC, Bluefield SIF Investments Limited, Consolidated Edison Development, TBEA Xinjiang Sunoasis Co., Ltd. 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.

Table of Contents

A small number of customers have historically accounted for a significant portion of our net sales. Our top five customers collectively accounted for approximately 18.7%, 34.7% and 23.3% of our net sales in 2013, 2014 and 2015, respectively. Our largest customer contributed approximately 5.9% of our net sales in 2015.

We currently sell most of our PV modules to customers located in the United States, China, Japan and Europe. Solar manufacturers like us have capitalized on government and regulatory policies promoting 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. The United States, China and Japan are our most important markets and in 2015, the United States, China and Japan accounted for 34.7%, 28.5% and 11.4% of our net sales, respectively. In 2015, our sales of PV modules in the United States, China and India increased significantly and we increased our market presence globally. We have built our brand as one of the top global solar brands.

To enhance our sales capabilities in the European, American and Asian (excluding China) markets, we have established regional headquarters in San Jose, Zurich, Tokyo and Singapore. We also have established sales and business development offices in Madrid, Beijing, Shanghai, Munich, Abu Dhabi, Sydney, Chengdu, Urumqi, Santiago and New Dehli, all to support our growing base of customers and to seek out business development opportunities in the regions. 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 effects of reduced incentives from the governments of certain European countries.

The following table sets forth our total net sales by geographical region for the periods indicated:

Region	2013		Year Ended December 31, 2014		2015	
	Total Net Sales	Percent	Total Net Sales	Percent	Total Net Sales	Percent
	(in thousands, except for percentages)					
China	\$ 591,071	33.3%	\$ 747,811	32.7%	\$ 864,108	28.5%
Europe	548,557	30.9	219,291	9.6	331,681	10.9
United States	302,270	17.0	634,446	27.8	1,053,637	34.7
Japan	147,403	8.3	457,901	20.0	345,567	11.4
India	79,105	4.5	67,359	2.9	242,950	8.0
Others	106,565	6.0	159,311	7.0	197,569	6.5
Total	\$ 1,774,971	100.0%	\$ 2,286,119	100.0%	\$ 3,035,512	100.0%

We conduct our PV module sales typically through short-term and medium-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 and medium-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 and medium-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.

Edgar Filing: Trina Solar LTD - Form 20-F

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 enhanced our credit control policy in 2015 and our accounts receivable turnover days were approximately 78 days in 2015, compared to 99 days in 2014. More than 90% of our overseas credit sales are insured against non-payment by our customers. The amount of credit line insurance coverage for each transaction is based on a rating assigned by the insurer to the customer, based on that customer's credit history.

Pursuant to our sales contracts, we provide customers with warranty services. Our PV modules were historically sold with a two or five year warranty for defects in material and workmanship and a minimum power output warranty for up to 25 years following the date of purchase or installation. In 2011, we extended the warranty for defects in material and workmanship to ten years and began to guarantee that module power output will not decrease by more than approximately 0.7% per year after the initial year of service.

Table of Contents

We seek to better serve our customers and end users 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 serve 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 offer a three-pronged service solution featuring complementary design services, high performance

Honey modules and the rapid install Trinamount racking system, a proprietary system to mount PV modules onto residential and commercial rooftops. 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.

Solar Power Projects Segment

We sell our build-to-sell projects to predetermined or committed purchasers. For our build-to-own projects, we sell the electricity generated from those projects to the local transmission grid. Purchasers of build-to-sell projects include large utility companies or other power producers that desire to sell the electricity from the projects to local power suppliers. We focus on countries and regions where the solar power industry is growing rapidly and expected to have sustainable growth supported by favorable government policies, such as China.

Sales and Marketing

Manufacturing Segment

Over the years, we have expanded our distribution network globally. While our core solar module customer base continues to expand in China and the United States, we continue to grow our sales and distribution channels into newer and emerging solar power markets, which include the United Kingdom, India and Japan, as well as other markets in Asia, Africa, the Middle East, Latin America, and the Caribbean Islands. 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, warehouse operations and have major sales offices in the locations listed below. Our localized offices will continue to be supported by our global operations and administration headquarters located in Changzhou, China.

Global Headquarters

Changzhou, China

Regional Headquarters

San Jose, California, US (January 2010)

Zurich, Switzerland (January 2010)

Tokyo, Japan (February 2010)

Singapore (November 2011)

Warehouse Operations

Rotterdam, the Netherlands (December 2008)

San Jose, California, US (June 2009)

Sales and Business Development Offices

Madrid, Spain (May 2010)

Beijing, China (July 2010)

Shanghai, China (July 2010)

Munich, Germany (March 2011)

Abu Dhabi, United Arab Emirates (December 2011)

Sydney, Australia (May 2011)

Chengdu, China (March 2012)

Urumqi, China (March 2012)

Santiago, Chile (September 2012)

New Dehli, India (September 2015)

Table of Contents

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.



Solar Power Projects Segment

We diligently conduct market due diligence, routinely meet with industry players and interested investors, and attend industry conferences and events to identify project development opportunities. Our business team has extensive industry expertise and significant experience in working with government authorities and developing new projects for our target markets, especially in China. With respect to our build-to-sell projects, our business team generally actively identifies and pursues potential purchasers before commencing construction. With respect to our build-to-own projects, we focus on markets with favorable government policies that guarantee or provide favorable financial incentives for the purchase of solar power by local or national grid companies.

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. All senior research and development personnel employed by us 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 the inventions, designs and technologies they develop during their terms of employment with us.

We obtained an additional 102 patents in 2015. As of December 31, 2015, we had 671 issued patents, including eight jointly owned by third parties, and 484 patent applications pending in China. Our issued patents and our pending patent applications mainly 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. 105 of our issued patents and patent applications 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 European Union, Japan, Singapore, Switzerland, Morocco, Taiwan, Thailand, Croatia, Canada, South Korea, the Philippines, Australia, the United States, the United Arab Emirates and Vietnam. We have registered as a trademark the logo  Trinasolar in China, the United States, Canada, the European Union, Australia,

the United Arab Emirates, Croatia, Thailand, the Philippines, Japan, Singapore, Switzerland, Morocco, Taiwan, South Korea, India, Vietnam and Turkey and the logo TSM in the European Union, Australia, China, Croatia, Japan, Morocco, South Korea, Singapore, Switzerland, Turkey, the United States and Vietnam. We have pending trademark registration applications for the logos Trina and Trinasolar in Pakistan, Indonesia and several other countries. We filed a trademark registration application for the logo in the PRC in December 2007 and in Taiwan in September 2009. We also registered as a trademark the logo MeSolar in China, Croatia, Singapore, Canada, Morocco, Turkey, the United Arab Emirates, Thailand, the European Union, Taiwan, Japan, Australia and Switzerland and registered as a trademark the logo YouSolar in China, the United States, Australia, Morocco, the United Arab Emirates, Taiwan, Japan, South Korea, Croatia, the European Union, Thailand, Philippines, Turkey, Vietnam, Switzerland and Singapore. We have filed trademark registration applications for the logo Trinasolar in China, the European Union, Croatia, South Korea, Singapore, Japan and several other countries. We have also recently filed European Community Trade Mark (CTM) registration for the logo Honey and Comax in twenty-seven European Union member states and will extend the registration to other states afterwards. Additionally, we have filed the trademark registration applications for the logos , , , , , , and individually with the trademark office in the PRC in November 2009, registration applications for the logo Smart energy together with the trademark office in the PRC in September 2012. We filed trademark registrations for the logos Trina and Trinasolar in Brazil, Costa Rica, Malaysia, Jordan and Chile in 2013, and also filed trademark registrations in 80 countries and regions under the Madrid Agreement and the Madrid Protocol. We also filed trademark registration for the logo , Trinahome and Trinamap in China during December 2012, the trademarks and TrinaSolar were certified as well-known trademarks of Changzhou City. In December 2013, the trademark was certified as well-known trademark of Jiangsu Province. In 2014, we filed trademark registrations for the logos Trinasmart and Dualglass in China, and the logo Smart energy together was registered in Classes 6, 9, 11, 14, 19, 25, 28, 39 and 40 in China. In 2015, we filed trademark registrations in China for the logos Trinabest, Trinastore, Trinastorage, Spacemax, Airmax, Tallmax, Allmax, Trinaswitch, Sun Duomax, Trinaflex, Trinapeak, , , Trina energy, Trina smart energy.

Table of Contents

Competition

The market for solar power products is competitive and it evolves quickly. 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 PV module manufacturing companies, including dedicated PV manufacturers such as First Solar Inc., GCL, Canadian Solar, Inc., JinkoSolar Holding Co., Ltd., JA Solar Holdings Co., Ltd. and Xi'an LONGi Silicon Materials Corp. as well as multinational conglomerates such as Mitsubishi Electric Corporation. We may also face competition in the downstream solar power business from competitors such as Canadian Solar Inc., JinkoSolar Holding Co., Ltd., and GCL, as well as the large Chinese state-owned electric utility enterprises in the downstream solar power business in China. Some of our competitors may have a stronger market position than ours, more sophisticated technologies and products, greater resources and better name recognition than we do. Further, some 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. As the shortage of polysilicon has eased, supply chain management and financial strength have become less significant barriers to entry and many new competitors may enter the industry and cause it to become over-saturated. Some mid-stream solar power products manufacturers have been seeking to move downstream to strengthen their position in regional markets. In addition, we may also face new competition from manufacturers developing thin film and other PV technologies that are designed to offer economic or performance advantages, several of which have already announced their intention to start production of solar cells or module products. Decreases in polysilicon prices and increases in PV module production could result in substantial downward pressure on the price of PV modules and

intensify the competition we face.

Table of Contents

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 maintain programs to reduce electricity consumption, water consumption, waste water and greenhouse gas emission since operation and aim to achieve sustainable development and a low carbon footprint. In connection with our module production activities, we have significantly reduced electricity consumption, water consumption, waste water emissions, and greenhouse gas emissions in our production.

Our solar power projects business is usually supported by environmental laws and policies, and receives government subsidies or other financial incentives because it produces clean and renewable energy. For example, the Renewable Energy Law of the PRC sets forth policies to encourage the development and utilization of solar power and other renewable energy. The Circular on Improving Policies on the On-grid Tariffs of Solar Power Generation issued by the NDRC of China provides that the FIT for solar power projects be RMB1.00 per kilowatt-hour, or kWh. See Regulation section below. During our project development process, we often prepare environmental impact assessment reports as part of the permitting process. During the construction stage, we comply with environmental laws and regulations relating to construction. Once operational, our solar power projects do not generate industrial waste.

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 have limited worldwide product liability insurance coverage for our products manufactured in China. 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 2015.

Some of our overseas credit sales are insured against non-payment by our customers. The amount of insurance coverage for each transaction is based on a rating assigned by the insurer to the customer, based on that customer's credit history.

Regulation

Edgar Filing: Trina Solar LTD - Form 20-F

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 imposes mandatory obligations on grid enterprises to purchase the full amount of on-grid electricity generated by approved renewable energy plants whose power generation projects meet the grid connection technical standards in the areas covered by the grid enterprises' power grids.

Table of Contents

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 PV 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, NDRC 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, NDRC 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 \$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 per watt for BIPV projects using solar-integrated building materials and components and up to RMB15 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.

On July 24, 2011, NDRC released the Notice Regarding the Pricing Policy of the Feed-in Tariffs (NDRC Pricing [2011] No. 1594), or the Notice. According to the Notice, all solar energy projects that were approved before July 1, 2011 and completed construction and commenced manufacturing before December 31, 2011 shall price their feed-in tariff at RMB1.15 kWh (tax included), if such price had not been set by NDRC before the date of the Notice. All other solar energy projects, except for the solar energy projects in Tibet which shall still price their feed-in tariff at RMB1.15 per kWh (tax included), shall price at RMB1 per kWh (tax included). The solar power projects granted through special auction procedures shall follow the auction price, which shall not exceed the relevant prices set forth in the Notice. In addition, according to the Notice, the solar power projects receiving governmental subsidies shall follow certain local feed-in tariff guidance.

Table of Contents

On March 1, 2013, China's State Council issued the Twelfth Five Year Plan. The plan supports the promotion and development of renewable energy, including the solar energy. The plan also encourages the development of solar PV power stations in the areas with abundant solar power resource.

In July 2013, China's State Council issued the Several Opinions on Promoting the Healthy Development of the PV Industry. The opinions stress the importance of promoting the healthy development of the PV industry and set the goal that the total installed capacity reaches thirty-five million kWh by 2015. The opinions also indicate the State Council's intention to accelerate the adjustment of the PV industry's structure and the advancement of PV technology.

In August 2013, the National Energy Administration promulgated the Interim Measures for the Administration of Solar Power Projects, which stipulated that solar power projects are subject to filings with the provincial NDRC. Such filing is subject to the national development plan for solar power generation, the regional scale index and implementation plan of the year as promulgated by the competent national energy authority and a pre-condition for connecting to power grid.

On August 26, 2013, the NDRC issued the Circular on Promoting the Healthy Development of PV Industry by Price Leverage, or the NDRC Pricing Circular. Under this Circular, the FIT (tax inclusive) for solar power projects approved or filed after September 1, 2013 or beginning operation after January 1, 2014 would be RMB0.90 per kWh, RMB0.95 per kWh or RMB1.00 per kWh, depending on the locations of the projects (excluding on-grid solar power projects located in Tibet). In addition, the NDRC Pricing Circular sets forth special rules that entitle distributed solar power projects (excluding the projects that have received an investment subsidy from the central budget) to a national subsidy of RMB0.42 per kWh. The difference (in amount) between the FIT for solar power projects and the desulphurized coal benchmark electricity price, or the subsidies paid to distributed solar power projects, are funded by the renewable energy development funds. The above FIT and subsidy policies are valid for 20 years for each power generation project since its formal operation, in principle.

In September 2013, the Ministry of Finance and the SAT jointly issued the Notice on the Value-added Tax Policy for PV Power Generation. This notice announces a new policy regarding value-added tax, effective from October 1, 2013 to December 31, 2015. Under the new policy, 50% of the value-added tax paid by taxpayers in connection with sales of self-produced electrical products generated by solar energy will be immediately refunded to the taxpayers when the value-add tax is collected.

On November 26, 2013, the National Energy Administration promulgated the Interim Measures for the Administration of Distributed PV Power Generation. The interim measures clarify that the distributed solar projects are subject to filings with the provincial or regional NDRC. Such filing is subject to State Council's rules for administration of investment projects and the regional scale index and implementation plan of the year as promulgated by the competent national energy authority. Distributed solar projects in the regional scale index of the year that are not completed or put into operation within two years from their respective filing date must be cancelled and disqualified to receive national subsidies. The interim measures also provide that the filing procedures should be simplified and the electric power business permit and permits in relation to land planning, environmental impact review, energy saving evaluation and other supporting documents may be waived. The interim measures are valid for three years starting from the date of promulgation.

Edgar Filing: Trina Solar LTD - Form 20-F

In February 2014, the Certification and Accreditation Administration and the National Energy Administration jointly issued the Implementation Opinions on Strengthening the Testing and Certification of PV Products. The implementation opinions provide that only certified PV products may be connected to the public grid or receive government incentives. The institutions that certify PV products must be approved by the Certification and Accreditation Administration. According to the implementation opinions, PV products that are subject to certification include PV battery parts, inverters, control devices, confluence devices, energy storage devices and independent PV systems.

Table of Contents

In September 2014, the National Energy Administration promulgated the Notice on Further Implementation of Certain Policies in Relation to Distributed Solar Power, which aims to encourage the application of distributed solar power in various fields by improving subsidies, financing and supporting services.

In October 2014, the National Energy Administration released a succession of circulars on regulating the investment and development order of PV power stations and subduing the speculative behaviors. These circulars stipulates that the filings of solar power projects will be automatically invalidated if the construction of solar power projects has not commenced prior to the expiration of such filings and no application for extension has been made. The investor applying for solar power projects shall take the lead on the project investment and development as a controlling party. Prior to the commercial commencement, the investor shall not transfer the project without the consent from the filing authority. Also, in case of any material changes to the investing party or any changes to the location or details of the construction, the investor shall re-apply for the filing with the authority.

In March 2015, the National Energy Administration promulgated the Circular on Implementing Plans of PV Generation Construction for 2015, which announced that the total target for the increase in PV power generation capacity of ground-mounted projects for 2015 will be 17.8 GW and indicated that rooftop distributed solar projects and ground-mounted projects which are completely for self-use would no longer be subject to quota requirement.

On March 20, 2015, the NDRC and the National Energy Administration issued a directive opinion, which emphasizes that the competent provincial authorities must strengthen the implementation of the provisions with regard to the purchase of the full amount of electricity generated by renewable energy and avoid any curtailment of solar power projects. In addition, it also stated that electricity generated by clean energy is encouraged to be sold directly to the consumers in the regions where there is ample supply of clean energy, and the relevant parities must coordinate the trans-provincial supply of electricity and power transmission capability, in order to maximize the utilization of clean energy.

Electric Power Industry

The regulatory framework of the PRC power industry consists primarily of the Electric Power Law of the PRC, which became effective on April 1, 1996 (subsequently revised on August 27, 2009 and April 24, 2015) and the Electric Power Regulatory Ordinance, which became effective on May 1, 2005. One of the stated purposes of the Electric Power Law is to protect the legitimate interests of investors, operators and users and to ensure the safety of power operations. According to the Electric Power Law, the PRC government encourages PRC and foreign investment in the power industry. The Electric Power Regulatory Ordinance sets forth regulatory requirements for many aspects of the power industry, including, among others, the issuance of electric power business permits, the regulatory inspections of power generators and grid companies and the legal liabilities for violations of the regulatory requirements.

On January 5, 2006, the NDRC promulgated the Administrative Provisions on Renewable Energy Power Generation which set forth specific measures for setting the price of electricity generated from renewable energy sources, including solar and for allocating the costs associated with renewable power generation. The Administrative Provisions on Renewable Energy Power Generation also delegate administrative and supervisory authority among government agencies at the national and provincial levels and assign partial responsibility to electricity grid companies and power generation companies for implementing the Renewable Energy Law.

Edgar Filing: Trina Solar LTD - Form 20-F

Pursuant to the Provisions on the Administration of the Electric Power Business Permit, which were issued by the State Electricity Regulatory Commission, or the SERC, and became effective on December 1, 2005 (subsequently revised on May 30, 2015), unless otherwise provided by the SERC, no company or individual in the PRC may engage in any aspect of electric power business (including power generation, transmission, dispatch and sales) without first obtaining an electric power business permit from the SERC. These provisions also require that if an applicant seeks an electric power business permit to engage in power generation, it must also obtain in advance all relevant government approvals for the project including construction, generation capacity and environmental compliance.

However, there are exceptions where the PV power generation projects may not need to obtain an electric power business permit from the SERC. On July 18, 2013, the NDRC issued the Interim Measures for the Administration of Distributed PV Power Generation, which waived the previous requirement to obtain an Electric Power Business Permit for distributed PV power generation project. On April 9, 2014, the National Energy Administration issued the Circular on Clarifying Issues concerning the Administration of Electric Power Business Permit, which waived requirement to obtain an Electric Power Business Permit for those solar power generation projects with installed capacity less than 6 MW and any distributed PV power generation project approved by or filed with the NDRC or its local branches, and required local National Energy Administration to simplify the Electric Power Business Permit application procedure for the solar power generation companies.

Table of Contents

All electric power generated in China is distributed through power grids, except for electric power generated by facilities not connected to a grid. The distribution of power to each grid is administered by dispatch centers, which the administration and dispatch of planned output by power plants connected to the grid. The Regulations on the Administration of Electric Power Dispatch to Networks and Grids, promulgated by the State Council and the former Ministry of Electric Power Industry, effective on November 1, 1993, as amended on January 8, 2011, and its implementation measures, regulate the operation of dispatch centers.

On November 29, 2011, the Ministry of Finance, NDRC and National Energy Administration jointly issued the Interim Measures for the Administration of Levy and Use of Renewable Energy Development Fund, which provides that development funds for renewable energy include designated funds arranged by the public budget of national finance, and renewable energy tariff surcharge collected from electricity consumers. Solar power projects can only receive central government subsidies after completing certain administrative and perfunctory procedures with the relevant authorities of finance, pricing and energy to be listed in the Subsidy Catalog issued by the Ministry of Finance, NDRC and National Energy Administration. These subsidies represent the difference between the FIT for solar power projects and the desulphurized coal benchmark electricity price. In order to be listed in the Subsidy Catalog, ground-mounted projects must submit applications to the relevant provincial authorities; and in accordance with the Circular on Issues Concerning Implementing Electric Quantity-based Subsidy Policy for Distributed Generation Projects issued by the Ministry of Finance on July 24, 2013, rooftop distributed solar power projects must submit applications to the grid enterprises in the area where the projects are located. After preliminary review of the applications, the provincial authorities will jointly report to the Ministry of Finance, NDRC and National Energy Administration, and the Ministry of Finance, NDRC and NEA will have final review on such applications to decide whether to list in the Subsidy Catalog.

The following flow chart illustrates the process for a utility-scale project to be listed in the Subsidy Catalog.

The Renewable Energy Law provides financial incentives, including national funding for the development of renewable energy projects. Pursuant to the Interim Measures for the Administration of Designated Funds for the Development of Renewable Energy issued by the Ministry of Finance and effective on April 2, 2015, the Ministry of Finance sets up designated funds to support the development and utilization of renewable energy in accordance with the national fiscal budget. According to the Implementing Measures for the Administration of Price of Renewable Energy and Cost Sharing Program and the Interim Measures for Adjustment to Additional On-grid Tariff for Renewable Energy issued by the NDRC, the gap between the FIT for solar power projects and the desulphurized coal benchmark electricity price is subsidized by collecting tariff surcharge from the electricity consumers within the service coverage of grid enterprises at or above provincial level.

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, 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.

Table of Contents

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 (subsequently revised on August 31, 2014). 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. On September 3, 2008, the PRC government promulgated the Implementing Rules on the PRC Labor Contract Law. On December 28, 2012, the Standing Committee of the National People's Congress issued the amendments to the PRC Labor Contract Law, which became effective on July 1, 2013. Pursuant to the PRC Labor Contract Law, employers must enter into written labor contracts with employees. Employers must pay their employees' wages equal to or above local minimum wage standards, establish labor safety and workplace sanitation systems, comply with government labor rules and standards and provide employees with appropriate training regarding workplace safety. In addition, the PRC Labor Contract Law imposes more stringent requirements on employers with regard to, among others, severance payment and non-fixed-term employment contracts, time limits for probation periods, as well as the duration and the times that an employee can be placed on a fixed-term employment contract. Violations of the PRC Labor Contract Law and the PRC Labor Law may result in liabilities to employees and subject employer to administrative sanctions including fines or, in the case of serious violations, criminal liability.

The PRC regulatory authorities have passed a variety of laws and regulations regarding statutory social welfare benefits, including, among others, the PRC Social Insurance Law, the Regulations of Insurance for Occupational Injury, the Regulations of Insurance for Unemployment, the Provisional Insurance Measures for Maternal Employees, and the Interim Provisions on Registration of Social Insurance. Pursuant to these laws and regulations, companies in China have to make sufficient contributions of statutory social welfare benefits for their employees, including medical care insurance, occupational injury insurance, unemployment insurance, maternity insurance, pension benefits and housing funds. Failure to comply with such laws and regulations may result in supplementary payments, surcharges or fines.

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 April 10, 2015), 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 EIT Law imposes a uniform tax rate of 25% on all PRC enterprises, including foreign-invested enterprises, and eliminates or modifies most of the tax exemptions, reductions and preferential treatments available under the previous tax laws and regulations. Under the EIT Law, certain enterprises may benefit from a preferential tax rate of 15% if they qualify as high and new technology enterprises strongly supported by the State, subject to certain general factors and conditions described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. In 2011, Trina China renewed its High and New Technology Enterprise Certificate, effective from 2011 to 2013, entitling it to a preferential income tax rate of 15% from 2008 through 2013. Also, in 2011, TST obtained the High and New Technology Enterprise Certificate, effective from 2011 to 2013, and is entitled to a preferential income tax rate of 15% during that period. In 2014, Trina China and TST renewed their High and New Technology Enterprise Certificates, effective from 2014 to 2016, which entitle both of them to a preferential income tax rate of 15% from 2014 through 2016.

Table of Contents

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.

Under the 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 EIT 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. On July 27, 2011, the SAT issued the Bulletin 45, which became effective on September 1, 2011, to provide further guidance on the implementation of SAT Circular 82. Bulletin 45 further prescribes the rules concerning the recognition, administration and taxation of an enterprise incorporated offshore and controlled by a PRC enterprise or PRC enterprise group. Bulletin 45 provides two ways for determining whether a foreign enterprise controlled by a PRC enterprise or a PRC enterprise group should be treated as a resident enterprise. First, the offshore enterprise may decide on its own whether its de facto management body is located in China based on the criteria set forth in Circular 82, and, if it makes such determination, it must apply to the competent tax bureau to be treated as a resident enterprise. Second, the tax authority may, after investigating, determine that the offshore enterprise is a resident enterprise.

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 SAT's general position on how the de facto management body test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC or foreign enterprises or individuals.

Under the IITL, which was adopted and promulgated at the third meeting of the Standing Committee of the fifth People's Congress on September 10, 1980 and amended on October 31, 1993, August 30, 1999, October 27, 2005, June 29, December 29, 2007 and June 30, 2011, if we are treated as a PRC resident enterprise, it is possible that non-resident individual investors of our shares or ADSs be subject to PRC individual income tax at a rate of 20% on dividends paid to such investors and any capital gains realized from the transfer of our ordinary shares or ADSs if such dividends or capital gains are deemed income derived from sources within the PRC, except in the case of individuals that qualify for a lower rate under a tax treaty. Under the PRC-U.S. tax treaty, a 10% preferential rate of withholding tax will apply to dividends provided that the recipients are U.S. tax residents that are eligible for the benefits of the PRC-U.S. tax treaty. A non-resident individual is an individual who has no domicile in the PRC and does not stay within the PRC or has stayed within the PRC for less than one year. Pursuant to the IITL and its implementation rules, for purposes of the PRC capital gains tax, the taxable income will be based on the total income obtained from the transfer of our ordinary shares or ADSs minus all the costs and expenses that are permitted under PRC tax laws to be deducted from the income.

Pursuant to SAT Circular 7, issued by the SAT on February 3, 2015, if a non-PRC resident enterprise indirectly transfers so-called PRC Taxable Properties, referring to properties of an establishment or a place of business in China, real estate properties in China and equity investments in a PRC tax resident enterprise, by disposition of the equity interests in an overseas non-public holding company without a reasonable commercial purpose and resulting in the avoidance of PRC EIT, the transfer will be re-characterized as a direct transfer of the PRC Taxable Properties and gains derived from the transfer may be subject to a PRC withholding tax of up to 10%. SAT Circular 7 has listed several factors to be taken into consideration by the tax authorities in determining if an indirect transfer has a reasonable commercial purpose. However, despite these factors, an indirect transfer satisfying all the following criteria will be deemed to lack reasonable commercial purpose and be taxable under the PRC laws: (i) 75% or more of the equity value of the intermediary enterprise being transferred is derived directly or indirectly from PRC Taxable Properties; (ii) at any time during the one year period before the indirect transfer, 90% or more of the asset value of the intermediary enterprise (excluding cash) is comprised directly or indirectly of investments in the PRC, or 90% or more of its income is derived directly or indirectly from the PRC; (iii) the functions performed and risks assumed by the intermediary enterprise and any of its subsidiaries that directly or indirectly hold the PRC Taxable Properties are limited and are insufficient to prove their economic substance; and (iv) the foreign tax payable on the gain derived from the indirect transfer of the PRC Taxable Properties is lower than the potential Chinese tax on the direct transfer of those assets. Nevertheless, the indirect transfers falling into the scope of the safe harbor under SAT Circular 7 may not be subject to PRC tax. The safe harbor includes qualified group restructurings, public market trades and exemptions under tax treaties.

Table of Contents

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, foreign-invested enterprises 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. Furthermore, on November 9, 2010 the SAFE promulgated a notice on relevant issues concerning strengthening the administration of foreign exchange business, which requires the authenticity of settlement of net proceeds from an offshore offering to be closely examined and the net proceeds to be settled in the manner described in the offering documents. In order to further reform the foreign exchange administration system, SAFE issued Circular 19, which took effect from June 1, 2015 and replaced the SAFE Circular 142. Circular 19 allows foreign invested enterprises to settle their foreign exchange capital on a discretionary basis according to the actual needs of their business operations and provides procedures by which a foreign-invested company may convert and use equity investments made in foreign currencies. Circular 19 also reiterates, however, the principle that Renminbi converted from the foreign currency-denominated capital of a foreign-invested company may not be used, either directly or indirectly, for purposes beyond its business scope. Thus, it is unclear whether SAFE will permit such capital to be used for equity investments in the PRC in practice.

Foreign Exchange in Certain Onshore and Offshore Transactions

In October 2005, SAFE promulgated a regulation known as SAFE Circular 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.

Table of Contents

On July 4, 2014, SAFE promulgated SAFE Circular 37, which replaced the SAFE Circular 75. SAFE Circular 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular 37 as a special purpose vehicle. The term control under SAFE Circular 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the PRC subsidiaries of that special purpose vehicle may be prohibited from distributing profits to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its PRC subsidiary. Moreover, failure to comply with the various SAFE registration requirements described above could result in liability under PRC law for evasion of foreign exchange controls.

While we believe our shareholders who have confirmed to us that they are PRC residents have taken actions available to them to comply with SAFE Circular 75 and they are still in the process of updating their SAFE registration to reflect the recent changes to our group structure, we have urged relevant shareholders and beneficial owners to make the necessary applications, filings and amendments as required under SAFE Circular 37 and other related rules. We cannot assure you that our current shareholders and/or beneficial owners or their shareholders or beneficial owners can successfully comply with registration requirements under SAFE Circular 37 and subsequent implementation rules in a timely fashion or at all. 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 these regulations could subject our company to fines or sanctions imposed by the PRC government, including restrictions on our PRC subsidiaries' ability to pay dividends or make distributions to us and our ability to increase our investment in or to provide loans to such PRC subsidiaries.

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 the Implementation Rules of Measures for Administration of Individual Foreign Exchange. On February 15, 2012, the SAFE promulgated the Notice on Issues concerning the Foreign Exchange Administration of Domestic Individuals' Participation in Equity Incentive Plans of Overseas Listed Companies. 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.

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

Edgar Filing: Trina Solar LTD - Form 20-F

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, 2015, the restricted portion of our PRC subsidiaries' net assets was \$1,203.5 million, which consists of their registered capital and statutory reserves.

Table of Contents

Mergers and Acquisitions

On August 8, 2006, six PRC regulatory agencies, including the CSRC, promulgated the M&A Rules which became effective on September 8, 2006 and was amended on June 22, 2009. The M&A Rules, among other things, require offshore special purpose vehicles, formed for overseas listing purposes through acquisitions of PRC domestic companies and controlled by PRC enterprises or individuals, to obtain the approval of the CSRC prior to publicly listing their securities on an overseas stock exchange. On September 21, 2006, the CSRC published a notice specifying the documents and materials that are required to be submitted for obtaining CSRC approval. Based on the advice we received from Fangda Partners, our PRC counsel, we did not seek the CSRC approval in connection with our initial public offering as we believed that this regulation did not apply to us and that CSRC approval was not required because (1) Trina was 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 M&A Rules; and (2) such acquisition was completed before the M&A Rules became effective. Uncertainty still exists as to how the M&A Rules will be interpreted and implemented, and the opinion of our PRC counsel is subject to any new laws, regulations, rules and their detailed implementations in the future in any form relating to the M&A Rules.

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 MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise.

In February 2011, the State Council promulgated Circular No. 6, a notice on the establishment of the security review system for mergers and acquisitions of domestic enterprises by foreign investors, which became effective on March 3, 2011. To implement Circular No. 6, the MOFCOM promulgated the MOFCOM Security Review Rules on August 25, 2011 which became effective on September 1, 2011. According to Circular No. 6 and the MOFCOM Security Review Rules, a national security review is required for certain mergers and acquisitions by foreign investors of enterprises relating to national defense and certain mergers and acquisitions by which foreign investors may acquire de facto control of domestic enterprises raising national security concerns. When deciding whether a specific merger or acquisition of a domestic enterprise by foreign investors is subject to the national security review, the MOFCOM will review the substance and actual impact of the transaction and the foreign investors are prohibited from bypassing the national security review requirement by structuring transactions through proxies, trusts, indirect investments, leases, loans, control through contractual arrangements or offshore transactions. In addition, if a merger or acquisition by foreign investors which was not submitted for national security review, or was determined to have no impact on national security after such review, but thereafter, due to changed elements, including modification of the merger, change of business activities or acquisition transaction or amendment of the relevant agreements or documents and other changes, involves an enterprise relating to national defense or a change of de facto control of a domestic enterprise raising national security concerns such that it becomes subject to national security review, the foreign investor to such merger or acquisition will be required to file an application for national security review with the MOFCOM.

C. Organizational Structure

The following table sets out the details of our significant subsidiaries as of December 31, 2015.

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

Name of Entity	Country of Incorporation	Ownership Interest
Changzhou Trina Solar Energy Co., Ltd.	China	100%
Trina Solar (Singapore) Pte. Ltd.	Singapore	100%
Trina Solar (Luxembourg) Holdings S.A.R.L.	Luxembourg	100%
Trina Solar (U.S.) Inc.	United States	100%
Trina Solar (U.S.) Holding Inc.	United States	100%
Trina Solar (Germany) GmbH	Germany	100%
Trina Solar (Schweiz) AG	Switzerland	100%
Trina Solar (Luxembourg) S.A.R.L.	Luxembourg	100%
Trina Solar (Spain) S.L.U.	Spain	100%
Trina Solar (Italy) S.r.l.	Italy	100%
Trina Solar (Japan) Limited	Japan	100%
Trina Solar Energy Development Pte. Ltd.	Singapore	100%
Trina Solar (Changzhou) Science and Technology Co., Ltd.	China	100%
Trina Solar Energy (Shanghai) Co., Ltd.	China	100%
Trina Solar (U.S.) Development LLC	United States	100%
Trina Solar (Australia) Pty Ltd.	Australia	100%
Trina Solar Middle East Limited	United Arab Emirates	100%
Lucania S.r.l.	Italy	100%
Yancheng Trina Solar Science & Technology Co., Ltd.	China	100%
Changzhou Trina Solar PV Power System Co., Ltd.	China	100%
Jiangsu Trina Solar Electric Power Development Co., Ltd.	China	100%
Wuwei Trina Solar Electricity Generation Co., Ltd.	China	100%
Trina Solar (United Kingdom) Limited	United Kingdom	100%
Trina Solar (Canada) Inc.	Canada	100%
Hunan Trina Solar Electric Power Development Co., Ltd.	China	95%
Trina Solar (Luxembourg) Overseas Systems S.à r.l.	Luxembourg	100%
Tanagra Solar Energy S.A	Greece	100%
S. Aether Energy S.A.	Greece	100%
Lightleasing PTY LTD	Australia	100%
Trina Solar (Luxembourg) EU Systems S.à r.l.	Luxembourg	100%
Witherington Solar Farm Limited	United Kingdom	100%
TSF Constructions Limited	United Kingdom	100%
Turpan Trina Solar Energy Co., Ltd.	China	100%
Yunnan Matallurgical New Energy Co., Ltd.	China	90%
Hubei Trina Solar Energy Co., Ltd.	China	51%
Xiangshui Hengneng Electricity Generation Co., Ltd.	China	100%
Yongneng Trina Solar Electricity Generation Co., Ltd.	China	100%
Tuokexun Trina Solar Co., Ltd.	China	100%
Changzhou Trina Solar Yabang Energy Co., Ltd.	China	51%
Trina Solar Science & Technology (Thailand) Ltd.	Thailand	100%
Jiangsu Trina Solar Electric Power Development Holdings Ltd.	China	100%
Trina Solar New Energy Investment Co., Ltd.	China	100%
Trina Solar (Singapore) Science & Technology Pte. Ltd	Singapore	100%
Trina Solar (India) Private Limited	India	100%

D. Property, Plants and Equipment

Manufacturing Segment

As of December 31, 2015, substantially all of our research, development and manufacturing of ingots, wafers, cells and PV modules are conducted at our facilities in Changzhou, Yancheng, Turpan and Xiantao China. Our main campus is located in Changzhou, where we occupy an area of 545,248 square meters and further own the rights to develop and use an additional 297,696 square meters. In Yancheng, we occupy an area of 53,333 square meters which we use for module production. In Turpan, we occupy an area of 66,667 square meters which we use for the module production. In Xiantao, we occupy an area of 174,920 square meters which we use for cell production. We plan to build or acquire new facilities to increase our annualized in-house manufacturing capacity of cells and modules from 3,500 MW and 5,000 MW, respectively, as of December 31, 2015 to 5,000 MW and 6,000 MW, respectively, as of December 31, 2016. We plan to incur capital expenditures of up to \$250 million to accomplish our 2016 expansion plans in our manufacturing segment. See B. Business Overview Products and Projects Manufacturing Segment for more details. We believe our current and planned facilities will meet our current and foreseeable requirements.

