FIRST SOLAR, INC.
Form 10-Q
August 04, 2016
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

(Mark one)
[x] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2016
or
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 001-33156

First Solar, Inc.
(Exact name of registrant as specified in its charter)

Delaware	20-4623678
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

350 West Washington Street, Suite 600
Tempe, Arizona 85281
(Address of principal executive offices, including zip code)
(602) 414-9300
(Registrant’s telephone number, including area code)

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 [x] 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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [x] No [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.
Large accelerated filer [x] Accelerated filer [ ] Non-accelerated filer [ ] Smaller reporting company [ ]
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [x]

As of July 29, 2016, 102,359,553 shares of the registrant's common stock, $0.001 par value per share, were outstanding.

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FIRST SOLAR, INC. AND SUBSIDIARIES

FORM 10-Q FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2016

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PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (Unaudited)

FIRST SOLAR, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Net sales	$934,381	$896,217	$1,782,865	$1,365,426
Cost of sales	743,216	731,734	1,328,755	1,161,962
Gross profit	191,165	164,483	454,110	203,464
Operating expenses:				
Research and development	32,931	29,479	63,118	64,235
Selling, general and administrative	63,776	70,901	131,279	138,589
Production start-up	55	6,970	55	13,620
Restructuring and asset impairments	85,532	—	85,532	—
Total operating expenses	182,294	107,350	279,984	216,444
Operating income (loss)	8,871	57,133	174,126	(12,980)
Foreign currency loss, net	(2,723)	(2,957)	(5,963)	(3,178)
Interest income	6,529	6,058	12,935	11,122
Interest expense, net	(7,151)	(826)	(11,793)	(1,020)
Other income (expense), net	6,753	(792)	42,306	(2,051)
Income (loss) before taxes and equity in earnings of unconsolidated affiliates	12,279	58,616	211,611	(8,107)
Income tax (expense) benefit	(9,047)	33,340	(42,811)	39,320
Equity in earnings of unconsolidated affiliates, net of tax	10,176	1,929	15,173	1,755
Net income	$13,408	$93,885	$183,973	$32,968
Net income per share:				
Basic	$0.13	$0.93	$1.80	$0.33
Diluted	$0.13	$0.92	$1.78	$0.33
Weighted-average number of shares used in per share calculations:				
Basic	102,287	100,852	102,070	100,615
Diluted	103,875	101,607	103,281	101,631

See accompanying notes to these condensed consolidated financial statements.

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FIRST SOLAR, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Net income	$13,408	$93,885	$183,973	$32,968
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(2,325)	2,495	3,217	(12,898)
Unrealized gain (loss) on marketable securities and restricted investments	29,630	(60,640)	35,596	(22,353)
Unrealized gain (loss) on derivative instruments	2,240	(341)	2,346	(1,901)
Other comprehensive income (loss), net of tax	29,545	(58,486)	41,159	(37,152)
Comprehensive income (loss)	$42,953	$35,399	$225,132	$(4,184)

See accompanying notes to these condensed consolidated financial statements.

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FIRST SOLAR, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share data)
(Unaudited)

	June 30, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$916,660	$ 1,126,826
Marketable securities	750,779	703,454
Accounts receivable trade, net	369,135	500,629
Accounts receivable, unbilled and retainage	172,892	59,171
Inventories	384,504	380,424
Balance of systems parts	92,796	136,889
Deferred project costs	112,512	187,940
Notes receivable, affiliate	372	1,276
Prepaid expenses and other current assets	276,971	248,977
Total current assets	3,076,621	3,345,586
Property, plant and equipment, net	1,268,267	1,284,136
PV solar power systems, net	410,759	93,741
Project assets and deferred project costs	1,247,114	1,111,137
Deferred tax assets, net	351,714	357,693
Restricted cash and investments	414,019	333,878
Investments in unconsolidated affiliates and joint ventures	427,243	399,805
Goodwill	78,888	84,985
Other intangibles, net	68,218	110,002
Inventories	103,885	107,759
Notes receivable, affiliates	22,254	17,887
Other assets	75,038	69,722
Total assets	$7,544,020	$ 7,316,331
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$263,062	$ 337,668
Income taxes payable	1,518	1,330
Accrued expenses	354,525	409,452
Current portion of long-term debt	71,591	38,090
Billings in excess of costs and estimated earnings	110,514	87,942
Payments and billings for deferred project costs	94,316	28,580
Other current liabilities	56,503	57,738
Total current liabilities	952,029	960,800
Accrued solar module collection and recycling liability	167,740	163,407
Long-term debt	161,839	251,325
Other liabilities	457,767	392,312
Total liabilities	1,739,375	1,767,844
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.001 par value per share; 500,000,000 shares authorized; 102,349,660 and 101,766,797 shares issued and outstanding at June 30, 2016 and December 31, 2015,	102	102

respectively		
Additional paid-in capital	2,773,821	2,742,795
Accumulated earnings	2,974,083	2,790,110
Accumulated other comprehensive income	56,639	15,480
Total stockholders’ equity	5,804,645	5,548,487
Total liabilities and stockholders’ equity	$7,544,020	$ 7,316,331

See accompanying notes to these condensed consolidated financial statements.

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FIRST SOLAR, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2016	2015
Cash flows from operating activities:		
Net income	$183,973	$32,968
Adjustments to reconcile net income to cash used in operating activities:		
Depreciation, amortization and accretion	115,079	129,157
Impairment of long-lived assets, intangible assets and goodwill	82,536	6,924
Share-based compensation	18,571	20,933
Equity in earnings of unconsolidated affiliates, net of tax	(15,173)	(1,755)
Remeasurement of monetary assets and liabilities	(4,062)	6,283
Deferred income taxes	(3,182)	(24,822)
Excess tax benefits from share-based compensation arrangements	(28,108)	(16,352)
Gain on sales of marketable securities and restricted investments	(37,804)	—
Other, net	875	492
Changes in operating assets and liabilities:		
Accounts receivable, trade, unbilled and retainage	8,333	(135,053)
Prepaid expenses and other current assets	(51,921)	(7,116)
Inventories and balance of systems parts	42,867	56,390
Project assets and deferred project costs	(344,385)	(421,836)
Other assets	(9,093)	(13,208)
Accounts payable	(74,569)	70,936
Income taxes payable	27,723	(54,149)
Accrued expenses and other liabilities	59,644	(82,740)
Accrued solar module collection and recycling liability	3,915	(2,070)
Net cash used in operating activities	(24,781)	(435,018)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(130,139)	(94,111)
Purchases of marketable securities and restricted investments	(299,719)	(394,313)
Proceeds from sales and maturities of marketable securities and restricted investments	253,420	199,459
Distributions received from equity method investments	1,502	238,980
Investments in notes receivable, affiliates	(4,600)	(45,288)
Payments received on notes receivable, affiliate	52	16,277
Change in restricted cash	35,264	(13,551)
Other investing activities	(4,928)	(10,231)
Net cash used in investing activities	(149,148)	(102,778)
Cash flows from financing activities:		
Repayment of long-term debt	(85,830)	(25,575)
Proceeds from borrowings under long-term debt, net of discounts and issuance costs	19,829	122,942
Repayment of sale-leaseback financing	(3,502)	(1,904)
Proceeds from sale-leaseback financing	—	44,718
Excess tax benefits from share-based compensation arrangements	28,108	16,352
Contingent consideration payments and other financing activities	(111)	(12,960)
Net cash (used in) provided by financing activities	(41,506)	143,573

Effect of exchange rate changes on cash and cash equivalents	5,269	(12,687)
Net decrease in cash and cash equivalents	(210,166)	(406,910)
Cash and cash equivalents, beginning of the period	1,126,826	1,482,054
Cash and cash equivalents, end of the period	$916,660	$1,075,144
Supplemental disclosure of noncash investing and financing activities:		
Equity interests retained from the partial sale of project assets	$(7,549)	$126,079
Property, plant and equipment acquisitions funded by liabilities	$20,797	$34,022
Acquisitions currently or previously funded by liabilities and contingent consideration	$23,803	$27,398

See accompanying notes to these condensed consolidated financial statements.

