FIRST SOLAR, INC. Form 10-Q August 07, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 10-Q

(Mark one)

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

For the quarterly period ended June 30, 2013

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 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. (Check one):

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 August 2, 2013, 97,647,373 shares of the registrant's common stock, \$0.001 par value per share, were issued and outstanding.

# FIRST SOLAR, INC. AND SUBSIDIARIES

# FORM 10-Q FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2013

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# PART I. FINANCIAL INFORMATION

Item 1. Unaudited Condensed Consolidated Financial Statements

# FIRST SOLAR, INC. AND SUBSIDIARIES

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts) (Unaudited)

	Three Month	ns Ended	Six Months I	Ended
	June 30,	June 30,	June 30,	June 30,
	2013	2012	2013	2012
Net sales	\$519,760	\$957,332	\$1,274,965	\$1,454,387
Cost of sales	379,662	713,591	965,541	1,133,901
Gross profit	140,098	243,741	309,424	320,486
Operating expenses:				
Research and development	30,964	32,365	60,895	68,449
Selling, general and administrative	66,265	52,184	140,730	144,004
Production start-up	1,392	533	2,768	4,591
Restructuring	2,381	19,000	4,728	420,065
Total operating expenses	101,002	104,082	209,121	637,109
Operating income (loss)	39,096	139,659	100,303	(316,623)
Foreign currency (loss) gain	(1,068	1,015	550	31
Interest income	3,405	3,379	8,352	6,290
Interest expense, net	(875)	(7,372)	(1,625)	(8,292)
Other income (expense), net	504	(1,334)	(329)	(2,545)
Income (loss) before income taxes	41,062	135,347	107,251	(321,139)
Income tax expense	7,464	24,364	14,511	17,294
Net income (loss)	\$33,598	\$110,983	\$92,740	\$(338,433)
Net income (loss) per share:				
Basic	\$0.38	\$1.28	\$1.05	\$(3.90)
Diluted	\$0.37	\$1.27	\$1.03	\$(3.90)
Weighted-average number of shares used in per share				
calculations:				
Basic	89,201	86,855	88,209	86,681
Diluted	91,142	87,653	90,265	86,681

See accompanying notes to these condensed consolidated financial statements.

# FIRST SOLAR, INC. AND SUBSIDIARIES

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

	Three Month	ns Ended	Six Months	Ended
	June 30,	June 30,	June 30,	June 30,
	2013	2012	2013	2012
Net income (loss)	\$33,598	\$110,983	\$92,740	\$(338,433)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	1,500	(9,795)	(1,577	3,714
Unrealized (loss) gain on marketable securities and restricted investments	(17,029	12,626	(27,370	8,562
Unrealized gain (loss) on derivative instruments	2,909	2,585	(2,937	) (12,715 )
Total other comprehensive income (loss), net of tax	(12,620	5,416	(31,884	) (439
Comprehensive income (loss)	\$20,978	\$116,399	\$60,856	\$(338,872)

See accompanying notes to these condensed consolidated financial statements.

# FIRST SOLAR, INC. AND SUBSIDIARIES

# CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)

(Unaudited)

	June 30, 2013	December 31, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	\$928,657	\$ 901,294
Marketable securities	356,615	102,578
Accounts receivable trade, net	192,580	553,567
Accounts receivable, unbilled and retainage	460,438	400,987
Inventories	334,261	434,921
Balance of systems parts	128,384	98,903
Deferred project costs	1,004,778	21,390
Deferred tax assets, net	28,878	44,070
Assets held for sale	49,521	49,521
Note receivable affiliate	_	17,725
Prepaid expenses and other current assets	117,167	207,368
Total current assets	3,601,279	2,832,324
Property, plant and equipment, net	1,560,908	1,525,382
Project assets and deferred project costs	559,151	845,478
Deferred tax assets, net	332,688	317,473
Restricted cash and investments	275,183	301,400
Goodwill	74,930	65,444
Inventories	132,668	134,375
Retainage	237,594	270,364
Other assets	93,725	56,452
Total assets	\$6,868,126	\$6,348,692
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$217,587	\$ 350,230
Income taxes payable	4,749	5,474
Accrued expenses	391,764	554,433
Current portion of long-term debt	61,194	62,349
Deferred revenue	1,682	2,056
Payments and billings for deferred project costs	1,116,670	94,535
Other current liabilities	61,149	32,297
Total current liabilities	1,854,795	1,101,374
Accrued solar module collection and recycling liability	248,178	212,835
Long-term debt	194,570	500,223
Payments and billings for deferred project costs	38,974	636,518
Other liabilities	374,871	292,216
Total liabilities	2,711,388	2,743,166
Commitments and contingencies		
Stockholders' equity:		
Common stock, \$0.001 par value per share; 500,000,000 shares authorized; 97,629,891 and 87,145,323 shares issued and outstanding at June 30, 2013 and December 31, 2012,	98	87

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Additional paid-in capital	2,555,872	2,065,527
Accumulated earnings	1,622,473	1,529,733
Accumulated other comprehensive (loss) income	(21,705)	10,179
Total stockholders' equity	4,156,738	3,605,526
Total liabilities and stockholders' equity	\$6,868,126	\$ 6,348,692

See accompanying notes to these condensed consolidated financial statements.

# FIRST SOLAR, INC. AND SUBSIDIARIES

# CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands) (Unaudited)

Cash flows from operating activities:  Cash received from customers  Cash paid to suppliers and associates  Interest received  Interest paid  Income tax refunds (payments), net  Excess tax benefit from share-based compensation arrangements  Other operating activities  Net cash provided by operating activities  Cash flows from investing activities:  Purchases of property, plant and equipment  Purchases of marketable securities  Proceeds from maturities and sales of marketable securities  Investment in note receivable, affiliate  Payments received on note receivable, affiliate  \$2,050,622 \$1,639,136  (1,709,914 ) (1,169,399 )  (1,169,399 )  (1,18,030 )  (1,8,030 )  (1,050 )  (25,695 ) (66,853 )  (25,695 ) (66,853 )  (1,050 )  (281,972 )  (21,883 )  Payments received on note receivable, affiliate
Cash paid to suppliers and associates Interest received 3,724 2,970 Interest paid (5,974 ) (18,030 ) Income tax refunds (payments), net 5,976 25,561 Excess tax benefit from share-based compensation arrangements (55,695 ) (66,853 ) Other operating activities 89 (1,050 ) Net cash provided by operating activities 288,828 412,335 Cash flows from investing activities: Purchases of property, plant and equipment (156,856 ) (281,972 ) Purchases of marketable securities (316,285 ) (14,446 ) Proceeds from maturities and sales of marketable securities Investment in note receivable, affiliate — (21,883 ) Payments received on note receivable, affiliate
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Other operating activities 89 (1,050 ) Net cash provided by operating activities 288,828 412,335 Cash flows from investing activities: Purchases of property, plant and equipment (156,856 ) (281,972 ) Purchases of marketable securities (316,285 ) (14,446 ) Proceeds from maturities and sales of marketable securities 60,766 83,367 Investment in note receivable, affiliate — (21,883 ) Payments received on note receivable, affiliate 17,108 —
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Investment in note receivable, affiliate — (21,883 ) Payments received on note receivable, affiliate 17,108 —
Payments received on note receivable, affiliate 17,108 —
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Purchase of restricted investments — (80,667)
Change in restricted cash 5,136 21,547
Acquisitions, net of cash acquired (30,745) (2,437)
Purchase of equity and cost method investments (14,894 ) —
Other investing activities (1,850 ) (4,812 )
Net cash used in investing activities (437,620 ) (301,303 )
Cash flows from financing activities:
Repayments of long-term debt (635,876) (735,296)
Proceeds from borrowings under long-term debt, net of discount and issuance costs 335,000 590,000
Excess tax benefit from share-based compensation arrangements 55,695 66,853
Repayment of economic development funding (8,315 ) (6,820 )
Proceeds from equity offering, net of issuance costs 430,368 —
Other financing activities 349 (643)
Net cash provided by (used in) financing activities 177,221 (85,906)
Effect of exchange rate changes on cash and cash equivalents (1,066) (505)
Net increase in cash and cash equivalents 27,363 24,621
Cash and cash equivalents, beginning of the period 901,294 605,619
Cash and cash equivalents, end of the period \$928,657 \$630,240
Supplemental disclosure of noncash investing and financing activities:
Property, plant and equipment acquisitions funded by liabilities \$57,681 \$61,615
Acquisitions funded by liabilities and contingent consideration \$22,780 \$—

See accompanying notes to these condensed consolidated financial statements.

#### FIRST SOLAR, INC. AND SUBSIDIARIES

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

#### Note 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 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, 2013 are not necessarily indicative of the results that may be expected for the year ending December 31, 2013, or for any other period. The condensed consolidated balance sheet at December 31, 2012 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 financial statements and notes should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2012 included in our Annual Report on Form 10-K filed with the SEC.

Certain prior year balances have been reclassified to conform to the current year's presentation. Such reclassifications did not affect total cash flows, total net sales, operating income, net income, total assets, total liabilities or stockholders' equity.

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

## Note 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. Significant estimates in these condensed consolidated financial statements include percentage-of-completion revenue recognition, estimates of future cash flows from and the economic useful lives of long-lived assets, certain accrued liabilities, income taxes and tax valuation allowances, reportable segment allocations, product warranties and manufacturing excursions, accrued collection and recycling expense, 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 ASC 605, Accounting for Long-term Construction Contracts or, for arrangements which include land or land rights, ASC 360, Accounting for Sales of Real Estate.

For systems business sales arrangements that do not include land or land rights and thus are accounted for under ASC 605, we use the percentage-of-completion method, as described further below, using actual costs incurred over total estimated costs to develop and construct a project (including module costs) as our standard accounting policy, unless we cannot make reasonably dependable estimates of the costs to complete the contract, in which case we would use the completed contract method.

For systems business sales arrangements that are accounted for under ASC 360, where we convey control of land or land rights, we record the sale as revenue using one of the following revenue recognition methods, based upon evaluation of the substance and form of the terms and conditions of such real estate sales arrangements:

(i) We apply the percentage-of-completion method, as further described below, to certain real estate sales arrangements covered under ASC 360, 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. The initial and continuing investment requirements, which demonstrate a buyer's commitment to honor their obligations for the sales arrangement, can typically be met through the receipt of cash or an irrevocable letter of credit from a highly credit worthy lending institution. 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. Prohibited forms of continuing involvement in a real estate sales arrangement may include us retaining risks or rewards associated with the project that are not customary with the range of risks or rewards that an engineering, procurement and construction ("EPC") contractor may assume.

- (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.
- (iii) We may also record revenue for certain sales arrangements after construction of discrete portions of a project or after the entire project is substantially complete, we have transferred the usual risks and rewards of ownership to the buyer, and we have received substantially all payments due from the buyer or the initial and continuing investment criteria have been met.

For any systems business sales arrangements containing multiple deliverables (including our solar modules) not required to be accounted for under ASC 360 (real estate) or ASC 605 (long-term construction contracts), we analyze each activity within the sales arrangement to ensure that we adhere to the separation guidelines of ASC 605 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 estimated costs to complete (including module costs) in order to estimate the progress towards completion to determine the amount of revenue and profit to recognize. Incurred costs include all installed direct materials, installed solar modules, labor, subcontractor costs, and those indirect costs related to contract performance, such as indirect labor, supplies, and tools. We recognize direct material and solar module costs as incurred costs 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 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 fitted to a solar power system as required by engineering designs. Solar modules manufactured by us that will be used in our solar power systems, which we still hold title to, remain within inventory until such modules are installed in a solar power system.