Table of Contents

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 solar equipment suppliers in Europe, North America and Asia, including China and Japan. Other critical equipment is also sourced worldwide. Key operating equipment used in our manufacturing facilities includes DSS furnaces, high-precision wafer sawing machines, diffusion furnaces (sets), screen print machine sets and automatic laminators. Set forth below is a list of our major equipment as of December 31, 2015:

Manufacturing Facility	Major Equipment	No. of Units in Operation as of December 31, 2015	Source (Country)
Silicon ingots	DSS furnaces	187	China, United States
Silicon wafers	Wafer sawing machines	179	Japan, Switzerland
Solar cells	Diffusion furnaces (sets)	76	China, Germany, the Netherlands
	Screen print machine sets	79	Italy, China
PV modules	Automatic laminators	159	China

With respect to encumbrances, as of December 31, 2015, we pledged our plant and machinery of a total carrying value of \$478.9 million and our land use rights of a total carrying value of \$15.6 million to secure our borrowings of \$516.5 million.

Solar Power Projects Segment

As of December 31, 2015, our project assets consisted of \$531.3 million of build-to-sell project assets and \$807.9 million of build-to-own project assets. In addition, our build-to-own project assets consisted of \$681.1 million of completed build-to-own solar power projects and \$126.8 million of build-to-own solar power projects under construction and our build-to-sell project assets consisted of \$205.9 million of completed build-to-sell solar power projects and \$325.4 million of build-to-sell solar power projects under construction.

With respect to encumbrances, as of December 31, 2015, we pledged build-to-own project assets with a total carrying amount of \$196.8 million to secure our borrowings of \$297.8 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.

Table of Contents

A. Operating Results

Overview

We are a large-scale integrated solar power products manufacturer and solar system developer based in China with a global distribution network covering Europe, Asia, North America, Australia and Africa. 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 also develop, design, construct, operate and sell solar power projects that primarily use the solar modules we manufacture. Beginning in 2014, we have two reportable operating segments consisting of the manufacturing segment and the solar power projects segment.

We produce standard monocrystalline PV modules ranging from between 215 watts, or W, and 230 W to between 275 W and 295 W in power output for 60 cell and between 325 W and 350 W for 72 cell and multicrystalline PV modules ranging from between 260 W and 270 W to between 305 W to 320 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 China and the United States, where government incentives have accelerated the adoption of solar power. In recent years, we have also increased our sales in newer and emerging solar power markets, which include the United Kingdom and India, as well as other markets in Asia, Africa, the Middle East, Latin America, and the Caribbean Islands. We have established regional headquarters and offices located in Europe, North America and Asia to target sales and distribution in those markets. We primarily sell our products to wholesalers, power plant developers and operators and PV system integrators, including NVT, LLC dba SunEdison, Sanshin Electronics Co., Ltd., Solar City, SunEnergy1, FLS Energy, Welspun Energy Private Limited, Vivint Solar Developer, LLC, Bluefield SIF Investments Limited, Consolidated Edison Development, TBEA Xinjiang Sunoasis Co., Ltd.

We have expanded into the downstream solar power projects market. In 2015, we completed and connected 425.0 MW of build-to-own projects in China, completed and connected 210.9 MW of build-to-sell projects in China, and completed and sold 50.0 MW of build-to-sell projects in Europe. We anticipate completing between 750 MW and 850 MW of projects during 2016, including significant projects in China and globally. Our integrated manufacturing model and experience as a provider of high quality solar solutions have allowed us to successfully grow our solar power projects business and develop a strong solar project pipeline to support future expansion. In 2015, our net sales were \$3,035.5 million, compared to \$2,286.1 million in 2014 and \$1,775.0 million in 2013. We recorded a net income of \$86.3 million in 2015, compared to a net income of \$61.3 million in 2014 and a net loss of \$72.2 million in 2013.

Factors Affecting Our Results of Operations

Beginning in 2014, we have two reportable operating segments consisting of the manufacturing segment and the solar power projects segment. Significant factors affecting the financial performance and results of operations of these two operating segments are as follows:

Manufacturing Segment

The most significant factors that affect the financial performance and results of operations of our manufacturing segment are:

- industry demand;
- government economic incentives and trade sanctions;
- product pricing;
- flexible vertically integrated manufacturing capabilities; and
- availability and prices of polysilicon.

Table of Contents

Industry Demand

Solar energy generation systems use interconnected solar cells to generate electricity from sunlight through a process known as the photovoltaic effect. Although solar power technology has been used for several decades, the global solar power market has grown significantly only in the past several years. The global solar power market continues to develop, in part aided by declining industry average selling prices, making solar power more affordable to users.

According to GTM Research, global PV end-market demand was estimated to grow 33% on a year-on-year basis to 54.6 GW in 2015 compared to 40.9 GW in 2014. This growth was driven mostly by the staggering growth in China and India. According to GTM Research, the market will keep growing at 21% to 66 GW in 2016 and experience slower growth of 4% to 68.7 GW in 2017. The market will resume a faster growth pace in 2018 onwards to reach 82.9 GW by 2019. The near-term growth is driven by a number of national policies benefiting the solar industry. For instance, in China, the National Energy Administration has started to develop its 13th five-year (2016-2020) plan, with plans of a 2020 target of 150 GW to 200 GW. In mid-December 2015, the United States legislators approved a major overhaul to the Investment Tax Credit policy, resulting in a five-year extension of the 30% tax credit (previously to reduce to 10% on January 1, 2017). This change in policy will boost the utility segment in the United States for years to come. India accelerated tender processes and set up other measures to speed up PV deployment in order to achieve the 100 GW target announced at the end of 2014. China remains the global leader of PV installations. As the target was raised, China installations are estimated to have taken a 73% leap in 2015 to approach 18.3 GW. Demand will then grow moderately to 20.5 GW by 2020. Japan peaked at 11.6 GW in 2015, as projects under previous FIT rates continued to be completed. Grid constraints and reduced FIT rates are expected to result in a projected 12% decline in demand in 2016, pending on-going regulatory discussions. India's ambitious policy support on both the national and state levels raises the outlook. Based on announced construction activity and planned pipelines, GTM Research forecasts India demand to grow 150% in 2015 and to more than double again in 2016.

The demand for solar power is also influenced by macroeconomic factors such as global economic conditions, the supply and prices of other energy products, such as oil, coal and natural gas, 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. Please see Item 3. Key Information D. Risk Factors for discussions of the risks related to declining industry demand for solar power products.

Government Economic Incentives and Trade Sanctions

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 economic incentives. Today, when upfront system costs are factored in, the per kilowatt cost of solar power substantially exceeds that of power provided by the electric utility grid in many locations. As a result, national and local governmental bodies in many of our primary-targeted markets, notably, China, the United Kingdom, the United States, Japan, Germany, Italy, and other countries in Europe, Australia, India, and several Middle Eastern and African countries, have provided economic incentives in the form of capital cost rebates, feed-in tariffs, tax credits and other incentives to end users, distributors, system integrators and manufacturers of solar power products. Accordingly, demand for PV modules in our targeted or potential markets is affected significantly by government economic incentives. According to GTM Research, the three largest PV markets in 2015 were China, Japan and the United States, and these top three markets accounted for 34%, 21% and 13%, respectively, of the global market and collectively accounted for 68% of the global market.

We seek to counteract the impact of the expiring incentives and anti-dumping and anti-subsidy actions taken by existing major solar markets through enhancing our brand recognition and shifting some of our sales focus to newer and emerging solar power markets, which include the United Kingdom and India, as well as other markets in Asia, Africa, the Middle East, Latin America and the Caribbean Islands. To enhance our

Edgar Filing: Trina Solar LTD - Form 20-F

global sales capabilities, we established regional headquarters in San Jose, Zurich, Tokyo and Singapore, as well as sales and business development offices in Madrid, Beijing, Shanghai, Munich, Abu Dhabi, Sydney, Chengdu, Urumqi, Santiago and New Dehli.

On December 5, 2013, the Council of the European Union announced its final decision imposing anti-dumping and anti-subsidy duties on imports of CSPV cells and modules originating in or consigned from China. Both anti-dumping and anti-subsidy duties, are applicable for a period of two years beginning on December 6, 2013 to imports from Chinese solar panel exporters who, like us, cooperated with the European Commission's investigations. However, on the same day, the European Commission accepted a price undertaking by Chinese export producers in connection with the anti-dumping and anti-subsidy proceedings. As a result, imports from Chinese solar panel exporters that are made pursuant to the price undertaking are exempt from the final anti-dumping and anti-subsidy duties imposed by the European Union. We agreed to comply with the minimum price and other conditions set forth in the undertaking so that our exported products were exempt from the anti-dumping and anti-subsidy duties imposed by the European Commission, though effective from December 11, 2015, we have withdrawn from the price undertaking and started to supply the European Union markets through our tariff-free overseas manufacturing facilities. During the time that we were subject to the undertaking, including nearly all of 2015, the average selling price of our PV solar products in the European markets, as well as the products of the other Chinese solar panel exporters that entered into the undertaking, were higher than those that were not subject to the undertaking.

Table of Contents

On December 17, 2014, the Commerce, issued final rulings that imports of certain CSPV products were dumped in the United States from China and Taiwan and that imports of certain CSPV products from China received subsidies. Under these rulings, we received an anti-dumping duty of 26.71% and a countervailing duty of 49.79%. On January 21, 2015, the Commission affirmed that imports of certain CSPV cells and modules from mainland China and Taiwan materially injure the domestic industry. The Commission completed and filed its determinations in these investigations on February 5, 2015. The actual duty rates at which entries of covered merchandise will be finally assessed may differ from the announced deposit rates, because they will be subject to completion of administrative reviews of these anti-dumping and countervailing duty orders. In February 2016, we filed requests for review of the anti-dumping and countervailing orders on our exports of Chinese modules possessing non-Chinese CSPV cells. We expect the first administrative reviews to be completed around the third quarter of 2017. For additional information, see Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry The determination by U.S. and European Union authorities that our export sales are in violation of international fair trade rules could impede our access to important export markets and our overall competitiveness.

According to GTM Research, global PV module spot prices declined by 8% on a year-over-year basis in 2015, which decline was smaller compared to previous years. We believe reduced FITs and low PPA prices will force customers to concentrate more on quality and price, which will be to our advantage given our favorable rankings by third party sources, such as TÜV Rheinland, a global independent safety and quality testing agency for PV modules, and DNV-GL, a U.S.-based testing lab specializing in long-term reliability testing.

Product Pricing

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 when 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-based raw materials costs. In the last several years, the average selling price of our PV modules declined as a result of market trends and conditions. See Industry Demand for more information. The industry average selling price of PV modules decreased from \$0.71 per watt in the fourth quarter of 2013 to \$0.63 per watt in the fourth quarter of 2014, and further to \$0.59 per watt in the fourth quarter of 2015. We believe industry module average selling prices have begun to show signs of stabilization in several markets after a long period of significant decline across multiple markets. However, we continue to face intense competition from manufacturers of PV modules and other types of solar modules. We plan to mitigate the effects of decreased average selling prices by continuing to lower our silicon and non-silicon processing and supply chain costs, improve our inventory management control and increase sales of high-efficiency and other premium products for which we are able to charge higher prices. Further, we withdrew from the price undertaking in the European Union markets on December 11, 2015. Before the withdrawal, in European Union markets we were restricted from selling our products at prices below those agreed to in the price undertaking, making our products less competitive than those not subject to price restrictions.

We conduct our PV module sales typically through short-term and medium-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 and medium-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 and medium-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 enhanced our credit control policy in 2015 and our accounts receivable turnover days were approximately 78 days in 2015, compared to 99 days in 2014. We have reviewed the credit limits applicable to our customers to

reduce our credit exposure. More than 90% of our overseas credit sales are insured against non-payment by our customers. The amount of credit line insurance coverage for each transaction is based on a rating assigned by the insurer to the customer, based on that customer's credit history.

Table of Contents

Flexible Vertically Integrated Manufacturing Capabilities

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

- achieve better quality control of our products;
- shorten production cycle and improve value chain coordination;
- discontinue excess reliance on toll manufacturing;
- capture upstream or downstream profit margins; and
- adjust our capacity expansion plan by outsourcing certain products from third parties when we can obtain good prices.

In addition, we have developed relationships with various domestic and international suppliers of wafers and cells. In 2010, we began sourcing wafers from our suppliers and strategic partners in order to fill the gap between our PV cell and ingot and wafer manufacturing capacity and to achieve import cost advantages to certain markets.

Availability and Prices of Polysilicon

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

In the past, increases in the price of polysilicon have increased our cost of sales and impacted our margins. In addition, polysilicon production capacity has expanded rapidly in recent years, which led to an oversupply of high-purity silicon in 2009 and, together with the global economic downturn, a decrease in polysilicon prices. These factors contributed to an oversupply of solar wafers, cells and modules, resulting in substantial downward pressure on prices throughout the value chain in 2011, which continued until the second half of 2013. According to PVinsights, as demand increased during 2013, polysilicon spot prices began to stabilize and during the second half of 2013 through the first half of 2014 spot

prices increased. Polysilicon prices again fell during 2015, decreasing 28.6% by the end of 2015 compared to the beginning of the year. In March 2016, polysilicon prices increased to an average of \$15.50 per kilogram due to production reduction by certain manufacturers outside China as a result of China's anti-dumping and countervailing duties. According to PVinsights, annual polysilicon supply is forecasted to grow to 101 GW in 2016, compared with 95.18 GW in 2015, an increase of 6.7%, and prices are expected to stabilize during 2016. Further, the gap between average spot prices and contract prices for polysilicon used in PV applications has narrowed considerably beginning in 2014 as long-term contracts previously entered into expired, were renegotiated to be priced by referencing to the prevailing market price, or were cancelled.

We purchase polysilicon primarily from 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 and provide for a variable price and fixed quantity 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 four years, and our long-term contracts have terms ranging from five to ten years. Our medium-term and long-term suppliers include Jiangsu Zhongneng and GCL (Changzhou), among others. These medium-term and long-term contracts have delivery terms up to 2020 and variable prices. Generally we negotiate purchase quantities annually. These contracts also require us to make an advance payment of a certain negotiated amount.

Table of Contents

Suppliers of polysilicon typically require customers to make payments in advance of shipment. Some of our long-term suppliers 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. Except for those medium and long-term contracts, we normally use letter of credit or notes payment as settlement term for polysilicon procurement.

Solar Power Projects Segment

The solar power projects segment has grown rapidly, representing 1.0%, 6.1% and 5.6% of our net sales in 2013, 2014 and 2015, respectively. We consider the solar power segment to be strategically important to us and expect it to continue to grow significantly in the next few years. We categorize our solar power projects into build-to-sell projects and build-to-operate projects. The most significant factors that affect the financial performance and results of operations of our solar power projects segment are:

- FIT regime and other government subsidies or incentives for solar power projects;
- mix of our project portfolio;
- access to project financing;
- growth of our project portfolio through project acquisition or development;
- sale of build-to-sell projects and operation and maintenance of build-to-own projects; and
- EPC costs.

FIT regime and other government subsidies or incentives for solar power projects

Government incentives, including FIT regimes, government subsidies and other incentives for solar power projects, or government mandates requiring electric utility companies to use renewable energy to produce a certain percentage of their power, are a significant factor in determining whether our solar power projects will be profitable. These government incentives and mandates vary from country to country and

change over time. For example, the Japanese government has introduced an attractive FIT price support regime to encourage developing solar power projects while Greece's government has reduced its support for the solar power industry. With respect to our build-to-sell projects, FIT regimes, which determine the price that utilities will pay for power generated from our projects, as well as other government incentives, directly impact the price at which we are able to sell our completed projects. We develop and sell solar power projects in a number of countries and regions, including our strategic markets in Europe, China, United States and Japan. With respect to our build-to-own projects, most of which are located in China, the FIT regime provided by the PRC government determines the price that the national grid companies must pay us for the power our projects generate, which directly affects our revenue and profitability. In light of growing environmental concerns and the increasing demand for energy, the PRC government has set aggressive targets for solar power generation and has adopted favorable policies to support these targets.

Mix of our project portfolio

Our build-to-sell projects and build-to-own projects have different revenue models and different risk and return profiles. Build-to-sell projects generate revenue from the sale of projects while the build-to-own projects generate revenue by selling electricity to the grid companies. We entered the solar power projects market in 2009, and in 2013, 2014 and 2015, we derived 70.7%, 96.3% and 53.6% of total net sales of the solar power projects segment from selling build-to-sell projects. We are also developing a number of build-to-own projects, especially in China, and as we complete construction on new build-to-own projects the amount of net sales that they generate will continue to increase. As of December 31, 2015, our project portfolio included 210.9 MW of build-to-sell projects and 698.3 MW of build-to-own projects. Our results of operations and profitability may also be affected by the geographical mix of our project portfolio, because the financial incentives provided by national and local governments vary significantly depending on the location of the solar power projects.

Table of Contents

Access to project financing

Currently, we target to finance about 70% to 75% of our solar power projects externally. For our build-to-sell projects, we would typically borrow short-term bridge loans or use the project purchaser's financing during the project construction phase. For our build-to-own projects, in addition to short-term bridge loans during the project construction phase, we may also enter into long-term project loans to refinance the bridge loans after the completion of project construction.

Growth of our project portfolio through project acquisition or development

We expect our solar power projects segment to grow significantly. This growth will depend on our ability to grow our current project portfolio quickly and successfully, either through project acquisition or in-house development. Developing projects entirely in-house is generally more cost-effective while acquiring existing projects at various stages of development is generally quicker. The asset quality of any newly acquired or developed projects will directly affect the financial performance of our entire project portfolio as a whole.

Sale of build-to-sell projects and operation and maintenance of build-to-own projects

We recognize revenue and profits from our build-to-sell projects when they are successfully sold as we do not have any form of continuing involvement of the project asset after it is sold. If we retain continuing involvement of the project asset and do not transfer all of the ownership to the buyer, we recognize gross profit under a method determined by the nature and extent of the continuing involvement. Under certain arrangements, we provide customers with guarantees of system performance for a limited period of time and our exposure to loss is contractually limited based on the terms of the arrangement. Under such circumstances, the gross profit recognized is reduced by our maximum exposure to loss until such time that such exposure no longer exists. Therefore, our ability to identify and engage credible purchasers timely and to negotiate a favorable purchase price and payment terms directly affects our profitability. Our build-to-own projects generate revenue by generating and selling electricity to the grid companies. In order to maximize financial returns, in China, we operate and maintain these projects by our own operation and maintenance team to ensure the uninterrupted generation of electricity and to prolong the usable life of solar modules and other equipment. For overseas build-to-own projects, we engage third party suppliers to provide operation and maintenance service.

EPC costs

The EPC costs of build-to-sell projects are capitalized as project assets and constitute a primary portion of the cost of sales at the time of sale. The EPC costs of build-to-own projects are capitalized as property, plant and equipment, and depreciated over 20 to 25 years after the project begins operating, representing a primary portion of cost of sales when the generated electricity is sold to the grid companies. EPC costs include the costs of design, procurement, construction and connection costs of solar

power projects. The most significant cost is the procurement cost, which primarily consists of costs of solar modules, inverters and mounting systems. We use solar modules that we produce in our solar power projects, which give us a competitive advantage in controlling EPC costs. Our industry experience and connections have enabled us to purchase high quality inverters and other equipment at relatively competitive prices and payment terms. Our engineering team is responsible for designing our solar power projects. However, we engage third-party contractors to construct our projects. We control the construction costs of our projects through contractual terms with and diligent monitoring of contractors.

Overview of Financial Results

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

Net Sales

Our net sales are net of business tax, VAT and returns and exchanges, as applicable.

The following table sets forth our total net sales by operating segments:

Table of Contents

Segment	2013		Year Ended December 31, 2014		2015	
	Total Net Sales	Percent	Total Net Sales	Percent	Total Net Sales	Percent
	(in thousands, except for percentages)					
Manufacturing	\$ 1,796,331	101.2%	\$ 2,402,964	105.1%	\$ 3,389,366	111.6%
Intersegment elimination(1)	(38,235)	(2.2)	(255,820)	(11.2)	(522,585)	(17.2)
Manufacturing after intersegment elimination	1,758,096	99.0	2,147,144	93.9	2,866,781	94.4
Solar power projects	16,875	1.0	138,975	6.1	168,731	5.6
Consolidated net sales	\$ 1,774,971	100.0%	\$ 2,286,119	100.0%	\$ 3,035,512	100.0%

(1) Represents revenues generated from the sales of modules from our manufacturing segment to our solar power projects segment, which are eliminated to prevent double-recording such revenue.

The following table sets forth our total net sales by geographical region for the periods indicated:

Region	2013		Year Ended December 31, 2014		2015	
	Total Net Sales	Percent	Total Net Sales	Percent	Total Net Sales	Percent
	(in thousands, except for percentages)					
China	\$ 591,071	33.3%	\$ 747,811	32.7%	\$ 864,108	28.5%
Europe	548,557	30.9	219,291	9.6	331,681	10.9
United States	302,270	17.0	634,446	27.8	1,053,637	34.7
Japan	147,403	8.3	457,901	20.0	345,567	11.4
India	79,105	4.5	67,359	2.9	242,950	8.0
Others	106,565	6.0	159,311	7.0	197,569	6.5
Total	\$ 1,774,971	100.0%	\$ 2,286,119	100.0%	\$ 3,035,512	100.0%

Manufacturing Segment

The manufacturing segment, after eliminating intersegment sales to our solar power projects segment, accounted for 99.0%, 93.9% and 94.4% of our net sales for 2013, 2014 and 2015, respectively. Factors affecting our net sales include average selling price per watt, market demand for our PV modules, unit volume shipped and our production capacity expansion.

In 2013, 2014 and 2015, sales to our top five customers accounted for approximately 18.7%, 34.7% and 23.3% of our net sales, respectively, and sales to our largest customer accounted for 4.9%, 13.2% and 5.9% of our net sales, respectively.

To enhance our global sales capabilities, we established regional headquarters in San Jose, Zurich, Tokyo and Singapore, as well as sales and business development offices in Madrid, Beijing, Shanghai, Munich, Abu Dhabi, Sydney, Chengdu, Urumqi, Santiago and New Dehli.

In 2015, sales to the United States accounted for 34.7% of our net sales, a significant increase from 27.8% in 2014. We seek to mitigate the impact of the expiring incentives by enhancing our brand recognition and refocusing on newer and emerging solar power markets, which include the United Kingdom and India, as well as other markets in Asia, Africa, the Middle East, Latin America and the Caribbean Islands. Some of these markets have experienced rapid growth due to government incentives and mandates that require electric utility companies to use renewable energy to produce a certain percentage of their power by a future date, and because the decreased costs of grid-scale solar projects make such projects more competitive with conventional energy forms. Our largest markets in 2015 were the United States, China, and Japan, which accounted for 34.7%, 28.5% and 11.4%, respectively, of our net sales. We expect to continue to expand our customer base geographically in 2016.

Table of Contents

Solar Power Projects Segment

Our solar power projects business accounted for 1.0%, 6.1% and 5.6% of our net sales for 2013, 2014 and 2015, respectively. Factors affecting our net sales for build-to-sell projects include contract price and construction schedule, and for build-to-own projects include electricity price, grid capacity, market demand for clean energy and government subsidies and other financial incentives.

In 2013, 2014 and 2015, net sales contributed by our build-to-sell projects accounted for 70.7%, 96.3% and 53.6% of total net sales of the solar power projects segment, with our build-to-own projects accounting for the remaining portion.

We develop and sell or operate our solar power projects in China, Europe, Japan and India, with more than 70% of our projects located in China, in terms of installed capacity. Most of our build-to-sell projects and our build-to-own projects are located in China.

Cost of Sales

Manufacturing Segment

Our cost of sales consists primarily of:

- *Polysilicon raw materials.* We purchase polysilicon from various suppliers, including silicon distributors, silicon manufacturers, semiconductor manufacturers and silicon processing companies.
- *Other direct materials.* Other direct materials include direct materials for the production of PV modules such as plastic, metallic pastes, tempered glass, laminate material, connecting systems and aluminum frames.
- *Sourcing costs.* We fulfill some of our wafer requirements by sourcing from strategic partners. We will continue to source wafers through medium-term and long-term supply agreements in order to fill the gap between our PV cell and module manufacturing capacity and our wafer manufacturing capacity.

- *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 sales 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 discontinued our reliance on toll manufacturers for processing solar cells. In 2013, 2014 and 2015, we fulfilled some of our ingot and wafer requirements by 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 25 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 sales is affected by our ability to control raw material costs, to achieve economies of scale in our operations, to ramp up our production capacity as planned, 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.

Table of Contents

Solar Power Projects Segment

For our build-to-sell projects, cost of sales consists primarily of (i) equipment costs, primarily consisting of costs for solar modules and balance-of-system components, such as inverters and mounting systems, land costs or land use right; (ii) development costs, such as fees paid for permits, site control, grid connection and transmission upgrade, and development staff and due diligence costs; (iii) engineering and construction related costs, including fees paid to third-party contractors, and project management costs; and (iv) overhead costs.

For our build-to-own projects that have completed construction, cost of sales consists primary of: (i) depreciation of fixed assets, including solar modules and other equipment, and amortization of the land use rights; (ii) operation and maintenance costs; (iii) tax and insurance; and (iv) management and other overhead costs. For our build-to-own projects that are under development, we capitalize as property, plant and equipment the costs of developing solar power projects, including equipment and land costs, development costs, engineering and construction related costs and interests incurred.

Gross Margin

Our gross margin is affected by changes in our net sales and cost of sales. Our gross margins increased from 12.3% in 2013 to 16.9% in 2014 and then further increased to 18.7% in 2015. The increase from 2014 to 2015 was primarily due to a greater reduction in manufacturing costs compared with the general decline in module average selling price, as well as an increase in downstream revenue, which yielded higher gross margins than module sales. The increase from 2013 to 2014 was primarily due to increases in gross profits from both our manufacturing segment and solar power projects segment. The increase in our manufacturing segment was primarily due to decreases in fixed manufacturing costs per watt resulting from the increase in shipping volume of our PV modules by approximately 0.7 GW from 2013 to 2014, as well as that average selling price decreased at a slower rate compared to the decrease in our manufacturing costs per watt in 2014 primarily due to the decrease of material costs and our improved operating efficiency. The increase in gross profits for our solar power projects segment was due to that we successfully sold a few solar power projects in China and overseas during 2014. We believe the solar industry will continue to experience periods of structural imbalance between supply and demand that will cause pressure on pricing. 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 sales due to the extent of maintaining reasonable margin. As our PV module business expands, we believe additional economies of scale 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 outbound freight, employee costs, product warranties, promotion expenses, travel and other sales and marketing expenses. Our PV modules were historically sold with a two or five 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 2011, we extended the warranty for defects in material and workmanship to ten years and began to guarantee that module power output will not decrease by more than approximately 0.7% per year after the initial year of service. Our selling expenses as a percentage of net sales decreased from 7.5% in 2013 to 5.9% in 2014 due to the increase of net sales in 2014 as the shipping volume in new and emerging markets increased. Our selling expenses as a percentage of net sales stayed at 5.9% in 2015.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and benefits for our administrative personnel, share-based compensation expenses, compliance related consulting and professional fees, depreciation, and travel expenses. Our general and administrative expenses as a percentage of net sales decreased from 5.8% in 2013 to 4.7% in 2014, mainly due to the increase of net sales in 2014, and a decrease in bad debt allowance for accounts receivables as improvements in the solar market lowered the likelihood of customer default. Our general and administrative expenses as a percentage of net sales further decreased from 4.7% in 2014 to 4.4% in 2015, mainly due to an increase in net sales in 2015.

Table of Contents

Research and Development Expenses

Research and development expenses consist primarily of salaries and benefits for research and development personnel, share-based compensation expenses and benefits, costs of raw materials used in our research and development activities, depreciation, outsourced research contracts and prototype and equipment costs relating to the design, development, testing and enhancement of our products and manufacturing process. In 2015, we maintained a number of development programs and activities aimed at improving our technology and processes in order to enhance performance and reduce the cost of our solar modules.

In 2014, our research and development efforts focused on developing new PV modules adapted for particular climates, as well as smarter PV products for better safety and better energy production, with a goal of achieving grid parity. In October 2014, we announced that our high-efficiency Honey solar module had set a new world record for peak power output for P-type monocrystalline silicon PV modules, as independently certified by TUV Rheinland. The module was developed in our PV Park Lab and was composed of 60 156mmx156mm high-efficiency Honey monocrystalline silicon cells. It generated a peak power output of 335.2 W, breaking the previous world record of 326.3 W, set by our original Honey module in April 2014. In November 2014, our PV Park Lab set new world records for high efficiency *p*-type and *n*-type silicon solar cells. To our knowledge, these total-area efficiency results, independently verified by external laboratories, affirm these cells to be in their categories the most efficient silicon solar cells made by industrially feasible production processes on 156mm x 156mm substrates for both *p*-type (mono & multi) and *n*-type (mono) substrates that have been tested anywhere in the world to date.

In 2015, we remained committed to advancing the scientific development and technological progress of the PV industry. In 2015, one of the key focus areas for our PV Park Lab was the development of high-efficiency IBC cells and HJT cells, where we have seen early success and these innovations has advanced solar product technology throughout the industry. We continued to work on the development of new PV modules including mono- and multi-crystalline silicon Honey Plus cells and modules, and the 60-cell as well as 72-cell frameless dual glass modules. We developed our patented high-tech Trinasmart modules technology, a complete solution that includes power optimization and monitoring built into the module junction box, allowing for monitoring and control of the PV array at the module level.

In 2016, we will continue to develop advanced PV technologies, focusing on developing products that are highly efficient, low cost, and reliable, while enhancing our smart PV modules, and improving the performance of our PV products across varying climates and applications. In addition, we will continue to invest in research and development to further the remote monitoring, information exchange, electrical management, and AC-DC conversion of PV modules, in order to foster the development of smart energy. The Key National Laboratory of PV Science & Technology will continue to cooperate with international research and development institutes in different countries to promote technology exchanges and innovation at home and abroad. More importantly, we are continuing our efforts to narrow the gap between the laboratory developments and mass production, and enhance the reliability and cost-effectiveness of our photovoltaic crystalline silicon products.

Share-based Compensation Expenses

We adopted our share incentive plan in July 2006 and a total of 56,187,133 restricted shares and 125,912,215 share options were outstanding as of December 31, 2015. 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 on a straight-line basis 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 sales; (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.

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

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.

	2013		Year Ended December 31, 2014		2015	
			(in thousands, except for percentages)			
	\$	%	\$	%	\$	%
Cost of sales						
Selling expenses	706	12.5	580	13.2	650	10.8
General and administrative expenses	4,631	81.7	3,503	79.6	4,941	82.3
Research and development expenses	331	5.8	317	7.2	416	6.9
Total share-based compensation expenses	\$ 5,668	100.0%	\$ 4,400	100.0%	\$ 6,007	100.0%

Taxation

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

We operate mainly in the PRC, Hong Kong, Singapore, United States, Japan and European countries.

The 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.

In addition, certain enterprises may benefit from a preferential tax rate of 15% under the EIT Law if they qualify as high and new technology enterprises strongly supported by the State, subject to certain general factors described therein. In September 2008, Trina China obtained the High and New Technology Enterprise Certificate with a valid term of three years starting from 2008. In 2011, Trina China renewed its High and New Technology Enterprise Certificate, effective from 2011 to 2013, entitling it to a preferential income tax rate of 15% from 2008 through 2013. Also, in 2011, TST obtained the High and New Technology Enterprise certificate, effective from 2011 to 2013, and is entitled to a preferential income tax rate of 15% during that period. In 2014, Trina China and TST renewed and received their respective High and New Technology Enterprise Certificate, effective from 2014 to 2016, entitling each of them to a preferential income tax rate of 15% from 2014 through 2016.

Our wholly-owned subsidiary, Trina Solar (Hong Kong) Enterprise Limited was subject to Hong Kong profit tax at a rate of 16.5% in 2013, 2014 and 2015, respectively. No Hong Kong profit tax has been provided as our subsidiary has not had assessable profit that was earned in or derived from Hong Kong during the years presented.

Edgar Filing: Trina Solar LTD - Form 20-F

In 2013, 2014 and 2015, our wholly-owned subsidiaries, Trina Solar (Singapore) Pte. Ltd. was subject to Singapore profit tax at a rate of 17% and Trina Solar Energy Development Pte. Ltd. was subject to a preferential Singapore profit tax at an effective rate of 5%, which is applicable to qualified trading activities.

Our subsidiaries incorporated in the United States were subject to United States income tax at a combined federal and state tax rate of 40% in 2013, 2014 and 2015, respectively.

Our wholly-owned subsidiary, Trina Solar (Japan) Limited was subject to Japan profit tax at a rate of 40%, 41% and 40% in 2013, 2014 and 2015, respectively.

Our wholly-owned subsidiary, Trina Solar (Germany) GmbH was subject to Germany profit tax at a rate of 32.9%, 27.38% and 27.38% in 2013, 2014 and 2015, respectively.

We make an assessment of the level of authority for each of our uncertain tax positions (including the potential application of interests and penalties) based on their technical merits, and have measured the unrecognized benefits associated with such tax positions. As of December 31, 2014 and 2015, we had no significant unrecognized tax benefits relating to uncertain tax positions.

Table of Contents

Critical Accounting Policies

We prepare our consolidated 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 reporting period and (iii) the reported amounts of revenues and expenses during each reporting 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 reading our consolidated 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 judgments and estimates used in the preparation of our consolidated 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 usually do not contain post-shipment obligations nor any return or credit provisions. We recognize sales of our PV modules based on the terms of the specific sales contracts. 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 recognize the sale of project assets with the concurrent sale or lease of the underlying land use rights, whether explicit or implicit in the transaction, in accordance with ASC 360-20, Real Estate Sales. For these transactions, we have determined that the project asset sale represents the sale of real estate and is therefore subject to the revenue recognition guidance applicable to real estate. A project asset comprises of properties, physical fixtures, solar modules and other related integral equipment attached

to the land that cannot be removed and used separately without incurring significant costs. Equipment is determined to be integral when the cost to remove the equipment from its existing location, ship and reinstall at a new site, including any diminution in fair value, exceeds 10% of the fair value of the equipment at the time of original installation. Under real estate accounting, we recognize revenue and profit using the full accrual method once the sale is consummated, the buyer's initial and continuing investments are adequate to demonstrate its commitment to pay, the buyer's receivable is not subject to any future subordination, and we have transferred the usual risk and rewards of ownership to the buyer. For the years ended December 31, 2013, 2014 and 2015, revenues from the sale of project assets were \$11.9 million, \$133.9 million and \$90.4 million, respectively. During the years of 2013, 2014 and 2015, we did not have sales that qualified for use of the installment method nor entered into any sale transactions during the construction period of the project assets.

Table of Contents

If we retain continuing involvement in the project asset and do not transfer substantially all of the risks and rewards of ownership to the buyer, we recognize gross profit under a method determined by the nature and extent of our continuing involvement. In certain arrangements, we may provide the customers guarantees of system performance for a limited period of time and our exposure to loss is contractually limited based on the terms of the applicable agreement. In accordance with real estate sales accounting guidance, the gross profit recognized is reduced by our maximum exposure to loss until such time that the exposure no longer exists. As of December 31, 2015, deferred revenue amounted to \$4.6 million relating to our guarantee of system performance after the sale.

We also derive electricity revenues from build-to-own project assets through the sale of electricity to end customers or grid operators pursuant to terms set forth in the PPAs. We have determined that none of the PPAs contains a lease since (i) the purchaser does not have the rights to operate the project assets, (ii) the purchaser does not have the rights to control physical access to the project assets, and (iii) the price that the purchaser pays is at a fixed price per unit of output. The period of the PPAs are generally between 3 to 20 years.

We recognize electricity service revenues when a PPA exists, electricity has been generated and transmitted to the direct customer or grid operator, the price of electricity is fixed or determinable, and the collectability of the resulting receivable is reasonable assured. The price of electricity includes a portion that is subsidized by Chinese central or local government. The portion subsidized by Chinese central or local governments is recognized as part of electricity service revenue when all the conditions for receipt of the subsidy have been met and the above revenue recognition criteria for electricity service revenue have been met. Electricity revenues for the years ended December 31, 2013, 2014, and 2015 were \$4.9 million, \$5.1 million, and \$61.6 million, respectively.

We use the percentage-of-completion method to recognize revenues for which we provide EPC services, unless we cannot make reasonably dependable estimates of the costs to complete the contract, in which case we would use the completed contract method. The percentage-of-completion method is considered appropriate in circumstances in which reasonably dependable estimates can be made and in which all the following conditions exist: (i) contracts executed by the parties normally include provisions that clearly specify the enforceable rights regarding goods or services to be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement; (ii) the buyer can be expected to satisfy all obligations under the contract; and (iii) the contractor can be expected to perform all contractual obligations. We use the cost-to-cost method to measure the percentage of completion and recognize revenue based on the estimated progress to completion. We periodically revise our profit estimates based on changes in facts, and immediately recognize any losses that are identified on contracts. Incurred costs include all direct material, labor, subcontractor cost, and other associated costs. We recognize job material costs as incurred costs when the job materials have been permanently attached or fitted to the solar power projects as required by the engineering design. The construction periods normally extend beyond six months and less than one year. Revenues from EPC service for the years ended December 31, 2013, 2014, and 2015 were nil, nil and \$16.3 million, respectively.

Warranty Cost

It is customary in our business and industry to warrant or guarantee the performance of our solar module products at certain levels of power output for extended periods. Our PV modules were historically sold with a two or five 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 2011, we extended the warranty for defects in material and workmanship to ten years and began to guarantee that module power output will not decrease by more than approximately 0.7% per year after the initial year of service. 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 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) results from academic research, including industry-standard accelerated testing, and other assumptions that we believe to be reasonable under the circumstances. Based on the results of analysis and technical testing, the revision to our warranty policy in June 2011 did not have a material effect on our warranty accrual rate. 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 \$2.8 million for the year ended December 31, 2015.