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FIRST SOLAR, INC. AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of First Solar, Inc. and its subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission (the "SEC"). Accordingly, these interim financial statements do not include all of the information and footnotes required by U.S. GAAP for annual financial statements. In the opinion of First Solar management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair statement have been included. Operating results for the three and six months ended June 30, 2016 are not necessarily indicative of the results that may be expected for the year ending December 31, 2016 or for any other period. The condensed consolidated balance sheet at December 31, 2015 has been derived from the audited consolidated financial statements at that date, but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements. These interim financial statements and notes should be read in conjunction with the audited financial statements and notes thereto for the year ended December 31, 2015 included in our Annual Report on Form 10-K, which has been filed with the SEC.

Unless expressly stated or the context otherwise requires, the terms "the Company," "we," "our," "us," and "First Solar" refer t First Solar, Inc. and its subsidiaries.

Revision of Previously Issued Financial Statements

During the three months ended September 30, 2015, we revised our previously issued financial statements, including periods presented in this Quarterly Report on Form 10-Q, to properly record a liability associated with an uncertain tax position, including penalties, related to income of a foreign subsidiary along with corresponding adjustments in each successive period for the effect of changes in foreign currency exchange rates associated with the liability.

We evaluated the aggregate effects of the errors to our previously issued financial statements in accordance with SEC Staff Accounting Bulletins No. 99 and No. 108 and, based upon quantitative and qualitative factors, determined that the errors were not material to our previously issued financial statements. As part of this evaluation, we considered a number of qualitative factors, including, among others, that the errors did not change a net loss into net income or vice versa, did not have an impact on our long-term debt covenant compliance, and did not mask a change in earnings or other trends when considering the overall competitive and economic environment within the industry during the periods. However, the cumulative effect of the errors, including the uncertain tax position matter identified during the three months ended September 30, 2015, was significant to our financial results for the year ended December 31, 2015. Accordingly, all financial information presented in the accompanying notes to these condensed consolidated financial statements was revised to reflect the correction of these errors.

The following tables present the effect of the aforementioned revisions on our condensed consolidated statements of operations for the three and six months ended June 30, 2015 (in thousands, except per share amounts):

	Three Months Ended June 30, 2015		
	As Reported	Adjustment	As Revised
Foreign currency loss, net	$(2,352)	$ (605)	$(2,957)

Income before taxes and equity in earnings of unconsolidated affiliates	59,221	(605)	58,616
Net income	94,490	(605)	93,885
Comprehensive income	36,004	(605)	35,399
Basic net income per share	$0.94	$ (0.01)	$0.93
Diluted net income per share	$0.93	$ (0.01)	$0.92

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	Six Months Ended June 30, 2015		
	As Reported	Adjustment	As Revised
Foreign currency loss, net	$(3,948)	$ 770	$(3,178)
Loss before taxes and equity in earnings of unconsolidated affiliates	(8,877)	770	(8,107)
Net income	32,198	770	32,968
Comprehensive loss	(4,954)	770	(4,184)
Basic net income per share	$0.32	$ 0.01	$0.33
Diluted net income per share	$0.32	$ 0.01	$0.33

The following table presents the effect of the aforementioned revisions on our condensed consolidated statement of cash flows for the six months ended June 30, 2015 (in thousands):

	Six Months Ended June 30, 2015		
	As Reported	Adjustment	As Revised
Net income	$32,198	$ 770	$32,968
Adjustments to reconcile net income to cash used in operating activities:			
Remeasurement of monetary assets and liabilities	7,053	(770)	6,283
Net cash used in operating activities	(435,018)	—	(435,018)

2. Summary of Significant Accounting Policies

Use of Estimates. The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in our condensed consolidated financial statements and the accompanying notes. On an ongoing basis, we evaluate our estimates, including those related to percentage-of-completion revenue recognition, inventory valuation, recoverability of project assets and photovoltaic (“PV”) solar power systems, estimates of future cash flows from and the economic useful lives of long-lived assets, asset retirement obligations, certain accrued liabilities, income taxes and tax valuation allowances, reportable segment allocations, product warranties and manufacturing excursions, solar module collection and recycling liabilities, and applying the acquisition method of accounting for business combinations and goodwill. Despite our intention to establish accurate estimates and reasonable assumptions, actual results could differ materially from these estimates and assumptions.

Revenue Recognition – Systems Business. We recognize revenue for arrangements entered into by our systems business generally using two revenue recognition models, following the guidance in either Accounting Standards Codification (“ASC”) 605-35, Construction-Type and Production-Type Contracts, or ASC 360-20, Real Estate Sales, for arrangements which include land or land rights.

Systems business sales arrangements in which we construct a PV solar power system for a specific customer on land that is controlled by the customer, and has not been previously controlled by First Solar, are accounted for under ASC 605-35. For such sales arrangements, we use the percentage-of-completion method, as described further below, using actual costs incurred over total estimated costs to develop and construct the system (including module costs) as our standard accounting policy.

Systems business sales arrangements in which we convey control of land or land rights as part of the transaction are accounted for under ASC 360-20. Accordingly, we use one of the following revenue recognition methods, based upon

an evaluation of the substance and form of the terms and conditions of such real estate sales:

(i) We apply the percentage-of-completion method, as further described below, to certain real estate sales arrangements in which we convey control of land or land rights, when a sale has been consummated, we have transferred the usual risks and rewards of ownership to the buyer, the initial and continuing investment criteria have been met, we have the ability to estimate our costs and progress toward completion, and all other revenue recognition criteria have been met. When evaluating whether the usual risks and rewards of ownership have transferred to the buyer, we consider whether we have or may be contingently required to have any prohibited forms of continuing involvement with the project pursuant to ASC 360-20. The initial and continuing investment requirements, which demonstrate a buyer’s commitment to honor its obligations for the sales arrangement, can typically be met through the receipt of cash or an irrevocable letter of credit from a highly creditworthy lending institution.

(ii) Depending on whether the initial and continuing investment requirements have been met and whether collectability from the buyer is reasonably assured, we may align our revenue recognition and release of project assets or deferred project costs to cost of sales with the receipt of payment from the buyer if the sale has been consummated and we have transferred the usual risks and rewards of ownership to the buyer.

For any systems business sales arrangements containing multiple deliverables (including our solar modules) not required to be accounted for under ASC 605-35 (long-term construction contracts) or ASC 360-20 (real estate sales), we analyze each activity within the sales arrangement to adhere to the separation guidelines of ASC 605-25 for multiple-element arrangements. We allocate revenue for any transactions involving multiple elements to each unit of accounting based on its relative selling price and recognize revenue for each unit of accounting when all revenue recognition criteria for a unit of accounting have been met.