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

If estimated total costs on any contract are greater than the 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 contract revenues and costs to complete contracts, including penalties, incentive awards, claims, change orders, anticipated losses and others are recorded in the period in which the revisions to estimates are identified and 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 changes in estimate.

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 module 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 contracts. Our customers typically do not have extended payment terms or rights of return for our products. We account for rebates or other customer incentives as a reduction to the selling price of our solar modules at the time of sale; and therefore, as a reduction to revenue.

Ventures and Variable Interest Entities. In the normal course of business we establish wholly owned project companies which may be considered variable interest entities. We consolidate wholly owned variable interest entities, even if there are other variable interests in such entities, as we are considered the primary beneficiary of such entities. Additionally, we have and may in the future form joint venture type arrangements ("ventures"), including partnerships and partially owned limited liability companies or similar legal structures, with one or more third parties primarily to develop and build specific or a pipeline of solar power projects. These types of ventures are core to our business and long-term strategy related to providing solar photovoltaic ("PV") generation solutions using our modules to sustainable geographic markets. In accordance with ASC 810, Consolidations, we analyze all of our ventures and classify them into two groups: (i) ventures that must be consolidated because they are either not variable interest entities ("VIEs") and we hold the 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 equity or cost methods 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.

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 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 on behalf of the investor. Our venture agreements typically require some form of project development capital or project equity ranging from amounts necessary to obtain a power purchase agreements ("PPA") (or similar power off-take agreement) to a pro-rata portion of the total equity required to develop and complete construction of a project, depending upon the opportunity and the market our ventures are in. Our limited number of ventures as of June 30, 2013 and future ventures of a similar nature are typically VIEs because the total equity investment at risk is not sufficient to permit the ventures to finance their activities without additional financial support.

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

We account for our unconsolidated ventures using either the equity or cost methods of accounting depending upon whether we have the ability to exercise significant influence over a venture. We consider the participating and protective rights we have as well as the legal form of the venture when evaluating whether we have the ability to exercise significant influence, which requires us to apply the equity method of accounting. Income from ventures for the three and six months ended June 30, 2013 was immaterial to the condensed consolidated statements of operations. Refer to 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, 2012 for a more complete summary of our significant accounting policies.

## Note 3. Recent Accounting Pronouncements

In December 2011, the FASB issued ASU 2011-11, Balance Sheet (Topic 210), Disclosures about Offsetting Assets and Liabilities, updated by ASU 2013-01, Clarifying the Scope of Disclosures about Offsetting Assets and Liabilities, which requires companies to disclose information about financial instruments that have been offset and related arrangements to enable users of their financial statements to understand the effect of those arrangements on their financial position. Companies will be required to provide both net (offset amounts) and gross information in the notes to the financial statements for relevant assets and liabilities that are offset. ASU 2011-11, as amended by ASU 2013-01, is effective for fiscal years, and interim periods within those years, beginning on or after January 1, 2013. The adoption of ASU 2011-11, as amended by ASU 2013-01, in the first quarter of 2013, did not have an impact on our financial position, results of operations, or cash flows.

In July 2012, the FASB issued ASU 2012-02, Intangibles - Goodwill and Other (Topic 350), Testing Indefinite-Lived Intangible Assets for Impairment. ASU 2012-02 gives companies an option to first assess qualitative factors to determine whether the existence of events and circumstances indicate it is more-likely-than-not that an indefinite-lived intangible asset (excluding goodwill) is impaired. If based on its qualitative assessment, a company concludes that it is more-likely-than-not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, quantitative impairment testing is required. However, if a company concludes otherwise, quantitative impairment testing is not required. ASU 2012-02 is effective for annual and interim impairment tests performed for fiscal years beginning after September 15, 2012, with early adoption permitted. The adoption of ASU 2012-02, in the first quarter of 2013, did not have an impact on our financial position, results of operations, or cash flows.

In February 2013, the FASB issued ASU 2013-02, Comprehensive Income (Topic 220): Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income. ASU 2013-02 supersedes and replaces the presentation requirements for reclassifications out of accumulated other comprehensive income in ASUs 2011-05 and 2011-12 for all public and private organizations. The amendment requires that an entity must report the effect of significant reclassifications out of accumulated other comprehensive income by the respective line items in net income if the amount being reclassified is required under U.S. GAAP. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures required under U.S. GAAP that provide additional detail about those amounts. ASU 2013-02 is effective for fiscal years, and interim periods within those years, beginning on or after

December 15, 2012. The adoption of ASU 2013-02, in the first quarter of 2013, did not have an impact on our financial position, results of operations or cash flows.

## Note 4. Restructuring

The activity related to our restructuring charges for material restructuring initiatives that were not completed as of December 31, 2012 are as follows:

## February 2012 Manufacturing Restructuring

In February 2012, executive management completed an evaluation of and approved a set of manufacturing capacity and other initiatives primarily intended to adjust our previously planned manufacturing capacity expansions and global manufacturing footprint. The primary goal of these initiatives was to better align production capacity and geographic location of such capacity with expected geographic market requirements and demand. The remaining \$5.1 million of asset impairment related charges from the February 2012 manufacturing restructuring as of December 31, 2012 is included within other liabilities and such amount is not expected to be paid within the next year.

## April 2012 European Restructuring

In April 2012, executive management approved a set of restructuring initiatives intended to align the organization with our Long Term Strategic Plan including expected sustainable market opportunities and to reduce costs. As part of these initiatives, we substantially reduced our European operations including the closure of our manufacturing operations in Frankfurt (Oder), Germany at the end of 2012. Due to the then current lack of policy support for utility-scale solar projects in Europe at that time, we did not believe there was a business case for continuing manufacturing operations in Germany or to proceed with the previously announced 2-line plant in France. Additionally, we substantially reduced the size of our operations in Mainz, Germany and elsewhere in Europe. After the closure of our Frankfurt (Oder) manufacturing operations, which was comprised of eight production lines, at the end of 2012, First Solar's installed manufacturing capacity consists of 24 production lines in Kulim, Malaysia and four production lines in Perrysburg, Ohio.

In connection with these restructuring initiatives, we incurred total charges to operating expense during 2012 of \$342.0 million and \$4.7 million in the six months ended June 30, 2013. These total charges consisted of (i) \$253.0 million in asset impairments and asset impairment related charges, primarily related to the closure of the Frankfurt (Oder) plants; (ii) \$63.2 million in severance and termination related costs; and (iii) \$30.5 million for the required repayment of German government grants related to the second Frankfurt (Oder) plant.

The following table summarizes the April 2012 European restructuring amounts remaining as of December 31, 2012, amounts recorded to restructuring expense during the three and six months ended June 30, 2013, and the remaining balance at June 30, 2013 (in thousands):

April 2012 European Restructuring	Asset Impairments and Related Costs	Severance and Termination Related Costs	Grant Repayments	Total	
Ending Balance at December 31, 2012	\$16,625	\$25,717	\$8,400	\$50,742	
Charges to Income		2,347	_	2,347	
Change in Estimates	_	_	_		
Cash Payments	(7,193	(6,720	) (8,315 )	(22,228	)
Non-Cash Amounts Including Foreign Exchange Impact	(304	) (718	) (85	(1,107	)

Ending Balance at March 31, 2013	9,128	20,626		29,754	
Charges to Income	2,170	1,185		3,355	
Change in Estimates	(945	) (29	) —	(974	)
Cash Payments	(6,597	) (13,563	) —	(20,160	)
Non-Cash Amounts Including Foreign Exchange	(771	) 316		(455	)
Impact	(//1	) 310	_	(433	,
Ending Balance at June 30, 2013	\$2,985	\$8,535	\$—	\$11,520	

Expenses recognized for restructuring activities are presented in "Restructuring" on the condensed consolidated statements of operations. Substantially all expenses related to the April 2012 European restructuring were related to our components segment. We expect to incur up to \$1 million in additional restructuring expense through the end of 2013 primarily related to remaining asset impairment and related costs associated with such restructuring initiatives.

# Note 5. Acquisitions

#### **TetraSun**

In April 2013, we acquired 100%, of the stock not previously owned by us, of TetraSun, Inc. ("TetraSun"), a development stage company that is in advanced stages of developing high efficiency crystalline silicon technology that is expected to provide improvements in performance relative to conventional crystalline silicon solar modules.

The all-cash acquisition was not material to our historical condensed consolidated balance sheets, results of operations or cash flows. We have included the financial results of TetraSun in our condensed consolidated financial statements from the date of acquisition.

In connection with applying the acquisition method of accounting, \$39.1 million of the purchase price consideration was assigned to an in-process research and development ("IPR&D") intangible asset that will be amortized over its useful life upon successful completion of the project or expensed earlier if impaired and \$6.1 million was assigned to goodwill. Goodwill represents the excess of the purchase price of an acquired business over the fair value of the underlying net tangible and intangible assets.

#### Solar Chile

In January 2013, we acquired 100% of the ownership interest of Solar Chile S.A. ("Solar Chile"), a Chilean-based solar project development company with substantially all of its assets being a portfolio of early to mid-stage utility-scale PV power projects in northern Chile, in an all-cash transaction which was not material to our historical condensed consolidated balance sheets, results of operations or cash flows. We have included the financial results of Solar Chile in our condensed consolidated financial statements from the date of acquisition.

#### Note 6. Cash, Cash Equivalents, and Marketable Securities

Cash, cash equivalents, and marketable securities consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Cash:		
Cash	\$882,091	\$ 889,065
Cash equivalents:		
Commercial paper	3,199	1,500
Money market funds	43,367	10,729
Total cash and cash equivalents	928,657	901,294
Marketable securities:		
Commercial paper	5,097	1,698
Corporate debt securities	137,704	23,384
Federal agency debt	25,813	29,936
Foreign agency debt	110,641	7,233
Foreign government obligations	26,191	4,142

Supranational debt	47,673	34,181
U.S. government obligations	3,496	2,004
Total marketable securities	356,615	102,578
Total cash, cash equivalents, and marketable securities	\$1,285,272	\$ 1,003,872

We have classified our marketable securities as "available-for-sale." Accordingly, we record them at fair value and account for net unrealized gains and losses as a part of other comprehensive income (loss). We report realized gains and losses on the sale

or maturity of our marketable securities in other income (expense), net computed using the specific identification method. We may sell these securities prior to their stated maturities after consideration of our liquidity requirements. We view securities with maturities beyond 12 months as available to support current operations, and accordingly we classify all such securities as current assets under the caption marketable securities in the accompanying condensed consolidated balance sheets. During the three and six months ended June 30, 2013 and June 30, 2012, we realized an immaterial amount of gains and losses on the sale or maturities of our marketable securities. See Note 12. "Fair Value Measurements," to our condensed consolidated financial statements for information about the fair value of our marketable securities.

All of our available-for-sale marketable securities are subject to a periodic impairment review. We consider a marketable security to be impaired when its fair value is less than its cost, in which case we would further review the marketable security to determine whether it is other-than-temporarily impaired. When we evaluate a marketable security for other-than-temporary impairment, we review factors such as the length of time and extent to which its fair value has been below its cost basis, the financial condition of the issuer and any changes thereto, our intent to sell, and whether it is more-likely-than-not that we will be required to sell the marketable security before we have recovered its cost basis. If a marketable security were other-than-temporarily impaired, we would write it down through other expense to its impaired value and establish that as a new cost basis. We did not identify any of our marketable securities as other-than-temporarily impaired at June 30, 2013 and December 31, 2012.