Table of Contents

Impairment of Long-lived Assets

Our long-lived assets primarily include property, plant and equipment and prepaid land use rights. We evaluate our long-lived 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. If circumstances require a long-lived asset or asset group be tested for possible impairment, we first compare undiscounted cash flows expected to be generated by that asset or asset group to its carrying amount. If the carrying amount of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying amount exceeds its fair value. 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. No impairments were recorded for long-lived assets held and used during the years ended December 31, 2013, 2014 and 2015.

Our total module shipments, excluding modules shipped to solar power projects segment, during 2015 were 4,825.4 MW, compared to 3,336.2 MW in 2014 and compared to 5,000 MW annualized in-house manufacturing capacity as of December 31, 2015. Generally, our actual shipments for a given year are lower than the year-ending annualized in-house manufacturing capacity for that year. 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. We effectively utilized most of our capacity in 2015.

Allowance for Doubtful Accounts and Provision for Losses of Advances to Suppliers

Before conducting business with customers, we assess and evaluate customer creditworthiness which was primarily based on information provided by third party credit rating agencies, validation of the project specifications with the customers and their financing banks, and customer onsite visits by senior management. We assess the collectability of accounts receivable on a quarterly basis and provide allowances when there is doubt as to collectability. In addition to the specific allowance applied on the balance of individual customers, we group the remaining receivables without specific allowance based on overdue aging. An estimated loss percentage is then applied to each overdue aging group based on historical collection experiences, previous loss history and current credit conditions. During 2011 and 2012, when the solar industry was experiencing continuous declines in selling price and stagnated operating and financing cash flows, we focused our assessment and evaluation on certain specific customers with significant doubt as to the collectability of their past due balances based on a number of factors, including the long-overdue aging of the receivables, the customer's current ability to pay, past payment patterns and their failure to adhere to previously negotiated repayment schedules, as well as the market conditions in Europe and United States, and how those conditions may affect the relevant customers. Although the solar market began to improve in the second half of 2013, we continue to perform due diligence work on all customers with outstanding accounts receivables. Based on such assessment, we made provision for doubtful accounts receivable totaling \$0.3 million during 2013 against the accounts receivable. In 2014, we reversed provision for doubtful accounts receivable totaling \$7.4 million, due to the collection of certain long-aged receivables for which we provided provision in prior years. In 2015, we reversed provisions for doubtful accounts receivable totaling \$13.0 million, due to the collection of certain long-aged receivables for which we provided provision in prior years.

Table of Contents

With respect to advances to suppliers, who are primarily suppliers of silicon and wafer raw materials, we perform ongoing credit evaluations of our suppliers' financial conditions. Some of our suppliers require prepayments and our prepayments are recorded either as current portion of advances to suppliers, if they are expected to be utilized within 12 months of each balance sheet date, or as advances to suppliers, net of current portion, if they represent the portion expected to be utilized after 12 months. We reversed provision for losses of advances to suppliers totaling nil, \$1.1 million and nil, respectively, during the years ended December 31, 2013, 2014 and 2015. 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 terms 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 and record the lower of cost and market write-down if any inventories have a cost in excess of market value. Market value does not exceed the net realizable value of the inventory, which is the estimated selling price of our inventory in the ordinary course of business, less reasonably predictable costs of completion and disposal. The evaluation of net realizable value takes into consideration a number of factors including actual consumption of our finished goods compared to forecasted market demand, actual selling prices as agreed in our sales contracts and orders on hand for finished goods, the anticipated changes in the market selling price of our finished goods, seasonality fluctuations, and conversion costs in our production.

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, market 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. If, based on assumptions about expected demand and market conditions, we determine that the cost of inventories exceeds its estimated market value or inventory is excess or obsolete, we would record a write-down equal to the difference between the cost of inventories and the estimated market value. 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 or nominal amount.

Based on such estimates, we had inventory write-downs totaling \$40.6 million, \$37.8 million and \$15.3 million in the years ended December 31, 2013, 2014 and 2015, respectively.

To date, the majority of the inventory write-downs were due to the change of market's preference for power output of multicrystalline PV modules. Our main product is multicrystalline PV modules. Prevailing power output of multicrystalline PV modules increased from above 255 W in 2014 to above 260 W in 2015. We must sell those multicrystalline PV modules with power output below prevailing power output for a discount and we write down those multicrystalline PV modules to their estimated market value. Additionally, market conditions are subject to change and actual consumption of our inventory could differ from forecasted demand. 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. Although our inventories have a long life cycle, due to the change of market's preference for power output, obsolescence and slow-movers accounts for the majority inventory write-down as of December 31, 2015.

Table of Contents

Project Assets

We construct solar energy project systems, or project assets, that are (i) developed for sale, which we reported as build-to-sell project assets, or (ii) developed for our own use, which we reported as build-to-own project assets. Project assets are classified as either build-to-sell project assets or as build-to-own project assets once the project assets have been constructed and ready for use. Classification of the project assets affects the accounting and presentation in the consolidated financial statements, including the consolidated statement of operations and consolidated statement of cash flows. Transactions related to the construction and sale of build-to-sell project assets are presented as operating activities in the consolidated statements of cash flows and reported as sales and costs of goods sold in the consolidated statement of operations when the project assets are sold. Incidental electricity income generated from the build-to-sell project assets prior to the sale of the projects is recorded as other operating income in the consolidated statement of operations. Build-to-own project assets relate to solar energy project systems that we use in our operations to generate income or a return from the use of the assets. Income generated from the build-to-own project assets are reported as part of net sales in the consolidated statement of operations. The costs to construct build-to-own project assets are presented as investing activities in the consolidated statement of cash flows. The proceeds received for the sale of build-to-own project assets are presented as cash flows from investing activities within the consolidated statement of cash flows. A net gain or loss upon the disposal of build-to-own project assets is reported as other operating income or expense in the consolidated statement of operations.

Project assets costs consist primarily of capitalizable costs for items such as permits and licenses, land use rights, and work-in-process. Work-in-process includes materials and modules, construction, installation and labor and other capitalizable costs incurred to construct the solar energy project systems.

Upon completion of the construction of build-to-sell project assets, we initiate a plan to actively market the asset for immediate sale in its present condition to potential buyers at a price that is reasonable in relation to its current fair value and it is probable that the sale of the asset will be sold within one year. No depreciation expense is recognized while the project assets are under construction or classified as held for sale. Build-to-sell project assets are measured at the lower of its carrying amount or fair value less costs to sell. At each reporting date, the appropriateness of the classification of build-to-sell project assets is reassessed. If facts and circumstances change such that it is no longer probable that the project asset will be sold within one year, the project asset will be reclassified to property, plant and equipment.

For build-to-sell project assets, we consider a project commercially viable if it is anticipated to be sold for a profit once it is either fully developed or fully constructed. We also consider a partially developed or partially constructed project commercially viable if the anticipated selling price is higher than the carrying value of the related project assets plus the estimated cost to completion. We consider a number of factors, including changes in environmental, ecological, permitting, market pricing 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. We record an impairment loss of the project asset to the extent the carrying value exceed its estimated recoverable amount. The recoverable amount is estimated based on the anticipated sales proceeds plus any refundable project investment deposits reduced by estimated cost to complete such sales.

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 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. All available evidence, both positive and negative, shall be considered to determine whether a valuation allowance for deferred tax assets is needed. In 2013, 2014 and 2015, our deferred tax assets were reduced by a valuation allowance amounting to \$52.5 million, \$19.3 million and \$40.4 million. The determination of a need for a valuation allowance is based on our evaluation of both positive and negative evidence available to us, including the net losses in recent years for our major operating subsidiaries, and our projection of future taxable income of those subsidiaries. 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.

Table of Contents

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.

We have entered into a series of foreign currency forward 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 foreign currency forward 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 2013, 2014 and 2015, we recorded a derivatives gain of \$2.2 million, \$3.4 million and \$4.1 million, respectively.

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

Beginning in 2014, we have two reportable operating segments: the manufacturing segment that manufactures and sells PV modules world-wide, and the solar power projects segment that designs, constructs, sells and/or operates solar power projects in China and overseas.

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 sales. Our historical results presented below are not necessarily indicative of the results that may be expected for any future period.

Year Ended December 31,

Edgar Filing: Trina Solar LTD - Form 20-F

	2013		2014		2015				
	(in thousands, except for percentages)								
Net sales:									
Manufacturing	\$	1,796,331	101.2%	\$	2,402,964	105.1%	\$	3,389,366	111.6%
Solar power projects		16,875	1.0		138,975	6.1		168,731	5.6
Intersegment elimination		(38,235)	(2.2)		(255,820)	(11.2)		(522,585)	(17.2)
Consolidated net sales		1,774,971	100.0		2,286,119	100.0		3,035,512	100.0
Cost of sales		1,556,777	87.7		1,900,547	83.1		2,468,879	81.3
Gross profit:									
Manufacturing		228,507	12.9		372,204	16.3		618,815	20.4
Solar power projects		(10,313)	(0.6)		29,928	1.3		81,088	2.7
Intersegment elimination					(16,560)	(0.7)		(133,270)	(4.4)
Consolidated gross profit		218,194	12.3		385,572	16.9		566,633	18.7
Operating expenses:									
Selling expenses		132,824	7.5		135,061	5.9		178,119	5.9
General and administrative expenses		103,523	5.8		108,150	4.7		132,439	4.4
Research and development expenses		19,926	1.1		22,258	1.0		34,099	1.1
Provision for settlement of lawsuit with Solyndra								45,000	1.5
Total operating expenses		256,273	14.4		265,469	11.6		389,657	12.9
(Loss) income from operations									
		(38,079)	(2.1)		120,103	5.3		176,976	5.8
Foreign exchange (loss) gain		(13,576)	(0.8)		(21,934)	(1.0)		(25,139)	(0.8)
Interest expense		(48,445)	(2.7)		(34,886)	(1.5)		(52,252)	(1.7)
Interest income		3,958	0.2		2,793	0.1		2,862	0.1
Derivatives gain		2,180	0.1		3,422	0.2		4,065	0.1
Equity in (loss) income of equity method investees									
		(746)			(198)			1,741	0.1
Other income, net		9,442	0.5		7,448	0.3		7,539	0.2
(Loss) income before income taxes:									
Manufacturing		(67,179)	(3.8)		86,172	3.7		206,473	6.8
Solar power projects		(18,087)	(1.0)		7,136	0.3		39,281	1.3
Intersegment elimination					(16,560)	(0.6)		(129,962)	(4.3)
Consolidated (loss) income before income taxes		(85,266)	(4.8)		76,748	3.4		115,792	3.8
Income tax (expense) benefit		13,030	0.7		(15,488)	(0.7)		(29,445)	(1.0)
Net loss (income)	\$	(72,236)	(4.1)%	\$	61,260	2.7%	\$	86,347	2.8%

Table of Contents

Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

Net Sales. Our total net sales increased by \$749.4 million, or 32.8%, from \$2,286.1 million in 2014 to \$3,035.5 million in 2015, due to increased net sales from both our manufacturing segment and our solar power projects segment.

- *Manufacturing segment.* Net sales in our manufacturing segment increased by \$986.4 million, or 41.0%, from \$2,403.0 million in 2014 to \$3,389.4 million in 2015. Net sales in our manufacturing segment less intersegment elimination, which excludes net sales generated from the sales of modules from our manufacturing segment to our solar power projects segment, increased by \$719.7 million, or 33.5%, from \$2,147.1 million in 2014 to \$2,866.8 million in 2015. This increase was primarily due to increased shipments from 3,336.2 MW in 2014 to 4,825.4 MW in 2015, or an increase of 44.6%, offset by a slight decrease in average selling price of our PV modules, which decreased from \$0.63 per watt in 2014 to \$0.58 per watt in 2015. The increase in the shipments was primarily due to an increase in sales from key geographical regions, particularly the United States, India, China and Europe. The decrease in the average selling price was in line with the general decline of industry average selling price.

- *Solar power projects segment.* Net sales in our solar power projects segment increased by \$29.7 million, or 21.4%, from \$139.0 million in 2014 to \$168.7 million in 2015, primarily due to the increase of electricity revenue from build-to-own projects.

Cost of sales. Our cost of sales increased by \$568.4 million, or 29.9%, from \$1,900.5 million in 2014 to \$2,468.9 million in 2015, due to increased cost of sales from both manufacturing segment and solar power projects segment. Cost of sales in our manufacturing segment increased primarily due to increased shipments, offset by improvements in operating efficiency made possible by our proprietary technology and business scale. Cost of sales in our solar power projects segment increased primarily due to the sales of solar power projects in Norfolk, the United Kingdom as well as increased depreciation and amortization for our build-to-own projects. As a percentage of our total net sales, our cost of sales decreased from 83.1% to 81.3% during the same period.

Gross Profit. As a result of the foregoing, our gross profit increased by \$181.0 million, or 47.0%, from \$385.6 million in 2014 to \$566.6 million in 2015, primary due to increased profits from both manufacturing segment and solar power projects segment. Our gross margin increased from 16.9% to 18.7% during the same period due to a greater reduction in manufacturing costs per watt compared with the general decline in module average selling price, as well as an increase in downstream revenue, which yielded higher gross margins than module sales.

Table of Contents

- *Manufacturing segment.* Gross profit from our manufacturing segment increased by \$246.6 million, or 66.3%, from \$372.2 million in 2014 to \$618.8 million in 2015, primarily due to slower decreases in average selling price and reduced manufacturing cost per watt as we improved our operating efficiency and decreased costs of raw material.

- *Solar power projects segment.* Gross profit from our solar power projects segment increased by \$51.2 million, from \$29.9 million in 2014 to \$81.1 million in 2015, primarily due to the increase of electricity revenue from build-to-own projects and the sales of solar power projects in Norfolk, the United Kingdom.

Operating Expenses. Our operating expenses increased by \$124.2 million, or 46.8%, from \$265.5 million in 2014 to \$389.7 million in 2015. The increase in operating expenses was due to increased selling expenses, general and administrative expenses, research and development expenses, and \$45.0 million in provisions for the settlement of a lawsuit with Solyndra. As a percentage of total net sales, operating expenses increased from 11.6% in 2014 to 12.9% in 2015. Share-based compensation expenses allocated to our selling expenses, general and administrative expenses, and research and development expenses in 2015 were \$0.7 million, \$4.9 million and \$0.4 million, respectively, based on the respective departments in which employees worked at the time of the grant.

Selling Expenses. Our selling expenses increased by \$43.0 million, or 31.9%, from \$135.1 million in 2014 to \$178.1 million in 2015, primarily due to increases in overall shipping costs and warranty expenses given the 32.8% increase in our net sales. Selling expenses as a percentage of net sales remained at 5.9% in 2015.

General and Administrative Expenses. Our general and administrative expenses increased by \$24.2 million, or 22.5%, from \$108.2 million in 2014 to \$132.4 million in 2015, as a result of increased wages and benefits paid to our administrative personnel. General and administrative expenses as a percentage of net sales decreased from 4.7% in 2014 to 4.4% in 2015 due to the increase in net sales.

Research and Development Expenses. Our research and development expenses increased by \$11.8 million, or 53.2%, from \$22.3 million in 2014 to \$34.1 million in 2015, as a result of increased costs of raw materials used in our research and development activities and increased wages and benefits paid to our research and development personnel. Research and development expenses as a percentage of net sales increased from 1.0% in 2014 to 1.1% in 2015.

Foreign Exchange Loss. We had a foreign exchange loss of \$25.1 million in 2015, compared to a foreign exchange loss of \$21.9 million in 2014. The foreign exchange loss in 2015 resulted from depreciation of the Renminbi against the U.S. dollar.

Provision for settlement of lawsuit with Solyndra. In 2015, we agreed to and paid a settlement of \$45 million to the trustee of Solyndra LLC. We and Solyndra have agreed to a release of all claims and a dismissal with prejudice of the claims against us. See [Liquidity and Capital Resources](#) [Contingencies](#) for more details.

Interest Expenses, Net. Our interest expenses, net, was \$32.1 million and \$49.4 million in 2014 and 2015, respectively. Our interest expenses increased from \$34.9 million in 2014 to \$52.3 million in 2015, primary due to the increase of loan balance. Interest income increased from \$2.8 million in 2014 to \$2.9 million in 2015 as a result of the increase in cash and restricted cash balance resulting from the increase in bank loans. In 2015, we capitalized \$13.8 million of interest expenses, which is primarily for solar power projects under construction when the capitalization criteria for such projects are met.

Derivatives Gain. In 2015, we had a derivatives gain of \$4.1 million, compared to a derivatives gain of \$3.4 million in 2014, primarily due to changes in the value of the foreign currency forward contracts between the Euro and the U.S. dollar, the Japanese Yen and the U.S. dollar, and the Renminbi and the U.S. dollar, respectively, which are used to mitigate the effects of exchange rate volatility. See [Critical Accounting Policies](#) [Derivative Financial Instruments](#) for more details.

Income Tax Expense. We had an income tax expense of \$29.4 million in 2015, compared to an income tax expense of \$15.5 million in 2014, primarily due to increased income of \$115.8 million before income tax in 2015, as compared with income of \$76.7 million before income tax in 2014. Our effective income tax rate was 20.2% and 25.4% in 2014 and 2015, respectively. Our effective income tax rate in 2015 was higher than the PRC statutory EIT rate of 25%, primarily due to the accrual of valuation allowance to reflect the portion of the net operating loss carry forward, that is not more likely than not to be realized, offset by the change of preferential income tax rate received by certain PRC entities.

Table of Contents

Net Income. As a result of the foregoing, we had a net income of \$86.3 million in 2015, compared to a net income of \$61.3 million in 2014, representing an increase of \$25.1 million. Our net margin was 2.8% in 2015, compared to 2.7% in 2014.

Year Ended December 31, 2014 Compared to Year Ended December 31, 2013

Net Sales. Our total net sales increased by \$511.1 million, or 28.8%, from \$1,775.0 million in 2013 to \$2,286.1 million in 2014, due to increased net sales from both our manufacturing segment and our solar power projects segment.

- *Manufacturing segment.* Net sales in our manufacturing segment increased by \$606.7 million, or 33.8%, from \$1,796.3 million in 2013 to \$2,403.0 million in 2014. Net sales in our manufacturing segment less intersegment elimination, which excludes net sales generated from the sales of models from our manufacturing segment to our solar power projects segment, increased by \$389.0 million, or 22.2%, from \$1,758.1 million in 2013 to \$2,147.1 million in 2014. This increase was primarily due to increased shipments from 2,584.3 MW in 2013 to 3,336.2 MW in 2014, or an increase of 29.1%, offset by a slight decrease in average selling price of our PV modules, which decreased from \$0.64 per watt in 2013 to \$0.63 per watt in 2014. The increase in the shipments was primarily due to growing demand from key geographical regions, particularly China, the United States and Japan. The slight decrease in the average selling price was primarily due to increased sales to countries with lower average selling price.
- *Solar power projects segment.* Net sales in our solar power projects segment increased by \$122.1 million, or 722.5%, from \$16.9 million in 2013 to \$139.0 million in 2014, primarily due to the sales of our 50 MW solar power plant in Wuwei, Gansu Province and of two solar power plants with total capacity of 23.8 MW in the United Kingdom in 2014, totaling \$133.9 million.

Cost of sales. Our cost of sales increased by \$343.7 million, or 22.1%, from \$1,556.8 million in 2013 to \$1,900.5 million in 2014, due to increased cost of sales from both manufacturing segment and solar power projects segment. Cost of sales in our manufacturing segment increased primarily due to increased shipments, offset by improvements in operating efficiency made possible by our proprietary technology and business scale. Cost of sales in our solar power projects segment increased primarily due to the sales of solar power projects in China and the United Kingdom as well as increased depreciation and amortization for our build-to-own projects. As a percentage of our total net sales, our cost of sales decreased from 87.7% to 83.1% during the same period.

Gross Profit. As a result of the foregoing, our gross profit increased by \$167.4 million, or 76.7%, from \$218.2 million in 2013 to \$385.6 million in 2014, primary due to increased profits from our manufacturing segment, and our solar power projects segment having profits in 2014 as compared to losses in 2013. Our gross margin increased from

12.3% to 16.9% during the same period.

- *Manufacturing segment.* Gross profit from our manufacturing segment increased by \$143.7 million, or 62.9%, from \$228.5 million in 2013 to \$372.2 million in 2014, primarily due to slower decreases in average selling price and reduced manufacturing cost per watt as we improved our operating efficiency and decreased costs of raw material.

- *Solar power projects segment.* Gross profit from our solar power projects segment increased by \$40.2 million, from losses of \$10.3 million in 2013 to profits of \$29.9 million in 2014, primarily due to the sales of solar power projects in China and the United Kingdom.

Operating Expenses. Our operating expenses increased by \$9.2 million, or 3.6%, from \$256.3 million in 2013 to \$265.5 million in 2014. The increase in operating expenses was due to increased selling expenses, general and administrative expenses, and research and development expenses. As a percentage of total net sales, operating expenses decreased from 14.4% in 2013 to 11.6% in 2014. Share-based compensation expenses allocated to our selling expenses, general and administrative expenses, and research and development expenses in 2014 were \$0.6 million, \$3.5 million and \$0.3 million, respectively, based on the respective departments in which employees worked at the time of the grant.

Table of Contents

Selling Expenses. Our selling expenses increased by \$2.3 million, or 1.7%, from \$132.8 million in 2013 to \$135.1 million in 2014, primarily due to increases in overall shipping costs and warranty expenses given the 28.8% increase in our net sales. Selling expenses as a percentage of net sales decreased from 7.5% in 2013 to 5.9% in 2014, primarily due to the increase in net sales.

General and Administrative Expenses. Our general and administrative expenses increased by \$4.7 million, or 4.5%, from \$103.5 million in 2013 to \$108.2 million in 2014, as a result of increased wages and benefits paid to our administrative personnel, partially offset by a reversal of allowance for doubtful accounts due to the collection of cash from customers for whom we originally provided a full provision for their accounts receivable. General and administrative expenses as a percentage of net sales decreased from 5.8% in 2013 to 4.7% in 2014 due to the increase in net sales.

Research and Development Expenses. Our research and development expenses increased by \$2.4 million, or 11.7%, from \$19.9 million in 2013 to \$22.3 million in 2014, as a result of increased wages and benefits paid to our research and development personnel. Research and development expenses as a percentage of net sales decreased from 1.1% in 2013 to 1.0% in 2014 due to the increase in net sales.

Foreign Exchange Loss. We had a foreign exchange loss of \$21.9 million in 2014, compared to a foreign exchange loss of \$13.6 million in 2013. The foreign exchange loss in 2014 resulted from depreciation of the Japanese Yen against the U.S. dollar.

Interest Expenses, Net. Our interest expenses, net, was \$44.5 million and \$32.1 million in 2013 and 2014, respectively. Our interest expenses decreased from \$48.5 million in 2013 to \$34.9 million in 2014, primary due to the decreased average loan balance and capitalization of interest expenses. Interest income decreased from \$4.0 million in 2013 to \$2.8 million in 2014 as a result of the reduction in cash and restricted cash balance following the repayment of certain loans. In 2014, we capitalized \$7.2 million of interest expenses, which is primarily for solar power projects under construction when the capitalization criteria for such projects are met.

Derivatives Gain. In 2014, we had a derivatives gain of \$3.4 million, compared to a derivatives gain of \$2.2 million in 2013, primarily due to changes in the value of the foreign currency forward contracts between the Euro and the U.S. dollar, and the Renminbi and the U.S. dollar, respectively, which are used to mitigate the effects of exchange rate volatility. See [Critical Accounting Policies Derivative Financial Instruments](#) for more details.

Income Tax (Expense) Benefit. We had an income tax expense of \$15.5 million in 2014, compared to an income tax benefit of \$13.0 million in 2013, primarily due to income of \$76.7 million before income tax in 2014, as compared

with loss of \$85.3 million before income tax in 2013. Our effective income tax rate was 15.3% and 20.2% in 2013 and 2014, respectively. Our effective income tax rate in 2014 was lower than the PRC statutory EIT rate of 25%, primarily due to the reversal of valuation allowance as result of the realization or expected realization of net operating loss carry forward, offset by the change of preferential income tax rate received by certain PRC entities.

Net Income. As a result of the foregoing, we had a net income of \$61.3 million in 2014, compared to a net loss of \$72.2 million in 2013, representing an increase of \$133.5 million. Our net margin was 2.7% in 2014, compared to negative 4.1% in 2013.

B. Liquidity and Capital Resources

We finance our operations primarily through short-term and long-term borrowings, proceeds from public offerings, including our convertible senior notes offerings in July 2008, June 2014 and October 2014, our follow-on offerings of ADSs in July 2009, March 2010, June 2014 and October 2014, and also the cash generated from operations. We believe that our current cash, short-term and long-term borrowings and anticipated cash flows from operations and the renewal of short-term bank borrowings 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. If we are unable to obtain sufficient funding for any reason, including the inability to renew our short-term bank borrowings, we may need curtail our operations or postpone portions of our planned capital expenditures. 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 additional loans from banks. However, 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.

Table of Contents

As of December 31, 2015, we had \$465.4 million in cash, \$194.5 million in restricted cash and \$1,438.6 million in outstanding borrowings. Our cash primarily consist of cash on hand and demand deposits with original maturities of three months or less. Our treasury policy requires cash, restricted cash and investments to be placed with banks and other financial institutions. We plan to use the cash available as of December 31, 2015, for potential future capital expenditures, including the maintenance and enhancement of existing facilities, to further increase production capacity, potential downstream investments, and for working capital and other day-to-day operating purposes.

Our bank borrowing facilities include both short-term and long-term bank borrowings. We had total bank borrowing facilities of \$1,492.8 million with various banks, of which \$54.2 million was unused as of December 31, 2015. We historically successfully renewed or rolled over our short-term bank borrowings upon the maturity date. In addition to bank borrowing facilities, as of December 31, 2015, we also had facilities for trade financing in the amount of \$675.4 million, of which \$323.3 million was unused. On July 15, 2013, we redeemed all outstanding convertible senior notes due 2013, together with all accrued but unpaid interest. As of December 31, 2015, we had \$172.5 million 3.5% convertible senior notes due 2019 and \$115.0 million 4.0% convertible senior notes due 2019. For details on our borrowings, please see Cash Flows and Working Capital Borrowings.

In the past, we have had significant working capital commitments for purchases of polysilicon and wafers. Our prepayments to suppliers were recorded either as current portion advances to suppliers, if they were expected to be utilized within 12 months of each balance sheet date, or as advances to suppliers, net of current portion, if they represented the portion expected to be utilized after 12 months. As of December 31, 2015, we had advances to suppliers, net of current portion, of \$20.6 million, compared to \$18.8 million as of December 31, 2014, due to the prepayment for assets acquired in the Netherlands of \$7.3 million, offset by our decreasing dependence on the procurement of polysilicon through long-term supply contracts that require prepayments to meet our needs for silicon-based raw materials. We also had the current portion of advances to suppliers of \$55.7 million as of December 31, 2015, an increase from \$46.1 million as of December 31, 2014 due to the increase in our purchase of raw materials as we expanded our manufacturing capacity. 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.

We plan to build or acquire new facilities to increase our annualized in-house manufacturing capacity of cells and modules from 3,500 MW and 5,000 MW, respectively, as of December 31, 2015 to 5,000 MW and 6,000 MW as of December 31, 2016, respectively. We plan to incur capital expenditures of up to \$250 million to accomplish our expansion plans in 2016 in our manufacturing segment. We also plan to incur capital expenditures of up to \$170 million for our build-to-own projects under construction and to be constructed in 2016. See Capital Expenditures. In addition, we plan to spend up to \$690 million for our build-to-sell projects under construction and to be constructed in 2016. With the increase of revenue, we expect that our accounts receivable and inventories, two of the principal components of our current assets, will continue to be maintained at an appropriate level facilitating our working capital management. We require prepayments from certain customers, depending on the customer's credit status, 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.

Cash Flows and Working Capital

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

Table of Contents

	2013	Year Ended December 31, 2014 (in thousands)		2015
Net cash provided by operating activities	\$ 46,531	\$ 183,959		\$ 188,194
Net cash used in investing activities	(36,205)	(487,786)		(702,697)
Net cash (used in) provided by financing activities	(337,113)	207,656		595,118
Effect of exchange rate changes	6,197	2,377		(8,114)
Net change in cash	(320,590)	(93,794)		72,501
Cash at the beginning of the year	807,276	486,686		392,892
Cash at the end of the year	\$ 486,686	\$ 392,892		\$ 465,393

Operating Activities

Net cash provided by operating activities amounted to \$188.2 million in 2015. The net cash provided by operating activities in 2015 was primarily due to (i) an increase in accounts payable of \$578.5 million due to increase in raw materials purchased as a result of our increased sales as well as the increase in construction of build-to-sell project assets, (ii) depreciation and amortization of \$135.0 million, and (iii) net income of \$86.3 million. Net cash provided by operating activities was partially offset by (a) an increase in build-to-sell project assets of \$467.9 million due to increased proportion of project assets that we plan to sell (b) an increase in value-added tax recoverable of \$121.7 million.

Net cash provided by operating activities amounted to \$184.0 million in 2014. The net cash provided by operating activities in 2014 was primarily due to (i) an increase in accounts payable of \$207.3 million due to increase in purchases of raw materials as a result of our increased sales, (ii) depreciation and amortization of \$108.3 million, and (iii) net income of \$61.3 million. Net cash provided by operating activities was partially offset by (a) an increase in accounts receivable of \$165.7 million due to increased proportion of sales to customers based in China and (b) an increase in inventories of \$105.3 million as a result of the expected increase in product demand for year 2015.

Net cash provided by operating activities amounted to \$46.5 million in 2013. The net cash provided by operating activities in 2013 was primarily due to (i) a decrease in inventories of \$93.6 million as a result of increased sales and efforts to control average inventory in-stock levels and (ii) a decrease in accounts receivable turnover days as a result of efforts to improve debtor collection. Net cash provided by operating activities was partially offset by (a) a net loss of \$72.2 million and (b) an increase in project assets held for sale of \$69.0 million.

Investing Activities

Net cash used in investing activities amounted to \$702.7 million in 2015. The net cash used in investing activities in 2015 was primarily as a result of (i) capital expenditures of \$652.4 million in 2015 for property, plant and equipment which were primarily used to grow our build-to-own solar projects portfolio; (ii) an increase in restricted cash of \$47.6

million mainly due to bank deposits held as collateral for letters of credit, commercial paper, bank drafts and bank borrowings; and (iii) the acquisition of land use rights of \$10.2 million, offset in part by an increase in proceeds from the sale of property, plant and equipment of \$14.2 million.

Net cash used in investing activities amounted to \$487.8 million in 2014. The net cash used in investing activities in 2014 was primarily as a result of (i) capital expenditures of \$404.7 million in 2014 for property, plant and equipment which was primarily used to grow our build-to-own solar projects portfolio; (ii) an increase in restricted cash of \$72.2 million mainly due to bank deposits held as collateral for letter of credit, commercial paper, bank drafts, bank borrowings; and (iii) investments in affiliates of \$14.0 million.

Net cash used in investing activities amounted to \$36.2 million in 2013. The net cash used in investing activities in 2013 was primarily as a result of capital expenditures of \$70.0 million for property, plant and equipment incurred in the second half of 2013 to increase our manufacturing capacity, offset in part by a decrease in restricted cash of \$36.2 million.

Table of Contents

Financing Activities

Net cash provided by financing activities amounted to \$595.1 million in 2015, which included proceeds of \$1,818.2 million from bank borrowings (short-term and long-term), offset in part by repayment of \$1,222.3 million in bank borrowings (short-term and long-term).

Net cash provided by financing activities amounted to \$207.7 million in 2014, which included proceeds of \$1,142.5 million from bank borrowings (short-term and long-term), proceeds of \$287.5 million from issuance of convertible notes, and proceeds of \$132.4 million from the issuance of ordinary shares, net of issuance costs, offset in part by repayment of \$1,303.3 million in bank borrowings (short-term and long-term) and \$52.3 million used to pay for call options in connection with issuance of convertible senior notes.

Net cash used in financing activities amounted to \$337.1 million in 2013, which was primarily used to repay \$1,256.7 million in bank borrowings (short-term and long-term) and to repurchase or redeem convertible senior notes of \$83.3 million, offset in part by proceeds of \$1,001.8 million from bank borrowings (short-term and long-term).

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 Risks Related to Doing Business in China 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 our subsidiaries in the PRC. and Item 3. Key Information D. Risk Factors Risks Related to Doing Business in China The dividends we receive from our PRC subsidiaries and our global income may be subject to PRC tax under the EIT Law, which would have a material adverse effect on our results of operations; our foreign ADS holders may be subject to a PRC withholding tax upon the dividends payable by us and upon gains realized on the sale of our ADSs, if we are classified as a PRC resident enterprise.

Borrowings

We had short-term borrowings, excluding the current portion of long-term borrowings, of \$737.9 million and \$896.0 million as of December 31, 2014 and 2015. The average interest rate on short term borrowings was 4.41% and 4.25% per annum in 2014 and 2015, respectively. The funds borrowed under short-term arrangements are repayable within one year. As of December 31, 2015, certain short-term loans were secured by the plant and machinery of Trina China and TST with a carrying value of \$478.9 million. We had current portion of long term borrowings of \$82.4 million and \$20.6 million, and we had long-term borrowings, excluding current portion, of \$22.4 million and \$522.0 million as of December 31,

2014 and 2015, respectively.

Certain of our loan agreements require us or the borrowing entities to maintain certain financial ratios, such as debt to total assets ratio, net profit ratio, net external gearing ratio, income to interest ratio, net tangible worth, the ratio of net borrowings, and the ratio of earnings before interest, taxes, depreciation and amortization, or EBITDA, to net interest expenses. As of December 31, 2015, Trina China was not in compliance with the net external gearing ratio on a loan from HSBC, and Yunnan Matallurgical was not in compliance with the asset liability ratio and turnover ratio of current assets for loans from CDB. On March 1, 2016, Trina China obtained a waiver letter from HSBC waiving its compliance obligations for the net external gearing ratio covenant for the duration of the loan. On March 17, 2016, Yunnan Matallurgical obtained a written confirmation from CDB that CDB would waive the right to declare an event of default for Yunnan Matallurgical's non-compliance with the asset liability ratio and turnover ratio of current assets covenants provided that Yunnan Matallurgical would cure the non-compliance prior to September 17, 2016. We have determined that Yunnan Matallurgical will be able to cure the non-compliance prior to September 17, 2016 and believe that Yunnan Matallurgical will be in compliance with the financial covenants again for the remainder of 2016.

On December 31, 2012, Trina Solar (Luxembourg) Holdings S.A.R.L., or TLH, entered into a three-year credit facility with CDB, or the TLH CDB Facility, totaling \$80.0 million for working capital. TLH fully drew down the facility in 2012. The interest rate under the TLH CDB Facility is the prevailing six-month U.S. LIBOR plus 370 basis points which was 4.21% and 4.04% in 2013 and 2014, respectively. The TLH CDB Facility is guaranteed by Trina. The facility contains certain financial covenants. In June 2014, TLH was in non-compliance with the gearing ratio covenant under the TLH CDB Facility. TLH subsequently obtained a waiver letter from CDB, waiving the non-compliance of the gearing ratio covenant and amended such financial covenant. TLH is in compliance with the revised financial covenants. TLH had a loan balance of \$80.0 million as of December 31, 2014 and fully repaid the outstanding balance in December 2015.

Table of Contents

On March 6, 2014, Trina Solar (Luxembourg) Overseas Systems S.A.R.L and Jiangsu Trina Solar Electric Power Development Co., Ltd., or TJS, entered into a 15-year credit facility with CDB, or the TLO CDB Facility, in the amount of 20.85 million to fund 16 MW of utility-scale solar power projects in Greece. As of December 31, 2015, we had drawn down and had an outstanding balance of 16.4 million (\$17.9 million). The interest rate is the prevailing six-month EURIBOR plus 350 basis points, which was 3.501% on average in 2015. The outstanding balance as of December 31, 2015 was 16.4 million (\$17.9 million). The TLO CDB Facility is guaranteed by us and contains a coverage ratio financial covenant. Trina Solar (Luxembourg) Overseas Systems S.A.R.L was in compliance with the covenant as of December 31, 2015.

On March 10, 2015, Xiangshui Hengneng Electricity Generation Co., Ltd., or TXSI, entered into a twelve-year loan facility with Bank of Beijing Co., Ltd. for the construction of solar power project assets located in Yancheng City, Jiangsu Province, China. The total credit available under the loan facility is RMB658.0 million (\$101.3 million), which can be drawn down within 364 days from the date that the loan facility was entered into and matures on March 10, 2027. As of December 31, 2015, we had drawn down RMB450 million (\$69.3 million). The interest rate is 108% of the prevailing base lending rate pronounced by the People's Bank of China, or PBOC, for loans of similar duration. The facility is guaranteed by Trina China, and pledged by the electricity income of TXSI and 100% equity interests in TXSI held by TJS, a subsidiary of Trina. The facility contains a financial covenant which requires TXSI to maintain specified debt to asset ratio on a quarterly basis. TXSI was in compliance with the debt covenant as of December 31, 2015.

On June 19, 2015, Hunan Trina Solar Electric Power Development Co., Ltd., or THN, entered into a ten-year loan facility with China Construction Bank for the construction of the solar project assets located in Hunan province, China. The total credit available under the loan facility is RMB70 million (\$10.8 million). As of December 31, 2015, we had drawn down RMB40 million (\$6.2 million). The interest rate is 105% of the prevailing base lending rate pronounced by the PBOC for loans of similar duration. The facility is guaranteed by Trina China and TJS. The facility contains certain financial covenants and THN was in compliance with the covenants as of December 31, 2015.