Revenue Recognition – Percentage-of-Completion. In applying the percentage-of-completion method, we use the actual costs incurred relative to the total estimated costs (including module costs) in order to determine the progress towards completion and calculate the corresponding amount of revenue and profit to recognize. Costs incurred include direct materials, solar modules, labor, subcontractor costs, and those indirect costs related to contract performance, such as indirect labor and supplies. We recognize direct material and solar module costs as incurred when the direct materials and solar modules have been installed in the project. When contracts specify that title to direct materials and solar modules transfers to the customer before installation has been performed, we will not recognize revenue or the associated costs until those materials are installed and have met all other revenue recognition requirements. We consider direct materials and solar modules to be installed when they are permanently placed or affixed to a PV solar power system as required by engineering designs. Solar modules manufactured and owned by us that will be used in our systems remain within inventory until such modules are installed in a system.

The percentage-of-completion method of revenue recognition requires us to make estimates of net contract revenues and costs to complete our projects. In making such estimates, management judgments are required to evaluate significant assumptions including the amount of net contract revenues, the cost of materials and labor, expected labor productivity, the impact of potential variances in schedule completion, and the impact of any penalties, claims, change orders, or performance incentives.

If estimated total costs on any contract are greater than the net contract revenues, we recognize the entire estimated loss in the period the loss becomes known. The cumulative effect of the revisions to estimates related to net contract revenues and costs to complete contracts, including penalties, claims, change orders, performance incentives, anticipated losses, and others are recorded in the period in which the revisions to estimates are identified and the amounts can be reasonably estimated. The effect of the changes on future periods are recognized as if the revised estimates had been used since revenue was initially recognized under the contract. Such revisions could occur in any reporting period, and the effects may be material depending on the size of the contracts or the changes in estimates.

Revenue Recognition – Operations and Maintenance. Our operations and maintenance (“O&M”) revenue is billed and recognized as services are performed. Costs of these revenues are expensed in the period in which they are incurred.

Revenue Recognition – Components Business. Our components business sells solar modules directly to third-party solar power system integrators and operators. We recognize revenue for module sales when persuasive evidence of an arrangement exists, delivery of the modules has occurred and title and risk of loss have passed to the customer, the sales price is fixed or determinable, and the collectability of the resulting receivable is reasonably assured. Under this policy, we record a trade receivable for the selling price of our module and reduce inventory for the cost of goods sold when delivery occurs in accordance with the terms of the sales contract. Our customers typically do not have extended payment terms or rights of return for our products.

Ventures and Variable Interest Entities. In the normal course of business we establish wholly owned project companies which may be considered variable interest entities ("VIEs"). We consolidate wholly owned variable interest entities when we are considered the primary beneficiary of such entities. Additionally, we have, and may in the future form, joint venture type arrangements, including partnerships and partially owned limited liability companies or similar legal structures, with one or more third parties primarily to develop, construct, own, and/or sell solar power projects. These types of ventures are core to our business and long-term strategy related to providing PV solar generation solutions using our modules to key geographic markets. We analyze all of our ventures and classify them into two groups: (i) ventures that must be consolidated because they are either not VIEs and we hold a majority voting interest, or because they are VIEs and we are the primary beneficiary and (ii) ventures that do not need to be consolidated and are accounted for under either the cost or equity method of accounting because they are either not VIEs and we hold a minority voting interest, or because they are VIEs and we are not the primary beneficiary.

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Ventures are considered VIEs if (i) the total equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support; (ii) as a group, the holders of the equity investment at risk lack the ability to make certain decisions, the obligation to absorb expected losses, or the right to receive expected residual returns; or (iii) an equity investor has voting rights that are disproportionate to its economic interest and substantially all of the entity's activities are conducted on behalf of that investor. Our venture agreements typically require us to fund some form of capital for the development and construction of a project, depending upon the opportunity and the market in which our ventures are located.

We are considered the primary beneficiary of and are required to consolidate a VIE if we have the power to direct the activities that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the entity. If we determine that we do not have the power to direct the activities that most significantly impact the entity, then we are not the primary beneficiary of the VIE.

Cost and Equity Method Investments. We account for our unconsolidated ventures using either the cost or equity method of accounting depending upon whether we have the ability to exercise significant influence over the venture. As part of this evaluation, we consider our participating and protective rights in the venture as well as its legal form. We record our cost method investments at their historical cost and subsequently record any dividends received from the net accumulated earnings of the investee as income. Dividends received in excess of earnings are considered a return of investment and are recorded as reductions in the cost of the investment. We use the equity method of accounting for our investments when we have the ability to significantly influence the operations or financial activities of the investee. We record our equity method investments at cost and subsequently adjust their carrying amount each period for our share of the earnings or losses of the investee and other adjustments required by the equity method of accounting. Dividends received from our equity method investments are recorded as reductions in the carrying value of such investments.

We monitor our investments, which are included in "Investments in unconsolidated affiliates and joint ventures" in the accompanying condensed consolidated balance sheets, for impairment and record reductions in their carrying values if the carrying amount of the investment exceeds its fair value. An impairment charge is recorded when such impairment is deemed to be other-than-temporary. To determine whether an impairment is other-than-temporary, we consider our ability and intent to hold the investment until the carrying amount is fully recovered. Circumstances that indicate an other-than-temporary impairment may have occurred include factors such as decreases in quoted market prices or declines in the operations of the investee. The evaluation of an investment for potential impairment requires us to exercise significant judgment and to make certain assumptions. The use of different judgments and assumptions could result in different conclusions. We recorded no impairment losses related to our cost and equity method investments during the three and six months ended June 30, 2016 and 2015.

See Note 2. "Summary of Significant Accounting Policies" to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015 for a more complete summary of our significant accounting policies.

3. Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606), to clarify the principles of recognizing revenue and create common revenue recognition guidance between U.S. GAAP and International Financial Reporting Standards. An entity has the option to apply the provisions of ASU 2014-09 either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this standard recognized at the date of initial application. ASU 2014-09 is effective for fiscal years and interim periods within those years beginning after December 15, 2017, and early adoption is permitted for periods

beginning after December 15, 2016. We are currently evaluating our method and timing of adoption and the impact ASU 2014-09 will have on our consolidated financial statements and associated disclosures.

In February 2015, the FASB issued ASU 2015-02, Consolidation (Topic 810) – Amendments to the Consolidation Analysis. ASU 2015-02 modifies existing consolidation guidance related to (i) limited partnerships and similar legal entities, (ii) the evaluation of variable interests for fees paid to decision makers or service providers, (iii) the effect of fee arrangements and related parties on the primary beneficiary determination, and (iv) certain investment funds. These changes are expected to limit the number of consolidation models and place more emphasis on risk of loss when determining a controlling financial interest. The adoption of ASU 2015-02 in the first quarter of 2016 did not have a significant impact on our consolidated financial statements and associated disclosures.

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In January 2016, the FASB issued ASU 2016-01, Financial Instruments – Overall (Subtopic 825-10) – Recognition and Measurement of Financial Assets and Financial Liabilities. ASU 2016-01 changes how entities measure certain equity investments and present changes in the fair value of financial liabilities measured under the fair value option that are attributable to their own credit. The guidance also changes certain disclosure requirements and other aspects of current U.S. GAAP. ASU 2016-01 is effective for fiscal years and interim periods within those years beginning after December 15, 2017, and early adoption is permitted for certain provisions of the guidance. We are currently evaluating the impact ASU 2016-01 will have on our consolidated financial statements and associated disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), to increase transparency and comparability among organizations by recognizing a right-of-use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either operating or financing, with such classification affecting the pattern of expense recognition in the income statement. ASU 2016-02 is effective for fiscal years and interim periods within those years beginning after December 15, 2018, and early adoption is permitted. We are currently evaluating the impact ASU 2016-02 will have on our consolidated financial statements and associated disclosures.