The following tables summarize the unrealized gains and losses related to our marketable securities, by major security type, as of June 30, 2013 and December 31, 2012 (in thousands):

As of June 30, 2013

	1 to of June 3	0, 2013		
Security Type	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
• • •	\$5,097	\$—	\$—	
Commercial paper	•		·	\$5,097
Corporate debt securities	137,818	20	134	137,704
Federal agency debt	25,817	11	15	25,813
Foreign agency debt	110,788	6	153	110,641
Foreign government obligations	26,190	1	_	26,191
Supranational debt	47,692	40	59	47,673
U.S. government obligations	3,497		1	3,496
Total	\$356,899	\$78	\$362	\$356,615
	As of Decem	nber 31, 2012		
	Amortized	onber 31, 2012 Gross Unrealized	Gross Unrealized	Estimated Fair
Security Type		Gross		
Security Type Commercial paper	Amortized	Gross Unrealized	Unrealized	Fair
• • •	Amortized Cost	Gross Unrealized Gains	Unrealized Losses	Fair Value
Commercial paper	Amortized Cost \$1,697	Gross Unrealized Gains \$1	Unrealized Losses	Fair Value \$1,698
Commercial paper Corporate debt securities	Amortized Cost \$1,697 23,358	Gross Unrealized Gains \$1 26	Unrealized Losses \$— —	Fair Value \$1,698 23,384
Commercial paper Corporate debt securities Federal agency debt	Amortized Cost \$1,697 23,358 29,888	Gross Unrealized Gains \$1 26	Unrealized Losses \$—  1	Fair Value \$1,698 23,384 29,936
Commercial paper Corporate debt securities Federal agency debt Foreign agency debt	Amortized Cost \$1,697 23,358 29,888 7,266	Gross Unrealized Gains \$1 26 49	Unrealized Losses \$—  1	Fair Value \$1,698 23,384 29,936 7,233
Commercial paper Corporate debt securities Federal agency debt Foreign agency debt Foreign government obligations	Amortized Cost \$1,697 23,358 29,888 7,266 4,138	Gross Unrealized Gains \$1 26 49 — 4	Unrealized Losses \$—  1	Fair Value \$1,698 23,384 29,936 7,233 4,142

Contractual maturities of our marketable securities as of June 30, 2013 and December 31, 2012 were as follows (in thousands):

	As of June 30, 2013			
Maturity	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
One year or less	\$71,006	\$55	\$11	\$71,050
One year to two years	259,274	20	337	258,957
Two years to three years	26,619	3	14	26,608
Total	\$356,899	\$78	\$362	\$356,615
12				

	As of December 31, 2012			
	Amortized Cost	Gross Unrealized	Gross Unrealized	Estimated Fair
Maturity		Gains	Losses	Value
One year or less	\$71,225	\$67	\$32	\$71,260
One year to two years	30,707	88	1	30,794
Two years to three years	525	_	1	524
Total	\$102,457	\$155	\$34	\$102,578

The net unrealized loss of \$0.3 million and net unrealized gain of \$0.1 million as of June 30, 2013 and December 31, 2012, respectively, on our marketable securities were primarily the result of changes in interest rates. 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 table shows gross unrealized losses and estimated fair values for those marketable securities that were in an unrealized loss position as of June 30, 2013 and December 31, 2012, 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	0, 2013	г	(		
	In Loss Position for		In Loss Position for		T-4-1	
	Less Than 12 Months		12 Months or Greater		Total	
	Estimated	Gross	Estimated	Gross	Estimated	Gross
	Fair	Unrealized	Fair	Unrealized	Fair	Unrealized
Security Type	Value	Losses	Value	Losses	Value	Losses
Corporate debt securities	\$48,170	\$134	<b>\$</b> —	\$	\$48,170	\$134
Federal agency debt	10,016	15			10,016	15
Foreign agency debt	86,100	153	_	_	86,100	153
Foreign government obligations	1,053	_	_	_	1,053	_
Supranational debt	29,149	59			29,149	59
U.S. government obligations	3,502	1			3,502	1
Total	\$177,990	\$362	<b>\$</b> —	<b>\$</b> —	\$177,990	\$362
	As of Decem	ber 31, 2012				
	In Loss Posit	•	In Loss Posit	ion for	_	
	Less Than 12		12 Months or		Total	
	Estimated	Gross	Estimated	Gross	Estimated	Gross
	Fair	Unrealized	Fair	Unrealized	Fair	Unrealized
Security Type	Value	Losses	Value	Losses	Value	Losses
Federal agency debt	\$524	\$1	<b>\$</b> —	<b>\$</b> —	\$524	\$1
Foreign agency debt	_	_	5,970	33	5,970	33
Total	\$524	\$1	\$5,970	\$33	\$6,494	\$34

Note 7. Restricted Cash and Investments

Restricted cash and investments consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Restricted cash (1)	\$157	\$ 184
Restricted investments	275,026	301,216

## Restricted cash and investments

\$275,183 \$301,400

There was \$5.1 million of restricted cash included within prepaid expenses and other current assets at (1)December 31, 2012 primarily related to required cash collateral for certain letters of credit provided for projects under development in foreign jurisdictions.

At June 30, 2013 and December 31, 2012, our restricted investments consisted of long-term marketable securities that we hold through a custodial account to fund the estimated future costs of collecting and recycling modules covered under our solar module collection and recycling program and related obligations. We have classified our restricted investments as "available-for-sale." Accordingly, we record them at fair value and account for net unrealized gains and losses as a part of accumulated other comprehensive income (loss). We report realized gains and losses on the maturity or sale of our restricted investments in other income (expense), net computed using the specific identification method. Restricted investments are classified as noncurrent as the underlying accrued solar module collection and recycling liability is also noncurrent in nature.

We fund the estimated collection and recycling obligations incremental to amounts already pre-funded in prior years for the cumulative module sales covered by our solar module collection and recycling program within 90 days of the end of each year, assuming for this purpose a service life of 25 years for our solar modules. To ensure that our collection and recycling program for covered modules is available at all times and the pre-funded amounts are accessible regardless of our financial status in the future (even in the case of our own insolvency), we have established a trust structure (the "Trust") under which estimated required funds are put into custodial accounts with an established and reputable bank as the investment advisor in the name of the Trust, for which First Solar, Inc. ("FSI"), First Solar Malaysia Sdn. Bhd. ("FS Malaysia"), and First Solar Manufacturing GmbH ("FSM 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 executing the required collection and recycling services. Investments in this custodial account must meet the criteria of the highest quality investments, such as 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 which are not currently at risk of default. Under the Trust agreements, each year we determine the annual pre-funding requirement (if any) based upon the difference between the current estimated future costs of collecting and recycling all solar modules covered under our program combined with the rate of return restricted investments will earn prior to being utilized to cover qualified collection and recycling costs and amounts already pre-funded in prior years. Based primarily upon reductions in the estimated future costs of collecting and recycling solar modules covered under our program combined with the cumulative amounts pre-funded since the inception of our program, we have determined that no incremental funding was required in the first quarter of 2013 for all historical covered module sales through December 31, 2012.

The following table summarizes unrealized gains and losses related to our restricted investments by major security type as of June 30, 2013 and December 31, 2012 (in thousands):

	As of June 30, 2013			
	Amortized	Gross	Gross	Estimated
	Cost	Unrealized	Unrealized	Fair
Security Type	Cost	Gains	Losses	Value
Foreign government obligations	\$189,780	\$27,910	<b>\$</b> —	\$217,690
U.S. government obligations	54,626	3,559	849	57,336
Total	\$244,406	\$31,469	\$849	\$275,026
	As of Decem	nber 31, 2012		
		nber 31, 2012 Gross	Gross	Estimated
	Amortized	· ·	Gross Unrealized	Estimated Fair
Security Type		Gross		
Security Type Foreign government obligations	Amortized	Gross Unrealized	Unrealized	Fair
• • •	Amortized Cost	Gross Unrealized Gains	Unrealized Losses	Fair Value

As of June 30, 2013 and December 31, 2012, the contractual maturities of these restricted investments were between 15 years and 24 years. As of June 30, 2013, the gross unrealized loss of \$0.8 million had been in a continuous loss position for less than 12 months.

Note 8. Net Income (Loss) per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding for the period. Diluted net income (loss) per share is computed giving effect to all potential dilutive common stock, including employee stock options, restricted and performance stock units, stock purchase plan shares, and contingently issuable shares, unless there is a net loss for the period.

The calculation of basic and diluted net income (loss) per share for the three and six months ended June 30, 2013 and June 30, 2012 was as follows (in thousands, except per share amounts):

	Three Months Ended		Six Months Ended		
	June 30,	June 30,	June 30,	June 30,	
	2013	2012	2013	2012	
Basic net income (loss) per share					
Numerator:					
Net income (loss)	\$33,598	\$110,983	\$92,740	\$(338,433	)
Denominator:					
Weighted-average common stock outstanding	89,201	86,855	88,209	86,681	
Diluted net income (loss) per share					
Denominator:					
Weighted-average common stock outstanding	89,201	86,855	88,209	86,681	
Effect of stock options, restricted and performance stock	1,941	798	2,056		
units, and stock purchase plan shares	1,5 11	770	2,030		
Weighted-average shares used in computing diluted net	91,142	87,653	90,265	86,681	
income (loss) per share	<i>z</i> -,	0.,000	,		
	mi 3.6 d				
	Three Month		Six Months l		
	June 30,	June 30,	June 30,	June 30,	
	2013	2012	2013	2012	
Per share information — basic:		*	* * * * *	* * * * * *	
Net income (loss) per share	\$0.38	\$1.28	\$1.05	\$(3.90	)
Dan shows information diluted					
Per share information — diluted:	¢0.27	¢1.27	¢1.02	\$ (2.00	`
Net income (loss) per share	\$0.37	\$1.27	\$1.03	\$(3.90	)

The following number of outstanding employee stock options, restricted and performance stock units and stock purchase plan shares were excluded from the computation of diluted net income (loss) per share for the three and six months ended June 30, 2013 and June 30, 2012 as they would have had an anti-dilutive effect (in thousands):

	Three Mon	Three Months Ended		s Ended
	June 30,	June 30,	June 30,	June 30,
	2013	2012	2013	2012
Anti-dilutive shares	91	3,681	107	2,324

#### Note 9. Consolidated Balance Sheet Details

Accounts receivable trade, net

Accounts receivable trade, net consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Accounts receivable trade, gross	\$202,109	\$ 568,070
Allowance for doubtful accounts	(9,529)	(14,503)
Accounts receivable trade, net	\$192,580	\$ 553,567

At June 30, 2013 and December 31, 2012, \$51.6 million and \$104.5 million, respectively, of our Accounts receivable trade, net were secured by letters of credit, bank guarantees or other forms of financial security issued by credit

worthy financial institutions.

## Accounts receivable, unbilled and retainage

Accounts receivable, unbilled and retainage consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Accounts receivable, unbilled	\$222,636	\$ 342,587
Retainage	237,802	58,400
Accounts receivable, unbilled and retainage	\$460,438	\$ 400,987

Accounts receivable, unbilled represents revenue that has been recognized in advance of billing the customer. This is common for long-term construction contracts. For example, we recognize revenue from contracts for the construction and sale of solar power systems which include the sale of project assets over the construction period using applicable accounting methods. One applicable accounting method is the percentage-of-completion method under which sales and gross profit are recognized as construction work is performed based on the relationship between actual costs incurred compared to the total estimated costs for constructing the project. Under this accounting method, revenue can be recognized 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 customers 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.

Also included within Accounts receivable, unbilled and retainage is the current portion of retainage. 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.

Retainage that is noncurrent in nature is expected to be collected in the second half of 2014 through 2015, after certain construction milestones have been met.