On July 30, 2015, Trina China entered into a two-year credit facility with Ping An Trust Co., Ltd., or PATC, amounting to RMB253 million (\$39.0 million) with an interest rate of 11% per year to support the project of a subsidiary of Trina China. The lender has the option to convert up to 31.2% of the total shares of the subsidiary, amount of which shall not exceed RMB253 million (\$39.0 million). Trina China had fully drawn down the facility in 2015 and the outstanding balance as of December 31, 2015 was RMB253 million (\$39.0 million). The facility is guaranteed by Trina China and pledged by the 35.2% share of the subsidiary held by Trina China with a carrying amount of \$31.3 million as of December 31, 2015. There are no financial covenants with respect to this facility.

On August 25, 2015, Trina China entered into a two-year credit facility with PATC for RMB63 million (\$9.7 million) with an interest rate of 11% per year to support the project of a subsidiary of Trina China. The lender has the option to convert up to 7.8% of the total shares of the subsidiary, amount of which shall not exceed RMB63 million (\$9.7 million). Trina China had fully drawn down the facility in 2015 and the outstanding balance as of December 31, 2015 was RMB63 million (\$9.7 million). The facility is guaranteed by us and pledged by the 8.8% share of the subsidiary held by Trina China with a carrying amount of \$7.8 million as of December 31, 2015. There are no financial covenants with respect to this facility.

On September 30, 2015, Trina Solar (U.S.), Inc., or Trina US, entered into a five-year revolving loan facility with the Wells Fargo Bank amounting to \$60 million to support Trina US's working capital and business operations. As of December 31, 2015, we had drawn down \$25.6

Edgar Filing: Trina Solar LTD - Form 20-F

million. The outstanding balance as of December 31, 2015 was \$25.6 million. The interest rate is the prevailing LIBOR / Base rate plus LIBOR margin / Base rate margin, which was 2.83% on average in 2015. The facility contains a financial covenant which requires a specified fixed charge coverage ratio be maintained and Trina US was in compliance with the covenant as of December 31, 2015.

On October 20, 2015, Trina China entered into a five-year credit facility with Agriculture Bank of China, or the ABC Facility, and Jiangnan Rural Commercial Bank as a syndicated loan lender amounting to RMB350.0 million (\$53.6 million) to support the project of the upgrading and automation renovation of the solar module technology. The ABC Facility is guaranteed by Trina Solar Limited and pledged by the equipment of the project. We had fully drawn down the facility in 2015. The outstanding balance as of December 31, 2015 was RMB350.0 million (\$53.6 million). The interest rate is the prevailing base lending rate pronounced by by the PBOC for loans of similar duration. There are no financial covenants with respect to this facility.

Table of Contents

On November 24, 2015, Yunnan Matallurgical entered into a fifteen-year loan facility with CDB, including both a RMB facility and a US dollar facility, or the TYM CDB Facility, amounting to RMB765 million (\$117.8 million) and \$180 million, respectively, for the construction of solar project assets located in Yunnan Province, China. We fully drew down the facility in 2015. Interest is due quarterly in arrears. The interest rate on the RMB facility is the prevailing base lending rate pronounced by the PBOC for loans of similar duration. The interest rate on the US dollar facility is the prevailing six-month US LIBOR plus 380 basis points. The TYM CDB Facility is guaranteed by Trina Solar Limited and Trina China, and secured by the build-to-own project assets with a carrying amount value of \$196.8 million and the electricity income of Yunnan Matallurgical. Yunnan Matallurgical is required to make installment payments twice each year, with the last payment due in 2030. The facility contains certain financial covenants requiring the maintenance of the asset liability ratio, quick ratio, debt payment coverage rate and other ratios. As of December 31, 2015, Yunnan Matallurgical was not in compliance with the asset liability ratio and turnover ratio of current assets. On March 17, 2016, Yunnan Matallurgical obtained a written confirmation from CDB that CDB would waive the right to declare an event of default for Yunnan Matallurgical's non-compliance with the asset liability ratio and turnover ratio of current assets covenants provided that Yunnan Matallurgical would cure the non-compliance prior to September 17, 2016. We have determined that Yunnan Matallurgical will be able to cure the non-compliance prior to September 17, 2016 and believe that Yunnan Matallurgical will be in compliance with the financial covenants again for the remainder of 2016.

On December 28, 2015, TJS entered into an eight-year loan facility with China Minsheng Bank amounting to RMB250 million (\$37.5 million) at an interest rate of 4.9% per year for the construction of solar project assets located in Xinjiang Province, China. We had drawn down RMB138 million (\$21.3 million) by the end of 2015. The facility is guaranteed by Trina China, and secured by the phase II project assets of Tuokexun Trina Solar Co., Ltd., or TKX, and pledged by the account receivables generated from the electricity income of TKX phase II project assets. There are no financial covenants with respect to this facility.

On March 28, 2016, Trina Solar Science & Technology (Thailand) Ltd. or TTL, entered into a syndicated loan arrangement with Siam Commercial Bank, or SCB, and China Minsheng Banking Corporation Ltd, or CMBC, of \$100 million to finance the capital expenditures of TTL. The facility will mature in June 2020 and is guaranteed by TSL, pledged by the shares of TTL held by Trina Singapore and secured by all the plant, property and equipment of TTL. In addition, according to the arrangement, we were granted a line of credit by SCB for Thai Baht 1.53 billion (\$42.8 million), which will be used for the working capital of TTL.

We have historically been able to repay our total borrowings as they became due mostly from cash from operations, sales of our solar power projects, proceeds from additional short-term and long-term borrowings or renewing the loans upon maturity. 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.

Capital Expenditures

We had capital expenditures of \$72.1 million, \$404.7 million and \$662.5 million in 2013, 2014 and 2015, respectively.

Manufacturing Segment. Our capital expenditures in this segment were used primarily for purchases of equipment and facilities for the production of ingots, wafers, cells and modules. We plan to build or acquire new facilities to increase our annualized in-house manufacturing capacity of cells and modules from 3,500 MW and 5,000 MW, respectively, as of December 31, 2015 to 5,000 MW and 6,000 MW, respectively, as of December 31, 2016. We plan to incur capital expenditures of up to \$250 million to accomplish our 2016 expansion plans in our manufacturing segment.

Solar Power Projects Segment. We capitalize project assets costs consisting primarily of costs for developing and obtaining permits and licenses, land costs or land use rights, equipment, including modules, construction and installation. No depreciation expense is recognized while the project assets are under construction or classified as build-to-sell. For our build-to-own solar power projects that have started operating, we recognize depreciation as cost of sales. As of December 31, 2015, we had 537.9 MW projects under construction and 1,036.9 MW projects in pipeline. We plan to incur capital expenditures of up to \$170 million for our build-to-own projects under construction and to be constructed in 2016. In addition, we plan to spend up to \$690 million for our build-to-sell projects under construction and to be constructed in 2016.

Table of Contents

Contingencies

For contingencies relating to potential violations of international fair trade rules, see Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry The determination by U.S. and European Union authorities that our export sales are in violation of international fair trade rules could impede our access to important export markets and our overall competitiveness.

On October 11, 2012, the trustee of Solyndra LLC, a manufacturer of solar panels based in California, filed a lawsuit against us, including our subsidiary Trina Solar (U.S.), Inc., and other Chinese manufacturers of photovoltaic solar panels in the U.S. District Court in California. The plaintiff has asserted antitrust and related state-law claims against the defendants in this lawsuit. The plaintiff's complaint alleges that defendants have violated Section 1 of the Sherman Antitrust Act by conspiring among each other and with additional co-conspirators to fix prices of solar panels by dumping products in the United States and to destroy fair competition in the U.S. market. The plaintiff similarly alleges conspiracy to fix prices and predatory pricing under California's Cartwright Act and Unfair Practices Act. In addition, the plaintiff has brought state-law claims of tortious interference with existing agreements and tortious interference with prospective economic advantage, alleging that the defendants interfered with Solyndra's existing agreements with its customers by selling their products to Solyndra's customers at below-cost prices. On November 17, 2015, we entered into a settlement agreement with Solyndra, pursuant to which we paid \$45.0 million on December 31, 2015. We and Solyndra have agreed to a release of all claims and a dismissal with prejudice of the claims against us, and we have not admitted to any wrongdoing or any validity to the allegations made against it in the lawsuit. On January 4, 2016, the district court dismissed Solyndra's claims against us.

In October 2013, the liquidating trustee for Energy Conversion Devices, or ECD, filed an antitrust and unfair trade practice lawsuit against us and other China-based solar manufacturers in the U.S. District Court for the Eastern District of Michigan. The complaint is substantially similar to the complaint filed by Solyndra against the same defendants in the Northern District of California. The plaintiff's complaint alleges that defendants violated Section 1 of the Sherman Antitrust Act by conspiring among each other and with additional co-conspirators to fix prices of solar panels by dumping products in the United States and to destroy fair competition in the U.S. market. The plaintiff similarly alleges conspiracy to fix prices and predatory pricing under Michigan's Antitrust Reform Act. The defendants filed a motion to dismiss the complaint in its entirety on April 18, 2014. The district court granted defendants' motion to dismiss on October 31, 2014, and later denied plaintiff's motion for reconsideration and motion to amend its complaint. ECD appealed the district court's rulings to the United States Court of Appeals for the Sixth Circuit. ECD filed its appellate brief on December 17, 2015, and filed unredacted form of its appellate brief on January 29, 2016. Defendants-Appellees, including us, filed a response brief on March 2, 2016. ECD filed its reply on April 4, 2016. As of the date of this annual report, it is difficult to fully evaluate the claims and determine the likelihood of an unfavorable outcome or provide an estimate of the amount of any potential loss because (i) this matter was at its early stages of the proceeding; (ii) it is uncertain how the United States Court of Appeals for the Sixth Circuit will rule on the plaintiff's appellate brief; (iii) there is a lack of any discovery related specially to the Energy Conversion Devices Matter, including any discovery of Energy Conversion Devices itself; and (iv) there is a lack of any expert reports related to damages in the Energy Conversion Devices. As a result, we believe that information available to us did not indicate that it is probable that a loss had been incurred, or the amount of the loss can be reasonably estimated. Accordingly, no accrual was made as of December 31, 2015, and, we believe it is impossible to estimate any possible loss or range of losses.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update 2014-09, Revenue from Contracts with Customers, or ASU 2014-09. ASU 2014-09 requires companies to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which companies expect to be entitled in exchange for those goods or services. ASU 2014-09 will replace most existing revenue recognition guidance in GAAP when it becomes effective. ASU 2014-09 was originally effective for fiscal years and interim periods beginning after December 15, 2016. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts

Edgar Filing: Trina Solar LTD - Form 20-F

with Customers, or ASU 2015-14, which amends ASU 2014-09 and defers its effective date to fiscal years and interim reporting periods beginning after December 15, 2017. ASU 2015-14 permits earlier application only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. We are currently evaluating the impact of this standard on our consolidated financial statements.

Table of Contents

In August 2014, the FASB issued ASU 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern, or ASU 2014-15, to provide guidance on management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and to provide related footnote disclosures. ASU 2014-15 is effective for annual periods ending after December 15, 2016 and interim periods within annual periods beginning after December 15, 2016, with early adoption permitted. We are currently evaluating the impact of this standard on our consolidated financial statements.

In January 2015, the FASB issued ASU 2015-01, Income Statement - Extraordinary and Unusual Items (Subtopic 225-20), which eliminates the concept of reporting for extraordinary items. ASU 2015-01 is effective for fiscal year ending December 31, 2016 and for interim periods thereafter.

In April 2015, the FASB issued ASU 2015-03, Interest - Imputation of Interest, or ASU 2015-03, to simplify the presentation of debt issuance costs. The ASU requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability, consistent with debt discounts or premiums. The recognition and measurement guidance for debt issuance costs is not affected by this ASU. This ASU is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within fiscal years beginning after December 15, 2016, with early adoption permitted. The impact upon adoption would be presenting the debt issuance costs amounting to \$9,148,909 as of December 31, 2015 as a deduction to the carrying amount of the debt.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes, or ASU 2015-17, to simplify the presentation of deferred income taxes by eliminating the requirement to separate deferred tax assets and liabilities into current and noncurrent amounts. ASU 2015-17 requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent and is effective for financial statements issued for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Earlier application is permitted as of the beginning of an interim or annual reporting period. We are currently evaluating the impact of this standard on our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), or ASU 2016-02. Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (1) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (2) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged. Certain targeted improvements were made to align, where necessary, lessor accounting with the lessee accounting model and Topic 606, Revenue from Contracts with Customers. The new lease guidance simplified the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and lease liabilities. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. ASU 2016-02 is effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with early adoption permitted. We are currently evaluating the impact of this standard on our consolidated financial statements.

C. Research and Development, Patents and Licenses, Etc.

Edgar Filing: Trina Solar LTD - Form 20-F

We focus our research and development efforts on 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, 2015, we had a total of 2,588 employees involved in our research and development activities. Among them, 842 employees are under our technology development department and are dedicated to research and development. We also have a team of 1,746 employees under our engineering department that are responsible for manufacturing technology development and further fine-tuning our production processes.

Table of Contents

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 led by our senior management and comprised of both our employees and external solar energy experts.

Our research and development efforts have been further enhanced by our research and development laboratory in the PV Park Lab, a research and development center that focuses on developing PV technologies, including the use of alternative materials, increasing cell conversion efficiencies and conducting assembly and system research. The location of the PV Park Lab allows us to more easily conduct technology exchanges with PV experts from world-leading companies, research institutes and emerging technology companies also located within the PV Park. We completed construction and began using the PV Park Lab during the second quarter of 2012. We have also formed a world-class academic committee dedicated to creating a technology platform for the development of PV technologies. We are one of the two solar companies in China commissioned by the PRC government to establish and operate research and development centers. On November 3, 2013, the PV Park Lab received accreditation from China's Ministry of Science and Technology.

Our research efforts are currently focused on four main product areas, namely ingots, wafers, solar cells and PV 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. To enhance the quality and performance of our solar products, our research and development efforts also include leveraging on existing and newer technologies to optimize our silicon and non-silicon feedstock and processing costs. In the fourth quarter of 2015, our average silicon usage was approximately 5.1 grams per watt, compared to approximately 5.3 grams per watt in the fourth quarters of both 2014 and 2013.

For the assembly of modules, our research and development team work 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.

In July 2012, we launched Trinasmart, which provides maximizing and monitoring technologies to maximize roof space and overall power output. Trinasmart's proprietary intelligent technology is integrated into the module junction box, which allows monitoring and control of the PV array at the module level. We have also entered into collaborative relationships with developers and manufacturers of various system technologies, with the goal of lowering the overall unit cost of solar energy produced when combined with our module products. In July 2013, we announced the commercial availability of an enhanced version of our industry-leading Trinasmart modules, embedded with Smart Curve technology. Smart Curve technology ensures maximum voltage is constant regardless of temperature and enables the installation of longer strings than traditional modules. With Smart Curve, each module in a string performs independently at its maximum level, delivering optimal energy output.

In 2013, our research and development efforts focused on developing of high-efficiency IBC cells and silicon-based HJ cells. We expect both of these cell technologies to be part of our future product portfolio. We worked together with the Solar Energy Research Institute of Singapore to develop a commercial-sized IBC cell with an efficiency rate of 21.4% using low cost processes, allowing the power of a 1.2m² IBC cell module to reach 238 W. We also aligned with the Shanghai Institute of Microsystem and Information Technology under the Chinese Academy of Sciences to develop an HJ cell with a 21.3% efficiency rate. We aim to further build on the success of our Honey product by using innovative technologies to develop high performance products, including high-efficiency multi and mono-crystalline silicon PV modules. Our Honey pilot production line has reached an average module power of 283.5 W, and a maximum module power of 285.5 W, while the upgraded Honey cells now reach an average efficiency of approximately 20% and a maximum efficiency of 20.54%. In October 2014,

we announced that our high-efficiency Honey solar module had set a new world record for peak power output for P-type monocrystalline silicon PV modules, as independently certified by TUV Rheinland. The module was developed in our PV Park Lab and was composed of 60 156x156 mm² high-efficiency Honey monocrystalline silicon cells. It generated a peak power output of 335.2W, breaking the previous world record of 326.3W, set by our original Honey module in April 2014.

Table of Contents

In November 2014, we announced that our State Key Laboratory of PV Science and Technology of China has set new world records for high efficiency *p*-type and *n*-type silicon solar cells. The *p*-type mono-crystalline silicon solar cell on an industrial Cz wafer reached an efficiency of 21.40% (156×156 mm²). The same advanced cell technologies on a high quality multicrystalline Si wafer resulted in a new *p*-type multicrystalline silicon solar cell with an efficiency of 20.53%. Both results are independently verified by external laboratories and established new world records for mono and multi *p*-type silicon solar cells with passivated rear surface and local contact, on 6 substrates and fabricated with an industrial process.

In April 2015, researchers at the State Key Laboratory have successfully demonstrated a multi-crystalline silicon PERC module with a champion module efficiency of 19.2%, independently measured by Fraunhofer CalLab. This is a new world record for multi-crystalline module efficiency, and also the first time that multi-crystalline silicon technology was able to cross the 19% module efficiency threshold, a domain that previously was only obtainable by more sophisticated technologies like mono-crystalline PERC, IBC or HIT.

In November 2015, we announced that our State Key Laboratory of PV Science and Technology of China set a new world record for high efficiency *p*-type multi-crystalline silicon solar cells. The *p*-type multi-crystalline silicon solar cell was fabricated on a high-quality multi-crystalline silicon substrate with a process that integrates advanced Honey Plus technologies, including back surface passivation and local back surface field and reached a total-area efficiency of 21.25% (156×156 mm²). In December 2015, we announced that our State Key Laboratory of PV Science and Technology of China set a new world record for high efficiency *p*-type mono-crystalline silicon solar cells. The *p*-type mono-crystalline silicon solar cell was fabricated on a large-size industrial boron-doped mono-crystalline silicon substrate with an advanced Honey Plus process that integrated both front and back surface passivation, reaching a total-area efficiency of 22.13% (156×156 mm²). Both results were independently verified by external laboratories and established new world records for mono and multi *p*-type silicon solar cells with passivated rear surface and local contact, on 6 substrates and fabricated with an industrial process. In 2015, we built the IBC cell pilot production line with average efficiency over 22% and the highest efficiency of 23.4%, which reached the highest level of industrialized 6 inches crystalline silicon cell efficiency. In 2015, the State Key Laboratory for Photovoltaic Science and Technology started research and development programs to develop industrialized processes for *N*-type PERT solar cells. The laboratory achieved cell efficiencies of 22.28% and 21.49% on 5- and 6-inch *n*-type silicon substrates, respectively, by optimizing the front and rear surface passivation, PVD and plating. Both cell efficiencies were independently certified by Fraunhofer ISE CalLab. Meanwhile, the latest research and development result showed a cell efficiency of 22.20% on a 6-inch substrate, which was certified by Fraunhofer CalLab.

In 2015, we built the IBC cell pilot production line with an average efficiency over 22% and the highest efficiency of 23.4%, which reached the highest level of industrialized 6 inches crystalline silicon cell efficiency. In 2015, the Key National Laboratory for Photovoltaic Science and Technology started research and development programs to develop industrialized processes for *N*-type PERT solar cells. The laboratory achieved cell efficiencies of 22.28% and 21.49% on 5- and 6-inch *n*-type silicon substrates, respectively, by optimizing the front and rear surface passivation, PVD and plating. Both cell efficiencies were independently certified by Fraunhofer ISE CalLab. Meanwhile, the latest results showed a cell efficiency of 22.20% on a 6-inch substrate, which was certified by Fraunhofer CalLab.

In 2013, 2014 and 2015, our research and development expenditures were \$19.9 million, \$22.3 million, and \$34.1 million, respectively, representing 1.1%, 1.0% and 1.1% of our total revenues for those periods. We expect our research and development expenses to remain significant as we 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, 2015 to December 31, 2015 that are reasonably likely to have a material adverse effect on our net sales, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information not necessarily to be indicative of future operating results or financial conditions.

E. Off-Balance Sheet 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 have not been 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. There are no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, net sales or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to you and other investors.

Table of ContentsF. Contractual Obligations and Commercial Commitments

The following table sets forth our contractual obligations and commercial commitments as of December 31, 2015:

	Total	Payment Due by Period				More than 5 Years
		Less than 1 Year	1-3 Years (in thousands)	3-5 Years		
Long-term borrowings(1)	\$ 699,415	\$ 47,399	\$ 195,154	\$ 149,662	\$ 307,200	
Short-term borrowings (2)	934,071	934,071				
Convertible Senior Notes(3)	316,393	10,637	305,756			
Operating lease commitments	14,575	3,896	3,514	2,034	5,131	
Capital lease commitments(4)	37,505	13,010	13,800	10,695		
Purchase obligations(5)	390,293	286,517	68,640	3,848	31,288	
Total	\$ 2,392,252	\$ 1,295,530	\$ 586,864	\$ 166,239	\$ 343,619	

(1) Includes interests that are derived using the interest rates under the loan agreements. If the borrowing is with a floating rate, the most recent rate as of December 31, 2015 is applied.

(2) Includes interests that are derived using an average rate of 4.25% per annum for short-term borrowings.

(3) Includes interests that are derived using the coupon rate of 3.5% per annum for \$172.5 million convertible senior notes due 2019, or the 3.5% Notes, and 4% per annum for \$115 million convertible senior notes due 2019, or the 4% Notes. The 3.5% Notes will mature on June 15, 2019 and the holders may require us to early redeem such notes on June 15, 2017. The 4% Notes will mature on October 15, 2019 and the holders may require us to early redeem such notes on October 15, 2017.

(4) Includes interests that are derived at rates ranging from 4.68% to 7.41%.

(5) Consists of raw material, property, plant and and equipment, and prepaid land use right purchase commitments. The raw material purchase commitment includes only the fixed and determinable portion under take-or-pay agreements, and does not include purchase commitments for which we are committed to purchase a specific volume amount but the purchase price is not fixed or determinable since the price is based upon the prevailing market price near the time of purchase.

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, 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; our 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 our manufacturing capacity; expectations with respect to our 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.

Table of Contents

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	51	Chairman and Chief Executive Officer
Zhiguo Zhu	53	Director, Chief Operating Officer, President and President of Module Business Unit, or MBU
Liping Qiu	51	Independent Director
Qian Zhao	47	Independent Director
Yeung Kwok On	55	Independent Director
Sean Shao	59	Independent Director
Teresa Tan	51	Chief Financial Officer
Yang Shao	50	Chief Human Resources Officer
Jiqing Gao	48	Vice President and Head of the China SBU
Jeff Dorety	58	President of Americas Region
Rongfang Yin	46	Regional Head of MBU in Europe and Africa
Rafael Esteban	53	Regional Head of SBU in Europe, the Middle East and Africa, or EMEA, and Latin America
Chan Shui On	51	Vice President of Legal Affairs and Board Secretary

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 research and development 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 currently serves as co-Chairman of the Global Solar Council, the executive member of the China Renewable Energy Society and as the standing vice chairman of the China New Energy Chamber of Commerce of the All-China Federation of Industry and Commerce and the founding member of the Private Sector Advisory Board for the United Nations Development Programme (UNDP). Mr. Gao is also an executive member of China Photovoltaic Society and the chairman of the executive committee of Asian Photovoltaic Industry Association. Mr. Gao also serves as the first president of China Photovoltaic Industry Association, which is the first accredited national level solar industry association established in China and is dedicated to the healthy and sustainable development of the solar industry, for a term of five years from 2014. 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. Mr. Gao's brother is Mr. Jiqing Gao, our vice president and head of the China SBU.

Table of Contents

Mr. Zhiguo Zhu has been a director of our company and our chief operating officer since January 2015, and our president of MBU since January 2012. Mr. Zhu served as our vice president of finance from February 2011 to December 2011. He has over 20 years of professional experience in finance and general management with leading global and Chinese companies. Prior to joining us, Mr. Zhu served as the global finance operation controller, internal controller, audit director and chief financial officer of the Air-Conditioner Group at Haier Group from June 2009 to January 2011. From May 2004 to June 2009, he worked at Lucent Technologies, including serving as a regional chief financial officer and vice president of Lucent Technologies (China) and a chief financial officer of Lucent Technologies (Qingdao) from 2008 to 2009. He also worked at China Track Group from 2002 to 2004 as finance controller and deputy general manager. From 1996 to 2002, Mr. Zhu worked for Howden Power and Howden Hua Engineering Company as financial controller and acting general manager. Mr. Zhu received a bachelor's degree in engineering from Tsinghua University in 1984, a master's degree from University of Shanghai Science and Technology in 1987 and an MBA from Imperial College London in 1995.

Independent Directors

Mr. Liping Qiu has been a director of our company since May 2006. 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. He is an independent non-executive director of Spring Asset Management Limited, as manager of Spring Real Estate Investment Trust, an entity listed on the Stock Exchange of Hong Kong Limited, since November 2013; and also a director of Qinhuangdao Boostsolar Photovoltaic Equipment Co., Ltd., a company quoted on the National Equities Exchange and Quotations in China. Mr. Qiu also serves as directors of a number of private companies. 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. Qian Zhao has been an independent director of our company since May 2007. Mr. Zhao has served a senior executive of BGI, a leading genomics life science company based in China, from June 2014. Mr. Zhao is also a founding partner of CXC China Sustainable Growth Fund, a private equity fund that makes investments in China-based companies. Mr. Zhao co-founded Haiwen & Partners, a preeminent China corporate finance law firm in Beijing, and was a senior partner of the law firm. Mr. Zhao has also served on the board of SouFun Holdings Limited, a company listed on the NYSE, since 2010. 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 1998 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. He is currently president of Y-Triangle Organizational Learning Association, a learning consortium where more than 100 CEOs and senior executives meet regularly to learn how companies can systematically build organizational capabilities. Dr. Yeung was the Philips Chair Professor of Human Resource Management and Director of the Centre of Organization and People

Excellence at China Europe International Business School. He was the founding director of CEO Learning Consortium, a learning platform where CEOs from more than 30 leading firms in China joined together to share the best practices on issues critical to business growth and success 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 member of the board of directors at SITC International Holdings Company Ltd. and Country Garden Holdings Company Limited, each of which is listed on the Hong Kong Stock Exchange, and as a non-executive director of two private companies. He was also elected as ex-officio board member for Human Resource Planning Society, the leading association for senior human resources executives in the United States. Dr. Yeung also teaches regularly in executive programs in association with Harvard, INSEAD, and The University of Michigan. Dr. Yeung received his bachelor's and master's degrees in management from the University of Hong Kong and Ph.D. in human resource management from the University of Michigan.

Table of Contents

Mr. Sean Shao has been an independent director of our company since January 2015. He currently serves as independent director and chairman of the audit committee for each of 21Vianet Group, Inc., a leading carrier-neutral internet data center services provider listed on Nasdaq, Jumei International Holding Limited, an e-commerce company listed on the NYSE, LightInTheBox Holding Co., Ltd., an e-commerce company listed on the NYSE, and UTStarcom Holdings Corp., a provider of broadband equipment and solutions listed on Nasdaq. Mr. Shao also serves as an independent director and chairman of the audit committee and compensation committee of China Biologic Products, Inc., a biopharmaceutical company listed on Nasdaq. In addition, Mr. Shao serves as an independent director and chairman of the corporate governance and nominating committee of Agria Corporation, a Chinese agricultural company listed on the NYSE. He previously served as the chief financial officer of our company from August 2006 to June 2008, of ChinaEdu Corporation, a Chinese educational service provider, from September 2005 to August 2006, and of Watchdata Technologies Ltd., a Chinese security software company, from August 2004 to September 2005. Prior to that, Mr. Shao worked at Deloitte Touche Tohmatsu CPA Ltd. for approximately ten years. Mr. Shao received his master's degree in health care administration from the University of California at Los Angeles in 1988 and his bachelor's degree in art from East China Normal University in 1982. Mr. Shao is a member of the American Institute of Certified Public Accountants.

Executive Officers

Ms. Teresa Tan has been our chief financial officer since January 2014. Ms. Tan has over two decades of experience in accounting, finance, and management leadership roles. Prior to joining us, Ms. Tan worked for Parker Hannifin Corporation, a global manufacturer of motion and control technologies/systems listed on the New York Stock Exchange. She led the finance service team for the Asia Pacific region and also served briefly as the financial controller role for China since she joined Parker Hannifin in 2005. From 1996 to 2005, Ms. Tan was the corporate vice president of taxation for Aleris International Inc., a U.S. manufacturer of aluminum products, where she was responsible for the company's global tax planning and compliance. From 1991 to 1996, Ms. Tan was a manager at the U.S. offices of Ernest & Young, where she provided consulting advices on tax and business planning to public and privately held companies across a broad range of industries. Ms. Tan is a CPA and received a bachelor's degree in industrial engineering management from Shanghai Jiao Tong University in China in 1986, a master's degree in economics in 1989 and a master's degree in accountancy in 1991 from Virginia Polytechnic Institute and State University in Virginia, United States.

Ms. Yang Shao has been our chief human resources officer since September 2010. Ms. Shao has approximately 20 years of global experience in Fortune 500 companies and expertise in key human resources areas, including corporate and international recruitment, performance management and organization development. Prior to joining us, Ms. Shao worked at Colgate-Palmolive (New York) in various roles, including the position of global employee relations & engagement director, from 2002 to 2010. Prior to joining Colgate-Palmolive, Ms. Shao worked at Bristol-Myers Squibb from 2001 to 2002 and The Dun & Bradstreet Corporation from 1993 to 2001, serving roles relating to human resources, marketing and business development. Ms. Shao received a doctorate degree in social and organizational psychology from Rutgers University in 1995 and received an Executive Education in Marketing Management at the Graduate School of Business of Columbia University in New York in 2000.

Mr. Jiqing Gao has been our vice president and head of the China SBU since December 17, 2015. He was our vice president of China and Asia Pacific (excluding China), Middle East and Africa PV System Business Unit from November 2012 to September 2013, and was our vice president of PV System Business Unit from October 2013 to December 2015. Beginning in December 2015, Mr. Gao has served as the head of China SBU. As one of the founders of our company, he has extensive experiences across various departments of our company, including production quality management, operations, research and development. He received a bachelor's degree from Jilin University in 1990 and a master degree from the Executive Master of Business Administration program in Nanjing University in 2013. Mr. Gao's brother is Mr. Jifan Gao, our chairman and chief executive officer.

Table of Contents

Mr. Jeff Dorety has served as our president of Americas Region since October 2014. Prior to joining us, Mr. Dorety served as the vice president of sales for JA Solar USA, where he was responsible for customer relations, sales, business development and operations for PV modules and cells in North America, from November 2011 to October 2014, a global director of sales for BP Solar, in which he was responsible for worldwide module distribution from June 2009 to November 2011, director of sales for commercial projects with engineering, procurement and construction developer, groSolar. Mr. Dorety has eight years of experience in the PV industry. Before entering the PV business, Mr. Dorety held a number of senior leadership positions in companies engaged in the telecommunications equipment and mobile wireless industries, such as Lucent Technologies, T-Mobile and AT&T. Mr. Dorety received his bachelor's degree in management from Clemson University in 1980.

Mr. Rongfang Yin has been our president of MBU in Europe and Africa and assistant vice president of global sales management since September 2015. Since early 2015, Mr. Yin has been our assistant vice president of MBU commercial operations, including global commercial operations, global customer service and global logistics management. During his time working with us, he has served as head of MBU Sales and Operation to support head of MBU in organizing and managing sales and operation. Prior to joining us, he served as KNS and Juniper project head at Flextronics from May 2005 to January 2009, Earlier in his career he worked at Invensys as an APEA region customer service head from June 2002 to April 2005, Mr. Yin has more than 20 years of experience in the semiconductor & PV industries. Mr. Yin received a bachelor's degree from Zhengzhou University of Light Industry in 1993 and obtained his EMBA from Shanghai Jiao Tong University in 2012.

Mr. Rafael Esteban joined us in 2013 and currently serves as our regional head of SBU in EMEA and Latin America where he is responsible for project development, construction, sale and project finance in the regions. Mr. Esteban has more than 15 years' experience in the PV industry, including three years with us and 12 years with BP Solar. Mr. Esteban served as Business Development Finance Director at BP Solar Europe from 2009 to 2013 and previously held a number of finance and structured finance leadership roles at BP Solar Europe. He began his career in financial control and accounting in the electronic and lighting industry with Philips Electronics. Mr. Esteban received his bachelor's degree in Economics & Business Administration from Universidad Complutense in Madrid in 1989 and an Executive MBA from IE Business School in 2006. He holds second Master's degree in Investing and Financing in the Renewables Business from IEB Business School in 2010 and Structure Finance and Venture Capital from IE Business School in 2008.

Mr. Chan Shui On joined us in 2008 and currently serves as our vice president of Legal Affairs and board secretary. Prior to joining us in January 2008, he served as the legal director and board secretary of The9 Limited, a NASDAQ-listed company headquartered in Shanghai, China. Prior to joining The9 Limited, Mr. Chan worked in Hong Kong as lawyer practicing in a wide-range of areas including merger and acquisition, commercial litigation, company winding-ups, property transactions and intellectual property matters. Mr. Chan holds a bachelor degree from the City University of Hong Kong and has been qualified as a solicitor in Hong Kong since 1997.

B. Compensation of Directors and Executive Officers

Compensation of Directors and Executive Officers

For the year ended December 31, 2015, the aggregate cash compensation that we paid to directors and executive officers was \$6.05 million, including the compensation we paid to two of our former directors who retired in August 2015 and two of our former executive officers who left our company in August 2015 and December 2015, respectively.

Our executive officers may be entitled to severance benefits upon termination of his or her employment depending on the reason for the termination. If the termination is without cause, then the executive officer is entitled to a certain amount of severance. Our directors and executive officers have also been paid pursuant to the share incentive plan in the form of restricted shares and share options.

Table of Contents

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, August 2010 and August 2014, reserves 552,718,350 shares for issuance, among which 319,779,761 were granted as of April 15, 2016.

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.

Share Options

As of April 15, 2016, our directors, officers, employees and consultants held an aggregate of 114,453,712 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.

Table of Contents

Option Exercise. Once vested, the options may be exercised, in whole or in part, at any time prior to the either the third or the fifth anniversary of the grant date, depending upon the terms of the grant.

Termination of Options. Options that were vested before the recipient's termination of service with us, or the recipient's disability or death, 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 April 15, 2016, 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	*	27.29	May 13, 2011	May 13, 2016
		3.94	November 15, 2012	May 15, 2017
		5.17	May 21, 2013	May 21, 2018
		11.49	May 16, 2014	May 16, 2019
		9.60	May 15, 2015	May 15, 2020
Zhiguo Zhu	*	3.94	November 15, 2012	November 15, 2017
		5.17	May 21, 2013	May 21, 2018
		11.49	May 16, 2014	May 16, 2019
		9.60	May 15, 2015	May 15, 2020
Liping Qiu				
Qian Zhao				
Yeung Kwok On				
Sean Shao				
Teresa Tan	*	11.49	May 16, 2014	May 16, 2019
		9.60	May 15, 2015	May 15, 2020
Jiqing Gao	*	27.29	May 13, 2011	May 15, 2016
		5.17	May 21, 2013	May 21, 2018
		11.49	May 16, 2014	May 16, 2019
		9.60	May 15, 2015	May 15, 2020
Rongfang Yin	*	27.29	May 13, 2011	May 13, 2016
		3.94	November 15, 2012	May 15, 2017
		5.17	May 21, 2013	May 21, 2018
		11.49	May 16, 2014	May 16, 2019
		9.60	May 15, 2015	May 15, 2020

Edgar Filing: Trina Solar LTD - Form 20-F

Chan Shui On	*	27.29	May 13, 2011	May 13, 2016
		3.94	November 15, 2012	May 15, 2017
		5.17	May 21, 2013	May 21, 2018
		11.49	May 16, 2014	May 16, 2019
	*	9.60	May 15, 2015	May 15, 2020
<hr/>				
Other individuals as a group	67,198,734		May 19, 2010 to May 15, 2015	May 19, 2015 to May 15, 2020

* Less than 1% of total outstanding ordinary shares.

Table of Contents

Restricted Shares

As of April 15, 2016, our directors, officers, employees and consultants held an aggregate of 54,845,523 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, 20% of the restricted shares shall vest at the first anniversary of the grant date and the remaining 80% shall vest at the second, third, fourth and fifth anniversary of the grant date. For restricted shares granted on or after April 11 in 2008 and in 2014, 15%, 15%, 20%, 25% and 25% of the restricted shares shall vest at the first, second, third, fourth and fifth anniversary of the grant date, respectively. For restricted shares granted in 2015, 20%, 20%, 20%, 20% and 20% of the restricted shares shall vest on 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 April 15, 2016, the outstanding restricted shares held by our directors and executive officers and other individuals as a group pursuant to the share incentive plan.