In March 2016, the FASB issued ASU 2016-09, Compensation – Stock Compensation (Topic 718) – Improvements to Employee Share-Based Payment Accounting. ASU 2016-09 simplifies several aspects of the accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for fiscal years and interim periods within those years beginning after December 15, 2016, and early adoption is permitted. We are currently evaluating the impact ASU 2016-09 will have on our consolidated financial statements and associated disclosures.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326), to provide financial statement users with more useful information about expected credit losses. ASU 2016-13 also changes how entities measure credit losses on financial instruments and the timing of when such losses are recorded. ASU 2016-13 is effective for fiscal years and interim periods within those years beginning after December 15, 2019, and early adoption is permitted for periods beginning after December 15, 2018. We are currently evaluating the impact ASU 2016-13 will have on our consolidated financial statements and associated disclosures.

4. Restructuring and Asset Impairments

In June 2016, our executive management elected to reallocate our crystalline silicon module production capacity to support a new assembly line dedicated to our recently announced Series 5 cadmium telluride (“CdTe”) module offering. As a result, we are ending production of our crystalline silicon modules to focus on our core CdTe module technology and utility-scale PV solar power systems. The majority of our crystalline silicon module manufacturing associates are expected to be redeployed to the new Series 5 assembly line, which is expected to be operational in early 2017.

In connection with these restructuring activities, we incurred charges of $84.6 million during the three months ended June 30, 2016, which included (i) $35.5 million of impairment charges related to certain crystalline silicon module manufacturing equipment considered abandoned for accounting purposes; (ii) $35.8 million of impairment charges for developed technology intangible assets associated with our crystalline silicon module technology; (iii) $6.1 million of goodwill impairment charges from the disposal of our crystalline silicon components reporting unit; and (iv) $7.2 million of miscellaneous charges related to certain contract manufacturing agreements and the write-off of operating supplies. All amounts associated with these charges related to our components segment and were classified as “Restructuring and asset impairments” on our condensed consolidated statements of operations. We expect to incur up to $10.0 million of additional charges as we complete these restructuring activities during the remainder of 2016.

During the three months ended June 30, 2016, we also incurred charges of $0.9 million for severance benefits to terminated employees associated with restructuring activities unrelated to the end of our crystalline silicon module production.

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5. Cash, Cash Equivalents, and Marketable Securities

Cash, cash equivalents, and marketable securities consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Cash and cash equivalents:		
Cash	$916,486	$ 1,126,496
Cash equivalents:		
Money market funds	174	330
Total cash and cash equivalents	916,660	1,126,826
Marketable securities:		
Foreign debt	710,779	663,454
Time deposits	40,000	40,000
Total marketable securities	750,779	703,454
Total cash, cash equivalents, and marketable securities	$1,667,439	$ 1,830,280

We classify our marketable securities as available-for-sale. Accordingly, we record them at fair value and account for the net unrealized gains and losses as part of “Accumulated other comprehensive income” until realized. We record realized gains and losses on the sale of our marketable securities in “Other income (expense), net” computed using the specific identification method. During the three and six months ended June 30, 2016 and 2015, we realized no gains or losses on the sale of our marketable securities. See Note 9. “Fair Value Measurements” to our condensed consolidated financial statements for information about the fair value of our marketable securities.

As of June 30, 2016 and December 31, 2015, we identified two investments totaling $45.1 million and $31.5 million, respectively, that had been in a loss position for a period of time greater than 12 months with unrealized losses of less than $0.1 million. The unrealized losses were primarily due to increases in interest rates relative to rates at the time of purchase. Based on the underlying credit quality of the investments, we do not intend to sell these securities prior to the recovery of our cost basis. Therefore, we did not consider these securities to be other-than-temporarily impaired. All of our available-for-sale marketable securities are subject to a periodic impairment review. We did not identify any of our marketable securities as other-than-temporarily impaired as of June 30, 2016 and December 31, 2015.

The following tables summarize the unrealized gains and losses related to our available-for-sale marketable securities, by major security type, as of June 30, 2016 and December 31, 2015 (in thousands):

	As of June 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Foreign debt	$708,916	$ 2,128	$ 265	$710,779
Time deposits	40,000	—	—	40,000
Total	$748,916	$ 2,128	$ 265	$750,779

	As of December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Foreign debt	$665,900	$ 9	$ 2,455	$663,454
Time deposits	40,000	—	—	40,000
Total	$705,900	$ 9	$ 2,455	$703,454

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The contractual maturities of our marketable securities as of June 30, 2016 and December 31, 2015 were as follows (in thousands):

	As of June 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
One year or less	$280,542	$ 62	$ 124	$280,480
One year to two years	239,539	525	82	239,982
Two years to three years	228,835	1,541	59	230,317
Total	$748,916	$ 2,128	$ 265	$750,779

	As of December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
One year or less	$290,377	$ 9	$ 406	$289,980
One year to two years	228,492	—	1,183	227,309
Two years to three years	187,031	—	866	186,165
Total	$705,900	$ 9	$ 2,455	$703,454

The net unrealized gains of $1.9 million and the net unrealized losses of $2.4 million on our marketable securities as of June 30, 2016 and December 31, 2015, respectively, were primarily the result of changes in interest rates relative to rates at the time of purchase. Our investment policy requires marketable securities to be highly rated and limits the security types, issuer concentration, and duration to maturity of our marketable securities portfolio.

The following tables show gross unrealized losses and estimated fair values for those marketable securities that were in an unrealized loss position as of June 30, 2016 and December 31, 2015, aggregated by major security type and the length of time the marketable securities have been in a continuous loss position (in thousands):

	As of June 30, 2016					
	In Loss Position for Less Than 12 Months		In Loss Position for 12 Months or Greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Foreign debt	$175,111	$ 234	$45,131	$ 31	$220,242	$ 265
Total	$175,111	$ 234	$45,131	$ 31	$220,242	$ 265

	As of December 31, 2015					
	In Loss Position for Less Than 12 Months		In Loss Position for 12 Months or Greater		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Foreign debt	$629,033	$ 2,386	$31,491	$ 69	$660,524	$ 2,455
Total	$629,033	$ 2,386	$31,491	$ 69	$660,524	$ 2,455

6. Restricted Cash and Investments

Restricted cash and investments consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Restricted cash	$4,830	$ 7,764
Restricted investments	409,189	326,114
Total restricted cash and investments (1)	$414,019	$ 333,878

(1) There was an additional $40.5 million and $72.5 million of restricted cash included within prepaid expenses and other current assets at June 30, 2016 and December 31, 2015, respectively.

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At June 30, 2016, our restricted cash consisted of deposits held by various banks to secure certain of our letters of credit and deposits designated for the construction of systems projects and payment of amounts related to project construction credit facilities. Restricted cash for our letters of credit is classified as current or noncurrent based on the maturity date of the corresponding letter of credit. See Note 13. "Commitments and Contingencies" to our condensed consolidated financial statements for further discussion relating to letters of credit. Restricted cash for project construction and financing is classified as current or noncurrent based on the projected use of the restricted funds.