#### Inventories

Inventories consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Raw materials	\$177,070	\$ 184,006
Work in process	11,672	14,868
Finished goods (solar modules)	278,187	370,422
Inventories	\$466,929	\$ 569,296
Inventories — current	\$334,261	\$ 434,921
Inventories — noncurrent (1)	\$132,668	\$ 134,375

(1) We purchase a critical raw material that is used in our core production process in quantities that exceed anticipated consumption within our operating cycle (which is 12 months). We classify the raw materials that we do not expect to be consumed within our operating cycle as noncurrent.

We regularly review the cost of inventories, including noncurrent inventories, against their estimated market value and record a lower of cost or market write-down if any inventories have a cost in excess of their estimated market value as defined by ASC 330, Inventories. We also regularly evaluate the quantities and values of our inventories, including noncurrent inventories, in light of current market conditions and market trends among other factors and record

write-downs for any quantities in excess of demand and for any new obsolescence.

# Balance of systems parts

Balance of systems parts represent mounting, electrical and other construction parts purchased for solar power plants to be constructed or currently under construction, which we hold title to and are not yet installed in a solar power plant. These parts include posts, tilt brackets, tables, harnesses, combiner boxes, inverters, cables, tracker equipment and other parts we purchase or

assemble for the solar power plants we construct. Balance of systems parts does not include any solar modules that we manufacture. We carry these parts at the lower of cost or market, with market being based primarily on recoverability through installation in a solar power system.

Prepaid expenses and other current assets

Prepaid expenses and other current assets consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Prepaid expenses	\$31,099	\$ 39,582
Derivative instruments	3,079	7,230
Deferred costs of goods sold	2,102	96,337
Other current assets	80,887	64,219
Prepaid expenses and other current assets	\$117,167	\$ 207,368

Property, plant and equipment, net

Property, plant and equipment, net consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Buildings and improvements	\$459,280	\$ 446,133
Machinery and equipment	1,421,761	1,415,632
Office equipment and furniture	123,553	117,228
Leasehold improvements	47,230	49,367
Depreciable property, plant and equipment, gross	2,051,824	2,028,360
Accumulated depreciation	(852,763)	(803,501)
Depreciable property, plant and equipment, net	1,199,061	1,224,859
Land	22,209	22,256
Construction in progress	128,809	51,133
Stored assets (1)	210,829	227,134
Property, plant and equipment, net	\$1,560,908	\$ 1,525,382

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. As the stored assets are neither in the condition or 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 the long-lived assets may not be recoverable. We ceased the capitalization of interest on such stored assets once they were physically received from the related machinery and equipment suppliers.

Depreciation of property, plant and equipment was \$57.8 million and \$116.0 million for the three and six months ended June 30, 2013, respectively, and was \$64.0 million and \$136.6 million for the three and six months ended June 30, 2012, respectively.

From time to time, we have received grants for the construction or expansion of our manufacturing facilities. We account for any such grants as a reduction to the carrying value of the property, plant and equipment they fund. During the first quarter of 2013, we repaid the remaining €6.3 million of grants received in 2011, including outstanding interest due, as a result of the closure of our Frankfurt (Oder) manufacturing facility.

See Note 4. "Restructuring," for more information on the long-lived asset impairments and grant repayments related to our April 2012 European restructuring.

Capitalized interest

We capitalized interest costs incurred into property, plant and equipment or project assets as follows during the three and six months ended June 30, 2013 and June 30, 2012 (in thousands):

	Three Months Ended				Six Months Ended			
	June 30,		June 30,		June 30,		June 30,	
	2013		2012		2013		2012	
Interest cost incurred	\$(3,167	)	\$(9,318	)	\$(6,442	)	\$(16,050	)
Interest cost capitalized — property, plant and equipment	736		769		1,046		2,822	
Interest cost capitalized — project assets	1,556		1,177		3,771		4,936	
Interest expense, net	\$(875	)	\$(7,372	)	\$(1,625	)	\$(8,292	)

#### Project assets and deferred project costs

Project assets consist primarily of costs relating to solar power projects in various stages of development and construction that we capitalize prior to entering into a definitive sales agreement for the solar power project including projects that have begun commercial operation under the project PPAs. These costs include costs for land and costs for developing and constructing a PV solar power system. Development costs can 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 sheet 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 to cost of sales after each respective project asset is sold to a customer and all revenue recognition criteria have been met (matching the expensing of costs to the underlying revenue recognition method). We classify project assets generally 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 is expected within the next 12 months.

If a project asset 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 sale of such project closes. Any income generated by such 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.

Project assets and deferred project costs consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Project assets — land	\$810	\$ 9,164
Project assets — development costs including project acquisition costs	251,835	157,489
Project assets — construction costs	71,827	192,171
Project assets — projects in commercial operation under project PPAs	205,283	_

Project assets	\$529,755	\$ 358,824
Deferred project costs — current	\$1,004,778	\$ 21,390
Deferred project costs — non-current	29,396	486,654
Deferred project costs	1,034,174	\$ 508,044
Total project assets and deferred project costs	\$1,563,929	\$ 866,868

Note Receivable

On April 8, 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% per annum and is due on December 31, 2026. As of June 30, 2013 and December 31, 2012, the balance on this credit facility was €7.0 million. The outstanding amount of this credit facility is included within "Other assets" on our condensed consolidated balance sheets.

#### Note Receivable, Affiliate

In January 2012, we contributed an immaterial amount for a 50% ownership interest in a newly formed limited liability company ("property company"), which was formed for the sole purpose of holding land for use in the development of a certain solar power project. One of our customers also contributed an immaterial amount for the remaining 50% ownership interest in the property company. The activities for the property company were governed by a shareholders agreement. The intent of the shareholders agreement was to outline the parameters of the arrangement with our customer, whereby we would supply solar modules to our customer for the solar power project and our customer would develop, construct, and sell the project. The shareholders agreement also required each party to consent to all decisions made for the most significant activities of the property company. There were no requirements for us to make further contributions to the property company and the proceeds from the sale of the project were to be divided equally between us and our customer after the repayment of all project development related costs including the repayment of the loan discussed further below.

We also entered into a loan agreement, with a 6% per annum interest rate, with the property company, which is considered an affiliate, which required that the proceeds be used to purchase the project land and to pay for certain land development costs. Construction of the project was substantially completed during September 2012. During the first quarter of 2013, the then outstanding principal balance on this loan of  $\in$ 13.4 million was repaid in full. Additionally,  $\in$ 1.1 million of interest income was received under the terms of the loan, representing the cumulative interest due from the property company since the inception of the loan.

The property company is considered a variable interest entity and our previous ownership interest in and our loan to the property company were considered variable interests. We accounted for our investment in the property company under the equity method of accounting as we concluded we were not the primary beneficiary as we did not have the power to make decisions for the most significant activities of the property Company. We had no remaining ownership interest or equity method investment balance related to the property company as of June 30, 2013.

## Intangible Assets

"Prepaid expenses and other current assets" and "Other assets" include acquired intangible assets, the majority of which were acquired during the three months ended June 30, 2013 as part of our TetraSun acquisition described in Note 5. "Acquisitions." Prepaid expenses and other current assets and Other assets also include our internally-generated intangible assets, substantially all of which are 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.

Intangible assets consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Intangible assets, gross	\$48,939	\$ 9,139
Accumulated amortization	(5,700	) (5,404 )

Intangible assets, net \$43,239 \$3,735

\$39.1 million of the \$48.9 million of Intangible assets, gross as of June 30, 2013 consists of IPR&D related to assets that were acquired as part of our TetraSun acquisition. Such assets will be amortized over their estimated useful lives upon successful completion of the project or expensed earlier if impaired.

# Accrued expenses

Accrued expenses consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Accrued compensation, benefits and severance	\$41,552	\$ 105,677
Accrued property, plant and equipment	22,131	20,564
Accrued inventory and balance of systems parts	55,910	52,408
Accrued project assets and deferred project costs	85,989	76,133
Product warranty liability (Note 14)	62,989	90,581
Accrued expenses in excess of normal product warranty liability and related expenses (1)	64,252	75,020
Other accrued expenses	58,941	134,050
Accrued expenses	\$391,764	\$ 554,433

(1) Accrued expenses in excess of normal product warranty liability and related expenses consists primarily of commitments to certain customers, each related to the manufacturing excursion occurring during the period between June 2008 to June 2009 ("2008-2009 manufacturing excursion"), whereby certain modules manufactured during that time period may experience premature power loss once installed in the field. Additionally, included in such accrued expenses are commitments to certain customers related to a workmanship issue potentially affecting solar modules manufactured between October 2008 to June 2009, as a limited number of the modules manufactured during that time utilized a new material and process to attach the cord plate (junction box) to the module which may not adhere securely over time.

Our best estimate for such remediation programs is based on evaluation and consideration of currently available information, including the estimated number of potentially affected modules in the field, historical experience related to our remediation efforts, customer-provided data related to potentially affected systems, the estimated costs of performing the removal, replacement and logistical services and the post-sale expenses covered under our remediation program. If any of our estimates prove incorrect, we could be required to accrue additional expenses.

#### Deferred Revenue

We recognize deferred revenue as net sales only after all revenue recognition criteria are met. We expect to recognize these amounts as net sales within the next 12 months.

#### Payments and billings for deferred project costs

Payments and billings for deferred project costs represent 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 related costs are included as deferred project costs. We classify such amounts as current or noncurrent depending upon when all revenue recognition criteria are expected to be met, consistent with the classification of the associated deferred project costs.

Other current liabilities

Other current liabilities consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Derivative instruments	\$4,759	\$ 5,825
Deferred tax liabilities	_	2,226
Billings in excess of costs and estimated earnings (1)	4,044	2,422
Other	52,346	21,824
Other current liabilities	\$61,149	\$ 32,297

(1) Billings in excess of costs and estimated earnings represents 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.

Other liabilities

Other liabilities consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

	June 30,	December 31,
	2013	2012
Product warranty liability	\$126,268	\$ 101,015
Other taxes payable	117,542	102,599
Billings in excess of costs and estimated earnings (1)	45,334	47,623
Other	85,727	40,979
Other liabilities	\$374,871	\$ 292,216

(1) Billings in excess of costs and estimated earnings represents 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.

#### Note 10. Equity Offering

During June 2013, we completed an equity offering of 9,747,000 shares of our common stock at a public offering price of \$46.00 per share. Net proceeds from the equity offering were \$428.2 million, after deducting \$17.9 million of underwriting discounts and offering expenses of \$2.2 million. We intend to use the proceeds for general corporate purposes, which may include acquisitions of under development photovoltaic solar power system projects, investments in photovoltaic solar power system projects that will be jointly developed with strategic partners and capital expenditures or strategic investments to develop certain business units and expand in new geographies.