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

Jifan Gao	*	0.00001	April 11, 2008 May 14, 2009 May 19, 2010 May 13, 2011 November 15, 2012 May 21, 2013 May 16, 2014 May 15, 2015	April 11, 2013 May 14, 2014 May 19, 2015 May 13, 2016 May 15, 2017 May 21, 2018 May 16, 2019 May 15, 2020
Liping Qiu	*	0.00001	July 4, 2012 May 21, 2013 May 16, 2014 May 15, 2015	July 4, 2014 May 21, 2014 May 16, 2015 May 15, 2020
Yeung Kwok On	*	0.00001	August 6, 2010 May 21, 2013 May 16, 2014 May 15, 2015	August 6, 2013 May 21, 2014 May 16, 2015 May 15, 2016
Teresa Tan	*	0.00001	December 12, 2013 May 16, 2014 May 15, 2015	December 12, 2018 May 16, 2019 May 15, 2020
Jiqing Gao	*	0.00001	April 11, 2008 May 14, 2009 May 19, 2010 May 13, 2011 May 21, 2013 May 16, 2014 May 15, 2015	April 11, 2013 May 14, 2014 May 19, 2015 May 13, 2016 May 21, 2018 May 16, 2019 May 15, 2020
Rongfang Yin	*	0.00001	February 14, 2011 November 15, 2012 May 21, 2013 May 16, 2014 May 15, 2015	February 14, 2016 May 15, 2017 May 21, 2018 May 16, 2019 May 15, 2020
Chan Shui On	*	0.00001	April 11, 2008 May 14, 2009 May 19, 2010 May 13, 2011 November 15, 2012	April 11, 2013 May 14, 2014 May 19, 2015 May 13, 2016 May 15, 2017

Edgar Filing: Trina Solar LTD - Form 20-F

			May 21, 2013	May 21, 2018
			May 16, 2014	May 16, 2019
			May 15, 2015	May 15, 2020
Other individuals as a group	33,273,711	0.00001	April 11, 2008 to May 15, 2015	April 11, 2013 to May 15, 2020

* Less than 1% of total outstanding ordinary shares.

Table of Contents

C. Board Practices

Board of Directors

Our board of directors consists of six directors. Our directors are elected by the holders of our ordinary shares. At each annual general meeting, one-third of our directors (or, when their number is not a multiple of three, the number nearest to but not greater than one-third) 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 or as otherwise agreed among themselves 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 annual general meeting and shall then be eligible for re-election. In August 2015, Mr. Sean Shao, who has been an independent director of our company since January 2015, and Mr. Zhiguo Zhu, who has been a director of our company since January 2015, 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. Sean Shao, Mr. Liping Qiu and Mr. Qian Zhao. Mr. Shao, Mr. Qiu 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. Shao 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;

Table of Contents

- 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 2015, our audit committee met five times.

Compensation Committee

Our compensation committee consists of Mr. Qian Zhao, Dr. Yeung Kwok On and Mr. Liping Qiu. Mr. Zhao, Mr. Yeung and Mr. Qiu 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 2015, our compensation committee met twice.

Corporate Governance and Nominating Committee

Our corporate governance and nominating committee consists of Dr. Yeung Kwok On, Mr. Qian Zhao and Mr. Sean Shao. Mr. Yeung, Mr. Zhao and Mr. Shao 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.

Table of Contents

In 2015, our corporate governance and nominating committee met one time.

Independent Committee

In December 2015, our board of directors formed a special committee of independent directors consisting of Messrs. Sean Shao and Qian Zhao in response to a preliminary non-binding proposal letter from the Buyer Group notifying our board of directors of their interest in acquiring all of our outstanding shares not owned by them in a proposed going private transaction. See Item 4. Information on the Company A. History and Development of the Company.

In 2015, our independent committee met one time.

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 in our name may have 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 13,974, 14,280 and 13,556 employees as of December 31, 2013, 2014 and 2015, respectively. As of December 31, 2015, we had 13,556 full-time employees, including 9,343 in manufacturing, 2,588 in research and development, 275 in sales and marketing and 1,350 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.

We have restructured our global sales, marketing and project development management structure since 2012. We believe this restructuring allowed us to streamline the communications and process times involved in key commercial decisions. In conjunction with this restructuring, we performed a top-down review of our operations to reallocate and reduce our headcount and other operating expenses.

Table of ContentsE. Share Ownership

The following table sets forth information with respect to the beneficial ownership of our shares as of April 15, 2016 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)	273,940,186	5.9%
Zhiguo Zhu	*	*
Liping Qiu	*	*
Qian Zhao	*	*
Yeung Kwok On	*	*
Sean Shao	*	*
Teresa Tan	*	*
Yang Shao	*	*
Jiqing Gao	*	*
Jeff Dorety	*	*
Rongfang Yin	*	*
Rafael Esteban	*	*
Chan Shui On	*	*
All Directors and Executive Officers as a Group(4)	308,942,636	6.6%
Principal Shareholders:		
Wonder World Limited(5)	242,587,083	5.2%
Platinum Investment Management Limited(6)	594,233,850	12.9%
Franklin Resources, Inc.(7)	685,885,750	14.8%
Oaktree Funds(8)	266,992,450	5.8%

* 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 4,623,277,244 ordinary shares, being the number of shares outstanding as of April 15, 2016.

(3) Includes (i) 7,587,263 ordinary shares held by Mr. Gao, (ii) 16,855,700 ordinary shares issuable upon the exercise of options held by Mr. Gao within 60 days from April 15, 2016, (iii) 1,853,280 ordinary shares issuable upon vesting of restricted shares held by Mr. Gao within 60 days from April 15, 2016, (iv) 242,587,083 ordinary shares held by Wonder World Limited, a Cayman Islands company wholly owned by Rising Star Worldwide Limited, which is managed by Rising Star Trust, a British Virgin Islands trust, of which Managecorp Limited is acting as the trustee. Mr. Gao is the sole director of Wonder World Limited and Rising Star Worldwide Limited, and the settlor of Rising Star Trust, (v) 4,824,205 ordinary shares held by Ms. Chunyan Wu, Mr. Gao's wife, (vi) 216,500 ordinary shares issuable upon the exercise of options held by Ms. Wu within 60 days from April 15, 2016, and (vii) 16,155 ordinary shares issuable upon vesting of restricted shares held by Ms. Wu within 60 days from April 15, 2016. 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 Rising Star Worldwide Limited, which is managed by Rising Star Trust, a British Virgin Islands trust, of which Managecorp Limited is acting as the trustee. Mr. Gao is the sole director of Wonder World Limited and Rising Star Worldwide Limited, and the settlor of Rising Star Trust. The principal business address of Wonder World Limited and Rising Star Worldwide Limited is No. 2 Tian He Road, Electronics Park, New District, Changzhou, Jiangsu 213031, People's Republic of China.

(6) Represents 11,884,677 ADS beneficially held by Platinum Investment Management Limited, as reported on Schedule 13G filed by Platinum Investment Management Limited on February 11, 2016. The percentage of beneficial ownership was calculated based on the total number of our ordinary shares outstanding as of April 15, 2016. The principal business address of Platinum Investment Management Limited is Level 8, 7 Macquarie Place, Sydney NSW 2000, Australia.

Table of Contents

(7) As reported on Schedule 13G/A filed jointly by Franklin Resources, Inc., or FRI, Charles B. Johnson, Rupert H. Johnson, Jr, Templeton Global Advisors Limited and Templeton Foreign Fund on February 10, 2016. Such shares are beneficially owned by one or more open-or closed-end investment companies or other managed accounts that are investment management clients of investment managers that are direct and indirect subsidiaries of FRI. The percentage of beneficial ownership was calculated based on the total number of our ordinary shares outstanding as of April 15, 2016. Charles B. Johnson and Rupert H. Johnson, Jr. each own in excess of 10% of the outstanding common stock of FRI and are the principal stockholders of FRI. Among these 685,885,750 ordinary shares, Templeton Global Advisors Limited may be deemed beneficially own 572,575,550 shares, Templeton Investment Counsel, LLC may be deemed to own 113,310,200 shares and Templeton Foreign Fund, a series of Templeton Funds, has an interest in 437,855,950 shares. The principal business address of FRI, Charles B. Johnson, and Rupert H. Johnson, Jr is One Franklin Parkway, San Mateo, CA94403-1906. The principal business address of Templeton Global Advisors Limited is Templeton Building, Lyford Cay, Nassau, Bahamas.

(8) As reported on Schedule 13G/A filed on February 16, 2016 jointly by (i) Oaktree Emerging Markets Absolute Return Fund, L.P., a Delaware limited partnership, or EMAR, in its capacity as the direct owner of 229,100 ADSs, representing a total of 11,455,000 Shares underlying the ADSs; (ii) Oaktree Emerging Markets Equity Fund Holdings, L.P., a Delaware limited partnership, or EMEF Holdings, in its capacity as the direct owner of 1,667,300 ADSs, representing a total of 83,365,000 Shares underlying the ADSs; (iii) Oaktree Emerging Markets Equity Fund GP, L.P., a Cayman Islands limited partnership, or EMEF GP, in its capacity as the general partner of EMEF Holdings; (iv) Oaktree Emerging Markets Equity Fund GP Ltd., a Cayman Islands exempted company, or EMEF GP Ltd., in its capacity as the general partner of EMEF GP; (v) Oaktree Fund GP I, L.P., a Delaware limited partnership, or GP I, in its capacity as the general partner of EMAR and as the sole shareholder of EMEF GP Ltd.; (vi) Oaktree Capital I, L.P., a Delaware limited partnership, or Capital I, in its capacity as the general partner of GP I; (vii) OCM Holdings I, LLC, a Delaware limited liability company, or Holdings I, in its capacity as the general partner of Capital I; (viii) Oaktree Holdings, LLC, a Delaware limited liability company, or Holdings, in its capacity as the managing member of Holdings I; (ix) Oaktree Capital Management, L.P., a Delaware limited partnership, or Management, in its capacity as the duly appointed investment manager of EMAR, EMEF Holdings and certain separate accounts, or the Separate Accounts, that are the direct owners of an aggregate of 3,443,449 ADSs, representing a total of 172,172,450 Shares underlying the ADSs, and as the sole director of EMEF GP Ltd.; (x) Oaktree Holdings, Inc., a Delaware corporation, or Holdings, Inc., in its capacity as the general partner of Management; (xi) Oaktree Capital Group, LLC, a Delaware limited liability company, or OCG, in its capacity as the managing member of Holdings and as the sole shareholder of Holdings, Inc.; and (xii) Oaktree Capital Group Holdings GP, LLC, a Delaware limited liability company, or OCGH GP, in its capacity as the duly elected manager of OCG. The percentage of beneficial ownership was calculated based on the total number of our ordinary shares outstanding as of April 15, 2016. The principal business address of each of the joint filers is 333 S. Grand Avenue, 28th Floor, Los Angeles, CA 90071.

As of April 15, 2016, 4,623,277,244 of our ordinary shares were issued and outstanding. Based on a review of the register of members maintained by our Cayman Islands registrar, 4,263,701,600 ordinary shares, or approximately 92.2% of our issued and outstanding shares, represented by 85,274,032 ADSs, were held by The Bank of New York Mellon, the depository of our ADS program and a shareholder of record in the United States.

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 other than the proposed going private transaction disclosed in Item 4. Information on the Company History and Development of the 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 have 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.

Purchase and Sales Contracts

In 2013, 2014 and 2015, we purchased wafers for a total price of \$14.5 million, \$4.1 million and \$8.9 million, respectively, from Changzhou Youze S&T Co., Ltd., or Youze, an entity controlled by Mr. Weizhong Wu, who is the brother-in-law of Mr. Jifan Gao, Trina's CEO. The transactions were approved by the audit committee.

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

In 2014 and 2015, we purchased wafers, cells and other materials for a total price of \$2.3 million and \$1.7 million, respectively, from Changzhou Jiuling New Energy S&T Co., Ltd., or Jiuling, an entity controlled by Mr. Weizhong Wu. The transactions were approved by the audit committee.

In 2015, we purchased other materials for a total price of \$9.5 million from Changzhou Hesai Photovoltaic Materials Co. Ltd., or Hesai, Changzhou Junhe Mechanical Co., Ltd., or Junhe, and Changzhou Youze Hezhong Photoelectric Co Ltd., or Hezhong. Junhe is an entity controlled by Mr. Weifeng Wu, who is the brother-in-law of Mr. Jifan Gao. Hezhong is an entity held by Mr. Weizhong Wu, Mr. Weifeng Wu and Ms Chunyan Wu, who is the wife of Mr. Jifan Gao. Hesai is an entity controlled by Mr. Jifan Gao and his wife. The transactions were approved by the audit committee.

In 2013, 2014 and 2015, we sold ingots for a total price of \$3.8 million, nil and nil, respectively, to Youze. The transactions were approved by the audit committee.

In 2014 and 2015, we sold modules for a total price of \$17.1 million and \$42.9 million, respectively, to Jiuling. The transactions were approved by the audit committee.

In 2015, we sold wafers and polysilicons for a total price of \$1.5 million to Jiuling, Youze and Jiangsu Trina Solar Storage Co. Ltd. Jiangsu Trina Solar Storage Co. Ltd. is an entity controlled by Mr. Jifan Gao. The transactions were approved by the audit committee.

In 2015, we sold modules for a total price of \$1.7 million to AHT Co., Ltd., an entity controlled by Mr. Weizhong Wu. The transactions were approved by the audit committee.

In 2013, 2014 and 2015, we incurred costs of \$32.3 million, \$39.8 million and \$49.1 million with respect to the wafer slicing service provided by Youze. In 2014, we entered into a long-term agreement with Youze for the wafer slicing service from July 2014 to June 2016 and made a prepayment of \$8.1 million. The prepayment balance was \$6.1 million and \$1.9 million, respectively, as of December 31, 2014 and 2015. The transactions were approved by the audit committee.

In 2013, 2014 and 2015, we received equipment maintenance services for a total price of \$0.5 million, \$0.4 million and \$0.4 million, respectively, from Junhe. The transactions were approved by the audit committee.

In 2015, we received logistics and shipping services for a total price of \$2.9 million from Jiangsu Youze International Logistics Co., Ltd., an entity controlled by Mr. Weizhong Wu. The transactions were approved by the audit committee.

We believe the prices paid for products or services provided by related parties approximate the purchase price paid to third party vendors and the sale price of the products sold to the related parties were at prices similar to the sales price sold to third party customers.

Going Private Transaction

Our board of directors received a preliminary non-binding proposal letter dated December 12, 2015 from the Buyer Group to acquire all of our outstanding ordinary shares not owned by them in a going private transaction for \$0.232 in cash per ordinary share, or \$11.6 in cash per ADS. Our board of directors formed a special committee consisting of two independent directors, Messrs. Sean Shao and Qian Zhao, on December 13, 2015 to consider the proposal. See Item 4. Information on the Company A. History and Development of the Company.

Employment Agreements

See Item 6. Directors, Senior Management and Employees C. Board Practices Employment Agreements.

Share Incentive Plan

See Item 6. Directors, Senior Management and Employees B. Compensation of Directors and Executive Officers 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.

Table of Contents

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

See Item 3. Key Information D. Risk Factors Risks Related to Our Company and Our Industry The determination by U.S. and European Union authorities that our export sales are in violation of international fair trade rules could impede our access to important export markets and our overall competitiveness and Item 5. Operating and Financial Review and Prospects B. Liquidity and Capital Resources Contingencies.

Other than the matters disclosed in the sections cross-referenced above, 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 on whether to distribute dividends subject to applicable Cayman Islands law. Under our articles of association, our shareholders in general meeting may declare dividends, but no dividend may exceed the amount recommended by our board of directors. 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 18, 2016, the trading price of our ADSs on the New York Stock Exchange has ranged from \$2.04 to \$35.43 per ADS. At the close of trading on April 18, 2016, the trading price of our ADSs was \$9.78.

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

Table of Contents

	Sales Price	
	High	Low
Annual High and Low		
2011	31.08	5.28
2012	12.19	2.04
2013	17.84	3.31
2014	18.77	7.52
2015	13.33	7.15
Quarterly High and Low		
First Quarter 2014	18.77	12.65
Second Quarter 2014	14.85	10.16
Third Quarter 2014	15.15	10.15
Fourth Quarter 2014	11.98	7.52
First Quarter 2015	12.79	8.13
Second Quarter 2015	13.33	10.90
Third Quarter 2015	11.92	7.15
Fourth Quarter 2015	11.35	8.61
First Quarter 2016	11.09	8.31
Monthly High and Low		
October 2015	11.34	8.61
November 2015	10.71	8.80
December 2015	11.35	9.53
January 2016	11.09	8.31
February 2016	10.48	8.37
March 2016	10.75	9.81
April 2016 (through April 18, 2016)	10.02	9.56

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.

Table of Contents

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. Directors, Senior Management and Employees 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.

Table of Contents

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 are not 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.

Table of Contents

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 are currently 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 4. Information on the Company B. Business Overview Regulation Foreign Currency Exchange and Item 4. Information on the Company B. Business Overview Regulation Dividend Distribution.

E. Taxation

Cayman Islands Taxation

Edgar Filing: Trina Solar LTD - Form 20-F

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 or produced before a Cayman Islands court. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Pursuant to section 6 of the Tax Concessions Law (1999 Revision) of the Cayman Islands, the Company has obtained an undertaking from the Governor in Cabinet:

- (a) that no law which is enacted in the Cayman Islands imposing any tax to be levied on profits or income or gains or appreciations shall apply to the Company or its operations; and
- (b) in addition, that no tax is levied on profits, income, gains or appreciations or no tax which is in the nature of estate duty or inheritance tax shall be payable by the Company:
 - (i) on or in respect of the shares, debentures or other obligations of the Company; or
 - (ii) by way of withholding in whole or in part of any relevant payment as defined in section 6(3) of the Tax Concession Law (1999 Revision).

The undertaking is for a period of 20 years from 14 November, 2006.

Table of Contents

People's Republic of China Taxation

Under the 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 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 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 EIT 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 SAT issued SAT Circular 82 on April 22, 2009. SAT Circular 82 provides certain criteria for determining whether the de facto management body of an offshore-incorporated enterprise controlled by PRC enterprises is located in China. On July 27, 2011, the SAT issued the Bulletin 45, which became effective on September 1, 2011, to provide further guidance on the implementation of SAT Circular 82. Bulletin 45 further prescribes the rules concerning the recognition, administration and taxation of an enterprise incorporated offshore and controlled by a PRC enterprise or PRC enterprise group. Bulletin 45 provides two ways for determining whether a foreign enterprise controlled by a PRC enterprise or a PRC enterprise group should be treated as a resident enterprise. First, the offshore enterprise may decide on its own whether its de facto management body is located in China based on the criteria set forth in Circular 82, and, if it makes such determination, it must apply to the competent tax bureau to be treated as a resident enterprise. Second, the tax authority may, after investigating, determine that the offshore enterprise is a resident enterprise. 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 the SAT's general position on how the de facto management body test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC or foreign enterprises or individuals. Considering that most of our management is currently located in the PRC, we may be considered a resident enterprise and may therefore be subject to the EIT 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 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 EIT Law, a withholding tax at the rate of 10% is applicable to dividends payable to investors that are non-resident enterprises, which do not have an establishment or place of business in the PRC, or which have such establishment or place of business but the relevant income is not effectively connected with the establishment or place of business, to the extent such interest or dividends have their sources within the PRC unless such non-resident enterprises can claim treaty protection. As such, these non-resident enterprises would enjoy a reduced withholding tax from treaty. Similarly, any gain realized on the transfer of ADSs or shares by such investors is also subject to a 10% withholding tax if such gain is regarded as income derived from sources within the PRC. If Trina is considered a PRC resident enterprise, it is likely that the dividends Trina pays with respect to Trina's ordinary shares or ADSs, or the gain you may realize from the transfer of Trina's

Edgar Filing: Trina Solar LTD - Form 20-F

ordinary shares or ADSs, would be treated as income derived from sources within the PRC and be subject to PRC withholding tax.

Under the relevant PRC tax laws, the price for equity interests transfer shall reflect the fair market value based on arm's length principle. The PRC tax authorities have the discretion to determine that the pricing of equity interests transfer does not adhere to the principle of fair market value, where the negative tax implications including upward adjustment of income tax based on reassessed transfer price might be imposed by the tax authorities.

Table of Contents

In addition, pursuant to SAT Circular 698 issued by the SAT on December 10, 2009 with retroactive effect from January 1, 2008, SAT Circular 24 and SAT Circular 7, where a non-resident enterprise indirectly transfers so-called PRC Taxable Properties, referring to properties of an establishment or a place of business in China, real estate properties in China and equity investments in a PRC tax resident enterprise, by disposition of the equity interests in an overseas non-public holding company without a reasonable commercial purpose and resulting in the avoidance of PRC EIT, the transfer will be re-characterized as a direct transfer of the PRC Taxable Properties and gains derived from the transfer may be subject to a PRC withholding tax of up to 10%. SAT Circular 7 has listed several factors to be taken into consideration by the tax authorities in determining if an indirect transfer has a reasonable commercial purpose. However, despite these factors, an indirect transfer satisfying all the following criteria will be deemed to lack reasonable commercial purpose and be taxable under the PRC laws: (i) 75% or more of the equity value of the intermediary enterprise being transferred is derived directly or indirectly from PRC Taxable Properties; (ii) at any time during the one year period before the indirect transfer, 90% or more of the asset value of the intermediary enterprise (excluding cash) is comprised directly or indirectly of investments in the PRC, or 90% or more of its income is derived directly or indirectly from the PRC; (iii) the functions performed and risks assumed by the intermediary enterprise and any of its subsidiaries that directly or indirectly hold the PRC Taxable Properties are limited and are insufficient to prove their economic substance; and (iv) the foreign tax payable on the gain derived from the indirect transfer of the PRC Taxable Properties is lower than the potential Chinese tax on the direct transfer of those assets. Nevertheless, the indirect transfers falling into the scope of the safe harbor under SAT Circular 7 may not be subject to PRC tax. The safe harbor includes qualified group restructurings, public market trades and exemptions under tax treaties.

Under SAT Circular 7 and other PRC tax regulations, in case of an indirect transfer, entities or individuals obligated to pay the transfer price to the transferor must act as withholding agents and are required to withhold the PRC tax from the transfer price. If they fail to do so, the seller is required to report and pay the PRC tax to the PRC tax authorities. If neither party complies with the tax payment or withholding obligations under SAT Circular 7, the tax authority may impose penalties such as late payment interest on the seller. In addition, the tax authority may also hold the withholding agents liable and impose a penalty of 50% to 300% of the unpaid tax on them. The penalty imposed on the purchasers may be reduced or waived if the withholding agents have submitted the relevant materials in connection with the indirect transfer to the PRC tax authorities in accordance with SAT Circular 7.

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;

Table of Contents

- U.S. expatriates;
- entities covered by U.S. anti-inversion tax rules;
- tax-exempt entities;
- persons liable for alternative minimum tax;
- persons whose functional currency is other than the United States dollar;
- persons holding an ADS or ordinary share as part of a straddle, hedging, conversion or integrated transaction;
- persons holding ADSs or ordinary shares through a bank, financial institution or other entity, or a branch thereof, located, organized or resident outside the United States;
- 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.

In addition, the discussion below does not describe any tax consequences arising out of the 3.8% Medicare tax on net investment income. This summary does not discuss any federal non-income tax laws, including the federal estate or gift tax laws, or the laws of any state, local, or non-U.S. taxing jurisdiction.

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. Deposits or withdrawals of ordinary shares for ADSs should not be subject to U.S. federal income tax.

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.

Table of Contents

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 depository, 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 generally will be reported as a dividend even if that distribution would otherwise be reported 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, 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 and other 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 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 generally will 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

Edgar Filing: Trina Solar LTD - Form 20-F

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 generally will 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.

Table of Contents

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, 2015. 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 generally will be determined by reference to the market price of our ADSs and ordinary shares, fluctuations in the market price of the ADSs and ordinary shares may cause us to become a PFIC. In addition, changes in the composition of our income or assets may cause us to become a PFIC.

If we are a PFIC for any taxable year during which 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

Table of Contents

- 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 non-U.S. 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, but not our ordinary shares, 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.

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 (as well as the elections discussed above) to your investment in ADSs or ordinary shares.

Table of Contents

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

Certain U.S. Holders who are individuals may be 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 advisors 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 previously filed with the SEC our registration statements on Form F-1 (file Numbers. 333-139144 and 333-142970), as amended, and registration statements on Form F-3 (file Number 333-196517).

Edgar Filing: Trina Solar LTD - Form 20-F

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 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 SEC 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 depository 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 depository 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 depository from us.

Table of Contents

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 4. Information on the Company C. 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 2.6% in 2013, 2.0% in 2014 and 1.4% in 2015. 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 Renminbi, U.S. dollars, Euros, GBP and Japanese Yen, 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 currency exchange rates, particularly among Renminbi, U.S. dollars, Euros, GBP and Japanese Yen, may 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 the signing of sales contracts and the settling of these contracts. As of December 31, 2013, we held \$435.1 million in accounts receivable, most of which were denominated in U.S. dollars and Renminbi. As of December 31, 2014, we held \$608.1 million in accounts receivable, most of which were denominated in Renminbi and U.S. dollars. As of December 31, 2015, we held \$658.8 million in accounts receivable, most of which were denominated in Renminbi and U.S. dollars.

Had we converted all of our accounts receivable into Renminbi at an exchange rate of RMB6.4778 for \$1.00, the exchange rate as of December 31, 2015, our accounts receivable would have been RMB2,818.5 million, RMB3,939.2 million and RMB4,267.6 million as of December 31, 2013, 2014 and 2015, respectively. Assuming that Renminbi appreciates by a rate of 10% to an exchange rate of RMB5.8889 to \$1.00, we would record a loss of our accounts receivable in Renminbi terms. A 10% appreciation of Renminbi would result in our holding Renminbi equivalents of RMB2,562.3 million, RMB3,581.0 million and RMB3,879.6 million in accounts receivable as of December 31, 2013, 2014 and 2015, respectively. These amounts would therefore reflect a theoretical loss of RMB256.2 million, RMB358.2 million and RMB388.0 million for our accounts receivable as of December 31, 2013, 2014 and 2015, 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 \$154.1 million, \$179.3 million and \$290.9 million as of December 31, 2013, 2014 and 2015, 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.

Table of Contents

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 2013, 2014 and 2015, we had a foreign exchange loss of \$13.6 million, \$21.9 million and \$25.1 million, respectively. The foreign exchange loss in 2015 was primarily resulted from the depreciation of the Renminbi against U.S. dollar.

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, 2015, we had foreign currency forward contracts with a total contract value of approximately \$144.4 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 of December 31, 2015, we recorded a gain in fair value of foreign currency forward contracts of \$4.1 million, which was included in the line item *Derivatives gain* in the consolidated statements of operations. We estimate fair value of foreign currency forward contract at the price that would be received from the sale of the contracts or paid to settle the contracts on the measurement date in an orderly transaction between market participants. 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. Assuming a 1.0% appreciation of the Japanese Yen against the U.S. dollar to the exchange rate as of December 31, 2015, the mark-to-market loss of our outstanding foreign currency forward contracts (Japanese Yen/U.S. dollars) would have increased by approximately \$0.7 million as of December 31, 2015. Assuming a 1.0% appreciation of the Renminbi against the U.S. dollar to the exchange rate as of December 31, 2015, the mark-to-market gain of our outstanding foreign currency forward contracts (Renminbi/U.S. dollars) would have increased by approximately \$0.2 million as of December 31, 2015.

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 interest rate for our bank borrowings would result in an increase of approximately \$143.9 million in interest expense in 2015. 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.

Table of Contents

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)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Depositary services
Registration or transfer fees	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement); or • Converting foreign currency to U.S. dollars

Edgar Filing: Trina Solar LTD - Form 20-F

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 the 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 2015, we received \$301,480, net of withholding tax, from the depositary in reimbursements relating to the ADS facility/we did not receive any reimbursements relating to the ADS facility from the depositary. In addition, the depositary waived \$130,164 of our fees relating to our ADR program in 2015. In the event our ADR program is early terminated, we may be required to return certain reimbursements, the amount of which will be agreed to between us and the depositary.

Table of Contents

PART II

Item 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

Item 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Use of Proceeds

None.

Item 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this report, as required by Rule 13a-15(b) under the Exchange Act.

Based upon that evaluation, our management has concluded that, as of December 31, 2015, our disclosure controls and procedures were effective in ensuring that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting

Edgar Filing: Trina Solar LTD - Form 20-F

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such item is defined in Rules 13a-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 generally accepted accounting principles 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 may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act and related rules as promulgated by the SEC, our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2015 using criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Table of Contents

Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2015 based on the criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Attestation Report of the Registered Public Accounting Firm

The effectiveness of internal control over financial reporting as of December 31, 2015 has been audited by KPMG Huazhen LLP, an independent registered public accounting firm. The attestation report issued by KPMG Huazhen LLP can be found on page F-3 of this annual report.

Changes in Internal Controls

Management has evaluated, with the participation of our chief executive officer and chief financial officer, whether any changes in our internal control over financial reporting that occurred during our last fiscal year have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on the evaluation we conducted, management has concluded that no such changes occurred during the period covered by this annual report on Form 20-F.

Item 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Mr. Sean Shao 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. Sean Shao, Mr. Liping Qiu 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 initial code of business conduct and ethics with the SEC on December 7, 2006. We amended the code of business conduct and ethics on August 16, 2011 and filed it with the SEC as Exhibit 11.1 to our annual report on Form 20-F on March 29, 2012. Our code of business conduct and ethics is posted 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

Edgar Filing: Trina Solar LTD - Form 20-F

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by KPMG in 2014 and KPMG Huazhen LLP in 2015 for the periods indicated.

	2014	2015
Audit fees(1)	\$ 1,702,884	1,227,878
Audit-related fees(2)	\$ 392,221	369,595
Advisory fees(3)	\$	184,797
All other fees(4)	\$ 138,584	

(1) **Audit fees** means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our independent auditors for the audit of our consolidated 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 independent auditors that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under **Audit fees**.

(3) **Advisory fees** means the aggregate fees billed in each of the fiscal years listed for professional services rendered for advisory.

(4) **All other fees** refers to the aggregate fees billed in each of the fiscal years listed for professional services rendered for financial and tax due diligence.

Table of Contents

The policy of our audit committee is to pre-approve all audit and non-audit services provided by our independent auditor, 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

KPMG, or KPMG Hong Kong, was previously the principal accountants for Trina Solar Limited. On June 29, 2015, KPMG Hong Kong was dismissed and KPMG Huazhen LLP was engaged as principal accountants. The decision to change accountants was approved by the audit committee of the board of directors.

During the two fiscal years ended December 31, 2014, and the subsequent interim period through June 29, 2015 preceeding such dismissal, there were no: (1) disagreements with KPMG Hong Kong on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to their satisfaction, would have caused them to make reference in connection with their opinion to the subject matter of the disagreement, or (2) reportable events.

The audit reports of KPMG Hong Kong on the consolidated financial statements of Trina Solar Limited and subsidiaries as of and for the years ended December 31, 2014 and 2013 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles.

A letter from KPMG Hong Kong is attached as Exhibit 15.2 to this Form 20-F.

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.

Item 16H. MINE SAFETY DISCLOSURE

Not applicable.

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 and its subsidiaries are included at the end of this annual report.

Table of Contents

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 depository 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)
- 4.1 Amended and Restated Share Incentive Plan (incorporated by reference to Exhibit 4.1 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 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 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)
- 4.5 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)
- 4.6 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)
- 4.7 Supplementary Agreement No. 4 to Polysilicon Supply Agreement between Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. and Trina China dated March 29, 2010 (incorporated by reference to Exhibit 4.10 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

- 4.8 Supplementary Agreement No. 10 to Polysilicon Supply Agreement between Trina China and Changzhou GCL Photovoltaic Technology Co., Ltd. dated January 11, 2011 (incorporated by reference to Exhibit 4.11 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)
- 4.9 Supplementary Agreement No. 15 to Polysilicon Supply Agreement between Trina China and Changzhou GCL Photovoltaic Technology Co., Ltd. dated March 22, 2012 (incorporated by reference to Exhibit 4.12 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)
- 4.10 Supplementary Agreement No. 17 to Polysilicon Supply Agreement between Trina China, Changzhou GCL Photovoltaic Technology Co., Ltd. and other parties named therein dated October 26, 2012 (incorporated by reference to Exhibit 4.13 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2013)
- 4.11 Supplementary Agreement No. 19 to Polysilicon Supply Agreement between Trina China, Changzhou GCL Photovoltaic Technology Co., Ltd. and other parties named therein dated March 8, 2013 (incorporated by reference to Exhibit 4.14 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2013)
- 4.12 Supplementary Agreement No. 20 to Polysilicon Supply Agreement between Trina China and Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. dated March 8, 2013 (incorporated by reference to Exhibit 4.15 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2013)
- 4.13 Supplementary Agreement (21) to Polysilicon Supply Contract between Trina China and Changzhou GCL Photovoltaic Technology Co., Ltd. and other parties named therein dated January 28, 2014 (incorporated by reference to Exhibit 4.16 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2014)
- 4.14 Supplementary Agreement (22) to Polysilicon Supply Contract between Trina China and Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. dated January 27, 2014 (incorporated by reference to Exhibit 4.17 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2014)
- 4.15 Supplementary Agreement (24) to Polysilicon Supply Contract between Trina China and GCL-Poly (Suzhou) New Energy Co., Ltd. and other parties named therein dated February 12, 2015 (incorporated by reference to Exhibit 4.15 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 4.16 Supplementary Agreement (25) to Polysilicon Supply Contract between Trina China and GCL-Poly (Suzhou) New Energy Co., Ltd. dated March 16, 2015 (incorporated by reference to Exhibit 4.16 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 4.17 Form of ADS Lending Agreement, dated as of September 30, 2014, among the borrowers 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 October 1, 2014).
- 4.18 Indenture dated as of June 11, 2014 between the Registrant and Wilmington Trust, National Association, as Trustee (incorporated by reference to Exhibit 4.18 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 4.19 Indenture dated as of October 6, 2014 between the Registrant and Wilmington Trust, National Association, as Trustee (incorporated by reference to Exhibit 4.19 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

8.1*	Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated by reference to Exhibit 4.1 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)
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 KPMG Huazhen LLP
15.2*	Letter from KPMG regarding Item 16F of this annual report
101*	Financial information from registrant for the year ended December 31, 2015 formatted in eXtensible Business Reporting Language (XBRL):

(i) Consolidated Balance Sheets as of December 31, 2014 and 2015; (ii) Consolidated Statements of Operations for the Years Ended December 31, 2013, 2014 and 2015; (iii) Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2013, 2014 and 2015; (iv) Consolidated Statements of Changes in Equity for the Years Ended December 31, 2013, 2014 and 2015; (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2013, 2014 and 2015; (vi) Notes to the Consolidated Financial Statements; and (vii) Additional Information Financial Statement Schedule I

* Filed with this annual report on Form 20-F

** Furnished with this annual report on Form 20-F

Confidential treatment has been granted with respect to portions of this exhibit and such confidential treatment portions have been deleted and replaced with ***** and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 under the Securities Exchange Act of 1934.

Table of Contents

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 19, 2016

[Signature page to 20-F]

Table of Contents

EXHIBIT INDEX

- 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 depository 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)
- 4.1 Amended and Restated Share Incentive Plan (incorporated by reference to Exhibit 4.1 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 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 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)
- 4.5 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)
- 4.6 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)
- 4.7 Supplementary Agreement No. 4 to Polysilicon Supply Agreement between Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. and Trina China dated March 29, 2010 (incorporated by reference to Exhibit 4.10 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)

Edgar Filing: Trina Solar LTD - Form 20-F

Table of Contents

- 4.8 Supplementary Agreement No. 10 to Polysilicon Supply Agreement between Trina China and Changzhou GCL Photovoltaic Technology Co., Ltd. dated January 11, 2011 (incorporated by reference to Exhibit 4.11 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)
- 4.9 Supplementary Agreement No. 15 to Polysilicon Supply Agreement between Trina China and Changzhou GCL Photovoltaic Technology Co., Ltd. dated March 22, 2012 (incorporated by reference to Exhibit 4.12 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)
- 4.10 Supplementary Agreement No. 17 to Polysilicon Supply Agreement between Trina China, Changzhou GCL Photovoltaic Technology Co., Ltd. and other parties named therein dated October 26, 2012 (incorporated by reference to Exhibit 4.13 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2013)
- 4.11 Supplementary Agreement No. 19 to Polysilicon Supply Agreement between Trina China, Changzhou GCL Photovoltaic Technology Co., Ltd. and other parties named therein dated March 8, 2013 (incorporated by reference to Exhibit 4.14 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2013)
- 4.12 Supplementary Agreement No. 20 to Polysilicon Supply Agreement between Trina China and Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. dated March 8, 2013 (incorporated by reference to Exhibit 4.15 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2013)
- 4.13 Supplementary Agreement (21) to Polysilicon Supply Contract between Trina China and Changzhou GCL Photovoltaic Technology Co., Ltd. and other parties named therein dated January 28, 2014 (incorporated by reference to Exhibit 4.16 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2014)
- 4.14 Supplementary Agreement (22) to Polysilicon Supply Contract between Trina China and Jiangsu Zhongneng Polysilicon Technology Development Co., Ltd. dated January 27, 2014 (incorporated by reference to Exhibit 4.17 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 2, 2014)
- 4.15 Supplementary Agreement (24) to Polysilicon Supply Contract between Trina China and GCL-Poly (Suzhou) New Energy Co., Ltd. and other parties named therein dated February 12, 2015 (incorporated by reference to Exhibit 4.15 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 4.16 Supplementary Agreement (25) to Polysilicon Supply Contract between Trina China and GCL-Poly (Suzhou) New Energy Co., Ltd. dated March 16, 2015 (incorporated by reference to Exhibit 4.16 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 4.17 Form of ADS Lending Agreement, dated as of September 30, 2014, among the borrowers 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 October 1, 2014).
- 4.18 Indenture dated as of June 11, 2014 between the Registrant and Wilmington Trust, National Association, as Trustee (incorporated by reference to Exhibit 4.18 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)
- 4.19 Indenture dated as of October 6, 2014 between the Registrant and Wilmington Trust, National Association, as Trustee (incorporated by reference to Exhibit 4.19 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2015)

Table of Contents

8.1*	Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated by reference to Exhibit 4.1 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)
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 KPMG Huazhen LLP
15.2*	Letter from KPMG regarding Item 16F of this annual report
101*	Financial information from registrant for the year ended December 31, 2015 formatted in eXtensible Business Reporting Language (XBRL):

(i) Consolidated Balance Sheets as of December 31, 2014 and 2015; (ii) Consolidated Statements of Operations for the Years Ended December 31, 2013, 2014 and 2015; (iii) Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2013, 2014 and 2015; (iv) Consolidated Statements of Changes in Equity for the Years Ended December 31, 2013, 2014 and 2015; (v) Consolidated Statements of Cash Flows for the Years Ended December 31, 2013, 2014 and 2015; (vi) Notes to the Consolidated Financial Statements; and (vii) Additional Information Financial Statement Schedule I

* Filed with this annual report on Form 20-F

** Furnished with this annual report on Form 20-F

Confidential treatment has been granted with respect to portions of this exhibit and such confidential treatment portions have been deleted and replaced with **** and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 under the Securities Exchange Act of 1934.