At June 30, 2016 and December 31, 2015, our restricted investments consisted of long-term marketable securities that were held in custodial accounts to fund the estimated future costs of collecting and recycling modules covered under our solar module collection and recycling program. We classify our restricted investments as available-for-sale. Accordingly, we record them at fair value and account for the net unrealized gains and losses as a part of "Accumulated other comprehensive income" until realized. We record realized gains and losses on the sale of our restricted investments in "Other income (expense), net" computed using the specific identification method. During the three months ended June 30, 2016, we realized no gains on the sale of our restricted investments. During the six months ended June 30, 2016, we realized gains of $37.8 million on the sale of certain restricted investments as part of an effort to align the currencies of the investments with those of the corresponding collection and recycling liabilities. Restricted investments are classified as noncurrent as the underlying accrued solar module collection and recycling liabilities are also noncurrent in nature. See Note 9. "Fair Value Measurements" to our condensed consolidated financial statements for information about the fair value of our restricted investments.

As necessary, we fund any incremental amounts for our estimated collection and recycling obligations within 90 days of the end of each year. We determine the funding requirement, if any, based on estimated costs of collecting and recycling covered modules, estimated rates of return on our restricted investments, and an estimated solar module life of 25 years less amounts already funded in prior years. No incremental funding was required in 2016 for covered module sales in 2015. To ensure that these funds will be available in the future regardless of any potential adverse changes in our financial condition (even in the case of our own insolvency), we have established a trust under which estimated funds are put into custodial accounts with an established and reputable bank, for which First Solar, Inc. ("FSI"), First Solar Malaysia Sdn. Bhd. ("FS Malaysia"), and First Solar Manufacturing GmbH are grantors. Only the trustee can distribute funds from the custodial accounts, and these funds cannot be accessed for any purpose other than to cover qualified costs of module collection and recycling, either by us or a third party performing the required collection and recycling services. Investments in these custodial accounts must meet certain investment quality criteria comparable to highly rated government or agency bonds. We closely monitor our exposure to European markets and maintain holdings primarily consisting of German and French sovereign debt securities that are not currently at risk of default.

The following tables summarize the unrealized gains and losses related to our restricted investments, by major security type, as of June 30, 2016 and December 31, 2015 (in thousands):

	As of June 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Foreign government obligations	$116,826	$ 90,112	$ —	$206,938
U.S. government obligations	169,847	32,404	—	202,251
Total	$286,673	$ 122,516	$ —	$409,189

	As of December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Foreign government obligations	$177,507	$ 75,670	$ —	$253,177

U.S. government obligations	61,228	11,709	—	72,937
Total	$238,735	$ 87,379	$ —	$326,114

As of June 30, 2016 and December 31, 2015, the contractual maturities of our restricted investments were between 12 years and 21 years.

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7. Consolidated Balance Sheet Details

Accounts receivable trade, net

Accounts receivable trade, net consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Accounts receivable trade, gross	$369,135	$ 500,631
Allowance for doubtful accounts	—	(2)
Accounts receivable trade, net	$369,135	$ 500,629

At June 30, 2016 and December 31, 2015, $35.1 million and $21.5 million, respectively, of our accounts receivable trade, net were secured by letters of credit, bank guarantees, or other forms of financial security issued by creditworthy financial institutions.

Accounts receivable, unbilled and retainage

Accounts receivable, unbilled and retainage consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Accounts receivable, unbilled	$153,864	$ 40,205
Retainage	19,028	18,966
Accounts receivable, unbilled and retainage	$172,892	$ 59,171

Accounts receivable, unbilled represents revenue that has been recognized in advance of billing the customer, which is common for long-term construction contracts. For example, we recognize revenue from contracts for the construction and sale of PV solar power systems, which include the sale of such assets over the construction period using applicable accounting methods. One such method is the percentage-of-completion method, which recognizes revenue and gross profit as work is performed based on the relationship between actual costs incurred compared to the total estimated costs for the contract. Under this accounting method, revenue could be recognized under applicable revenue recognition criteria in advance of billing the customer, resulting in an amount recorded to “Accounts receivable, unbilled and retainage.” Once we meet the billing criteria under a construction contract, we bill our customer accordingly and reclassify the “Accounts receivable, unbilled and retainage” to “Accounts receivable trade, net.” Billing requirements vary by contract but are generally structured around completion of certain construction milestones. Retainage refers to the portion of the contract price earned by us for work performed, but held for payment by our customer as a form of security until we reach certain construction milestones. Retainage included within “Accounts receivable, unbilled and retainage” is expected to be billed and collected within the next 12 months.

Inventories

Inventories consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Raw materials	$165,046	$ 159,078
Work in process	14,630	19,736
Finished goods	308,713	309,369
Inventories	$488,389	$ 488,183
Inventories – current	$384,504	$ 380,424

Inventories – noncurrent (1)	$103,885	$ 107,759

(1) As needed, we may purchase a critical raw material that is used in our core production process in quantities that exceed anticipated consumption within our normal operating cycle (which is 12 months). We classify such raw materials that we do not expect to consume within our normal operating cycle as noncurrent.

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Balance of systems parts

Balance of systems parts were $92.8 million and $136.9 million as of June 30, 2016 and December 31, 2015, respectively, and represented mounting, electrical, and other construction parts purchased for PV solar power systems to be constructed or currently under construction, which we held title to and were not yet installed in a system. Such construction parts included items such as posts, tilt brackets, tables, harnesses, combiner boxes, inverters, cables, tracker equipment, and other parts we may purchase or assemble for the systems we construct. We carry these parts at the lower of cost or net realizable value, with such value being based primarily on recoverability through installation in a system or recoverability through a sales agreement. Balance of systems parts do not include any solar modules that we manufacture.

Prepaid expenses and other current assets

Prepaid expenses and other current assets consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Value added tax receivables	$69,082	$ 51,473
Prepaid expenses	62,894	74,990
Derivative instruments	4,433	2,691
Restricted cash	40,510	72,526
Other current assets	100,052	47,297
Prepaid expenses and other current assets	$276,971	$ 248,977

Property, plant and equipment, net

Property, plant and equipment, net consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Land	$8,729	$12,063
Buildings and improvements	411,490	410,898
Machinery and equipment	1,809,714	1,824,717
Office equipment and furniture	151,163	144,773
Leasehold improvements	55,515	50,546
Construction in progress	126,749	37,734
Stored assets (1)	138,727	138,954
Property, plant and equipment, gross	2,702,087	2,619,685
Less: accumulated depreciation	(1,433,820)	(1,335,549)
Property, plant and equipment, net	$1,268,267	$1,284,136

(1) Consists of machinery and equipment ("stored assets") that were originally purchased for installation in our previously planned manufacturing capacity expansions. We intend to install and place the stored assets into service when such assets are required or beneficial to our existing installed manufacturing capacity or when market demand supports additional or market-specific manufacturing capacity. During the six months ended June 30, 2016, we transferred $0.2 million of stored assets to our manufacturing facility in Perrysburg, Ohio for use in the production of solar modules. As the remaining stored assets are neither in the condition nor location to produce modules as intended, we will not begin depreciation until such assets are placed into service. The stored assets are evaluated for impairment under a held and used impairment model whenever events or changes in business circumstances arise, including consideration of technological obsolescence, that may indicate that the carrying

amount of our long-lived assets may not be recoverable. We ceased the capitalization of interest on our stored assets once they were physically received from the related machinery and equipment vendors.

Depreciation of property, plant and equipment was $52.5 million and $107.0 million for the three and six months ended June 30, 2016, respectively, and $62.5 million and $124.0 million for the three and six months ended June 30, 2015, respectively.