#### Note 11. 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 consolidated net assets, financial position, results of operations, and cash flows. We use derivative instruments to hedge against certain risks such as these, and we only hold derivative 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. As required by ASC 815, Derivatives and Hedging, we report all of our derivative instruments that are within the scope of that accounting standard at fair value. We account for changes in the fair value of derivative instruments within accumulated other comprehensive income (loss) if the derivative instruments qualify for hedge accounting under ASC 815. 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 12. "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 value of derivative instruments included in our condensed consolidated balance sheets as of June 30, 2013 and December 31, 2012 (in thousands):

June 30, 201	13	
Prepaid		
Expenses	Other	Other
and Other	Current	
Current	Liabilities	Liabilities
Assets		

Derivatives designated as hedging instruments under ASC 815:

Cross-currency swap contract Interest rate swap contracts Total derivatives designated as hedging instruments	\$— — \$—	\$659 369 \$1,028	\$2,965 591 \$3,556
Derivatives not designated as hedging instruments under ASC 815:			
Foreign exchange forward contracts	\$3,079	\$3,731	<b>\$</b> —
Total derivatives not designated as hedging instruments	\$3,079	\$3,731	<b>\$</b> —
Total derivative instruments	\$3,079	\$4,759	\$3,556
21			

December 3 Prepaid Expenses and Other Current Assets	1, 2012 Other Current Liabilities	Other Liabilities
\$2,121	<b>\$</b> —	\$—
_	316	1,582
_	473	994
\$2,121	\$789	\$2,576
\$5,109	\$5,036	<b>\$</b> —
\$5,109	\$5,036	<b>\$</b> —
\$7,230	\$5,825	\$2,576
	Prepaid Expenses and Other Current Assets \$2,121 \$2,121 \$5,109 \$5,109	Expenses and Other Current Current Liabilities  \$2,121 \$—

The impact of offsetting balances associated with derivative instruments designated as hedging instruments under ASC 815 is shown below (in thousands):

	June 30, 20	013		Gross Amor Offset in Co Balance She	nsolidated	
	Gross Asset (Liability)	Gross Offset in Consolidated Balance Sheet	Net Amount Recognized in Financial Statements	Financial Instruments	Cash Collateral Pledged	Net Amount
Cross-currency swap contracts Interest rate swap contracts	\$(3,624) \$(960)		(3,624 ) (960 )	_	_	\$(3,624) \$(960)
	December	31, 2012		Gross Amor Offset in Co Balance She	nsolidated	
	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	\$2,121	_	2,121	_	_	\$2,121
Cross-currency swap contracts Interest rate swap contracts	\$(1,898 ) \$(1,467 )	_	(1,898 ) (1,467 )		_	\$(1,898) \$(1,467)

The following tables present the amounts related to derivative instruments designated as cash flow hedges under ASC 815 affecting accumulated other comprehensive income (loss) and our condensed consolidated statements of operations for the three and six months ended June 30, 2013 and June 30, 2012 (in thousands):

	Foreign Exchange Forward Contracts		Interest Ra Swap Contract	te	Cross Currency Swap Contract		Total	
Balance in other comprehensive income (loss) at December 31, 2012	\$8,980		\$(1,467	)	\$(8,031	)	\$(518	)
Amounts recognized in other comprehensive income (loss)	4,135		100		(1,604	)	2,631	
Amounts reclassified to net sales as a result of forecasted transactions being probable of not occurring Amounts reclassified to earnings impacting:	(13,115	)	_		_		(13,115	)
Foreign currency gain			_		1,974		1,974	
Interest expense			209		85		294	
Balance in other comprehensive income (loss) at March 31, 2013	<b>\$</b> —		\$(1,158	)	\$(7,576	)	\$(8,734	)
Amounts recognized in other comprehensive income (loss) Amounts reclassified to earnings impacting:	_		2		(313	)	(311	)
Foreign currency gain	_		_		2,912		2,912	
Interest expense	_		196		106		302	
Balance in other comprehensive income (loss) at June 30, 2013	\$—		\$(960	)	\$(4,871	)	\$(5,831	)
	Foreign Exchange Forward Contracts		Interest Ra Swap Contracts	te	Cross Currency Swap Contract		Total	
Balance in other comprehensive income (loss) at December 31, 2011	Exchange Forward		Swap		Currency Swap	)	Total \$25,281	
31, 2011 Amounts recognized in other comprehensive (loss) income	Exchange Forward Contracts	)	Swap Contracts	)	Currency Swap Contract	)		)
31, 2011	Exchange Forward Contracts \$33,751	)	Swap Contracts \$(2,571	)	Currency Swap Contract \$(5,899	)	\$25,281	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss)	Exchange Forward Contracts \$33,751 (11,341	)	Swap Contracts \$(2,571	)	Currency Swap Contract \$(5,899 4,347 — (5,003	)	\$25,281 (7,908 (6,710 (5,003	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss) Interest expense	Exchange Forward Contracts \$33,751 (11,341	)	Swap Contracts \$(2,571	)	Currency Swap Contract \$(5,899 4,347	)	\$25,281 (7,908 (6,710	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss) Interest expense Balance in other comprehensive income (loss) at March 31, 2012	Exchange Forward Contracts \$33,751 (11,341	)	Swap Contracts \$(2,571 (914 —	)	Currency Swap Contract \$(5,899 4,347 — (5,003		\$25,281 (7,908 (6,710 (5,003	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss) Interest expense Balance in other comprehensive income (loss) at March 31, 2012 Amounts recognized in other comprehensive income (loss)	Exchange Forward Contracts \$33,751 (11,341 (6,710 —	)	Swap Contracts \$(2,571 (914 — — 244	)	Currency Swap Contract \$(5,899 4,347 — (5,003 71	)	\$25,281 (7,908 (6,710 (5,003 315	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss) Interest expense Balance in other comprehensive income (loss) at March 31, 2012 Amounts recognized in other comprehensive income (loss) Amounts reclassified to net sales as a result of forecasted transactions being probable of not occurring	Exchange Forward Contracts \$33,751 (11,341 (6,710 — \$15,700	)	Swap Contracts \$(2,571) (914) ————————————————————————————————————	)	Currency Swap Contract \$(5,899 4,347 — (5,003 71 \$(6,484	)	\$25,281 (7,908 (6,710 (5,003 315 \$5,975	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss) Interest expense Balance in other comprehensive income (loss) at March 31, 2012 Amounts recognized in other comprehensive income (loss) Amounts reclassified to net sales as a result of forecasted transactions being probable of not occurring Amounts reclassified to earnings impacting:	Exchange Forward Contracts \$33,751 (11,341 (6,710 — \$15,700 5,825	)	Swap Contracts \$(2,571) (914) ————————————————————————————————————	)	Currency Swap Contract \$(5,899 4,347 — (5,003 71 \$(6,484 (5,989 —	)	\$25,281 (7,908 (6,710 (5,003 315 \$5,975 (498 (3,385	)
31, 2011 Amounts recognized in other comprehensive (loss) income Amounts reclassified to earnings impacting: Net sales Foreign currency gain (loss) Interest expense Balance in other comprehensive income (loss) at March 31, 2012 Amounts recognized in other comprehensive income (loss) Amounts reclassified to net sales as a result of forecasted transactions being probable of not occurring	Exchange Forward Contracts \$33,751 (11,341 (6,710 — \$15,700 5,825	)	Swap Contracts \$(2,571) (914) ————————————————————————————————————	)	Currency Swap Contract \$(5,899 4,347 — (5,003 71 \$(6,484	)	\$25,281 (7,908 (6,710 (5,003 315 \$5,975 (498	)

We recorded immaterial amounts related to ineffective portions of our derivative instruments designated as cash flow hedges during the six months ended June 30, 2013 and June 30, 2012 directly to other income (expense), net. In addition, we recognized losses of \$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, 2013, respectively. We recognized gains of \$2.2 million and \$1.9 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 and June 30, 2012, respectively.

The following table presents the amounts related to derivative instruments not designated as cash flow hedges under ASC 815 affecting our condensed consolidated statements of operations for the three and six months ended June 30, 2013 and June 30, 2012 (in thousands):

		Amount of Gain (Loss) Recognized in Income on					
		Derivatives					
		Three Three Months		Six Months Ended	Six Months Ended	<b>.</b>	
		Ended	Ended	Elided	Ended		
Derivatives not designated as hedging instruments under ASC 815:	Location of Gain (Loss) Recognized in Income on Derivatives	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012		
Foreign exchange forward contracts	Foreign currency gain (loss)	\$746	\$(8,877)	\$1,863	\$(1,523	)	
Foreign exchange forward contracts	Cost of sales	\$(685)	\$(1,546)	\$(773)	\$(738	)	
Foreign exchange forward contracts	Net Sales	\$5,666	<b>\$</b> —	\$5,666	\$—		

#### 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 MYR 465.0 million and entitles us to receive a three-month floating Kuala Lumpur Interbank Offered Rate ("KLIBOR") interest rate, and requires us to pay a fixed U.S. dollar rate of 3.495%. Additionally, this swap hedges the foreign currency risk of the Malaysian Ringgit denominated principal and interest payments as we make swap payments in U.S. dollars and receive swap payments in Malaysian Ringgits at a fixed exchange rate 3.19 MYR to USD. The notional amount of the swap is scheduled to decline in correspondence to our scheduled principal payments on the underlying hedged debt. As of June 30, 2013 and December 31, 2012, the notional value of this cross-currency swap agreement was MYR 426.3 million and MYR 465.0 million, respectively. This swap is a derivative instrument that qualifies for accounting as a cash flow hedge in accordance with ASC 815 and we designated it as such. We determined that this swap was highly effective as a cash flow hedge at June 30, 2013 and December 31, 2012. For the three and six months ended June 30, 2013 and June 30, 2012, there were immaterial amounts of ineffectiveness from this cash flow hedge.

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 are entitled to receive a six-month floating Euro Interbank Offered Rate ("EURIBOR") interest rate, and are required to pay a fixed rate of 2.80%. The notional amount of the interest rate swap contract is scheduled to decline in correspondence to our scheduled principal payments on the underlying hedged debt. As of June 30, 2013 and December 31, 2012, the notional value of this interest rate swap contract was €24.4 million and €29.1 million, respectively. This derivative instrument qualifies for accounting as a cash flow hedge in accordance with ASC 815, and we designated it as such. We determined that our interest rate swap contract was highly effective as a cash flow hedge at June 30, 2013 and December 31, 2012. For the three and six months ended June 30, 2013 and June 30, 2012, there were immaterial amounts of ineffectiveness from this cash flow hedge.

In the following 12 months, we expect to reclassify to earnings \$1.0 million of net unrealized losses related to swap contracts that are included in accumulated other comprehensive income (loss) at June 30, 2013 as we realize the earnings effect of the underlying loans. The amount we ultimately record to earnings will depend on the actual interest rates and foreign exchange rate when we realize the earnings effect of the underlying loans.

Foreign Currency Exchange Risk

#### Cash Flow Exposure

We expect many of the subsidiaries of our business to have material future cash flows, including net sales and expenses that will be denominated in currencies other than the subsidiaries' functional currency. Our primary cash flow exposures are net sales and expenses. Changes in the exchange rates between our subsidiaries' functional currency 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 December 31, 2012, these foreign exchange forward contracts hedged our forecasted cash flows for up to 3 months. 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 the derivative's unrealized gain or loss in accumulated other comprehensive income (loss) 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 at December 31, 2012. During the six months

ended June 30, 2013 and June 30, 2012, we did not discontinue any cash flow hedges because a hedging relationship was no longer highly effective. As of June 30, 2013 there were no longer any outstanding foreign exchange forward contracts qualifying as cash flow hedges.

As of December 31, 2012, 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):

December 31, 2012

Currency Notional Amount USD Equivalent Canadian dollar CAD 192.0 \$195.1

As of December 31, 2012, the net unrealized gain on these contracts was \$9.0 million.

Transaction Exposure and Economic Hedging

Many subsidiaries of our business have assets and liabilities (primarily receivables, marketable securities and investments, accounts payable, 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 our subsidiaries' functional currencies and the other currencies in which these assets and liabilities are denominated can 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 the 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 purchase foreign exchange forward contracts to economically hedge balance sheet and other exposures related to transactions with third parties. Such contracts are considered economic hedges and do not qualify for hedge accounting under ASC 815. We recognize gains or losses from the fluctuation in foreign exchange rates and the fair value of these derivative contracts in "Net sales", "Cost of sales", and "Foreign currency gain (loss)" on our condensed consolidated statements of operations, depending on where the gain or loss from the economically hedged item is classified on our condensed consolidated statements of operations. As of June 30, 2013 the total net unrealized loss on our economic hedge foreign exchange forward contracts was \$0.6 million. As of December 31, 2012 the total net unrealized gain on our economic hedge foreign exchange forward contracts was \$0.1 million. As these amounts do not qualify for hedge accounting, changes in fair value related to such derivative instruments are recorded directly to earnings. These contracts have maturities of less than six months.