TRINA SOLAR LIMITED

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

<u>Reports of Independent Registered Public Accounting Firms</u>	F-2
<u>Consolidated Balance Sheets as of December 31, 2014 and 2015</u>	F-4
<u>Consolidated Statements of Operations for the Years Ended December 31, 2013, 2014 and 2015</u>	F-5
<u>Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2013, 2014 and 2015</u>	F-6
<u>Consolidated Statements of Changes in Equity for the Years Ended December 31, 2013, 2014 and 2015</u>	F-7
<u>Consolidated Statements of Cash Flows for the Years Ended December 31, 2013, 2014 and 2015</u>	F-8
<u>Notes to Consolidated Financial Statements</u>	F-10
<u>Additional Information - Financial Statement Schedule I</u>	F-51

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders

Trina Solar Limited:

We have audited the accompanying consolidated balance sheets of Trina Solar Limited and subsidiaries as of December 31, 2014 and 2015, and the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2015. In connection with our audits of the consolidated financial statements, we also have audited financial statement schedule I. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 referred to above present fairly, in all material respects, the financial position of Trina Solar Limited and subsidiaries as of December 31, 2014 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related 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 also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Trina Solar Limited's internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated April 19, 2016, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG Huazhen LLP

Shanghai, China

April 19, 2016

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders

Trina Solar Limited:

We have audited Trina Solar Limited's internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Trina Solar Limited'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 Annual 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that 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, Trina Solar Limited maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Trina Solar Limited and subsidiaries as of December 31, 2014 and 2015, and the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2015, and our report dated April 19, 2016 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG Huazhen LLP

Shanghai, China

April 19, 2016

F - 3

TRINA SOLAR LIMITED AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(Amounts in U.S. dollars, except share data)

	As of December 31,	
	2014	2015
ASSETS		
Current assets:		
Cash (including consolidated variable interest entities of \$163,456 and \$1,079,416 as of December 31, 2014 and 2015, respectively)	392,891,984	465,393,461
Restricted cash	146,929,333	194,483,925
Inventories	350,851,594	431,993,582
Build-to-sell project assets (including consolidated variable interest entities of nil and \$269,033,046 as of December 31, 2014 and 2015, respectively)	60,104,751	531,344,158
Accounts receivable, net of allowance for doubtful accounts of \$69,905,290 and \$52,731,428 as of December 31, 2014 and 2015, respectively (including consolidated variable interest entities of nil and \$2,906,962 as of December 31, 2014 and 2015, respectively)	608,149,348	658,835,860
Current portion of advances to suppliers, net (including consolidated variable interest entities of nil and \$90,860 as of December 31, 2014 and 2015, respectively)	46,131,229	55,717,902
Amounts due from and advances to related parties	17,492,566	15,364,154
Deferred income tax assets	25,701,241	18,237,155
Value-added tax recoverable, current (including consolidated variable interest entities of \$nil and \$27,102,222 as of December 31, 2014 and 2015, respectively)	61,108,699	137,467,682
Prepaid expenses and other current assets (including consolidated variable interest entities of \$nil and \$12,012 as of December 31, 2014 and 2015, respectively)	63,985,417	80,093,990
Total current assets	1,773,346,162	2,588,931,869
Advances to suppliers, net of current portion	18,756,956	20,601,924
Advances to related parties, net of current portion	1,993,790	
Property, plant and equipment, net (including build-to-own project assets of \$385,477,374 and \$807,894,110 as of December 31, 2014 and 2015, respectively) (including consolidated variable interest entities of \$4,249,210 and \$96,924,507 as of December 31, 2014, respectively)	1,253,542,691	1,862,135,500
Prepaid land use rights, net (including consolidated variable interest entities of nil and \$2,286,812 as of December 31, 2014 and 2015, respectively)	48,075,950	57,201,822
Deferred income tax assets, net	30,977,697	34,294,509
Investment in equity affiliates	25,568,061	27,781,818
Value-added tax recoverable, non-current (including consolidated variable interest entities of nil and \$3,659,835 as of December 31, 2014 and 2015, respectively)	30,093,420	75,428,575
Other noncurrent assets	17,211,083	27,578,390
TOTAL ASSETS	3,199,565,810	4,693,954,407
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term borrowings and current portion of long-term borrowings	820,251,946	916,613,776
Current portion of capital lease obligation		11,279,996
Accounts payable (including consolidated variable interest entities of nil and \$ 156,812,903 as of December 31, 2014 and 2015, respectively)	742,007,176	1,390,162,325
Amount due to related parties	8,088,550	17,528,730
Income taxes payable	9,397,449	30,102,067
Accrued expenses and other current liabilities (including consolidated variable interest entities of \$980,732 and \$4,056,549 as of December 31, 2014 and 2015, respectively)	170,057,665	236,872,533

Edgar Filing: Trina Solar LTD - Form 20-F

Total current liabilities	1,749,802,786	2,602,559,427
Long-term borrowings, excluding current portion	22,433,705	521,982,440
Capital lease obligation, excluding current portion		21,673,637
Convertible senior notes	287,500,000	287,500,000
Accrued warranty costs	103,197,330	129,477,630
Deferred income tax liabilities	15,028,011	16,018,721
Other noncurrent liabilities	20,525,358	24,179,494
Total Liabilities	2,198,487,190	3,603,391,349
Equity:		
Ordinary shares (\$0.00001 par value; 73,000,000,000 shares authorized, 4,261,339,014 and 4,284,544,826 shares issued and outstanding as of December 31, 2014 and 2015, respectively)	42,613	42,845
Additional paid-in capital	752,384,179	759,493,276
Retained earnings	202,706,896	279,221,831
Accumulated other comprehensive income	17,710,281	11,978,251
Total Trina Solar Limited shareholders' equity	972,843,969	1,050,736,203
Non-controlling interests	28,234,651	39,826,855
Total equity	1,001,078,620	1,090,563,058
Commitments and contingencies (Note 18)		
TOTAL LIABILITIES AND EQUITY	3,199,565,810	4,693,954,407

See accompanying notes to consolidated financial statements

TRINA SOLAR LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(Amount in U.S. dollars, except share data)

	2013	Year ended December 31, 2014	2015
Net sales	1,774,970,623	2,286,119,379	3,035,511,903
Cost of goods sold	1,556,776,721	1,900,547,673	2,468,878,578
Gross profit	218,193,902	385,571,706	566,633,325
Selling expenses	132,824,382	135,060,972	178,119,294
General and administrative expenses	103,523,355	108,150,293	132,438,833
Research and development expenses	19,926,288	22,258,108	34,099,008
Provision for settlement of lawsuit with Solyndra			45,000,000
(Loss) income from operations	(38,080,123)	120,102,333	176,976,190
Other income (expenses):			
Interest income	3,958,465	2,793,449	2,861,901
Interest expense	(48,444,855)	(34,886,391)	(52,251,719)
Foreign exchange loss	(13,575,849)	(21,934,113)	(25,139,298)
Derivatives gain	2,180,418	3,422,052	4,064,972
Equity in (loss) income of equity method investees	(746,434)	(198,148)	1,741,279
Other income, net	9,442,147	7,448,541	7,539,058
(Loss) income before income taxes	(85,266,231)	76,747,723	115,792,383
Income tax benefit (expense)	13,030,391	(15,488,073)	(29,445,772)
Net (loss) income	(72,235,840)	61,259,650	86,346,611
Net loss (income) attributable to the non-controlling interests	209,905	(1,921,965)	(9,831,676)
Net (loss) income attributable to Trina Solar Limited shareholders	(72,025,935)	59,337,685	76,514,935
(Loss) earnings per ordinary share			
Basic	(0.02)	0.02	0.02
Diluted	(0.02)	0.01	0.02
Weighted average ordinary shares outstanding			
Basic	3,553,552,756	3,881,503,977	4,226,950,678
Diluted	3,553,552,756	4,274,694,832	5,277,943,367

See accompanying notes to consolidated financial statements

TRINA SOLAR LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amount in U.S. dollars)

	Year ended December 31,		
	2013	2014	2015
Net (loss) income	(72,235,840)	61,259,650	86,346,611
Other comprehensive income (loss):			
Foreign currency translation adjustments, net of nil tax	6,197,195	2,376,925	(8,113,672)
Comprehensive (loss) income	(66,038,645)	63,636,575	78,232,939
Less: comprehensive (loss) income attributable to non-controlling interests	(209,319)	1,991,540	7,450,034
Comprehensive (loss) income attributable to Trina Solar Limited	(65,829,326)	61,645,035	70,782,905

See accompanying notes to consolidated financial statements

TRINA SOLAR LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Amounts in U.S. dollars, except share data)

	Ordinary shares		Additional	Retained	Accumulated	Equity	Non-controlling	Total
	Shares	Amount	paid-in	earnings	other	attributable	Interest	shareholders
			capital		comprehensive	to Trina		equity
					income (loss)	Solar Limited		
						Shareholders		
Balance at January 1, 2013	3,993,306,819	39,933	656,943,591	215,395,146	9,206,322	881,584,992	199,717	881,784,709
Share-based compensation			5,667,846			5,667,846		5,667,846
Vesting of restricted shares issued to employees	10,749,320	107				107		107
Issuance of ordinary shares pursuant to share option plan	8,320,750	83	922,473			922,556		922,556
Return of ordinary shares under share lending facility	(407,319,400)	(4,073)	4,073					
Net loss				(72,025,935)		(72,025,935)	(209,905)	(72,235,840)
Capital contribution from non-controlling interests							342,196	342,196
Acquisition of non-controlling interest			(150,071)			(150,071)	(49,929)	(200,000)
Foreign currency translation adjustments, net of nil tax					6,196,609	6,196,609	586	6,197,195
Balance at December 31, 2013	3,605,057,489	36,050	663,387,912	143,369,211	15,402,931	822,196,104	282,665	822,478,769
Share-based compensation			4,399,729			4,399,729		4,399,729
Vesting of restricted shares issued to employees	10,533,125	105				105		105
Issuance of ordinary shares pursuant to share option plan	14,548,400	146	1,408,038			1,408,184		1,408,184
Issuance of ordinary shares, net of issuance cost	631,200,000	6,312	132,407,498			132,413,810		132,413,810
Call options in connection with issuance of convertible senior notes			(52,311,578)			(52,311,578)		(52,311,578)
Share lending arrangement in connection with issuance of convertible senior notes			3,092,580			3,092,580		3,092,580
Net Income				59,337,685		59,337,685	1,921,965	61,259,650
Capital contribution from non-controlling interests							8,144,078	8,144,078
Acquisition of subsidiaries							17,816,368	17,816,368
Foreign currency translation adjustments, net of nil tax					2,307,350	2,307,350	69,575	2,376,925
Balance at December 31, 2014	4,261,339,014	42,613	752,384,179	202,706,896	17,710,281	972,843,969	28,234,651	1,001,078,620
Share-based compensation			6,007,084			6,007,084		6,007,084
Vesting of restricted shares issued to employees	11,125,312	111				111		111
Issuance of ordinary shares pursuant to share option plan	12,080,500	121	1,102,013			1,102,134		1,102,134
Net Income				76,514,935		76,514,935	9,831,676	86,346,611
							7,367,435	7,367,435

Edgar Filing: Trina Solar LTD - Form 20-F

Capital contribution from non-controlling interests									
Acquisition of non-controlling interest							(81,715)		(81,715)
Dividends to non-controlling interest shareholders							(3,143,550)		(3,143,550)
Foreign currency translation adjustments, net of nil tax						(5,732,030)	(5,732,030)	(2,381,642)	(8,113,672)
Balance at December 31, 2015	4,284,544,826	42,845	759,493,276	279,221,831	11,978,251	1,050,736,203	39,826,855	1,090,563,058	

See accompanying notes to consolidated financial statements

TRINA SOLAR LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in U.S. dollars)

	2013	Year ended December 31, 2014	2015
Operating activities:			
Net (loss) income	(72,235,840)	61,259,650	86,346,611
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	116,788,045	108,261,965	134,986,793
Equity in loss (income) of associates	746,434	198,148	(1,741,279)
Loss (gain) on change in fair value of derivatives	1,580,824	(1,486,118)	2,273,889
Provision for impairment loss of build-to-sell project assets	10,660,148	3,379,824	
Gain on disposal of property, plant and equipment	(13,416)	(96,308)	(410,998)
Allowance made (reversed) for accounts receivable, net of recoveries	257,932	(7,380,299)	(12,952,252)
Provision reversed for losses of advances to suppliers, net of recoveries		(1,058,191)	
Inventory write-down	40,588,365	37,764,638	15,279,633
Deferred income tax benefit (expense)	(17,638,880)	18,583,646	4,634,996
Share-based compensation	5,667,846	4,399,729	6,007,084
Amortization of convertible senior notes issuance costs		1,131,147	3,850,512
Gain on repurchase of convertible senior notes	(282,625)		
Gain on disposal of subsidiaries		(326,895)	
Others		(814,592)	
Changes in operating assets and liabilities:			
Accounts receivable	(45,192,542)	(165,677,129)	(37,680,349)
Amounts due from and advances to related parties		(19,486,356)	2,128,412
Value-added tax recoverable	(53,411,973)	(13,546,571)	(121,694,138)
Inventories	93,621,779	(105,275,426)	(55,093,380)
Build-to-sell project assets	(68,995,784)	(7,646,847)	(467,932,102)
Advances to suppliers	(25,560,531)	5,990,951	(43,461,884)
Prepaid expenses and other current assets	3,743,044	10,496,007	(12,804,592)
Other noncurrent assets	(144,536)	(8,581,806)	(14,433,286)
Accounts payable	32,615,213	207,280,860	578,525,671
Amount due to related parties	10,524,438	(7,297,385)	9,440,180
Income taxes payable	2,331,466	6,129,180	20,704,618
Accrued expenses and other current liabilities	(1,238,302)	37,106,827	63,182,874
Accrued warranty costs	15,963,062	21,454,249	26,280,300
Other noncurrent liabilities	(3,842,967)	(803,309)	2,756,495
Net cash provided by operating activities	46,531,200	183,959,589	188,193,808
Investing activities:			
Purchases of property, plant and equipment	(69,990,898)	(404,655,016)	(652,354,550)
Prepaid land use rights	(2,149,101)		(10,156,156)
Proceeds from sale of property, plant and equipment	52,858	258,830	14,247,117
	2,817,719	2,508,743	897,641

Edgar Filing: Trina Solar LTD - Form 20-F

Subsidies received from government for purchases of property, plant and equipment			
Investments in affiliates	(3,135,773)	(13,996,479)	(472,478)
Cash received from disposal of a subsidiary		307,496	
Prepayment for acquisition of assets			(7,304,208)
Decrease (increase) in restricted cash	36,200,065	(72,209,369)	(47,554,592)
Net cash used in investing activities	(36,205,130)	(487,785,795)	(702,697,226)

See accompanying notes to consolidated financial statements

TRINA SOLAR LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)

(Amounts in U.S. dollars)

	2013	Year ended December 31, 2014	2015
Financing activities:			
Proceeds from issuance of ordinary shares pursuant to share option plan	922,556	1,408,184	1,102,134
Proceeds from issuance of ordinary shares, net of issuance costs		132,413,810	
Payment for call options in connection with convertible senior notes issuance		(52,311,578)	
Proceeds from issuance of convertible senior notes		287,500,000	
Debt issuance costs		(8,704,466)	
Payment for repurchase of convertible senior notes	(26,292,375)		
Redemption of convertible senior notes	(57,007,000)		
Principal payment under capital lease obligations			(6,036,302)
Proceeds from short-term bank borrowings	987,890,556	1,097,924,839	1,282,942,930
Repayment of short-term bank borrowings	(1,086,230,806)	(973,471,443)	(1,124,838,242)
Proceeds from long-term bank borrowings	13,941,512	44,616,290	535,273,412
Repayment of long-term bank borrowings	(170,480,333)	(329,863,899)	(97,467,535)
Payment for acquisition of non-controlling interest	(200,000)		(81,715)
Contribution from non-controlling interests	342,196	8,144,078	7,367,435
Dividends paid to non-controlling interests holders of subsidiaries			(3,143,550)
Net cash (used in) provided by financing activities	(337,113,694)	207,655,815	595,118,567
Effect of exchange rate changes	6,197,195	2,376,812	(8,113,672)
Net change in cash	(320,590,429)	(93,793,579)	72,501,477
Cash at the beginning of the year	807,275,992	486,685,563	392,891,984
Cash at the end of the year	486,685,563	392,891,984	465,393,461
Supplemental disclosure of cash flow information:			
Interest paid	50,023,964	34,908,088	63,891,021
Income taxes paid	4,075,481	432,030	30,407,022
Supplemental schedule of non-cash investing activities:			
Purchases of property, plant and equipment included in accounts payable	50,210,688	121,819,713	187,349,167
Purchases of property, plant and equipment under capital lease			35,492,129
Supplemental schedule of non-cash financing activities:			
Long-term borrowing assumed by the buyer upon sale of project assets		(32,612,240)	
Debt issuance cost of the share lending arrangement		3,092,580	

See accompanying notes to consolidated financial statements

TRINA SOLAR LIMITED AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEARS ENDED DECEMBER 31, 2013, 2014 AND 2015

(Amounts in U.S. dollars, except share data)

1. PRINCIPAL ACTIVITIES AND ORGANIZATION

Trina Solar Limited (Trina) was incorporated under the laws of the Cayman Islands on March 14, 2006. Trina Solar Limited and its subsidiaries (collectively the Company) are principally engaged in the manufacturing and selling of solar modules and also in the developing, operating, and selling of solar energy projects in the People's Republic of China (the PRC) and overseas markets including Europe, the United States and other Asia Pacific regions.

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES

(a) Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S.GAAP).

The accompanying consolidated financial statements contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. The realization of assets and the satisfaction of liabilities in the normal course of business are dependent on, among other things, the Company's ability to operate profitably, to generate cash flows from operations, and to pursue financing arrangements, including the renewal or rollover of its bank borrowings, to support its working capital requirements.

The Company has carried out a review of its cash flow forecast for the twelve months ending December 31, 2016. Based on such forecast, management believes that adequate sources of liquidity exist to fund the Company's working capital and capital expenditures requirements, and to meet its short term debt obligations and other liabilities and commitments as they become due. In preparing the cash flow forecast, management has considered historical cash requirements of the Company, as well as other key factors, including its ability to renew its short-term bank borrowings during 2016. Historically, the Company has renewed or rolled over substantially all its short-term bank loans upon the maturity date of the loans. From January 1, 2016 to March 31, 2016, the Company renewed a majority of short-term bank borrowings that matured during this period. Management believes the assumptions used in the cash forecast are

reasonable.

F - 10

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(b) Principles of consolidation

The consolidated financial statements include the financial statements of the Company, its consolidated subsidiaries, and variable interest entities (VIEs) for which the Company is the primary beneficiary. All significant inter-company transactions and balances have been eliminated upon consolidation. For consolidated subsidiaries where the Company's ownership in the subsidiary is less than 100%, the equity interest not held by the Company is shown as non-controlling interests. The Company accounts for investments over which it has significant influence but not a controlling financial interest using the equity method of accounting.

Due to certain PRC government regulations, the Company has entered into several contracts with third-party counterparties to construct certain solar energy projects in China on its behalf. Each solar energy project is owned by a VIE which is 100% owned by the counterparties. Although the counterparties have legal ownership of the specific purpose entity, the counterparties have no equity at risk since no equity contributions are required to be made by them. The counterparties have no rights to the net assets nor have the obligations to fund the specific purpose entities. According to the contract terms, the Company 1) has the rights to claim the ownership of these solar energy projects after the construction and connection of the project assets by demanding the counterparties to transfer their 100% equity interests in these solar energy projects to the Company; 2) has the exclusive rights to select the vendors and the constructors, as well as to monitor the design and construction of the solar energy projects; 3) funds the construction of the solar energy projects by providing loans to the specific purpose entities, which are pledged by 100% of the shares of these specific purpose entities; and 4) has the rights to receive all electricity and other income generated from the operation of the solar energy projects, and the rights to receive dividends of the VIEs once the solar energy projects are connected to the grid.

In accordance with Accounting Standards Codification (ASC) 810-10-25-38A, the Company is considered the primary beneficiary of the VIEs because it has (i) the power to direct activities of the VIEs that most significantly impact the economic performance of the VIEs; and (ii) the obligation to absorb the expected losses and the right to receive expected residual return of the VIEs that could potentially be significant to the VIEs. Accordingly, the financial statements of the VIEs are consolidated in the Company's consolidated financial statements. Total numbers of the projects entities being consolidated under the contracts aforementioned were 1 and 31 as of December 31, 2014 and 2015, respectively.

The financial results and cash flows of the VIEs that were included in the accompanying consolidated financial statements for the years ended December 31, 2013, 2014 and 2015 are as follows:

	Year ended December 31,		
	2013	2014	2015
	\$	\$	\$

Edgar Filing: Trina Solar LTD - Form 20-F

Net sales		3,289,920
Net income		120,775
Net cash used in operating activities		(172,702,153)
Net cash used in investing activities	(3,268,478)	(65,055,398)
Net cash provided by financing activities	3,431,933	238,751,610

F - 11

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(c) Use of estimates

The preparation of the consolidated financial statements in conformity with U.S.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 made for doubtful accounts receivable, provision for losses on advances to suppliers, inventory write-downs, the estimated useful lives of long-lived assets, the impairment of long-lived assets and project assets, fair value of foreign currency derivatives, accrued loss on firm purchase commitment, the accrual for uncertain tax positions and valuation allowance of deferred income tax assets, accrued warranty expenses, the grant-date fair value of share-based compensation awards and related forfeiture rates, fair value of financial instruments and loaned shares under the share lending arrangement, and assumptions related to the consolidation of entities in which the Company holds variable interests. Changes in facts and circumstances may result in revised estimates. The current economic environment has increased the degree of uncertainty inherent in those estimates and assumptions.

(d) Cash and cash equivalents

Cash consists of cash on hand and demand deposits at banks, which are unrestricted as to withdrawal or use, and which have maturities of three months or less when purchased. The Company did not hold any cash equivalents as of December 31, 2014 and 2015.

(e) Restricted cash

Restricted cash is primarily comprised of bank deposits held as collateral for letters of credit, commercial paper, bank drafts, and bank borrowings. These deposits carry fixed interest rates and will be released when the bank borrowings are repaid or the related letters of credit, commercial paper, and bank drafts 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, commercial paper and bank drafts). 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.

(f) 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 AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(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 other income 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 is obligated to provide additional funds to the affiliated companies or the Company has other investments in the affiliated companies. 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, 2014 and 2015, the Company has equity investment in affiliates with a carrying amount of \$25,568,061 and \$27,781,818, respectively. No impairments were recorded for the years ended December 31, 2013, 2014 and 2015.

(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 aging, historical collection history, the financial health of customers and other factors. The Company does not have any off-balance-sheet credit exposure related to its customers.

(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 and records a lower of cost or market write-down if any inventories have a cost in excess of 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-down for any quantities in excess of demand and for any product obsolescence. This evaluation considers historic usage, expected demand, market 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. If, based on assumptions about expected demand and market conditions, the Company determines that the cost of inventories exceeds its estimated market value or inventory is excess or obsolete, it

Edgar Filing: Trina Solar LTD - Form 20-F

records a write-down equal to the difference between the cost of inventories and the estimated market value. 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 or nominal amount.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(j) Project assets

The Company constructs solar energy project systems (project assets) that are (i) developed for sale (build-to-sell project assets) or (ii) developed for the Company's own use (build-to-own project assets). Project assets are classified as either build-to-sell project assets or as build-to-own project assets once the project assets have been constructed and ready for use. Classification of the project assets affects the accounting and presentation in the consolidated financial statements, including the consolidated statement of operations and consolidated statement of cash flows. Transactions related to the construction and sale of build-to-sell project assets are presented as operating activities in the consolidated statements of cash flows and reported as sales and costs of goods sold in the consolidated statement of operations when the project assets are sold. Incidental electricity income generated from the build-to-sell project assets prior to the sale of the projects is recorded in other operating income in the consolidated statement of operations. Build-to-own project assets relate to solar energy project systems that the Company uses in its operations to generate income or a return from the use of the assets. Income generated from build-to-own project assets are reported as part of net sales in the consolidated statement of operations. The costs to construct build-to-own project assets are presented as investing activities in the consolidated statement of cash flows. The proceeds received for the sale of build-to-own project assets are presented as cash flows from investing activities within the consolidated statement of cash flows. A net gain or loss upon the disposal of build-to-own project assets is reported in other operating income or expense in the consolidated statement of operations.

Project assets costs consist primarily of capitalizable costs for items such as permits and licenses, land use rights, and work-in-process. Work-in-process includes materials and modules, construction, installation and labor and other capitalizable costs incurred to construct the solar energy project systems.

Upon completion of the construction of build-to-sell project assets, the Company initiates a plan to actively market the asset for immediate sale in its present condition to potential buyers at a price that is reasonable in relation to its current fair value and it is probable that the sale of the asset will be sold within one year. No depreciation expense is recognized while the project assets are under construction or classified as held for sale. Build-to-sell project assets are measured at the lower of its carrying amount or fair value less costs to sell. At each reporting date, the appropriateness of the classification of build-to-sell project assets is reassessed. If facts and circumstances change such that it is no longer probable that the project asset will be sold within one year, the project asset will be reclassified to property, plant and equipment.

Build-to-sell project assets consisted of the following at December 31, 2014 and 2015:

December 31, December 31,

Edgar Filing: Trina Solar LTD - Form 20-F

	2014	2015
	\$	\$
Project assets - Module cost	24,355,693	238,020,983
Project assets - Project construction and others (Note 1)	35,749,058	293,323,175
Total build-to-sell project assets	60,104,751	531,344,158

Note 1. Project construction and other costs primarily represent the construction, permits and licenses, land use rights, and other capitalizable costs incurred to construct the solar energy project systems.

For build-to-sell project assets, the Company considers a project commercially viable if it is anticipated to be sold for a profit once it is either fully developed or fully constructed. The Company also considers a partially developed or partially constructed project commercially viable if the anticipated selling price is higher than the carrying value of the related project assets plus the estimated cost to completion. The Company considers a number of factors, including changes in environmental, ecological, permitting, market pricing 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. The Company records an impairment loss of the project asset to the extent the carrying value exceed its estimated recoverable amount. The recoverable amount is estimated based on the anticipated sales proceeds plus any refundable project investment deposits reduced by estimated cost to complete such sales. In 2013, 2014 and 2015, the Company provided impairment loss of \$10,660,148, \$3,379,824 and nil for certain build-to-sell project assets.

TRINA SOLAR LIMITED AND SUBSIDIARIES

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. Property, plant and equipment acquired under capital lease are stated at the present value of minimum lease payments. 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,		
	2013	2014	2015
	\$	\$	\$
Total interest incurred	48,444,855	42,068,402	66,004,092
Less: Interest capitalized		(7,182,011)	(13,752,373)
Interest expenses	48,444,855	34,886,391	52,251,719

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

	Years
Buildings	10-25
Plant and machinery	5-10
Motor vehicles	3-5
Electronic equipment, furniture and fixtures	3-5
Solar energy projects	20-25

Property, plant and equipment acquired under capital lease are amortized in a manner consistent with the above depreciation policy for owned assets if the lease transfers ownership to the Company by the end of the lease term or contains a bargain purchase option.

(l) Prepaid land use rights

The Company's prepaid land use rights are reported at cost and are charged to expense on a straight-line basis over the 50-year period of the rights granted in the PRC.

(m) Impairment of long-lived assets

The Company's long-lived assets primarily include property, plant and equipment and prepaid land use rights. The Company evaluates the long-lived 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 operating 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. If circumstances require a long-lived asset or asset group be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying amount. If the carrying amount of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying amount exceeds its fair value. No impairments were recorded for long-lived assets held and used during the years ended December 31, 2013, 2014, and 2015.

(n) Lease

Leases are classified at the inception date as either a capital lease or an operating lease. A lease is a capital lease if any of the following conditions exists: a) ownership is transferred to the lessee by the end of the lease term, b) there is a bargain purchase option, c) the lease term is at least 75% of the asset's estimated remaining economic life, or d) the present value of the minimum lease payments at the beginning of the lease term is 90% or more of the fair value of the leased property to the lessor at the inception date. The Company records a capital lease as an asset and an obligation at an amount equal to the present value at the beginning of the lease term of minimum lease payments during the lease term. As of December 31, 2015, assets acquired under capital leases primarily represent machinery and equipment.

The Company leases office space, employee accommodation and vehicle that are classified as operating leases. Rental on operating leases is charged to expense on a straight-line basis over the lease term. Certain operating leases contain rent holidays and escalating rent. Rent holidays and escalating rent are considered in determining the straight-line rent expense to be recorded over the lease term.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(o) Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. If a potential material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, is disclosed. Legal costs incurred in connection with loss contingencies are expensed as incurred.

(p) Income taxes

The Company accounts for income taxes using the asset and liability method whereby the Company calculates the deferred tax assets or liabilities at the balance sheet date using enacted tax laws and rates expected to apply in the periods in which the deferred tax assets or liabilities are expected to be realized or settled. The Company establishes valuation allowances 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 tax liabilities for investments in foreign subsidiaries to the extent such amounts relate to permanently reinvested earnings of such foreign subsidiaries.

Income tax expense includes (i) deferred tax expense, which generally represents the net change in the deferred tax assets and liabilities during the year plus any change in valuation allowances and (ii) current tax expense, which represents the amounts of tax currently payable to or receivable from the taxing authorities. 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. The Company records interest and penalties related to an uncertain tax position, if and when required, as part of income tax expense in the consolidated statements of operations.

(q) Revenue recognition

Sales of solar modules

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. The Company's sales agreements typically contain customary product warranties but normally do not contain post-shipment obligations nor 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 normally provides credit terms 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.

Sales of project assets

The Company recognizes the sale of project assets with the concurrent sale or lease of the underlying land use rights, whether explicit or implicit in the transaction, in accordance with ASC 360-20, Real Estate Sales. For these transactions, the Company has determined that the project asset sale represents the sale of real estate and is therefore subject to the revenue recognition guidance applicable to real estate. A project asset comprises of properties, physical fixtures, solar modules and other related integral equipment attached to the land that cannot be removed and used separately without incurring significant costs. Equipment is determined to be integral when the cost to remove the equipment from its existing location, ship and reinstall at a new site, including any diminution in fair value, exceeds ten percent of the fair value of the equipment at the time of original installation. Under real estate accounting, the Company recognizes revenue and profit using the full accrual method once the sale is consummated, the buyer's initial and continuing investments are adequate to demonstrate its commitment to pay, the buyer's receivable is not subject to any future subordination, and the Company has transferred the usual risk and rewards of ownership to the buyer. For the years ended December 31, 2013, and 2014, and 2015, revenues from the sale of project assets were \$11,930,935, and \$133,896,015, and \$90,437,349, respectively. During the years presented, the Company did not have sales that qualified for use of the installment method nor entered into any sale transactions during the construction period of the project assets.

If the Company retains continuing involvement in the project asset and do not transfer substantially all of the risks and rewards of ownership to the buyer, the Company recognizes gross profit under a method determined by the nature and extent of the continuing involvement. In certain arrangements, the Company provide the customers guarantees of system performance for a limited period of time and the exposure to loss is contractually limited based on the terms of the applicable agreement. In accordance with real estate sales accounting guidance, the gross profit recognized is reduced by the maximum exposure to loss until such time that the exposure no longer exists. As of December 31, 2015, deferred revenue related to the guarantee of system performance after the sale amounted to \$4,582,640.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

Electricity revenues

The Company derives electricity revenues from build-to-own project assets through the sale of energy to end customers or grid operators pursuant to terms set forth in power purchase agreements or other contractual arrangements (PPAs). The Company has determined that none of the PPAs contains a lease since (i) the purchaser does not have the rights to operate the project assets, (ii) the purchaser does not have the rights to control physical access to the project assets, and (iii) the price that the purchaser pays is at a fixed price per unit of output. The period of the PPAs are generally between 3 to 20 years.

The Company recognizes electricity service revenues when a PPA exists, electricity has been generated and transmitted to the direct customer or grid operator, the price of electricity is fixed or determinable, and the collectability of the resulting receivable is reasonably assured. The price of electricity includes a portion that is subsidized by Chinese central or local government. The portion subsidized by the Chinese central or local government is recognized as part of electricity service revenue when all the conditions for receipts of the subsidy have been met and the above revenue recognition criteria for electricity service revenue have been met. Electricity revenues for the years ended December 31, 2013, 2014, and 2015 were \$4,944,556, \$5,078,737, and \$61,641,640, respectively.

EPC service

The Company uses the percentage-of-completion method to recognize revenues for which the Company provides EPC services, unless the Company cannot make reasonably dependable estimates of the costs to complete the contract, in which case the Company would use the completed contract method. The percentage-of-completion method is considered appropriate in circumstances in which reasonably dependable estimates can be made and in which all the following conditions exist: (i) contracts executed by the parties normally include provisions that clearly specify the enforceable rights regarding goods or services to be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement; (ii) the buyer can be expected to satisfy all obligations under the contract; and (iii) the contractor can be expected to perform all contractual obligations. The Company uses the cost-to-cost method to measure the percentage of completion and recognize revenue based on the estimated progress to completion. The Company periodically revises its profit estimates based on changes in facts, and immediately recognizes any losses that are identified on contracts. Incurred costs include all direct material, labor, subcontractor cost, and other associated costs. The Company recognizes job material costs as incurred costs when the job materials have been permanently attached or fitted to the solar power projects as required by the engineering design. The construction periods normally extend beyond six months and less than one year. Revenues from EPC service for the years ended December 31, 2013, 2014, and 2015 were nil, nil, and \$16,270,723, respectively.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(r) Shipping and handling costs

Costs to ship products to customers are included in selling expenses in the consolidated statement of operations. Amounts billed to customers, if any, to cover shipping and handling are reported in net sales. Cost to ship products to customers were \$59,965,161, \$64,913,374 and \$94,894,378 for the years ended December 31, 2013, 2014 and 2015, respectively.

(s) Research and development

Research and development costs are incurred during the period the Company is developing new products or significantly improving existing products or technologies. 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.

(t) Government grants

The Company qualifies for grants from the PRC government for achieving certain research and development milestones. The Company records these grants as an offset to its research and development expenses in the periods in which the Company earns them. Grants that the Company receives prior to when the Company achieves the specified milestone are reported as a liability. Government grants related to assets are recorded as deferred liabilities and are recognized as an offset to depreciation expense on a straight-line basis over the useful life of the associated asset. The Company received government grants for assets of \$2,817,719, \$2,508,743 and \$897,641 during the years ended December 31, 2013, 2014 and 2015, respectively, and recognized \$320,682, \$3,810,345 and \$1,726,312 as an offset to depreciation expense for the years ended December 31, 2013, 2014 and 2015, respectively. The Company records unrestricted cash government subsidies in other income in the consolidated statements of operations. Unrestricted cash government subsidies received were \$5,380,114, \$2,525,918 and \$5,524,578 during the years ended December 31, 2013, 2014 and 2015, respectively.

(u) Product warranties

Historically the Company provided 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. Since June 2011, the Company extended the warranty period in relation to defects in materials and workmanship from two or five years to ten years. Additionally, the Company has replaced its two-step

performance warranty with a linear performance warranty that guarantees module power output will not decrease by more than approximately 0.7% per year after the initial year of service. The Company accrues warranty costs when revenue is recognized 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 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's revision to its warranty policy in June 2011 did not have a material effect on its warranty accrual rate. The Company's estimates of its warranty obligations are subjective. The Company regularly analyzes its claim history and the performance of its products compared to its competitors 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.

(v) Deferred debt issuance costs

Debt issuance costs are initially deferred and amortized to the income statement over the life of the related debt using either the effective interest method or the straight-line method if it approximates the effective interest method. Unamortized debt issuance costs are included in other current assets or other noncurrent assets based on expected dates of amortization.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(w) 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 at the beginning of the month the transactions occurred. Transaction gains and losses are recognized in the consolidated statements of operations.

The financial records of the Company's subsidiaries outside of the US are maintained in local currencies other than US dollar, such as RMB and Euro, which are also 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 comprehensive income.

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 restricted cash denominated in RMB amounted to \$179,285,684 and \$290,917,384 as of December 31, 2014 and 2015, respectively. As of December 31, 2015, 98% of the Company's cash and restricted cash were held in major financial institutions located in PRC, European, USA and Asian Pacific financial institutions and amounted to \$647,846,643 in total which were denominated in the following currencies:

	USD (million)	RMB (million)	EUR (million)	GBP (million)	JPY (million)
In PRC	232	1,888	1		365
In European Union	5		7	2	
In USA	56				
In Asian Pacific	36				1,439
Total in original currency	329	1,888	8	2	1,804
US\$ equivalent	329	291	9	4	15

(x) Concentrations of credit risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash and cash equivalent, restricted cash, accounts receivable, advances to suppliers and foreign currency forward contracts. The Company's investment policy requires

Edgar Filing: Trina Solar LTD - Form 20-F

cash and cash equivalents, restricted cash, and investments to be placed with high-quality financial institutions and to limit the amount of credit risk from any one issuer. Similarly, the Company enters into foreign currency forward contracts with high-quality financial institutions and limits the amount of credit exposure to any one counterparty. The foreign currency forward contracts are limited to a time period of less than 6 months. The Company regularly evaluates the credit standing of the financial institutions counterparty.