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PV solar power systems, net

PV solar power systems, net consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
PV solar power systems, gross	$417,486	$ 97,991
Accumulated depreciation	(6,727)	(4,250)
PV solar power systems, net	$410,759	$ 93,741

During the six months ended June 30, 2016, we placed $318.5 million of projects into service, including certain projects in Chile and India. Depreciation of PV solar power systems was $1.3 million and $2.5 million for the three and six months ended June 30, 2016, respectively, and $0.6 million and $1.2 million for the three and six months ended June 30, 2015, respectively.

Capitalized interest

The cost of constructing facilities, equipment, and project assets includes interest costs incurred during the assets' construction period. The components of interest expense and capitalized interest were as follows during the three and six months ended June 30, 2016 and 2015 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Interest cost incurred	$(8,473)	$(4,749)	$(14,368)	$(8,226)
Interest cost capitalized – property, plant and equipment	831	295	1,067	862
Interest cost capitalized – project assets	491	3,628	1,508	6,344
Interest expense, net	$(7,151)	$(826)	$(11,793)	$(1,020)

Project assets and deferred project costs

Project assets primarily consist of costs related to solar power projects in various stages of development that are capitalized prior to entering into a definitive sales agreement for the projects, including projects that may have begun commercial operation under power purchase agreements ("PPAs") and are actively marketed and intended to be sold. These project related costs include costs for land, development, and construction of a PV solar power system. Development costs may include legal, consulting, permitting, interconnection, and other similar costs. Once we enter into a definitive sales agreement, we reclassify project assets to deferred project costs on our condensed consolidated balance sheets until the sale is completed and we have met all of the criteria to recognize the sale as revenue, which is typically subject to real estate revenue recognition requirements. We expense project assets and deferred project costs to cost of sales after each respective project is sold to a customer and all revenue recognition criteria have been met (matching the expensing of costs to the underlying revenue recognition method). In addition, we present all expenditures related to the development and construction of project assets or deferred project costs, whether fully or partially owned, as a component of cash flows from operating activities. We classify project assets as noncurrent due to the nature of solar power projects (long-lived assets) and the time required to complete all activities to develop, construct, and sell projects, which is typically longer than 12 months.

Deferred project costs represent (i) costs that we capitalize as project assets for arrangements that we account for as real estate transactions after we have entered into a definitive sales arrangement, but before the sale is completed or before we have met all criteria to recognize the sale as revenue, (ii) recoverable pre-contract costs that we capitalize for arrangements accounted for as long-term construction contracts prior to entering into a definitive sales agreement, or (iii) costs that we capitalize for arrangements accounted for as long-term construction contracts after we have

signed a definitive sales agreement, but before all revenue recognition criteria have been met. We classify deferred project costs as current if completion of the sale and the meeting of all revenue recognition criteria are expected within the next 12 months.

If a project is completed and begins commercial operation prior to entering into or the closing of a sales arrangement, the completed project will remain in project assets or deferred project costs until the earliest of the closing of the sale of such project, our decision to temporarily hold such project, or one year from the project's commercial operations date. Any income generated by a project while it remains within project assets or deferred project costs is accounted for as a reduction to our basis in the project, which at the time of sale and meeting all revenue recognition criteria will be recorded within cost of sales.

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Project assets and deferred project costs consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Project assets – development costs, including project acquisition and land costs	$379,977	$ 436,375
Project assets – construction costs	828,337	674,762
Project assets	1,208,314	1,111,137
Deferred project costs – current	112,512	187,940
Deferred project costs – noncurrent	38,800	—
Deferred project costs	151,312	187,940
Total project assets and deferred project costs	$1,359,626	$ 1,299,077

Other assets

Other assets consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Notes receivable (1)	$7,782	$ 12,648
Income taxes receivable	4,204	4,071
Deferred rent	33,050	23,317
Other	30,002	29,686
Other assets	$75,038	$ 69,722

(1) In April 2009, we entered into a credit facility agreement with a solar power project entity of one of our customers for an available amount of €17.5 million to provide financing for a PV solar power system. The credit facility replaced a bridge loan that we had made to this entity. The credit facility bears interest at 8.0% per annum payable quarterly with the full amount due in December 2026. As of June 30, 2016 and December 31, 2015, the balance on the credit facility was €7.0 million ($7.8 million and $7.6 million, respectively, at the balance sheet dates). In February 2014, we entered into a convertible loan agreement with a strategic entity for an available amount of up to $5.0 million. As of December 31, 2015, the balance outstanding on the convertible loan was $5.0 million, which we converted into an equity interest in the entity in January 2016.

Goodwill

Goodwill, summarized by relevant reporting unit, consisted of the following as of June 30, 2016 and December 31, 2015 (in thousands):

	December 31, 2015	Acquisitions (Impairments)	June 30, 2016
CdTe components	$ 403,420	$ —	$403,420
Crystalline silicon components	6,097	—	6,097
Systems	68,833	—	68,833
Accumulated impairment losses	(393,365)	(6,097)	(399,462)
Total	$ 84,985	$ (6,097)	$78,888

Goodwill represents the excess of the purchase price of acquired businesses over the estimated fair value assigned to the individual assets acquired and liabilities assumed. We do not amortize goodwill, but instead are required to test goodwill for impairment at least annually. If necessary, we would record any impairment in accordance with ASC 350, Intangibles – Goodwill and Other. We perform impairment tests between scheduled annual tests in the fourth quarter if facts and circumstances indicate that it is more likely than not that the fair value of a reporting unit that has

goodwill is less than its carrying value. During the three months ended June 30, 2016, we impaired $6.1 million of goodwill associated with our crystalline silicon components reporting unit as a result of the decision to end the related manufacturing operations. See Note 4. “Restructuring and Asset Impairments” to our condensed consolidated financial statements for further discussion relating to these restructuring activities.

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Other intangibles, net

Other intangibles, net consisted of intangible assets acquired as part of our General Electric and TetraSun acquisitions and our internally-generated intangible assets, substantially all of which were patents on technologies related to our products and production processes. We record an asset for patents, after the patent has been issued, based on the legal, filing, and other costs incurred to secure them. We amortize intangible assets on a straight-line basis over their estimated useful lives once the intangible assets meet the criteria to be amortized.

The following tables summarize our intangible assets at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016			
	Gross Amount	Accumulated Amortization	Accumulated Impairments	Net Amount
Patents	$6,070	$ (2,219)	$ —	$3,851
Developed technology	114,596	(14,387)	(35,842)	64,367
Total	$120,666	$ (16,606)	$ (35,842)	$68,218

	December 31, 2015			
	Gross Amount	Accumulated Amortization	Accumulated Impairments	Net Amount
Patents	6,070	$ (1,824)	$ —	$4,246
Developed technology	114,565	(8,809)	—	105,756
Total	$120,635	$ (10,633)	$ —	$110,002

During the three months ended June 30, 2016, we impaired $35.8 million of developed technology intangible assets acquired in our TetraSun acquisition as a result of the decision to end the related crystalline silicon manufacturing operations. See Note 4. “Restructuring and Asset Impairments” to our condensed consolidated financial statements for further discussion relating to these restructuring activities. Amortization expense for our intangible assets was $3.0 million and $6.0 million for the three and six months ended June 30, 2016, respectively, and $2.2 million and $3.2 million for the three and six months ended June 30, 2015, respectively.