As of June 30, 2013 and December 31, 2012, the notional values of our foreign exchange forward contracts that do not qualify for hedge accounting under ASC 815 were as follows (notional amounts and U.S. dollar equivalents in millions):

June 30, 2013			
Transaction	Currency	Notional Amount	USD Equivalent
Purchase	Euro	€167.5	\$218.3
Sell	Euro	€174.2	\$227.0
Purchase	Australian dollar	AUD 1.8	\$1.6
Sell	Australian dollar	AUD 1.8	\$1.6
Purchase	Malaysian ringgit	MYR 152.2	\$48.7
Sell	Malaysian ringgit	MYR 63.9	\$20.4
Purchase	Canadian dollar	CAD 2.7	\$2.6

Sell	Canadian dollar	CAD 198.6	\$188.7
Purchase	Chinese yuan	CNY 43.4	\$6.9
Sell	Chinese yuan	CNY 17.4	\$2.8

The table above includes certain foreign exchange forward contracts originally designated as cash flow hedges that were subsequently de-designated.

December	: 31	, 20	12
----------	------	------	----

Transaction	Currency	Notional Amount	USD Equivalent
Purchase	Euro	€128.7	\$170.2
Sell	Euro	€134.2	\$177.5
Sell	Australian dollar	AUD 8.5	\$8.8
Purchase	Malaysian ringgit	MYR 136.4	\$45.0
Sell	Malaysian ringgit	MYR 36.0	\$11.9
Purchase	Canadian dollar	CAD 22.4	\$22.6
Sell	Canadian dollar	CAD 15.8	\$16.0

#### Note 12. Fair Value Measurements

The following is a description of the valuation techniques that we use to measure the fair value of assets and liabilities that we measure and report at fair value on a recurring basis:

Cash equivalents. At June 30, 2013 and December 31, 2012, our cash equivalents consisted of commercial paper and money market mutual funds. We value our commercial paper cash equivalents using quoted prices for securities with similar characteristics and other observable inputs (such as interest rates that are observable at commonly quoted intervals). Accordingly, we classify the valuation techniques that use these inputs as Level 2. We value our money market cash equivalents using observable inputs that reflect quoted prices for securities with identical characteristics, and accordingly, we classify the valuation techniques that use these inputs as Level 1.

Marketable securities and restricted investments. At June 30, 2013 and December 31, 2012, our marketable securities consisted of commercial paper, corporate debt securities, federal and foreign agency debt, foreign government obligations, supranational debt and U.S. government obligations, and our restricted investments consisted of foreign and U.S. government obligations. We value our marketable securities and restricted investments using quoted prices for securities with similar characteristics and other observable inputs (such as interest rates that are observable at commonly quoted intervals), and accordingly, we classify the valuation techniques that use these inputs as Level 2. We also consider the effect of our counterparties' credit standings in these fair value measurements.

Derivative assets and liabilities. At June 30, 2013 and December 31, 2012, our derivative assets and liabilities consisted of foreign exchange forward contracts involving major currencies, interest rate swap contracts involving a benchmark of interest rates, and a cross-currency swap including both. Since our derivative assets and liabilities are not traded on an exchange, we value them using industry standard valuation models. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, credit risk, foreign exchange rates, and forward and spot prices for currencies. These inputs are observable in active markets over the contract term of the derivative instruments we hold, and accordingly, we classify these valuation techniques as Level 2. We consider the effect of our own credit standing and that of our counterparties in our fair value measurements of our derivative assets and liabilities, respectively.

At June 30, 2013 and December 31, 2012, the fair value measurements of our assets and liabilities that we measure on a recurring basis were as follows (in thousands):

	As of June 30, 2013					
					e Measuremer	nts at
				Reporting		
				Date Usin	g	
		Total Fa	air	Quoted		
		Value a		Prices	Significant	
		Carryin		in Active	Other	Significant
		Value o	n	Markets		Unobservable
		Our		for	Inputs	Inputs
		Balance	2	Identical	(Level 2)	(Level 3)
		Sheet		Assets	(== )	(==::==)
•				(Level 1)		
Assets:						
Cash equivalents:		Ф2 100		Φ	Φ 2 100	¢.
Commercial paper		\$3,199		\$— 42.267	\$3,199	\$ <i>-</i>
Money market funds Marketable securities:		43,367		43,367	_	_
Commercial paper		5,097			5,097	
Corporate debt securities		137,704	1	_	137,704	_
Federal agency debt		25,813	+		25,813	_
Foreign agency debt		110,641	1		110,641	_
Foreign government obligations		26,191			26,191	
Supranational debt		47,673			47,673	_
U.S. government obligations		3,496			3,496	_
Restricted investments (excluding restricted cash)		275,026			275,026	_
Derivative assets		3,079		_	3,079	
Total assets		\$681,28	86	\$43,367	\$637,919	\$ <i>—</i>
Liabilities:						
Derivative liabilities		\$8,315		\$—	\$8,315	\$—
	As of	Decemb	er 3	1, 2012		
					easurements at	t Reporting
			Date	e Using		
	Total l	Fair	Quo	oted		
	Value	and	Pric	es	Significant	
	Carryi	_		ctive	Other	Significant
	Value			kets for	Observable	Unobservable
	Our			ntical	Inputs	Inputs
	Balanc		Ass		(Level 2)	(Level 3)
•	Sheet		(Le	vel 1)		
Assets:						
Cash equivalents:	¢ 1 500	0	ф		¢ 1 500	¢
Commercial paper Manay market funds	\$1,500		\$— 10.7		\$1,500	\$—
Money market funds Marketable securities:	10,729	7	10,7	129	_	_
Commercial paper	1,698				1,698	_
Corporate debt securities	23,384	1	_		23,384	
Federal agency debt	29,936				29,936	_
Foreign agency debt	7,233	-	_		7,233	_
- •						

Foreign government obligations	4,142	_	4,142	
Supranational debt	34,181	_	34,181	
U.S. government obligations	2,004	_	2,004	
Restricted investments (excluding restricted cash)	301,216	_	301,216	
Derivative assets	7,230	_	7,230	
Total assets	\$423,253	\$10,729	\$412,524	<b>\$</b> —
Liabilities:				
Derivative liabilities	\$8,401	<b>\$</b> —	\$8,401	\$ <i>-</i>

#### Fair Value of Financial Instruments

The carrying values and fair values of our financial and derivative instruments at June 30, 2013 and December 31, 2012 were as follows (in thousands):

	June 30, 20	December 31, 2012		
	Carrying Fair		Carrying	Fair
	Value	Value	Value	Value
Assets:				
Marketable securities	\$356,615	\$356,615	\$102,578	\$102,578
Foreign exchange forward contract assets	\$3,079	\$3,079	\$7,230	\$7,230
Restricted investments (excluding restricted cash)	\$275,026	\$275,026	\$301,216	\$301,216
Note receivable, affiliate	\$—	\$—	\$17,725	\$17,723
Notes receivable — noncurrent	\$9,121	\$9,029	\$9,260	\$9,371
Liabilities:				
Long-term debt, including current maturities	\$255,764	\$257,748	\$562,572	\$565,879
Interest rate swap contract liabilities	\$960	\$960	\$1,467	\$1,467
Cross-currency swap contract liabilities	\$3,624	\$3,624	\$1,898	\$1,898
Foreign exchange forward contract liabilities	\$3,731	\$3,731	\$5,036	\$5,036

The carrying values on our condensed consolidated balance sheets of our cash and cash equivalents, trade accounts receivable, unbilled accounts receivable and retainage, other assets, restricted cash, accounts payable, income taxes payable, and accrued expenses approximate their fair values due to their nature and relatively short maturities; therefore, we exclude them from the foregoing table.

We estimated the fair value of our long-term debt and notes receivable in accordance with ASC 820 using a discounted cash flows approach (an income approach) using market based observable inputs. We incorporated the credit risk of our counterparty for all asset fair value measurements and our credit risk for all liability fair value measurements. Such fair value measurements are considered Level 2 under the fair value hierarchy.

#### Credit Risk

We have certain financial and derivative instruments that subject us to credit risk. These consist primarily of cash, cash equivalents, marketable securities, restricted investments, interest rate swap and cross-currency swap contracts, and foreign exchange forward contracts. We are exposed to credit losses in the event of nonperformance by the counterparties to our financial and derivative instruments. We place cash, cash equivalents, marketable securities, restricted investments, interest rate swap and cross-currency swap contracts, and foreign exchange forward contracts with various high-quality financial institutions and limit the amount of credit risk from any one counterparty. We continuously evaluate the credit standing of our counterparty financial institutions.

#### Note 13. Debt

Our long-term debt consisted of the following at June 30, 2013 and December 31, 2012 (in thousands):

			Balance (U	JSD)
Loan Agreement	Maturity	Loan	June 30,	December 31,
Loan Agreement	Maturity	Denomination	2013	2012
	July 2018 (Tranche A)			
Revolving Credit Facility (1)	October 2015 (Tranche	USD	<b>\$</b> —	\$ 270,000
	B)			
Malaysian Ringgit Facility Agreement	September 2018	MYR	134,873	151,901
Malaysian Euro Facility Agreement	April 2018	EUR	52,166	58,255
Malaysian Facility Agreement	March 2016	EUR	65,020	78,657
Director of Development of the State of Ohio	May 2015	USD	3,608	4,527
Capital lease obligations	various	various	2,271	1,955
Long-term debt principal			\$257,938	\$ 565,295
Less unamortized discount			(2,174)	(2,723)
Total long-term debt			\$255,764	\$ 562,572
Less current portion			(61,194)	(62,349)
Noncurrent portion			\$194,570	\$ 500,223

(1) Maturity dates reflect July 15, 2013 amendment to Revolving Credit Facility

#### **Revolving Credit Facility**

Our credit agreement with several financial institutions as lenders, JPMorgan Securities LLC and Bank of America Securities LLC as joint-lead arrangers and bookrunners and JPMorgan Chase Bank, N.A. as administrative agent ("Revolving Credit Facility") provides FSI with a senior secured credit facility with an aggregate available amount of \$600.0 million, with the right to request an increase up to \$750.0 million, subject to certain conditions. Borrowings under the Revolving Credit Facility bear interest at (i) the London Interbank Offering Rate ("LIBOR") (adjusted for Eurocurrency reserve requirements) plus a margin of 2.25% or (ii) a base rate as defined in the credit agreement plus a margin of 1.25%, depending on the type of borrowing requested by us. These margins are subject to adjustments depending on our consolidated leverage ratio.

The facility allows for us to obtain letters of credit of up to \$600.0 million denominated in U.S. Dollars, Euros, Canadian Dollars, British Pound Sterling and Japanese Yen. The facility also allows for us to obtain letters of credit denominated in currencies other than U.S. Dollars, Euros, Canadian Dollars, and British Pound Sterling with the consent of the applicable issuing lender (as defined in the credit agreement); provided that the dollar equivalent of the aggregate amount of the obligation attributable to letters of credit denominated in such alternative currencies shall not exceed \$300.0 million at any time. At June 30, 2013, \$0.0 million of borrowings were outstanding and \$153.9 million of letters of credit were outstanding, leaving us with availability of \$446.1 million. Proceeds from borrowings under the Revolving Credit Facility may be used for working capital including project development and construction costs and other general corporate purposes.