The Company has made advances to suppliers where the Company has committed to purchase minimum quantities under some of the supply agreements. The Company does not require collateral or other security against its advances to related or third party suppliers. As a result, the Company's claims for such prepayments would rank only as an unsecured claim, which exposes the Company to the credit risks of the suppliers. The Company performs ongoing credit evaluations and communication with these suppliers of their financial condition and capability for delivery of the goods.

The Company conducts credit evaluations on its customers prior to delivery of goods or services. The assessment of customer creditworthiness is primarily based on historical collection records, validation of the project specifications with the customers and their financing banks, customer onsite visits by senior management and information provided by third party credit rating agency, such as Dun & Bradstreet, and the insurance company that ultimately insures the Company against customer credit default. Using this information, the Company 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 to the customer or require the customer to pay cash, post letters of credit to secure payment or to make significant down payments.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(y) 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.

(z) 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 derivative instruments is based on the designation of each derivative instrument and whether it qualifies for hedge accounting.

The Company entered into certain foreign currency forward contracts to protect against volatility of future cash flows caused by the changes in foreign exchange rates associated with outstanding accounts receivable. The foreign currency forward contracts did not qualify for hedge accounting and, as a result, the changes in fair value of the foreign currency forward contracts are recognized in the consolidated statements of operations. During the years ended December 31, 2013, 2014 and 2015, the Company recorded gain on foreign currency forward contracts of \$2,180,418, \$3,422,052 and \$4,064,972 respectively, which has been recorded in Derivative gain in the consolidated statements of operations.

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(aa) Earnings (loss) per share

Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted average number of ordinary shares outstanding during the period. Diluted earnings (loss) 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 earnings (loss) from operations per share for the periods indicated:

	2013 \$	Year ended December 31, 2014 \$	2015 \$
Net (loss) income attributable to Trina Solar Limited shareholders basic	(72,025,935)	59,337,685	76,514,935
Interest expenses of convertible senior notes		4,167,495	14,488,012
Net (loss) income attributable to Trina Solar Limited shareholders diluted	(72,025,935)	63,505,180	91,002,947
Weighted average number of ordinary shares outstanding basic	3,553,552,756	3,881,503,977	4,226,950,678
Plus incremental weighted average number of ordinary shares from assumed exercise of stock options using the treasury stock method		43,275,906	29,788,689
Plus incremental weighted average number of ordinary shares from assumed vesting of restricted shares using the treasury stock method		15,974,916	26,634,410
Plus incremental weighted average number of ordinary shares from assumed conversion of convertible senior notes due June 2019 using the if-converted method (see Note 11)		333,940,033	603,146,853
Plus incremental weighted average number of ordinary shares from assumed conversion of convertible senior notes due October 2019 using the if-converted method (see Note 11)			391,422,737
Weighted average number of ordinary shares outstanding diluted	3,553,552,756	4,274,694,832	5,277,943,367
(Loss) earnings per ordinary share from operations basic	(0.02)	0.02	0.02
(Loss) earnings per ordinary share from operations diluted	(0.02)	0.01	0.02

For the years ended December 31, 2013, 2014 and 2015, the following securities were excluded from the computation of diluted earnings (loss) per share as inclusion would have been anti-dilutive.

Edgar Filing: Trina Solar LTD - Form 20-F

	2013	Year ended December 31, 2014	2015
	\$	\$	\$
Non-vested restricted shares	38,183,882		
Share options	129,085,735	59,128,529	71,485,182
Convertible senior notes due October 2019 (see Note 11)		391,422,737	
Total	167,269,617	450,551,266	71,485,182

F - 21

TRINA SOLAR LIMITED AND SUBSIDIARIES

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES continued

(ab) Recently issued accounting pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers (ASU 2014-09). This ASU requires companies to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which companies expect to be entitled in exchange for those goods or services. This ASU will replace most existing revenue recognition guidance in GAAP when it becomes effective. This ASU was originally effective for fiscal years and interim periods beginning after December 15, 2016. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (ASU 2015-14), which amends ASU 2014-09 and defers its effective date to fiscal years and interim reporting periods beginning after December 15, 2017. ASU 2015-14 permits earlier application only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (ASU 2014-15), to provide guidance on management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and to provide related footnote disclosures. ASU 2014-15 is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016, with early adoption permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In January 2015, the FASB issued ASU No. 2015-01, Income Statement - Extraordinary and Unusual Items (Subtopic 225-20), which eliminates the concept of reporting for extraordinary items. ASU No. 2015-01 is effective for fiscal year ending December 31, 2016 and for interim periods thereafter.

In April 2015, the FASB issued ASU 2015-03, Interest - Imputation of Interest (ASU 2015-03), to simplify the presentation of debt issuance costs. The ASU requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability, consistent with debt discounts or premiums. The recognition and measurement guidance for debt issuance costs is not affected by this ASU. This ASU is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within fiscal years beginning after December 15, 2016, with early adoption permitted. The impact upon adoption would be presenting the debt issuance costs amounting to \$9,148,909 as of December 31, 2015 as a deduction to the carrying amount of the debt.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes (ASU 2015-17), to simplify the presentation of deferred income taxes by eliminating the requirement to separate deferred tax assets and liabilities into current and noncurrent amounts. ASU 2015-17 requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent and is effective for financial statements issued for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Earlier

application is permitted as of the beginning of an interim or annual reporting period. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) (ASU 2016-02). Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (1) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (2) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged. Certain targeted improvements were made to align, where necessary, lessor accounting with the lessee accounting model and Topic 606, Revenue from Contracts with Customers. The new lease guidance simplified the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and lease liabilities. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. ASU 2016-02 is effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with early adoption permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

TRINA SOLAR LIMITED AND SUBSIDIARIES

3. ALLOWANCE FOR DOUBTFUL ACCOUNTS RECEIVABLES AND PROVISION FOR LOSSES OF ADVANCES TO SUPPLIERS

Accounts receivable are recorded at the amount due from customers for the sales of products sold and service rendered. An allowance for doubtful accounts is provided based on the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company assesses collectability of accounts receivable by analyzing specific customer accounts that have known or potential doubt as to collectability. In addition to the specific allowance applied on the balance of individual customers, the Company groups the remaining receivables without specific allowance based on overdue aging. An estimated loss percentage is then applied to each overdue aging group based on historical collection experiences, previous loss history and current credit conditions. The following table presents the movement of the allowance for doubtful accounts:

	2013	At December 31, 2014	2015
	\$	\$	\$
Balance, beginning of the year	106,825,173	97,057,810	69,905,290
Allowance made (reversed) during the year	257,932	(7,380,299)	(12,952,252)
Amount written-off against allowance	(10,025,295)	(19,772,221)	(4,221,610)
Balance, end of the year	97,057,810	69,905,290	52,731,428

In order to secure a stable supply of silicon and wafer, the Company makes advances to certain suppliers. Advances to suppliers which the Company expects to take delivery of the inventory after the next twelve months are classified as non-current assets in the Company's consolidated balance sheets. The Company monitors suppliers to ensure the timely delivery of goods in accordance with agreed schedules, and assesses the recoverability of advances to suppliers by analyzing specific supplier accounts that have known or potential settlement issues. The Company reversed provision for losses of advances to suppliers totaling nil, \$1.1 million and nil, respectively, during the year ended December 31, 2013, 2014 and 2015.

4. INVENTORIES

Inventories consisted of the following:

	2014	2015
	\$	\$
Raw materials	80,343,732	88,591,369
Work in progress	73,530,496	79,405,492
Finished goods	196,977,366	263,996,721
Total	350,851,594	431,993,582

In 2013, 2014 and 2015, inventories were written down by \$40,588,365, \$37,764,638 and \$15,279,633, respectively, to reflect the lower of cost or market.

TRINA SOLAR LIMITED AND SUBSIDIARIES

5. PROPERTY, PLANT AND EQUIPMENT, NET

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

	At December 31,	
	2014	2015
	\$	\$
Buildings	214,327,475	244,321,889
Plant and machinery	991,407,500	1,122,738,331
Solar energy projects	324,703,525	704,107,567
Motor vehicles	3,753,834	4,011,594
Electronic equipment, furniture and fixtures	111,238,698	119,686,093
	1,645,431,032	2,194,865,474
Less: Accumulated depreciation	(517,481,282)	(651,156,298)
	1,127,949,750	1,543,709,176
Construction in progress	125,592,941	318,426,324
Property, plant and equipment, net	1,253,542,691	1,862,135,500

Depreciation of property, plant and equipment was \$115,964,302, \$107,185,306 and \$133,956,509 for the years ended December 31, 2013, 2014 and 2015, respectively.

As of December 31, 2014 and 2015, the carrying amounts of the Company's property, plant and equipment acquired under capital leases were as follows:

	2014	2015
	\$	\$
Plant and machinery		35,492,129
Less: Accumulated depreciation		(243,627)
		35,248,502

As of December 31, 2014 and 2015, solar energy projects under construction that the Company expects to operate upon completion of construction totalled \$66,733,408 and \$126,826,560, respectively, which are recorded in construction in progress. The remaining balance of construction in progress primarily represents the construction of new plants that include several new production lines and machinery under installation. As of December 31, 2014 and 2015, accumulated depreciation for the solar energy projects was \$5,959,559 and \$23,040,017, respectively.

As of December 31, 2014 and 2015, the Company has pledged property, plant and equipment with a total carrying amount of \$563,550,148 and \$675,674,184, respectively, to secure bank borrowings (see Note 10).

6. PREPAID LAND USE RIGHTS

Prepaid land use rights represent fees paid to obtain the land use rights for the Company's business operations. Amounts of amortization recognized in profit and loss related to the prepaid land use rights were \$823,743, \$1,076,659 and \$1,030,284 for the years ended December 31, 2013, 2014 and 2015, respectively.

As of December 31, 2014 and 2015, land use rights of \$15,913,751 and \$15,560,153, respectively, were pledged as collateral to secure bank borrowings (see Note 10).

TRINA SOLAR LIMITED AND SUBSIDIARIES

7. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and current liabilities consisted of the following:

	At December 31,	
	2014	2015
	\$	\$
Payroll and welfare payables	29,352,860	39,731,591
Advance from customers	50,517,816	73,922,757
Derivatives	487,780	2,282,725
Accrued expenses	70,524,998	103,727,260
Payments to custom and other taxes payables	19,174,211	17,208,200
Total	170,057,665	236,872,533

Accrued expenses primarily include the liabilities incurred for freight, rental, anti-subsidy and countervailing duties, professional services and other miscellaneous services.

8. 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, 2014 and 2015:

	December 31, 2014	
	Other Assets - Current	Other Current Liabilities
	\$	\$
Derivatives not qualified for hedge accounting:		
Foreign currency forward contracts	1,849,448	487,780

	December 31, 2015	
	Other Assets - Current	Other Current Liabilities
	\$	\$
Derivatives not qualified for hedge accounting:		
Foreign currency forward contracts	1,370,504	2,282,725

Edgar Filing: Trina Solar LTD - Form 20-F

See Note 9, 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.

The following table presents the amounts related to derivative instruments affecting the Company's consolidated statements of operations for the years ended December 31, 2013, 2014 and 2015:

Derivative Type	Amount of gain on Derivatives Recognized in Income Year Ended December 31			Location of gain Recognized in Income on Derivatives
	2013 \$	2014 \$	2015 \$	
Derivatives not qualified for hedging accounting:				
Foreign currency forward contracts	2,180,418	3,422,052	4,064,972	Derivatives gain

TRINA SOLAR LIMITED AND SUBSIDIARIES

9. FAIR VALUE MEASUREMENT

As of December 31, 2014 and 2015, 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, 2014
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:				
Foreign currency forward contracts	1,849,448		1,849,448	
Liabilities:				
Foreign currency forward contracts	(487,780)		(487,780)	
Net liabilities	1,361,668		1,361,668	

Fair Value Measurements at December 31, 2015
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:				
Foreign currency forward contracts	1,370,504		1,370,504	
Liabilities:				
Foreign currency forward contracts	(2,282,725)		(2,282,725)	
Net assets	(912,221)		(912,221)	

Following is a description of the valuation techniques that the Company uses to measure assets and liabilities 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:

- **Derivative assets and liabilities** The Company's derivative assets and liabilities relate to foreign currency forward contracts involving major currencies. Since such contracts are not traded on an exchange, the Company values the contracts using valuation models. The valuation of the foreign currency forward contracts incorporates 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 Company considers the effect of its own credit standing and that of its counterparties in valuations of its derivative financial instruments.
- **Short-term financial instruments (restricted cash, accounts receivable and payable, short-term borrowings, and accrued liabilities)** cost approximates fair value because of the short maturity period.
- **Long-term borrowings** fair value is based on the amount of future cash flows associated with each debt instrument discounted at the Company's current borrowing rate for similar debt instruments of comparable terms. The carrying values of the long-term borrowings approximate their fair values as all the long-term debt carry variable interest rates which approximate rates currently offered by the Company's bankers for similar debt instruments of comparable maturities.
- **Convertible senior notes** the estimated fair value was \$261,934,350 and \$278,094,150 as of December 31, 2014 and 2015, respectively, was measured based on the quoted market price in an active market. The carrying value of convertible senior notes as of December 31, 2014 and 2015 was \$287,500,000 and \$287,500,000 respectively.

TRINA SOLAR LIMITED AND SUBSIDIARIES

10. BANK BORROWINGS

The Company's bank borrowings consisted of the following:

	At December 31,	
	2014	2015
	\$	\$
Bank borrowings		
Short-term	737,886,632	895,991,320
Long-term, current portion	82,365,314	20,622,456
Total current	820,251,946	916,613,776
Long-term, non-current portion	22,433,705	521,982,440
Total	842,685,651	1,438,596,216

Short-term borrowings

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

	At December 31,	
	2014	2015
	\$	\$
Short-term borrowings secured by plants, machinery and land use rights of Changzhou Trina Solar Energy Co., Ltd. (Trina China)	148,739,778	108,649,945
Short-term borrowings secured by plants, machinery and land use rights of Trina China and Trina Solar (Changzhou) Science and Technology Co., Ltd. (TST), and also guaranteed by Trina	330,000,000	162,500,000
Short-term borrowings pledged by accounts receivable of Changzhou Trina Solar PV Solar System Co., Ltd (TPV), equity interest in a subsidiary of Trina China, and also guaranteed by Trina		80,078,847
Short-term borrowings guaranteed by Trina	215,146,854	416,579,401
Unsecured short-term borrowings	44,000,000	128,183,127
Total	737,886,632	895,991,320

The average interest rate on short term borrowings was 4.41% and 4.25% per annum for the years ended December 31, 2014 and 2015, respectively. The funds borrowed under the above short-term arrangements are repayable within one year.

As of December 31, 2015, the Company has short-term bank facilities of \$928,345,637 with various banks, of which \$895,991,320 had been drawn upon and \$32,354,317 was available. As of December 31, 2015, certain bank facilities are secured by the plant and machinery of Trina China and TST with carrying value of \$478,864,593 and land use

rights of Trina China with carrying value of \$15,560,153.

As of December 31, 2015, the carrying amount of accounts receivable pledged by TPV was \$9,807,577, and the carrying amount of equity interest in a subsidiary of Trina China pledged by Trina China was \$40,862,171.

Certain short-term borrowings contain general covenants which require the Company to obtain written notice prior to entering into other loan arrangement with other banks or financial institutions. Furthermore, certain financial covenants, such as specified debt to total assets ratio, net profit ratio, income to interest ratio, net tangible worth, the ratio of net borrowings, and the ratio of EBITDA to net interest expenses must be maintained. As of December 31, 2015, Trina China violated the net external gearing ratio on the loan from the Hongkong and Shanghai Banking Corporation Limited (HSBC). On March 1, 2016, Trina China obtained a waiver letter from HSBC to waive its compliance obligations for the net external gearing ratio covenant until the maturity date.

TRINA SOLAR LIMITED AND SUBSIDIARIES

Long term borrowings

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

	At December 31,	
	2014	2015
	\$	\$
Long-term borrowings guaranteed by Trina	100,713,385	540,294,929
Unsecured long-term borrowings	4,085,634	2,309,967
Total	104,799,019	542,604,896

On December 31, 2012, Trina Solar (Luxembourg) Holdings S.A.R.L. (TLH) entered into a three-year credit facility with China Development Bank (CDB) (the TLH CDB Facility) amounting to \$80.0 million which is designated for working capital. The Company had fully drawn down the facility in 2012. The interest rate is the prevailing six-month US LIBOR plus 370 basis points which is 4.21% and 4.04% in 2013 and 2014, respectively. The TLH CDB Facility is guaranteed by Trina. The facility contains financial covenants. In June 2014, TLH violated the gearing ratio of the loan. TLH subsequently obtained waiver letter from CDB, stating that the violation of the financial covenant has been waived and such financial covenant has been amended. TLH was in compliance with the revised covenants. TLH had a loan balance of \$80.0 million as of December 31, 2014 and fully repaid the outstanding balance in December 2015.

On March 6, 2014, Trina Solar (Luxembourg) Overseas Systems S.A.R.L and Jiangsu Trina Solar Electric Power Development Co., Ltd. entered into a fifteen-year credit facility with China Development Bank (TLO CDB Facility) amounting to EUR 20.85 million (\$28.7 million) to fund 16 MW of utility-scale solar power projects in Greece. As of December 31, 2014, the Company had drawn down EUR 17.0 million (\$20.7 million). The outstanding balance as of December 31, 2014 was EUR 17.0 million (\$20.7 million). The interest rate is the prevailing six-month EURIBOR plus 350 basis points, which was 3.501% on average in 2015. The outstanding balance as of December 31, 2015 was EUR 16.4 million (\$17.9 million). The TLO CDB Facility is guaranteed by Trina. The TLO CDB Facility contains a financial covenant ratio and TLO was in compliance with the covenant as of December 31, 2015.

On March 10, 2015, Xiangshui Hengneng Electricity Generation Co., Ltd. (TXSI) entered into a twelve-year loan facility with Bank of Beijing Co., Ltd. (BOB) for solar power project assets located in Yancheng City, Jiangsu Province, China. The total loan facility is RMB 658.0 million (\$101.3 million), which can be drawn down within 364 days from the date that the loan facility was entered into and matures on March 10, 2027. As of December 31, 2015, the Company had drawn down RMB 450 million (\$69.3 million). The interest rate is 108% of the prevailing base lending rate pronounced by the People's Bank of China (PBOC) for loans of similar duration. The facility is guaranteed by Trina China, and pledged by the electricity income of TXSI and 100% equity interests in TXSI held by Jiangsu Trina Solar Electric Power Development Co., Ltd. (TJS), a subsidiary of Trina. The facility contains a financial covenant which requires TXSI to maintain specified debt to asset ratio on quarterly basis. TXSI was in compliance with the debt covenant as of December 31, 2015.

On June 19, 2015, Hunan Trina Solar Electric Power Development Co., Ltd. (THN) entered into a ten-year loan facility with China Construction Bank (CCB) for the construction of the solar project assets located in Hunan province, China. The total loan facility is RMB 70 million (\$10.8

Edgar Filing: Trina Solar LTD - Form 20-F

million). As of December 31, 2015, the Company had drawn down RMB 40 million (\$6.2 million). The interest rate is 105% of the prevailing base lending rate pronounced by PBOC for loans of similar duration. The facility is guaranteed by Trina China and TJS. The facility contains certain financial covenants and THN was in compliance with the covenants as of December 31, 2015.

On July 30, 2015, Trina China entered into a two-year credit facility with Ping An Trust Co., Ltd. (PATC) amounting to RMB 253 million (\$39.0 million) with an interest rate of 11% per year to support the project of a subsidiary of Trina China. The lender has the option to convert up to 31.2% of the total share of the subsidiary, amount of which should not exceed RMB 253 million (\$39.0 million). Trina China had fully drawn down the facility in 2015. The outstanding balance as of December 31, 2015 was RMB 253 million (\$39.0 million). The facility is guaranteed by Trina and pledged by the 35.2% share of the subsidiary held by Trina China with a carrying amount of \$31,268,444 as of December 31, 2015. There are no covenants with respect to this facility.

On August 25, 2015, Trina China entered into a two-year credit facility with PATC amounting to RMB 63 million (\$9.7 million) with an interest rate of 11% per year to support the project of a subsidiary of Trina China. The lender has the option to convert up to 7.8% of the total share of the subsidiary, amount of which should not exceed RMB 63 million (\$9.7 million). Trina China had fully drawn down the facility in 2015. The outstanding balance as of December 31, 2015 was RMB 63 million (\$9.7 million). The facility is guaranteed by Trina and pledged by the 8.8% share of the subsidiary held by Trina China with a carrying amount of \$7,817,111 as of December 31, 2015. There are no covenants with respect to this facility.

TRINA SOLAR LIMITED AND SUBSIDIARIES

On September 30, 2015, Trina Solar (U.S.), Inc. (Trina US) entered into a five-year revolving loan facility with the Wells Fargo Bank amounting to \$60 million to support Trina US 's working capital and business operations. As of December 31, 2015, the Company had drawn down \$25.6 million. The outstanding balance as of December 31, 2015 was \$25.6 million. The interest rate is the prevailing LIBOR / Base rate plus LIBOR margin / Base rate margin, which was 2.83% on average in 2015. The facility contains a financial covenant which require a specified fixed charge coverage ratio be maintained and Trina US was in compliance with the covenant as of December 31, 2015.

On October 20, 2015, Trina China entered into a five-year credit facility with Agriculture Bank of China (the ABC Facility) and Jiangnan Rural Commercial Bank as a syndicated loan lender amounting to RMB 350.0 million (\$53.6 million) to support the project of the upgrading and automation renovation of the solar module technology. The ABC Facility is guaranteed by Trina Solar Limited and pledged by the equipment of the project. The Company had fully drawn down the facility in 2015. The outstanding balance as of December 31, 2015 was RMB 350.0 million (\$53.6 million). The interest rate is the prevailing base lending rate pronounced by PBOC for loans of similar duration. There are no covenants with respect to this facility.

On November 24, 2015, Yunnan Matallurgical New Energy Co., Ltd (TYM), a subsidiary of the Company entered into a fifteen-year loan facility with CDB including both RMB facility and US dollar facility (the TYM CDB Facility) amounting to RMB 765 million (\$117.8 million) and US\$180 million respectively for the construction of solar project assets located in Yunnan Province, China. The Company had fully drawn down the facility in 2015. Interest is due quarterly in arrears. The interest rate on RMB facility is the prevailing base lending rate pronounced by PBOC for loans of similar duration. The interest rate on US dollar facility is the prevailing six-month US London Interbank Offered Rate (LIBOR) plus 380 basis points. The TYM CDB Facility is guaranteed by Trina Solar Limited and Trina China, and secured by the build-to-own project assets with a carrying amount value of \$196.8 million and pledged by the electricity income of TYM. TYM is required to pay the loans twice a year by installment and the last payment term is by 2030. The facility contains certain financial covenants which require the asset liability ratio, quick ratio, debt payment coverage rate and other ratios to be maintained. As of December 31, 2015, TYM violated the asset liability ratio and turnover ratio of current assets. On March 17, 2016, the Company obtained a written confirmation from CDB which waived the bank right to call the loan provided that TYM complies with the financial covenants and cure the breach prior to September 17, 2016. Management determined that TYM is able to cure the breach within the grace period by settling intercompany liabilities and that it is not probable that TYM will violate the financial covenants during the year ended December 31, 2016.

On December 28, 2015, TJS entered into an eight-year loan facility with China Minsheng Bank (CMBC) amounting to RMB 250 million (\$37.5 million) at an interest rate of 4.9% per year for the construction of solar project assets located in Xinjiang Province, China. The Company had drawn down RMB 138 million (\$21.3 million) in 2015. The outstanding balance as of December 31, 2015 was RMB 138 million (\$21.3 million). The facility is guaranteed by Trina China, and secured by the phase II project assets of Tuokexun Trina Solar Co., Ltd. (TKX) and pledged by the account receivables generated from the electricity income of TKX phase II project assets. There are no covenants with respect to this facility.

Future principal payments under the above long-term borrowings as of December 31, 2015 are as follows:

Fiscal Years Ending December 31,	Long-term borrowings
2016	20,622,456
2017	103,266,422
2018	47,827,221
2019	47,936,485
2020	70,789,694
Thereafter	252,162,618
Total	542,604,896

TRINA SOLAR LIMITED AND SUBSIDIARIES

11. CONVERTIBLE SENIOR NOTES

4.0% Convertible Senior Notes due 2013

On July 23, 2008, the Company issued \$138 million of 4% Convertible Senior Notes (the 4.0% Notes Due 2013). The 4.0% Notes Due 2013 matured 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. The 4.0% Notes Due 2013 was paid off as of July 15, 2013.

Holders of the 4.0% Notes Due 2013 have the option to convert their 4.0% Notes Due 2013 at any time prior to the close of business on the second business day immediately preceding the maturity date. The 4.0% Notes Due 2013 can be converted into the Company's American Depositary Shares (ADSs), each representing 50 ordinary shares of the Company, par value \$0.00001 per share, at an initial conversion rate of 59.0318 of the Company's ADSs per \$1,000 principal amount of 4.0% Notes Due 2013 (equivalent to an initial conversion price of \$16.94 per ADS). The conversion rate is subject to adjustment in some events but is not adjusted for any accrued and unpaid interest. In addition, following a make-whole fundamental change that occur prior to the maturity date or following the Company's delivery of a notice of a tax redemption, the Company will increase the conversion rate for a holder who elects to convert its notes in connection with such a corporate event or such tax redemption.

The holders may require the Company to repurchase all or portion of the 4.0% Notes Due 2013 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. In August 2011, the 4.0% Notes Due 2013 with an aggregate principal amount of \$320,000 were redeemed and the July 15, 2011 redemption right of the remaining Notes expired.

Proceeds to the Company were \$132,392,740, net of issuance costs of \$5,607,260, which were 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.

TRINA SOLAR LIMITED AND SUBSIDIARIES

11. CONVERTIBLE SENIOR NOTES

3.5% Convertible Senior Notes due 2019

In June 2014, the Company issued \$172,500,000 in aggregate principal amount of convertible senior notes due June 2019 (the *3.5% Notes Due 2019*). The *3.5% Notes Due 2019* bear interest at a rate of 3.5% per year, payable semiannually in arrears on June 15 and December 15 of each year, beginning on December 15, 2014. The *3.5% Notes Due 2019* mature on June 15, 2019, unless earlier redeemed, repurchased or converted.

Holder of the *3.5% Notes Due 2019* have the option to convert their *3.5% Notes Due 2019* at any time prior to the close of business on the second business day immediately preceding the maturity date. The *3.5% Notes Due 2019* can be converted into the Company's American Depositary Shares (*ADSs*), each representing 50 ordinary shares of the Company, par value \$0.00001 per share, at an initial conversion rate of 69.9301 of the Company's *ADSs* per \$1,000 principal amount of *3.5% Notes Due 2019* (equivalent to an initial conversion price of \$14.30 per *ADS*). The conversion rate is subject to adjustment in some events but is not adjusted for any accrued and unpaid interest. In addition, following a make-whole fundamental change that occur prior to the maturity date or following the Company's delivery of a notice of a tax redemption, the Company will increase the conversion rate for a holder who elects to convert its notes in connection with such a corporate event or such tax redemption.

Holder of the *3.5% Notes Due 2019* have the right to require the Company to repurchase for cash all or part of their *3.5% Notes Due 2019* on June 15, 2017 (the *repurchase date*) at a repurchase price equal to 100% of the principal amount of the *3.5% Notes Due 2019* to be repurchased, plus accrued and unpaid interest to, but excluding, the *repurchase date*. In addition, if the Company undergoes a fundamental change, holders may require the Company to repurchase for cash all or part of their notes at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but excluding, the *fundamental change repurchase date*.

The *3.5% Notes Due 2019* are the Company's senior unsecured obligations and rank equally with all of its existing and future senior unsecured indebtedness, which are effectively subordinated to all of the Company's existing and future secured indebtedness and all existing and future liabilities of the Company's subsidiaries, including trade payables.

In accordance with FASB ASC Topic 815-15 and Topic 470-20, the Company recorded the *3.5% Notes Due 2019* as a liability in their entirety, as the Company determined that the conversion feature and any other embedded feature did not need to be bifurcated and accounted for separately.

The net proceeds from the *3.5% Notes Due 2019* offering were \$167,310,648, after deducting debt issuance costs of \$5,189,352. Debt issuance costs are recorded as deferred assets and amortized as interest expenses, using the effective interest method, to June 15, 2017, the

repurchase date. Amortization expense for the issuance costs were \$826,079 and \$1,715,779 for the year ended December 31, 2014 and 2015, respectively. As of December 31, 2014 and 2015, the unamortized amount of the issuance costs were \$4,363,273 and \$2,647,494, respectively.

In connection with the offering, the Company also used \$52,311,578 of the net proceeds from the offering to purchase the zero-strike call options (the Call Options), covering 4,755,598 ADSs, with affiliates of the initial purchasers. The Call Options are intended to facilitate privately negotiated transactions by which investors in the 3.5% Notes Due 2019 will hedge their investment in the related notes. The default settlement method for the Call Options is share settlement, but the Company may elect cash settlement in some cases pursuant to the terms of the Call Options. In accordance with ASC Topic 815-40, the Call Options are accounted as a prepaid forward to purchase the Company's own shares and are classified in permanent equity at its fair value at inception, and presented as a reduction to equity in the consolidated balance sheet. At inception, the fair value of the Call Options were \$52,311,578. The shares underlying the Call Options are included in the basic and diluted EPS calculation.

TRINA SOLAR LIMITED AND SUBSIDIARIES

11. CONVERTIBLE SENIOR NOTES continued

4.0% Convertible Senior Notes due 2019

In October 2014, the Company issued \$115,000,000 in aggregate principal amount of convertible senior notes due 2019 (the 4.0% Notes Due 2019). The 4.0% Notes Due 2019 mature on October 15, 2019 and bear interest at a rate of 4.0% per annum, payable in arrears semi-annually on October 15 and April 15, beginning April 15, 2015.

Holders of the 4.0% Notes Due 2019 have the option to convert their 4.0% Notes Due 2019 at any time prior to the close of business on the second business day immediately preceding the maturity date. The 4.0% Notes Due 2019 can be converted into the Company's ADSs at an initial conversion rate of 68.0851 of the Company's ADSs per \$1,000 principal amount of 4.0% Notes Due 2019 (equivalent to an initial conversion price of \$14.69 per ADS). The conversion rate is subject to adjustment in some events but is not adjusted for any accrued and unpaid interest. In addition, following a make-whole fundamental change that occur prior to the maturity date or following the Company's delivery of a notice of a tax redemption, the Company will increase the conversion rate for a holder who elects to convert its notes in connection with such a corporate event or such tax redemption.

Holders of the 4.0% Notes Due 2019 have the right to require the Company to repurchase for cash all or part of their 4.0% Notes Due 2019 on October 15, 2017 at a repurchase price equal to 100% of the principal amount of the 4.0% Notes Due 2019 to be repurchased, plus accrued and unpaid interest to, but excluding, the repurchase date. In addition, if the Company undergoes a fundamental change, holders may require the Company to repurchase for cash all or part of their notes at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The 4.0% Notes Due 2019 are the Company's senior unsecured obligations and rank equally with all of its existing and future senior unsecured indebtedness, which are effectively subordinated to all of the Company's existing and future secured indebtedness and all existing and future liabilities of the Company's subsidiaries, including trade payables.

In accordance with FASB ASC Topic 815-15 and Topic 470-20, the Company recorded the 4.0% Notes Due 2019 as a liability in their entirety, as the Company determined that the conversion feature and any other embedded feature did not need to be bifurcated and accounted for separately.

The net proceeds from the 4.0% Notes Due 2019 offering were \$111,484,886, after deducting debt issuance costs of \$3,515,114.

Debt issuance costs are recorded as deferred assets and amortized as interest expenses, using the effective interest method, to October 15, 2017, the repurchase date. Amortization expense for the issuance costs were \$164,084 and \$1,135,012 for the year ended December 31, 2014 and 2015, respectively. As of December 31, 2014 and 2015, the unamortized amount of the issuance costs was \$3,351,030 and \$2,216,018, respectively.

Share Lending Arrangement

Concurrent with the offering of the 4.0% Notes Due 2019, the Company entered into share lending agreements with the affiliates of the initial purchasers of the 4.0% Notes Due 2019 (ADS Borrowers), pursuant to which the Company lent to the ADS Borrowers 391,489,250 ordinary shares (the Loaned Shares) at a price equal to par, or \$0.00001 per share (Share Lending Arrangement). The purpose of the Share Lending Arrangement is to facilitate privately negotiated transactions in which the ultimate holders of the 4.0% Notes Due 2019 may elect to hedge their investment in the related notes. As of December 31, 2014 and 2015, the outstanding number of Loaned Shares was 391,489,250 and 391,489,250, respectively.

TRINA SOLAR LIMITED AND SUBSIDIARIES

11. CONVERTIBLE SENIOR NOTES continued

4.0% Convertible Senior Notes due 2019 continued

The Loaned Shares must be returned to the Company by the earliest of (a) the maturity date of the 4.0% Notes Due 2019, October 15, 2019, (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 4.0% Notes Due 2019 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 initial purchasers or ADS Borrower upon the return of the Loaned Shares. The ADS Borrowers do not have the choice or option to pay cash in exchange for the return of the Loaned Shares.

No collateral is required to be posted for the Loaned Share. The initial purchasers are required to remit to the Company any dividends paid to the holders of the Loaned Shares. An ADS Borrower has the ability to vote without restriction. However, the ADS Borrowers have agreed not to vote on the Loaned Shares.

In accordance with FASB ASC Sub-topic 470-20, 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. As a result, additional debt issuance costs of \$3,092,580 were recorded on the issuance date with a corresponding increase to additional paid-in capital. The debt issuance costs are amortized to October 15, 2017, the repurchase date, using the effective interest method. Amortization expense for the issuance costs were \$140,984 and \$999,721 for the year ended December 31, 2014 and 2015, respectively. As of December 31, 2014 and 2015, the unamortized amount of the issuance costs associated with the Share Lending Arrangement was \$2,951,596 and \$1,951,875, respectively, and the fair value of the Share Lending Agreement was \$3,092,580 and \$ 1,939,820, respectively.

In accordance with ASC Topic 470-20, although legally issued, the Loaned Shares are excluded from basic and diluted earnings per share unless default of the Share-Lending Arrangement occurs, at which time the Loaned Shares would be included in the basic and diluted earnings per share calculation. As of December 31, 2014 and 2015, it is not probable that the ADS Borrower or the counterparty to the Share-Lending Arrangement will default.

12. ACCRUED WARRANTY COSTS

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

	2013	For the year ended December 31,	
	\$	2014	2015
	\$	\$	\$
Beginning balance	65,780,019	81,743,081	103,197,330
Warranty provision	16,587,011	21,657,158	28,100,542
Warranty costs incurred or claimed	(623,949)	(202,909)	(1,820,242)
Ending balance	81,743,081	103,197,330	129,477,630

13. ORDINARY SHARES

In June 2014, the Company issued in aggregate 10,120,000 ADSs, representing 506,000,000 ordinary shares, in a registered offering. The net proceeds from the offering was \$106,177,882, after deducting underwriting discounts and commissions and other issuance costs of \$5,142,118.

In October 2014, the Company issued in aggregate 2,504,000 ADSs, representing 125,200,000 ordinary shares, in a registered offering. The net proceeds from the offering was \$26,235,928, after deducting underwriting discounts and commissions and other issuance costs of \$3,186,072.

TRINA SOLAR LIMITED AND SUBSIDIARIES

14. 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 on straight-line basis over the grant recipients' requisite service period.

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

	2013	2014	2015
	\$	\$	\$
Share options	2,756,308	1,784,501	2,774,046
Restricted shares	2,911,538	2,615,228	3,233,038
Total share-based compensation expense	5,667,846	4,399,729	6,007,084

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.

For restricted shares granted during 2008 and 2014, 15%, 15%, 20%, 25% and 25% of the restricted shares shall vest at the first, second, third, fourth and fifth anniversary of the grant date, respectively. For restricted shares granted in 2015, 20%, 20%, 20%, 20% and 20% of the restricted shares shall vest at the first, second, third, fourth and fifth anniversary of the grant date, respectively.

TRINA SOLAR LIMITED AND SUBSIDIARIES

14. SHARE-BASED COMPENSATION continued

Restricted Shares 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, 2015	33,507,224	\$ 0.16
Granted	36,662,000	\$ 0.24
Vested	(11,125,312)	\$ 0.27
Forfeited	(2,856,779)	\$ 0.19
Non-vested at December 31, 2015	56,187,133	\$ 0.19

The fair value of the restricted shares was based on the quoted market price of the Company's shares on the date of grant.

As of December 31, 2015 there was \$10,475,820 of total unrecognized compensation cost related to unvested restricted shares, which is expected to be recognized over a weighted-average period of 3.70 years. The total fair value of shares vested during the years ended December 31, 2013, 2014, and 2015 was \$1,266,440, \$2,531,384 and \$2,668,946 respectively.