Accrued expenses

Accrued expenses consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Accrued compensation and benefits	$37,041	$ 63,699
Accrued property, plant and equipment	10,410	7,808
Accrued inventory and balance of systems parts	33,628	53,542
Accrued project assets and deferred project costs	152,333	145,695
Product warranty liability (1)	37,926	38,468
Accrued expenses in excess of normal product warranty liability and related expenses (1)	4,599	5,040
Other	78,588	95,200
Accrued expenses	$354,525	$ 409,452

(1) See Note 13. “Commitments and Contingencies” to our condensed consolidated financial statements for further discussion of “Product warranty liability” and “Accrued expenses in excess of normal product warranty liability and related expenses.”

Billings in excess of costs and estimated earnings

Billings in excess of costs and estimated earnings was $110.5 million and $87.9 million at June 30, 2016 and December 31, 2015, respectively, and represented billings made or payments received in excess of revenue recognized on contracts accounted for under the percentage-of-completion method. Typically, billings are made based on the completion of certain construction milestones as provided for in the sales arrangement, and the timing of revenue recognition may be different from when we can bill or collect from a customer.

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Payments and billings for deferred project costs

Payments and billings for deferred project costs was $94.3 million and $28.6 million at June 30, 2016 and December 31, 2015, respectively, and represented customer payments received or customer billings made under the terms of solar power project related sales contracts for which all revenue recognition criteria for real estate transactions have not yet been met. The associated solar power project costs are included within deferred project costs. We classify such amounts as current if all revenue recognition criteria are expected to be met within the next 12 months, consistent with the classification of the associated deferred project costs.

Other current liabilities

Other current liabilities consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Deferred revenue	$22,568	$ 17,957
Derivative instruments	8,408	16,450
Contingent consideration (1)	8,930	9,233
Financing liability (2)	5,260	5,277
Other	11,337	8,821
Other current liabilities	$56,503	$ 57,738

(1) See Note 13. “Commitments and Contingencies” to our condensed consolidated financial statements for further discussion.

(2) See Note 10. “Investments in Unconsolidated Affiliates and Joint Ventures” to our condensed consolidated financial statements for further discussion of the financing liabilities associated with our leaseback of the Maryland Solar project.

Other liabilities

Other liabilities consisted of the following at June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016	December 31, 2015
Product warranty liability (1)	$212,445	$ 193,283
Other taxes payable	66,681	66,549
Contingent consideration (1)	14,873	8,756
Liability in excess of normal product warranty liability and related expenses (1)	15,040	19,565
Financing liability (2)	34,159	36,706
Other	114,569	67,453
Other liabilities	$457,767	$ 392,312

(1) See Note 13. “Commitments and Contingencies” to our condensed consolidated financial statements for further discussion on “Product warranty liability,” “Contingent consideration,” and “Liability in excess of normal product warranty liability and related expenses.”

(2) See Note 10. “Investments in Unconsolidated Affiliates and Joint Ventures” to our condensed consolidated financial statements for further discussion of the financing liabilities associated with our leaseback of the Maryland Solar project.

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8. Derivative Financial Instruments

As a global company, we are exposed in the normal course of business to interest rate and foreign currency risks that could affect our financial position, results of operations, and cash flows. We use derivative instruments to hedge against these risks and only hold such instruments for hedging purposes, not for speculative or trading purposes.

Depending on the terms of the specific derivative instruments and market conditions, some of our derivative instruments may be assets and others liabilities at any particular balance sheet date. We report all of our derivative instruments at fair value and account for changes in the fair value of derivative instruments within “Accumulated other comprehensive income” if the derivative instruments qualify for hedge accounting. For those derivative instruments that do not qualify for hedge accounting (“economic hedges”), we record the changes in fair value directly to earnings. See Note 9. “Fair Value Measurements” to our condensed consolidated financial statements for information about the techniques we use to measure the fair value of our derivative instruments.

The following tables present the fair values of derivative instruments included in our condensed consolidated balance sheets as of June 30, 2016 and December 31, 2015 (in thousands):

	June 30, 2016		
	Prepaid Expenses and Other Current Assets	Other Current Liabilities	Other Liabilities
Derivatives designated as hedging instruments:			
Foreign exchange forward contracts	$—	$ 181	$ 319
Total derivatives designated as hedging instruments	$—	$ 181	$ 319
Derivatives not designated as hedging instruments:			
Foreign exchange forward contracts	$4,433	$ 8,227	$ —
Total derivatives not designated as hedging instruments	$4,433	$ 8,227	$ —
Total derivative instruments	$4,433	$ 8,408	$ 319

	December 31, 2015		
	Prepaid Expenses and Other Current Assets	Other Current Liabilities	Other Liabilities
Derivatives designated as hedging instruments:			
Foreign exchange forward contracts	$—	$ 132	$ 285
Cross-currency swap contract	—	6,909	13,835
Interest rate swap contract	—	16	—
Total derivatives designated as hedging instruments	$—	$ 7,057	$ 14,120
Derivatives not designated as hedging instruments:			
Foreign exchange forward contracts	$2,691	$ 9,393	$ —
Total derivatives not designated as hedging instruments	$2,691	$ 9,393	$ —
Total derivative instruments	$2,691	$ 16,450	$ 14,120

The impact of offsetting balances associated with derivative instruments designated as hedging instruments is shown below (in thousands):

	June 30, 2016					
				Gross Amounts Not Offset in Consolidated Balance Sheet		
	Gross Asset (Liability)	Gross Offset in Consolidated Balance Sheet	Net Amount Recognized in Financial Statements	Financial Instruments	Cash Collateral Pledged	Net Amount
Foreign exchange forward contracts	$ (500)	—	(500)	—	—	$ (500)

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	December 31, 2015					
				Gross Amounts Not Offset in Consolidated Balance Sheet		
	Gross Asset (Liability)	Gross Offset in Consolidated Balance Sheet	Net Amount Recognized in Financial Statements	Financial Instruments	Cash Collateral Pledged	Net Amount
Foreign exchange forward contracts	$(417)	—	(417)	—	—	$(417)
Cross-currency swap contract	$(20,744)	—	(20,744)	—	—	$(20,744)
Interest rate swap contract	$(16)	—	(16)	—	—	$(16)

The following tables present the effective amounts related to derivative instruments designated as cash flow hedges affecting accumulated other comprehensive income (loss) and our condensed consolidated statements of operations for the six months ended June 30, 2016 and 2015 (in thousands):

	Foreign Exchange Forward Contracts	Interest Rate Swap Contract	Cross Currency Swap Contract	Total
Balance in accumulated other comprehensive income (loss) at December 31, 2015	$ 162	$ (16)	$ (2,017)	$ (1,871)
Amounts recognized in other comprehensive income (loss)	371	(2)	5,108	5,477
Amounts reclassified to earnings impacting:				
Foreign currency loss, net	—	—	(4,896)	(4,896)
Interest expense, net	—	18	1,805	1,823
Balance in accumulated other comprehensive income (loss) at June 30, 2016	$ 533	$ —	$ —	$ 533
Balance in accumulated other comprehensive income (loss) at December 31, 2014	$ 6,621	$ (210)	$ (3,399)	$ 3,012
Amounts recognized in other comprehensive income (loss)	973	23	(4,268)	(3,272)
Amounts reclassified to earnings impacting:				
Net sales	(352)	—	—	(352)
Cost of sales	(4,599)	—	—	(4,599)
Foreign currency loss, net	—	—	4,766	4,766
Interest expense, net	—	109	134	243
Balance in accumulated other comprehensive income (loss) at June 30, 2015	$ 2,643	$ (78)	$ (2,767)	$ (202)

We recorded no amounts related to ineffective portions of our derivative instruments designated as cash flow hedges during the three and six months ended June 30, 2016 and 2015. We recognized unrealized losses of $0.2 million and $0.4 million related to amounts excluded from effectiveness testing for our foreign exchange forward contracts designated as cash flow hedges within “Other income (expense), net” during the three and six months ended June 30, 2016, respectively. We recognized unrealized gains of $0.2 million and $0.5 million related to amounts excluded from effectiveness testing for our foreign exchange forward contracts designated as cash flow hedges within “Other income (expense), net” during the three and six months ended June 30, 2015, respectively.