The Revolving Credit Facility contains financial covenants including: a leverage ratio covenant, a minimum EBITDA covenant, and a minimum liquidity covenant. We are also subject to customary non-financial covenants. We were in compliance with these covenants through June 30, 2013.

In addition to paying interest on outstanding principal under the Revolving Credit Facility, we are required to pay a commitment fee, currently at the rate of 0.375% per annum, based on the average daily unused commitments under the facility. The commitment fee may also be adjusted due to changes in our consolidated leverage ratio. We also pay a letter of credit fee equal to the applicable margin for Eurocurrency revolving loans on the face amount of each letter of credit and a fronting fee of 0.125%.

On July 15, 2013, we entered into the fourth amendment to the amended and restated revolving credit facility (the "Amendment"). The Amendment provides for, among other things, the division of the Revolving Credit Facility into Tranche A commitments in an aggregate amount equal to \$450.0 million and Tranche B commitments in an aggregate amount equal to \$150.0 million and the extension of the maturity date of the Tranche A loans until July 15, 2018. The maturity date of the Tranche B loans and commitment is October 15, 2015 and is unchanged. The Amendment also effects certain covenant changes.

In connection with the Amendment, we entered into an amended and restated guarantee and collateral agreement. Loans and letters of credit issued under the Revolving Credit Facility are jointly and severally, unconditionally and irrevocably guaranteed by First Solar Electric, LLC, First Solar Electric (California), Inc. and First Solar Development, LLC (together with certain entities

that may become parties thereto, the "Grantors") and are secured by security interest in substantially all of the Grantor's tangible and intangible assets other than certain excluded assets.

# Malaysian Ringgit Facility Agreement

FS Malaysia, our indirect wholly owned subsidiary, has entered into a credit facility agreement ("Malaysian Ringgit Facility Agreement"), among FSI as guarantor, CIMB Investment Bank Berhad, Maybank Investment Bank Berhad, and RHB Investment Bank Berhad as arrangers with CIMB Investment Bank Berhad also acting as facility agent and security agent, and the original lenders party thereto. The loans made to FS Malaysia are secured by, among other things FS Malaysia's leases over the leased lots on which our fifth and sixth manufacturing plants in Kulim, Malaysia ("Plants 5 and 6") are located and all plant, machinery and equipment purchased by FS Malaysia with the proceeds of the facility or otherwise installed in or utilized in Plants 5 and 6, to the extent not financed, or subject to a negative pledge under a separate financing facility related to Plants 5 and 6. In addition, FS Malaysia's obligations under the Malaysian Ringgit Facility Agreement are guaranteed, on an unsecured basis, by FSI. At June 30, 2013, buildings, machinery and equipment and land leases with net book values of \$235.9 million were pledged as collateral for this loan.

## Malaysian Euro Facility Agreement

FS Malaysia, our indirect wholly owned subsidiary, has entered into a credit facility agreement ("Malaysian Euro Facility Agreement") with Commerzbank Aktiengesellchaft and Natixis Zweigniederlassung Deutschland as arrangers and original lenders, and Commerzbank Aktiengesellschaft, Luxembourg Branch as facility agent and security agent. In connection with the Malaysian Euro Facility Agreement, FSI concurrently entered into a first demand guarantee agreement in favor of the lenders. Under this agreement, FS Malaysia's obligations related to the credit facility are guaranteed, on an unsecured basis, by FSI. At the same time FS Malaysia and FSI also entered into a subordination agreement, pursuant to which any payment claims of FSI against FS Malaysia are subordinated to the claims of the lenders.

#### Malaysian Facility Agreement

FS Malaysia, our indirect wholly owned subsidiary, has entered into an export financing facility agreement ("Malaysian Facility Agreement") with a consortium of banks. In connection with the Malaysian Facility Agreement, all of FS Malaysia's obligations are secured by a first party, first legal charge over the machinery and equipment financed by the credit facilities, and any other documents, contracts and agreements related to that machinery and equipment. Also in connection with the agreement, any payment claims of FSI against FS Malaysia are subordinated to the claims of the lenders. At June 30, 2013, machinery and equipment with a net book value of \$71.9 million was pledged as collateral for these loans.

#### Malaysian Long-Term Debt Covenants

The Malaysian Ringgit Facility Agreement, Malaysian Euro Facility Agreement, and Malaysian Facility Agreement (the "Malaysia Facilities") contain negative covenants that, among other things, restrict, subject to certain exceptions, the ability of FS Malaysia to incur indebtedness, create liens, effect asset sales, engage in reorganizations, issue guarantees, and make loans. In addition, the Malaysia Facilities include financial covenants relating to net total leverage ratio, interest coverage ratio, total debt to equity ratio, debt service coverage ratio, and tangible net worth. The Malaysia Facilities also contain certain representations and warranties, affirmative covenants, and events of default provisions. We were in compliance with all covenants associated with each of the Malaysian Facilities through June 30, 2013.

Director of Development of the State of Ohio

At June 30, 2013, land and buildings with net book values of \$18.1 million were pledged as collateral for this loan.

#### Variable Interest Rate Risk

Certain of our long-term debt agreements bear interest at prime, EURIBOR, KLIBOR, or LIBOR. A disruption of the credit environment, as previously experienced, could negatively impact interbank lending and, therefore, negatively impact these floating rates. An increase in EURIBOR would impact our cost of borrowing under our entire Malaysian Euro Facility Agreement, but would not impact our cost of borrowing of the floating-rate term loan under our Malaysian Facility Agreement as we entered into an interest rate swap contract to mitigate such risk. An increase in KLIBOR would not increase our cost of borrowing under our Malaysian Ringgit Facility Agreement as we entered into a cross-currency swap contract to mitigate such risk. An increase in LIBOR or prime would increase our cost of borrowing under our Revolving Credit Facility.

Our long-term debt borrowing rates as of June 30, 2013 were as follows:

Loan Agreement

Borrowing Rate at June 30,

Revolving Credit Facility 2013
4.50%

Malaysian Ringgit Facility Agreement KLIBOR plus 2.00% (2)
Malaysian Euro Facility Agreement EURIBOR plus 1.00%

Fixed rate facility at 4.54% Floating rate facility at

Malaysian Facility Agreement (1) Floating rate facility at EURIBOR plus 0.55% (2)

Director of Development of the State of Ohio

Capital lease obligations

2.25%

Various

(1) Outstanding balance split equally between fixed and floating rates.

(2) Interest rate hedges have been entered into relating to these variable rates. See Note 11. "Derivative Financial Instruments," to our condensed consolidated financial statements.

#### **Future Principal Payments**

At June 30, 2013, the future principal payments on our long-term debt, excluding payments related to capital leases, were due as follows (in thousands):

Remainder of 2013	\$29,871
2014	61,690
2015	60,602
2016	37,972
2017	35,300
Thereafter	30,232
Total long-term debt future payments	\$255,667

#### Note 14. Commitments and Contingencies

#### Financial Guarantees

In the normal course of business, we occasionally enter into agreements with third parties under which we guarantee the performance or obligations of our wholly owned subsidiaries related to certain contracts, which may include development, engineering, procurement of permits and equipment, construction management, and operating and maintenance services related to solar power plants. These agreements are considered guarantees of our own performance and no liabilities are separately recorded outside of any liabilities recorded by our subsidiaries.

#### Loan Guarantees

At June 30, 2013 and December 31, 2012, our only loan guarantees were guarantees of our own long-term debt, as disclosed in Note 13. "Debt," to these condensed consolidated financial statements.

## **Commercial Commitments**

During the normal course of business, we enter into commercial commitments in the form of letters of credit, surety bonds, and bank guarantees to provide financial and performance assurance to third parties. Our Revolving Credit Facility provides us the capacity to issue up to \$600.0 million in letters of credit at a fee equal to the applicable margin for Eurocurrency revolving loans and a fronting fee. As of June 30, 2013, we had \$153.9 million in letters of credit issued under the Revolving Credit Facility

with a remaining availability of \$446.1 million, all of which can be used for the issuance of letters of credit. The substantial majority of these letters of credit were supporting our systems business projects. As of June 30, 2013, we had \$40.1 million in bank guarantees and letters of credit issued outside of our Revolving Credit Facility, some of which were posted by certain of our foreign subsidiaries and \$40.8 million in surety bonds outstanding primarily for our systems business projects.

#### **Product Warranties**

When we recognize revenue for module or systems project sales, we accrue a liability for the estimated future costs of meeting our limited warranty obligations for both modules and the balance of the systems. We make and revise these estimates based primarily on the number of our solar modules under warranty installed at customer locations, our historical experience with warranty claims, our monitoring of field installation sites, our internal testing of and the expected future performance of our solar modules and balance of systems ("BoS") components, and our estimated replacement cost.

From time to time we have taken remediation actions in respect of affected modules beyond our limited warranty, and we may elect to do so in the future, in which case we would incur additional expenses. Such potential voluntary future remediation actions beyond our limited warranty obligation may be material to our condensed consolidated statements of operations if we commit to any such remediation actions.

Product warranty activities during the three and six months ended June 30, 2013 and June 30, 2012 were as follows (in thousands):

	Three Month	is Ended	Six Months	Ended
	June 30,	June 30,	June 30,	June 30,
	2013	2012	2013	2012
Product warranty liability, beginning of period	\$185,630	\$179,454	\$191,596	\$157,742
Accruals for new warranties issued	7,916	7,636	18,449	11,613
Settlements	(8,447	) (10,894	) (19,410	) (16,597 )
Changes in estimate of product warranty liability (1)	4,158	5,693	(1,378	) 29,131
Product warranty liability, end of period	\$189,257	\$181,889	\$189,257	\$181,889
Current portion of warranty liability	\$62,989	\$97,779	\$62,989	\$97,779
Noncurrent portion of warranty liability	\$126,268	\$84,110	\$126,268	\$84,110

Changes in estimate of product warranty liability during the six months ended June 30, 2012 includes increases to our best estimate of \$22.6 million partially related to a net increase in the expected number of replacement modules required for certain remediation efforts related to the manufacturing excursion that occurred between June 2008

(1) and June 2009. Such estimated increase was primarily due to the completion of the analysis on certain outstanding claims as of December 31, 2011. Additionally, the remaining increase was primarily related to a change in estimate for the market value of the modules that we estimated would be returned to us under the voluntary remediation efforts that would meet the required performance standards to be re-sold as refurbished modules.

At June 30, 2013, our accrued liability for product warranty was \$189.3 million. We have historically estimated our product warranty liability for power output and defects in materials and workmanship under normal use and service conditions to have an estimated warranty return rate of approximately 3% of modules covered under warranty. A 1 percentage point change in estimated warranty return rate would change our estimated warranty liability by approximately \$51.0 million.

Systems Project Sale Rescission

From time to time under the sales agreements for a limited number of our solar power projects, we may be required to rescind the sale of such projects if certain events occur, such as not achieving commercial operation of the project within a certain timeframe. As of June 30, 2013 one of our sold projects was subject to such a conditional rescission clause.

For any sales agreements that have such conditional rescission clauses, in accordance with ASC 360, we will not recognize revenue on such sales agreements until the conditional rescission clauses are of no further force or effect and all other necessary revenue recognition criteria have been met.