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 2013, 2014 and 2015, the Company granted 53,599,950, 36,897,900 and 17,750,100 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 AND SUBSIDIARIES

14. 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 December 31, 2014	129,010,112	\$ 0.20	3.13	
Granted	17,750,100	\$ 0.19		
Exercised	(12,080,500)	\$ 0.09		
Forfeited	(8,767,497)	\$ 0.24		
Options outstanding at December 31, 2015	125,912,215	\$ 0.21	2.48	7,405,005
Options vested or expected to vest at December 31, 2015	114,196,051	\$ 0.21	2.35	7,219,611
Options exercisable at December 31, 2015	71,985,198	\$ 0.23	1.76	5,281,056

Total intrinsic value of options exercised for the years ended December 31, 2013, 2014 and 2015 were \$1,041,126, \$2,688,889 and \$1,676,174 respectively. The weighted-average grant date fair value of options granted during the years ended December 31, 2013, 2014 and 2015 was \$0.09, \$0.11 and \$0.14 respectively, computed using the Black-Scholes-Merton closed-form option valuation model and using the following weighted average assumptions:

	2013	2014	2015
Risk free rate of return	0.39%	0.80%	0.90%
Expected term	3.50	3.50	3.50
Volatility ratio	74.51%	79.26%	73.97%
Dividend yield			

The Company estimated the expected term, 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 term 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 term due to the limited period of time that has elapsed since its first option grant.

The Company estimated the expected volatility based 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 rate of return.

As of December 31, 2015, the Company had \$3,237,630 of unrecognized share-based compensation cost related to unvested share options, which it expects to recognize over a weighted-average period of 1.68 years.

TRINA SOLAR LIMITED AND SUBSIDIARIES

15. INCOME TAXES

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, Trina Solar (Hong Kong) Enterprise Limited (THK) was subject to Hong Kong profit tax at a rate of 16.5% in 2013, 2014 and 2015. No Hong Kong profit tax has been provided as THK 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) was subject to Singapore profit tax at a rate of 17% in 2013, 2014 and 2015, respectively. In addition, the Company's fully-owned subsidiary, Trina Solar Energy Development Pte. Ltd. (TED) was subject to a preferential Singapore profit tax at an effective rate of 5% in 2013, 2014 and 2015, respectively.

United States

The Company's subsidiaries incorporated in the United States were subject to United States income tax at a combined federal and state tax rate of 40% in 2013, 2014 and 2015, respectively.

Japan

The Company's fully-owned subsidiary, Trina Solar (Japan) Limited (TJP) was subject to Japan profit tax at a rate of 40% in 2013, 41% in 2014 and 40% in 2015, respectively.

Germany

The Company's fully owned subsidiary, Trina Solar (Germany) GmbH (TGM) was subject to Germany profit tax at a rate of 32.9% in 2013 and a rate of 27.38% in 2014 and 2015, respectively.

TRINA SOLAR LIMITED AND SUBSIDIARIES

15. INCOME TAXES continued

PRC

Under PRC's Enterprise Income Tax Law (EIT Law), the statutory income tax rate is 25%, and the EIT rate shall be reduced to 15% for state-encouraged High and New Technology Enterprises (HNTE). HNTE is valid for three years from the date of authorization. The Company's PRC subsidiaries are subject to income tax at 25%, unless otherwise specified. Trina China first obtained a HNTE certificate in 2008 and began to enjoy the preferential tax rate. In 2014, Trina China renewed the HNTE certificate and therefore currently is subject to income tax rate at 15% from 2014 to 2016. TST obtained a HNTE certificate in 2011 and began to enjoy the preferential tax rate. In 2014, TST renewed the HNTE certificate and therefore is subject to income tax rate at 15% from 2014 to 2016.

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 (\$15,399) 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 2010 through 2015 on non-transfer pricing matters, and from 2005 through 2015 on transfer pricing matters.

As of January 1, 2015 and for the year ended December 31, 2015, the Company has no significant unrecognized tax benefits relating to uncertain tax positions. Also, the Company does not expect that the amount of unrecognized tax benefits will increase significantly within the next 12 months.

The operating results before income tax and the provision for income taxes by tax jurisdictions for the years ended December 31, 2013, 2014 and 2015 is as follows:

	2013	Years ended December 31,	
	\$	2014	2015
	\$	\$	\$
(Loss) income before income taxes:			
PRC	(42,539,327)	115,838,449	303,766,414
Switzerland	(30,799,509)	1,252,724	(340,119)
United States	5,798,384	25,056,853	(20,710,142)
Other jurisdictions	(17,725,779)	(65,400,303)	(166,923,770)
Total (loss) income before income taxes	(85,266,231)	76,747,723	115,792,383

Current tax expense (benefit):

Edgar Filing: Trina Solar LTD - Form 20-F

PRC	149,516	3,329,076	50,469,068
Switzerland	4,441,146		(3,061,185)
United States	(2,370,118)	(13,470)	
Other jurisdictions	2,387,945	(6,411,179)	(22,597,107)
Total current tax expense (benefit)	4,608,489	(3,095,573)	24,810,776
Deferred tax (benefit) expense:			
PRC	(20,077,224)	27,288,797	2,932,709
Switzerland	(1,230,256)	(3,307)	
United States		(6,131,540)	6,131,540
Other jurisdictions	3,668,600	(2,570,304)	(4,429,253)
Total deferred tax (benefit) expense	(17,638,880)	18,583,646	4,634,996
Total income taxes (benefit) expense	(13,030,391)	15,488,073	29,445,772

TRINA SOLAR LIMITED AND SUBSIDIARIES

15. INCOME TAXES continued

A reconciliation between the PRC statutory income tax rate of 25% and the effective income tax rate computed by income tax expense (benefit) and earnings (loss) before income taxes reported in the consolidated statements of operations is as follows:

	Years ended December 31,		
	2013	2014	2015
PRC statutory enterprise income tax rate	25.0%	25.0%	25.0%
Tax rate differential for entities in non-PRC jurisdictions	(9.1)%	3.8%	(7.1)%
PRC tax rate differential, preferential rate	(2.6)%	(9.4)%	(9.4)%
Change in tax rate	0.3%	46.3%	(0.8)%
Tax effect of permanent differences	(2.1)%	(1.8)%	(0.4)%
Change in valuation allowance	3.8%	(43.3)%	18.2%
Others		(0.4)%	(0.1)%
	15.3%	20.2%	25.4%

TRINA SOLAR LIMITED AND SUBSIDIARIES

15. INCOME TAXES continued

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

	Years ended December 31,	
	2014	2015
	\$	\$
Bad debts provision	10,977,413	10,077,725
Accrued expenses	10,190,820	16,729,794
Government subsidy	2,819,480	2,688,402
Inventory write-down	6,110,751	3,978,548
Advance to suppliers provision	2,795,907	1,589,115
Warranty provision	15,481,032	19,847,812
Net operating loss carryforwards	22,263,085	31,470,838
Others	5,290,721	6,512,622
Total gross deferred tax assets	75,929,209	92,894,856
Valuation allowance on deferred tax assets	(19,250,271)	(40,363,192)
Deferred tax assets, net of valuation allowance	56,678,938	52,531,664
Deferred tax liabilities:		
Unrealized foreign exchange gain	(1,289,029)	(342,668)
Property, plant and equipment	(15,028,011)	(17,873,834)
Project assets held for development and sale	(1,554,230)	
Total deferred tax liabilities	(17,871,270)	(18,216,502)
Net deferred tax assets	38,807,668	34,315,162
Analysis as:		
Current deferred tax assets	25,701,241	18,237,155
Noncurrent deferred tax assets	30,977,697	34,294,509
Current deferred tax liabilities, included in accrued expenses and other current liabilities	(2,843,259)	(2,197,781)
Noncurrent deferred tax liabilities	(15,028,011)	(16,018,721)
Total	38,807,668	34,315,162

TRINA SOLAR LIMITED AND SUBSIDIARIES

15. INCOME TAXES continued

The following table presents the movement of the valuation allowance for deferred tax assets:

	2013	At December 31, 2014	2015
	\$	\$	\$
Balance, beginning of the year	55,702,812	52,475,082	19,250,271
(Deduction) addition during the year	(3,227,730)	(33,224,811)	21,112,921
Balance, end of the year	52,475,082	19,250,271	40,363,192

In assessing the realizability of deferred income tax assets, management considers whether it is more likely than not that some portion or all of the deferred income tax assets will not be realized. As of December 31, 2015, the valuation allowance of \$40,363,192 was related to the deferred income tax assets of certain Company's subsidiaries in Europe, United States and Japan. The increase in the valuation allowance during 2015 was primarily due to valuation allowance provided on the deferred income tax assets of the Company's subsidiaries in United States due to losses incurred by these entities resulting from anti-dumping and anti-subsidy duties. The ultimate realization of deferred income tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible or utilized. Management considers the scheduled reversal of deferred income tax liability, projected future taxable income and tax planning strategies in making this assessment.

Based upon the level of historical taxable income and projections for future taxable income over the periods in which the deferred income tax assets are deductible or can be utilized, management believes it is more likely than not that the deferred tax asset, net of the valuation allowance as of December 31, 2015, will be realized. However, the amount of the deferred tax assets considered realizable could be reduced in the near term if estimates of future taxable income during the carryforward period are reduced.

During 2014, valuation allowance for deferred tax assets on net operating losses (NOL) of \$27,407,428 were reversed as those NOLs were utilized by the respective subsidiaries. In addition, management has reversed valuation allowance for deferred income tax assets of these subsidiaries by \$5,617,066 based upon the estimated generation of future taxable income during the periods in which the underlying temporary differences become deductible or utilized.

The net operating losses carryforwards of the Company's PRC subsidiaries amounted to \$ 3,116,878 as of December 31, 2015, of which \$1,315,511 and 1,801,367 will expire if unused by December 31, 2019 and 2020, respectively. The net operating losses carryforwards of the Company's subsidiary in Switzerland amounted to \$135,450,307 as of December 31, 2015, of which \$40,660,540, \$76,829,178, \$5,718,159, \$1,158,554 and \$11,083,815 will expire if unused by December 31, 2018, 2019, 2020, 2021 and 2022, respectively.

Edgar Filing: Trina Solar LTD - Form 20-F

The EIT law and its relevant regulations impose a withholding tax at 10%, unless reduced by a tax treaty or agreement, for dividends distributed by a PRC-resident enterprise to its non-PRC-resident corporate investor for earnings generated beginning on January 1, 2008. Undistributed earnings generated prior to January 1, 2008 are exempt from such withholding tax. The Company has not recognized a deferred tax liability of \$53.7 million for the undistributed earnings of approximately \$537.1 million of the PRC-resident enterprise as of December 31, 2015, as the Company plans to reinvest these earnings indefinitely in the PRC.

The Company has considered temporary differences on the book to tax differences pertaining to all investment in subsidiaries including the determination of the indefinite reinvestment assertion that would apply to each foreign subsidiary. The Company evaluated each entity's historical, current business environment and plans to indefinitely reinvest all earnings accumulated in its respective jurisdiction for purpose of future business expansion.

The Company has not recognized a deferred tax liability of \$53.7 million for the undistributed earnings of approximately \$537.1 million of the PRC-resident enterprise as of December 31, 2015, as the Company plans to reinvest these earnings indefinitely in the PRC.

16. DISTRIBUTION OF PROFIT

Pursuant to the law of the PRC on enterprises with Wholly Owned Foreign Investment, the Company's subsidiaries in the PRC are required to allocate at least 10% of their after tax profits, after making good of accumulated losses as reported in their PRC statutory financial statements, to the general reserve fund and have the right to discontinue allocations to the general reserve fund if the balance of such reserve has reached 50% of their registered capital. The general reserves are not available for distribution to the shareholders (except in liquidation) and may not be transferred in the form of loans, advances, or cash dividend.

As a result of these PRC laws and regulations, the Company's subsidiary in the PRC 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 \$926,953,793 and \$1,203,486,652 as of December 31, 2014 and 2015, respectively, including non-distributable general reserve fund of \$49,713,298 and \$58,634,694 as of December 31, 2014 and 2015, respectively.

The amount that is not subject to restrictions, and which may be transferred from the Company's subsidiaries in the PRC in the form of dividends, loans or advances, is \$213,269,385 and \$468,338,971 as of December 31, 2014 and 2015, respectively.

TRINA SOLAR LIMITED AND SUBSIDIARIES

17. RELATED PARTY TRANSACTIONS AND BALANCES

Related party balances

As of December 31, 2014 and 2015, the amounts due from related parties of \$13,374,246 and \$13,485,381, respectively, represent receivables from Changzhou Jiuling New Energy S&T Co., Ltd. (Jiuling), an entity controlled by Mr. Weizhong Wu, who is the brother in law of Mr. Jifan Gao, Trina's CEO. The receivables arose from the Company's sales of solar module to Jiuling. As of March 31, 2016, the Company has collected all outstanding receivables from Jiuling.

As of December 31, 2014 and 2015, advance to related parties of \$6,112,110 and \$1,878,773, respectively, represents the prepayment to Changzhou Youze S&T CO., Ltd. (Youze), an entity controlled by Mr. Weizhong Wu, for wafer slicing service to be delivered in the future.

As of December 31, 2014 and 2015, the amounts due to related parties of \$8,088,550 and \$17,528,730, respectively, include payable to Youze arising from the Company's purchase of wafers, payable due to Jiuling, arising from the Company's purchase of wafers, packing materials and spare parts, payable due to Changzhou Hesai Photovoltaic Materials Co. Ltd. (Hesai) arising from the Company's purchase of tinned ribbons, payable due to Changzhou Youze Hezhong Photoelectric Co Ltd (Hezhong) arising from the Company's purchase of processing materials and payable due to Changzhou Junhe Mechanical Co., Ltd. (Junhe) arising from the Company's purchase of cleansers and equipment maintenance service. Junhe is an entity controlled by Mr. Weifeng Wu, who is the brother in law of Mr. Jifan Gao, Trina's CEO. Hezhong is an entity held by Mr. Weizhong Wu, Mr. Weifeng Wu and Ms Chunyan Wu, who is the wife of Mr. Jifan Gao. Hesai is an entity controlled by Mr. Jifan Gao, Trina's CEO and his wife.

Related party transactions

In 2013, 2014 and 2015, the Company purchased wafers for a total price of RMB 89,207,627 (\$14,450,766), RMB 24,974,373 (\$4,068,502) and RMB 55,536,476 (\$8,915,133), respectively, from Youze. The transactions were approved by the audit committee.

In 2014 and 2015, the Company purchased wafers, cells and other materials for a total price of RMB 13,857,069 (\$2,252,473) and RMB 10,901,676 (\$1,678,834), respectively, from Jiuling. The transactions were approved by the audit committee.

In 2015, the Company purchased other materials for a total price of RMB 61,454,081 (\$9,463,792) from Hesai, Junhe and Hezhong. The transactions were approved by the audit committee.

Edgar Filing: Trina Solar LTD - Form 20-F

In 2013, 2014 and 2015, the Company sold ingots for a total price of RMB 23,440,335 (\$3,762,160), nil and nil, respectively, to Youze. The transactions were approved by the audit committee.

In 2014 and 2015, the Company sold modules for a total price of RMB 104,770,386 (\$17,066,614) and RMB 267,300,928 (\$42,860,016), respectively, to Jiuling. The transactions were approved by the audit committee.

In 2015, the Company sold wafers and polysilicons for a total price of RMB 9,340,814 (\$1,507,741) to Jiuling, Youze and Jiangsu Trina Solar Storage Co. Ltd. Jiangsu Trina Solar Storage Co. Ltd. is an entity controlled by Mr. Jifan Gao. The transactions were approved by the audit committee.

In 2015, the Company sold modules for a total price of JPY 211,309,545 (\$1,736,171) to AHT Co., Ltd., an entity controlled by Mr. Weizhong Wu. The transactions were approved by the audit committee.

In 2013, 2014 and 2015, the Company incurred costs of RMB 200,985,124 (\$32,322,658), RMB 244,434,301 (\$39,766,273) and RMB 304,977,367 (\$49,139,874) with respect to the wafer slicing service provided by Youze. In 2014, the Company entered into a long-term agreement with Youze for the wafer slicing service from July 2014 to June 2016 and made a prepayment of RMB 50,000,000 (\$8,126,381). The prepayment balance was RMB 37,400,000 (\$ 6,112,110) and RMB 12,200,000 (\$1,878,773), respectively, as of December 31, 2014 and 2015. The transactions were approved by the audit committee.

In 2013, 2014 and 2015, the Company received equipment maintenance services for a total price of RMB 3,029,559 (\$487,808), RMB 2,744,009 (\$446,844) and RMB 2,766,398 (\$426,019) from Junhe. The transactions were approved by the audit committee.

In 2015, the Company received logistics and shipping services of RMB 18,575,387 (\$2,945,529) from Jiangsu Youze International Logistics Co., Ltd, an entity controlled by Mr. Weizhong Wu. The transactions were approved by the audit committee.

The Company believes the prices paid for products or services provided by related parties approximate the purchase price paid to third party vendors and the sale price of the products sold to the related parties were at prices similar to the sales price sold to third party customers.

TRINA SOLAR LIMITED AND SUBSIDIARIES

18. COMMITMENTS AND CONTINGENCIES

a) Capital commitments

As of December 31, 2015, the Company's commitments to purchase property, plant and equipment and prepaid land use right associated with the Company's production of solar wafers, cells and modules and development and construction of project assets is approximately \$291 million.

b) Materials purchase commitments

In order to better manage the Company's unit costs and to secure adequate and timely supply of polysilicon and wafer materials, the Company entered into a number of multi-year supply agreements with periods from 2008 through 2020 for quantities that are expected to meet the Company's anticipated production needs. Pursuant to the original terms of these agreements, the Company was required to purchase fixed or minimum quantities of polysilicon and wafer at fixed prices. During 2012, the Company renegotiated and revised the pricing terms of the supply agreements with these suppliers. Under the terms of the revised supply agreements, the Company commits to purchase the minimum quantities at the prevailing market prices at the time of the purchase during 2015 to 2020 as follows:

Year ending December 31	Wafer (Piece in Million)	Polysilicon (Metric Ton)
2016	625	2,650
2017	625	2,650
2018	625	2,650
2019	625	2,650
2020	625	2,650
Total	3,125	13,250

In addition, in order to better manage the Company's unit costs of production, the Company also entered into a long-term wafer slicing service agreement with Youze, a related party, for periods from 2014 through 2016. The Company commits to procure the minimum quantities of wafer which is processed by Youze, at the prevailing market prices at the time of the purchase till the year ended December 31, 2016 as follows:

Year ending December 31	(Megawatts)
2016	600
Total	600

TRINA SOLAR LIMITED AND SUBSIDIARIES

b) Materials purchase commitments continued

The Company also renegotiated with a supplier during 2012 on the pricing terms of take-or-pay contracts for the remaining procurement periods from 2015 to 2018. Pursuant to the revised contract terms, the Company is obligated to purchase fixed quantities of polysilicon materials at a range of price subject to negotiation. To the extent that the Company fails to take delivery of the polysilicon materials based on the revised term for three consecutive months, the revised pricing terms are nullified, and the take-or-pay contracts will then be subject to the original fixed price terms. As of December 31, 2015, the amount of the fixed and determinable portion of the obligation with respect to these contracts based on the minimum price of the range is as follows:

Year ending December 31	\$ in million
2016	34.4
2017	32.8
2018	32.0
Total	99.2

The Company's total purchase under the above take-or-pay contracts was \$63.6 million and \$78.5 million, respectively, in 2014 and 2015. At the time of these purchases, the price per unit approximated the prevailing market price of the polysilicon materials in both 2014 and 2015.

The Company has made advances to suppliers where the Company has committed to purchase minimum quantities under some of the supply agreements. The Company does not require collateral or other security against its advances to related or third party suppliers. As a result, the Company's claims for such prepayments would rank only as an unsecured claim, which exposes the Company to the credit risks of the suppliers. Also, the Company may not be able to recover all unutilized advances to suppliers if the Company does not purchase the minimum quantities or is unable to negotiate or renegotiate acceptable quantities, prices and delivery terms with these suppliers.

c) Capital lease obligation

The company had several capital leases covering certain machinery and equipment that expire at various dates during the next five years. Future minimum capital lease payments are as follows:

Years Ending December 31,	\$
2016	13,009,660
2017	10,985,094
2018	2,814,679
2019	2,814,679

Edgar Filing: Trina Solar LTD - Form 20-F

2020	7,881,085
Total minimum lease payments	37,505,197
Less amounts representing interest	(4,551,564)
Present value of total minimum capital lease payments (at rates ranging from 4.68% to 7.41%)	32,953,633
Less: current portion of capital lease obligation	11,279,996
Capital lease obligation, excluding current portion	21,673,637

F - 44

TRINA SOLAR LIMITED AND SUBSIDIARIES

18. COMMITMENTS AND CONTINGENCIES continued

e) Contingencies continued

d) Operating lease commitments

The Company entered into operating leases principally for its offices in the PRC, Europe and the US. The Company's lease expense was \$4,166,690, \$4,012,062 and \$5,203,951 for the years ended December 31, 2013, 2014 and 2015, respectively.

Future minimum operating lease payments are as follows:

Year ending December 31	\$
2016	3,896,144
2017	2,199,024
2018	1,315,126
2019	1,103,474
2020	930,363
Thereafter	5,131,207
Total	14,575,338

e) Contingencies

On October 11, 2012, the trustee of Solyndra LLC, a manufacturer of solar panels based in California, filed a lawsuit against the Company, including its subsidiary Trina Solar (U.S.), Inc., and other Chinese manufacturers of photovoltaic solar panels in the U.S. District Court in California. The plaintiff has asserted antitrust and related state-law claims against the defendants in this lawsuit. The plaintiff's complaint alleges that defendants have violated Section 1 of the Sherman Antitrust Act by conspiring among each other and with additional co-conspirators to fix prices of solar panels by dumping products in the United States and to destroy fair competition in the U.S. market. The plaintiff similarly alleges conspiracy to fix prices and predatory pricing under California's Cartwright Act and Unfair Practices Act. In addition, the plaintiff has brought state-law claims of tortious interference with existing agreements and tortious interference with prospective economic advantage, alleging that the defendants interfered with Solyndra's existing agreements with its customers by selling their products to Solyndra's customers at below-cost prices. On November 17, 2015, the Company entered into a settlement agreement with Solyndra, pursuant to which the Company paid \$45.0 million on December 31, 2015. The Company and Solyndra have agreed to a release of all claims and a dismissal with prejudice of the claims against the Company, and the Company has not admitted to any wrongdoing or any validity to the allegations made against it in the lawsuit. On January 4, 2016, the district court dismissed Solyndra's claims against the Company.

Edgar Filing: Trina Solar LTD - Form 20-F

On October 4, 2013, the liquidating trustee for Energy Conversion Devices (ECD) filed an antitrust and unfair trade practice lawsuit against Trina Solar and other China-based solar manufacturers in the U.S. District Court for the Eastern District of Michigan. The complaint is substantially similar to the complaint filed by Solyndra 's liquidating trustee against the same defendants a year earlier in the Northern District of California. The plaintiff 's complaint alleges that defendants have violated Section 1 of the Sherman Antitrust Act by conspiring among each other and with additional co-conspirators to fix prices of solar panels by dumping products in the United States and to destroy fair competition in the U.S. market. The plaintiff similarly alleges conspiracy to fix prices and predatory pricing under Michigan 's Antitrust Reform Act. The defendants filed a motion to dismiss the complaint in its entirety on April 18, 2014. The district court granted defendants ' motion to dismiss on October 31, 2014, and later denied plaintiff 's motion for reconsideration and motion to amend its complaint. ECD appealed the district court 's rulings to the United States Court of Appeals for the Sixth Circuit. ECD filed its appellate brief on December 17, 2015, and filed unredacted form of its appellate brief on January 29, 2016. Defendants-Appellees, including the Company, filed a response brief on March 2, 2016. ECD 's reply is due on April 4, 2016.

As of April 19, 2016, it is difficult to fully evaluate the claims and determine the likelihood of an unfavorable outcome or provide an estimate of the amount of any potential loss because (i) this matter was at its early stages of the proceeding; (ii) it is uncertain how the United States Court of Appeals for the Sixth Circuit will rule on the plaintiff 's appellate brief; (iii) there is a lack of any discovery related specially to the Energy Conversion Devices Matter, including any discovery of Energy Conversion Devices itself; and (iv) there is a lack of any expert reports related to damages in the Energy Conversion Devices. As a result, the Company believes that information available to the Company did not indicate that it is probable that a loss had been incurred, or the amount of the loss can be reasonably estimated. Accordingly, no accrual was made as of December 31, 2015. In addition, given the aforementioned difficulties, the Company believes it is impossible to estimate any possible loss or range of losses for disclosure purpose.

TRINA SOLAR LIMITED AND SUBSIDIARIES

19. SEGMENT INFORMATION

Reportable segment

The Company's chief operating decision maker (CODM) is the chief executive officer of the Company. The CODM evaluates performance based on profit or loss from operations before income taxes. In 2014, the Company's solar power projects segment, which is engaged in the construction, sale and operation of solar power projects, met the criteria of quantitative threshold according to ASC 280-10-50-10. Therefore, beginning in 2014, the Company reports its financial performance based on the two segments: manufacturing segment and solar power projects segment. The following segment information has been presented on this basis for all periods presented.

The manufacturing segment 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 solar power projects segment develops and constructs solar energy project systems that will be sold to third party buyers upon completion. This segment also operates solar power project systems under PPAs with utility or grid operators for which the segment derives revenue from the sale of electricity. The solar power projects segment also provides solar power project services or EPC services that integrate the design, installation, financing, monitoring, operations and maintenance portions of the downstream solar market for customers.

The following information has been presented on this basis for all periods presented.

The basis for attributing revenue from external customers to individual countries is the customers' country of incorporation.

TRINA SOLAR LIMITED AND SUBSIDIARIES

19. SEGMENT INFORMATION - continued

The following table set forth the results of operations of the Company's segments and reconciliation with the Company's consolidated results of operations for year ended Dec 31, 2013, 2014 and 2015:

	2013 \$	2014 \$	2015 \$
Net sales:			
Manufacturing	1,796,330,550	2,402,964,217	3,389,365,841
Solar power projects	16,875,491	138,974,752	168,730,989
Intersegment elimination(1)	(38,235,418)	(255,819,590)	(522,584,927)
Consolidated net sales	1,774,970,623	2,286,119,379	3,035,511,903
Revenue with other segment:			
Manufacturing	38,235,418	255,819,590	522,584,927
Solar power projects			
Total revenue within segments(2)	38,235,418	255,819,590	522,584,927
Gross Profit(Loss):			
Manufacturing	228,506,902	372,204,110	618,814,729
Solar power projects	(10,313,000)	29,927,952	81,088,461
Intersegment elimination(3)		(16,560,356)	(133,269,865)
Consolidated gross profit	218,193,902	385,571,706	566,633,325
Depreciation and amortization:			
Manufacturing	115,353,638	110,410,566	117,549,686
Solar power projects	1,434,407	2,547,110	17,437,107
Consolidated depreciation and amortization	116,788,045	112,957,676	134,986,793
Interest income:			
Manufacturing	3,888,514	2,318,578	1,163,127
Solar power projects	69,951	474,871	1,698,774
Consolidated interest income	3,958,465	2,793,449	2,861,901
Interest expense:			
Manufacturing	48,158,258	34,269,302	50,843,960
Solar power projects	286,597	617,089	1,407,759
Consolidated interest expense	48,444,855	34,886,391	52,251,719
Equity in (loss) income of equity method investees			
Manufacturing	(746,434)	(198,148)	1,741,279
Solar power projects			
Consolidated equity in (loss) income of equity method investees	(746,434)	(198,148)	1,741,279
(Loss) income before income taxes :			
Manufacturing	(67,179,476)	86,171,944	206,472,949
Solar power projects	(18,086,755)	7,136,135	39,281,290
Intersegment elimination(4)		(16,560,356)	(129,961,856)
Consolidated (loss) income before income taxes	(85,266,231)	76,747,723	115,792,383

-
- (1) Represents revenues generated from the sales of modules from the manufacturing segment to the solar power projects segment, which are eliminated to prevent double-recording such revenue.
 - (2) Represents intersegment sales between manufacturing segment and solar power projects segment.
 - (3) Represents unrealized profit generated from the sales of modules from the manufacturing segment to the solar power projects segment, which are eliminated to prevent double-recording such profit.
 - (4) Represents unrealized profit generated from the sales of modules from the manufacturing segment to the solar power projects segment and personnel expenses charged from the manufacturing segment to the solar power projects segment.

TRINA SOLAR LIMITED AND SUBSIDIARIES

19. SEGMENT INFORMATION continued

	2013 \$	2014 \$	2015 \$
Expenditure for additions to long-lived assets			
Manufacturing	59,486,690	130,477,581	327,044,399
Solar power projects	41,057,009	340,660,329	439,497,194
Intersegment elimination			
Consolidated expenditure for additions to long-lived assets	100,543,699	471,137,910	766,541,593

Segment assets

	As of December 31,	
	2014 \$	2015 \$
Investment in equity affiliates		
Manufacturing	25,568,061	27,781,818
Solar power projects		
Intersegment elimination		
Consolidated investment in equity affiliates	25,568,061	27,781,818
Total assets		
Manufacturing	3,149,273,358	6,636,310,240
Solar power projects	581,951,615	3,158,454,186
Intersegment elimination(1)	(531,659,163)	(5,100,810,019)
Consolidated total assets	3,199,565,810	4,693,954,407

(1) Consists primarily of elimination of the manufacturing segment's equity interest in the solar power projects segment and intersegment balances.

TRINA SOLAR LIMITED AND SUBSIDIARIES

19. SEGMENT INFORMATION - continued

Geographic segment

The following table summarizes the Company's net sales by geographic locations:

	Years ended December 31,		
	2013	2014	2015
	\$	\$	\$
Europe:			
- United Kingdom	211,643,719	133,219,284	159,236,306
- Germany	184,119,841	23,171,814	26,123,420
- Spain	40,628,366	2,764,543	71,092,969
- Italy	28,309,524	7,580,206	12,687,223
- France	19,516,030	18,343,666	23,242,856
- Others	64,339,439	34,211,717	39,297,773
Europe Total	548,556,919	219,291,230	331,680,547
China	591,070,936	747,810,766	864,108,403
United States	302,269,459	634,445,686	1,053,637,162
Japan	147,402,872	457,901,483	345,567,300
India	79,105,375	67,359,182	242,950,166
Others	106,565,062	159,311,032	197,568,325
Total net sales	1,774,970,623	2,286,119,379	3,035,511,903

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

TRINA SOLAR LIMITED AND SUBSIDIARIES

20. MAJOR CUSTOMERS AND SUPPLIERS

In 2013 and 2015, there was no customer which contributed more than 10% of net sale. In 2014, the Company sold solar modules to a customer which contributed more than 10% of total net sale, and the sales is included in the Company's manufacturing segment. The following table summarizes the sales to the customer:

	Years ended December 31,		
	2013	2014	2015
	\$	\$	\$
Company A	86,116,773	301,678,854	175,456,849

The following table summarizes advances to suppliers which exceeded 10% of total advances to suppliers:

	Advance to suppliers	
	December 31,	
	2014	2015
	\$	\$
Company I	18,725,689	14,481,238
Company II		12,627,165
Company III	11,500,629	
Company IV	14,603,391	

21. SUBSEQUENT EVENTS

In December 2015, Trina Solar (Netherlands) Real Estate B.V. and Trina Solar (Netherlands) B.V., two subsidiaries of the Company entered into asset purchase agreements with Solland Solar Real Estate B.V. and Solland Solar Cells BV (Solland Solar) to acquire the real estate, machines, equipment and inventories from Solland Solar, a solar cell manufacturing company with approximately 200 MW solar cell manufacturing capacity in Netherlands, for a total consideration of EUR 6.4 million (\$7.0 million). As of December 31, 2015, the Company has made prepayment of EUR 6.7 million (\$7.3 million). The transaction was consummated on February 19, 2016.

On March 28, 2016, Trina Solar Science & Technology (Thailand) Ltd. (TTL) entered into a syndicated loan arrangement with Siam Commercial Bank (SCB) and China Minsheng Banking Corporation Ltd (CMBC) of US\$ 100 million to finance the capital expenditure of the Thailand factory. The facility matures in June 2020 and is guaranteed by TSL, pledged by the shares of TTL held by Trina Singapore and secured by all the plant, property and equipment of TTL. In addition, according to the agreement, the Company has been granted a line of credit by SCB for THB 1.53 billion (\$42.8 million), which will be used for working capital of the Thailand factory.

Schedule I

TRINA SOLAR LIMITED AND SUBSIDIARIES

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. The restricted net assets of Trina's consolidated subsidiaries not available for distribution to Trina as of December 31, 2014 and 2015 were \$926,953,793 and \$1,203,486,652, respectively, which 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

Trina Solar Limited ("TSL") was the guarantor for several of its subsidiaries' bank borrowings or facilities. The balance of the relevant bank borrowings amounted to \$1,199 million as of December 31, 2015 (see Note 10).

TRINA SOLAR LIMITED AND SUBSIDIARIES

BALANCE SHEETS

(Amount in U.S. dollars)

	As of December 31,	
	2014	2015
ASSETS		
Current assets:		
Cash	3,166,158	472,446
Other current assets	3,870,069	4,117,220
Total current assets	7,036,227	4,589,666
Amount due from group companies	383,443,230	373,515,294
Investment in subsidiaries	870,074,042	967,131,035
Other noncurrent assets	7,024,961	2,949,967
TOTAL ASSETS	1,267,578,460	1,348,185,962
Current liabilities:		
Accrued expenses and other current liabilities	7,234,491	9,949,759
Total current liabilities	7,234,491	9,949,759
Convertible senior notes	287,500,000	287,500,000
Total liabilities	294,734,491	297,449,759
Equity:		
Ordinary shares (\$0.00001 par value; 73,000,000,000 shares authorized, 4,261,339,014 and 4,284,544,826 shares issued and outstanding as of December 31, 2014 and 2015, respectively)	42,613	42,845
Additional paid-in capital	752,384,179	759,493,276
Retained earnings	202,706,896	279,221,831
Accumulated other comprehensive income	17,710,281	11,978,251
Total equity	972,843,969	1,050,736,203
TOTAL LIABILITIES AND EQUITY	1,267,578,460	1,348,185,962

TRINA SOLAR LIMITED AND SUBSIDIARIES

STATEMENTS OF OPERATIONS

(Amount in U.S. dollars)

	2013	Year ended December 31, 2014	2015
Net sales			
Operating expenses			
Selling expenses	705,839	579,810	650,272
General and administrative expenses	6,734,756	7,562,085	15,310,879
Research and development expenses	331,032	316,555	415,891
Total operating expenses	7,771,627	8,458,450	16,377,042
Loss from operations	(7,771,627)	(8,458,450)	(16,377,042)
Interest expenses			
Interest expense	(2,344,317)	(6,186,962)	(14,484,249)
Interest income	380,918	4,072,473	5,884,060
Equity in (loss) income of subsidiaries	(63,625,771)	71,588,194	102,789,023
Other (loss) income, net	1,334,862	(1,677,570)	(1,296,857)
Income (loss) before income taxes	(72,025,935)	59,337,685	76,514,935
Income tax expense			
Net (loss) income	(72,025,935)	59,337,685	76,514,935

STATEMENTS OF COMPREHENSIVE INCOME

(Amount in U.S. dollars)

	2013	Year ended December 31, 2014	2015
Net (loss) income	(72,025,935)	59,337,685	76,514,935
Other comprehensive income (loss)			
Foreign currency translation adjustments, net of nil tax	6,196,609	2,307,350	(5,732,030)
Comprehensive (loss) income	(65,829,326)	61,645,035	70,782,905

TRINA SOLAR LIMITED AND SUBSIDIARIES

STATEMENTS OF CASH FLOWS

(Amount in U.S. dollars)

Operating activities:			
Net (loss) income	(72,025,935)	59,337,685	76,514,935
Adjustments to reconcile net (loss) income to net cash used in operating activities:			
Equity in loss (income) of subsidiaries	63,625,771	(71,588,194)	(102,789,023)
Gain on repurchase of convertible senior notes	(282,625)		
Share-based compensation	5,667,846	4,399,729	6,007,084
Amortization of convertible senior notes issuance costs		1,131,147	3,850,512
Changes in operating assets and liabilities:			
Other current assets	91	97	(22,558)
Other noncurrent assets			
Accrued expenses and other current liabilities	(1,633,225)	1,776,708	2,715,268
Net cash used in operating activities	(4,648,077)	(4,942,828)	(13,723,782)
Investing activities:			
Repayment of amounts due from group companies	83,833,829		9,927,936
Funds transferred to group companies		(354,745,383)	
Net cash provided by (used in) investing activities	83,833,829	(354,745,383)	9,927,936
Financing activities:			
Proceeds from issuance of ordinary shares pursuant to share option plan	922,556	1,408,184	1,102,134
Proceeds from issuance of convertible notes		287,500,000	
Debt issuance costs		(8,704,466)	
Payments for repurchase of convertible senior notes	(26,292,375)		
Redemption of convertible senior notes	(57,007,000)		
Proceeds from issuance of ordinary shares, net of issuance costs		132,413,810	
Payment for call options in connection with convertible senior notes issuance		(52,311,578)	
Net cash (used in) provided by financing activities	(82,376,819)	360,305,950	1,102,134
Net change in cash	(3,191,067)	617,739	(2,693,712)
Cash at the beginning of the year	5,739,486	2,548,419	3,166,158
Cash at the end of the year	2,548,419	3,166,158	472,446

* * * * *