The following table presents amounts related to derivative instruments not designated as hedges affecting our condensed consolidated statements of operations for the three and six months ended June 30, 2016 and 2015 (in thousands):

		Amount of Gain (Loss) Recognized in Income			
		Three Months Ended June 30,		Six Months Ended June 30,	
Derivatives Not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in Income	2016	2015	2016	2015
Foreign exchange forward contracts	Foreign currency loss, net	$(5,596)	$333	$(22,977)	$(7,984)
Foreign exchange forward contracts	Cost of sales	$—	$(4,553)	$—	$9,963

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Interest Rate Risk

We use cross-currency swap and interest rate swap contracts to mitigate our exposure to interest rate fluctuations associated with certain of our debt instruments. We do not use such swap contracts for speculative or trading purposes.

On September 30, 2011, we entered into a cross-currency swap contract to hedge the floating rate foreign currency denominated loan under our Malaysian Ringgit Facility Agreement. This swap had an initial notional value of Malaysian ringgit (“MYR”) MYR 465.0 million and entitled us to receive a three-month floating Kuala Lumpur Interbank Offered Rate (“KLIBOR”) interest rate while requiring us to pay a U.S. dollar fixed rate of 3.495%. Additionally, this swap hedged the foreign currency risk of the Malaysian ringgit denominated principal and interest payments as we made swap payments in U.S. dollars and received swap payments in Malaysian ringgits at a fixed exchange rate of 3.19 MYR to USD. This swap qualified for accounting as a cash flow hedge in accordance with ASC 815, and we designated it as such. The notional amount of the swap declined in line with our scheduled principal payments on the underlying hedged debt. In June 2016, we paid the remaining principal on the Malaysian Ringgit Facility Agreement and closed the corresponding cross-currency swap contract. As of December 31, 2015, the notional value of this cross-currency swap contract was MYR 232.6 million ($54.2 million).

On May 29, 2009, we entered into an interest rate swap contract to hedge a portion of the floating rate loans under our Malaysian Credit Facility, which became effective on September 30, 2009 with an initial notional value of €57.3 million and pursuant to which we were entitled to receive a six-month floating Euro Interbank Offered Rate (“EURIBOR”) interest rate while being required to pay a fixed rate of 2.80%. The derivative instrument qualified for accounting as a cash flow hedge in accordance with ASC 815, and we designated it as such. The notional amount of the interest rate swap contract declined in line with our scheduled principal payments on the underlying hedged debt. In March 2016, we paid the remaining principal on the Malaysian Credit Facility and closed the corresponding interest rate swap contract. As of December 31, 2015, the notional value of the interest rate swap contract was €2.2 million ($2.4 million).

Foreign Currency Exchange Risk

Cash Flow Exposure

We expect certain of our subsidiaries to have future cash flows that will be denominated in currencies other than the subsidiaries’ functional currencies. Changes in the exchange rates between the functional currencies of our subsidiaries and the other currencies in which they transact will cause fluctuations in the cash flows we expect to receive or pay when these cash flows are realized or settled. Accordingly, we enter into foreign exchange forward contracts to hedge a portion of these forecasted cash flows. As of June 30, 2016 and December 31, 2015, these foreign exchange forward contracts hedged our forecasted cash flows for 27 months and 33 months, respectively. These foreign exchange forward contracts qualify for accounting as cash flow hedges in accordance with ASC 815, and we designated them as such. We initially report the effective portion of a derivative’s unrealized gain or loss in “Accumulated other comprehensive income” and subsequently reclassify amounts into earnings when the hedged transaction occurs and impacts earnings. We determined that these derivative financial instruments were highly effective as cash flow hedges as of June 30, 2016 and December 31, 2015. As of June 30, 2016 and December 31, 2015, the notional values associated with our foreign exchange forward contracts qualifying as cash flow hedges were as follows (notional amounts and U.S. dollar equivalents in millions):

	June 30, 2016	
Currency	Notional Amount	USD Equivalent
Indian rupee	INR 1,290.0	$19.1

	December 31, 2015	

Currency	Notional Amount	USD Equivalent
Indian rupee	INR 1,290.0	$19.4

As of June 30, 2016 and December 31, 2015, the unrealized gains on these contracts were $0.5 million and $0.2 million, respectively.

In the following 12 months, we expect to reclassify to earnings $0.2 million of net unrealized gains related to these forward contracts that are included in “Accumulated other comprehensive income” at June 30, 2016 as we realize the earnings effect of the related forecasted transactions. The amount we ultimately record to earnings will depend on the actual exchange rates when we realize the related forecasted transactions.

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Transaction Exposure and Economic Hedging

Many of our subsidiaries have assets and liabilities (primarily cash, receivables, marketable securities, payables, debt, and solar module collection and recycling liabilities) that are denominated in currencies other than the subsidiaries' functional currencies. Changes in the exchange rates between the functional currencies of our subsidiaries and the other currencies in which these assets and liabilities are denominated will create fluctuations in our reported condensed consolidated statements of operations and cash flows. We may enter into foreign exchange forward contracts or other financial instruments to economically hedge assets and liabilities against the effects of currency exchange rate fluctuations. The gains and losses on such foreign exchange forward contracts will economically offset all or part of the transaction gains and losses that we recognize in earnings on the related foreign currency denominated assets and liabilities.

We enter into foreign exchange forward contracts to economically hedge balance sheet and other exposures related to transactions between certain of our subsidiaries and transactions with third parties. Such contracts are considered economic hedges and do not qualify for hedge accounting. We recognize gains or losses from the fluctuation in foreign exchange rates and the fair value of these derivative contracts in “Foreign currency loss, net” on our condensed consolidated statements of operations. As of June 30, 2016 and December 31, 2015, the total net unrealized loss on our economic hedge foreign exchange forward contracts was $3.8 million and $6.7 million, respectively. As these amounts do not qualify for hedge accounting, changes in the fair value of such derivative instruments are recorded directly to earnings. These contracts mature at various dates within the next 1.5 years.

As of June 30, 2016 and December 31, 2015, the notional values of our foreign exchange forward contracts that do not qualify for hedge accounting were as follows (notional amounts and U.S. dollar equivalents in millions):

	June 30, 2016		
Transaction	Currency	Notional Amount	USD Equivalent
Purchase	Euro	€63.7	$70.8
Sell	Euro	€117.3	$130.4
Sell	Australian dollar	AUD 16.4	$12.2
Purchase	Malaysian ringgit	MYR 36.4	$9.0
Sell	Malaysian ringgit	MYR 83.1	$20.6
Sell	Canadian dollar	CAD 19.1	$14.7
Sell	Chilean Peso	CLP 16,233.6	$24.6
Sell	Japanese yen	JPY 9,356.2	$91.1
Sell	British pound	GBP 1.9	$2.6
Purchase	Singapore dollar	SGD 48.2	$35.8
Sell	Indian rupee	INR 13,500.9	