**Legal Proceedings** 

**Class Action** 

On March 15, 2012, a purported class action lawsuit titled Smilovits v. First Solar, Inc., et al., Case No. 2:12-cv-00555-DGC, was filed in the United States District Court for the District of Arizona (hereafter "Arizona District Court") against the Company and certain of our current and former directors and officers. The complaint was filed on behalf of purchasers of the Company's securities between April 30, 2008, and February 28, 2012. The complaint generally alleges that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 by making false and misleading statements regarding the Company's financial performance and prospects. The action includes claims for damages, and an award of costs and expenses to the putative class, including attorneys' fees. The Company believes it has meritorious defenses and will vigorously defend this action.

On July 23, 2012, the Arizona District Court issued an order appointing as lead plaintiffs in the class action the Mineworkers' Pension Scheme and British Coal Staff Superannuation Scheme (collectively "Pension Schemes"). The Pension Schemes filed an amended complaint on August 17, 2012, which contains similar allegations and seeks similar relief as the original complaint. Defendants filed a motion to dismiss on September 14, 2012. On December 17, 2012, the court denied Defendants' motion to dismiss. On February 26, 2013, the court directed the parties to begin class certification discovery, and ordered a further scheduling conference to set the merit discovery schedule after the issue of class certification has been decided. On June 21, 2013, the Pension Schemes filed a motion for class certification.

The action is still in the initial stages and there has been no merits discovery. Accordingly, we are not in a position to assess whether any loss or adverse effect on our financial condition is probable or remote or to estimate the range of potential loss, if any.

# **Derivative Actions**

On April 3, 2012, a derivative action titled Tsevegmid v. Ahearn, et al., Case No. 1:12-cv-00417-CJB, was filed by a putative stockholder on behalf of the Company in the United States District Court for the District of Delaware (hereafter "Delaware District Court") against certain current and former directors and officers of the Company, alleging breach of fiduciary duties and unjust enrichment. The complaint generally alleges that from June 1, 2008, to March 7, 2012, the defendants caused or allowed false and misleading statements to be made concerning the Company's financial performance and prospects. The action includes claims for, among other things, damages in favor of the Company, certain corporate actions to purportedly improve the Company's corporate governance, and an award of costs and expenses to the putative plaintiff stockholder, including attorneys' fees, On April 10, 2012, a second derivative complaint was filed in the Delaware District Court. The complaint, titled Brownlee v. Ahearn, et al., Case No. 1:12-cv-00456-CJB, contains similar allegations and seeks similar relief to the Tsevegmid action. By Court order on April 30, 2012, pursuant to the parties' stipulation, the Tsevegmid action and the Brownlee action were consolidated into a single action in the Delaware District Court and defendants filed a motion to challenge Delaware as the appropriate venue for the consolidated action on May 15, 2012. On March 4, 2013, the magistrate judge issued a Report and Recommendation recommending to the Court that defendants' motion be granted and that the case be transferred to the District of Arizona. On July 12, 2013, the Court adopted the magistrate judge's Report and Recommendation and ordered the case transferred to the District of Arizona.

On April 12, 2012, a derivative complaint was filed in the Arizona District Court, titled Tindall v. Ahearn, et al., Case No. 2:12-cv-00769-ROS. In addition to alleging claims and seeking relief similar to the claims and relief asserted in the Tsevegmid and Brownlee actions, the Tindall complaint alleges violations of Sections 14(a) and 20(b) of the Securities Exchange Act of 1934. On April 19, 2012, a second derivative complaint was filed in the Arizona District Court, titled Nederhood v. Ahearn, et al., Case No. 2:12-cv-00819-JWS. The Nederhood complaint contains similar allegations and seeks similar relief to the Tsevegmid and Brownlee actions. On May 17, 2012 and May 30, 2012, respectively, two additional derivative complaints, containing similar allegations and seeking similar relief as the

Nederhood complaint, were filed in Arizona District Court: Morris v. Ahearn, et al., Case No. 2:12-cv-01031-JAT and Tan v. Ahearn, et al., 2:12-cv-01144-NVW.

On July 17, 2012, the Arizona District Court issued an order granting First Solar's motion to transfer the derivative actions to Judge David Campbell, the judge to whom the Smilovits class action is assigned. On August 8, 2012, the Court consolidated the four derivative actions pending in Arizona District Court, and on August 31, 2012, Plaintiffs filed an amended complaint. Defendants filed a motion to stay the action on September 14, 2012. On December 17, 2012, the Court granted Defendants' motion to stay pending resolution of the Smilovits class action. The Company intends to move the Court for an order consolidating the two derivative actions transferred from the Delaware District Court with the stayed Arizona derivative actions.

On July 16, 2013, a derivative complaint was filed in the Superior Court of Arizona, Maricopa County, titled Bargar et al. v. Ahearn et al., Case No. CV2013-009938, by a putative shareholder against certain current and former directors and officers of the Company. The complaint contains similar allegations to the Delaware and Arizona derivative cases, and includes claims for, among other things, breach of fiduciary duties, insider trading, unjust enrichment, and waste of corporate assets.

The Company believes that plaintiffs in the derivative actions lack standing to pursue litigation on behalf of First Solar. The derivative actions are still in the initial stages and there has been no discovery. Accordingly, we are not in a position to assess whether any loss or adverse effect on our financial condition is probable or remote or to estimate the range of potential loss, if any.

Note 15. Share-Based Compensation

We measure share-based compensation cost at the grant date based on the fair value of the award and recognize this cost as share-based compensation expense over the required or estimated service period for awards expected to vest, in accordance with ASC 718, Compensation - Stock Compensation. The share-based compensation expense that we recognized in our condensed consolidated statements of operations for the three and six months ended June 30, 2013 and June 30, 2012 was as follows (in thousands):

	Three Months	Ended	Six Months Ended			
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012		
Share-based compensation expense included in:						
Cost of sales	\$1,307	\$2,337	\$5,823	\$10,595		
Research and development	988	914	2,921	4,135		
Selling, general and administrative	5,207	(19,419 )	14,926	(8,123)		
Production start-up	(72)	(822)	248	(169)		
Restructuring		329	_	495		
Total share-based compensation expense	\$7,430	\$(16,661)	\$23,918	\$6,933		

The following table presents our share-based compensation expense by type of award for the three and six months ended June 30, 2013 and June 30, 2012 (in thousands):

	Three Months	Ended	Six Months Ended			
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012		
Stock options	<b>\$</b> —	\$33	<b>\$</b> —	\$264		
Restricted and performance stock units	7,244	(15,054)	25,680	8,958		
Unrestricted stock	300	186	600	361		
Stock purchase plan	235	136	472	371		
Net amount absorbed into inventory	(349)	(1,962)	(2,834)	(3,021)		
Total share-based compensation expense	\$7,430	\$(16,661)	\$23,918	\$6,933		

Share-based compensation expense capitalized in our inventory was \$7.3 million and \$4.5 million at June 30, 2013 and December 31, 2012, respectively. As of June 30, 2013, we had no unrecognized share-based compensation cost related to unvested stock option awards, and \$94.6 million of unrecognized share-based compensation cost related to unvested restricted and performance stock units including our stock purchase plan, which we expect to recognize as an expense over a weighted-average period of approximately 2.2 years.

The share-based compensation expense that we recognize in our results of operations is based on the number of awards expected to ultimately vest; therefore, amounts used to determine share-based compensation expense have been reduced for estimated forfeitures. ASC 718 requires us to estimate the number of awards that we expect to vest at the time the awards are granted and revise those estimates, if necessary, in subsequent periods. We estimate the number of awards that we expect to vest based on our historical experience with forfeitures, giving consideration to whether future forfeiture behavior might be expected to differ from past behavior. We recognize compensation cost for awards with graded vesting schedules on a straight-line basis over the requisite service periods for each separately vesting portion of the award as if each award was in substance multiple awards.

Our forfeiture rate assumptions, which estimates the share-based awards that will ultimately vest, requires judgment, and to the extent actual results or updated estimates differ from our current estimates, such amounts will be recorded

as a cumulative adjustment in the period of change and could be materially different from share-based compensation expense recorded in prior periods. Additionally, in accordance with ASC 718, when an associate's employment is terminated, all previously unvested awards

granted to such associate are forfeited, which results in a benefit to share-based compensation expense in the period of such associate's termination equal to the cumulative expense recorded through the termination date for such forfeited unvested awards.

We increased our estimated forfeiture rate in the second quarter of 2012, which was recorded as a cumulative adjustment in accordance with ASC 718 and resulted in a decrease to share-based compensation expense of \$12.7 million in the quarter. The increased forfeiture rate was primarily due to the restructuring activities discussed in Note 4. "Restructuring," which caused us to experience an increase in actual forfeitures during the second quarter of 2012 compared to historical experience prior to such restructuring activities. We expect that our recent forfeiture experience will continue over the remaining term of our outstanding share-based compensation awards. Additionally, primarily as a result of associate terminations, including terminations specifically related to our restructuring activities and reductions in force, we recorded a benefit to share-based compensation expense of \$4.9 million and \$8.5 million during the second quarter of 2013 and 2012, respectively.

#### Note 16. Income Taxes

Our effective tax rates were 18.2% and 13.5% for the three and six months ended June 30, 2013, and 18.0% and (5.4)% for the three and six months ended June 30, 2012. Our effective tax rate was higher during the six months ended June 30, 2013 compared with the six months ended June 30, 2012 primarily due to the increase in pre-tax profits during such periods and a greater percentage of profits earned in higher tax jurisdictions, partially offset by an increase in tax expense during the six months ended June 30, 2012 related to the establishment of a valuation allowance of \$12.3 million against previously established deferred tax assets and losses being generated in jurisdictions for which no tax benefit was recorded. The provision for income taxes differs from the amount computed by applying the statutory U.S. federal rate primarily due to the benefit associated with foreign income taxed at lower rates including the beneficial impact of our Malaysian tax holiday, and additional tax expense attributable to losses in jurisdictions in which no tax benefits could be recorded, in addition to the establishment of valuation allowances against previously established deferred tax assets.

Our Malaysian subsidiary has been granted a long-term tax holiday that expires in 2027. The tax holiday, which generally provides for a 100% exemption from Malaysian income tax, is conditional upon our continued compliance in meeting certain employment and investment thresholds, which we are currently in compliance with and expect to continue to comply with through the expiration of the tax holiday in 2027.

# Note 17. Comprehensive Income (Loss)

Comprehensive income (loss), which includes foreign currency translation adjustments, unrealized gains and losses on available-for-sale securities, and unrealized gains and losses on derivative instruments designated and qualifying as cash flow hedges, the impact of which, has been excluded from net income (loss) and reflected as components of stockholders' equity, was as follows for the three and six months ended June 30, 2013 and June 30, 2012 (in thousands):

	Three Monuis	Ended	
	June 30, 2013	June 30, 201	12
Net income	\$33,598	\$110,983	
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	1,500	(9,795	)
Unrealized gain (loss) on marketable securities and restricted investments for the period (net of tax of \$1,307 and \$(1,447), respectively)	(17,029	12,629	
	_	(3	)

Three Months Ended

Less: reclassification for (gains) losses included in net income (loss) (net of tax of				
\$0 and \$0, respectively)				
Unrealized gain (loss) on marketable securities and restricted investments	(17,029	)	12,626	
Unrealized gain (loss) on derivative instruments for the period (net of tax of \$5 and \$(1,145), respectively)	(305	)	(1,644	)
Less: reclassification for (gains) losses included in net income (net of tax of \$0 and \$17, respectively)	3,214		4,229	
Unrealized gain (loss) on derivative instruments	2,909		2,585	
Other comprehensive income (loss), net of tax	(12,620	)	5,416	
Comprehensive income (loss)	\$20,978		\$116,399	
35				

	Six Months Ended			
	June 30, 2013	3	June 30, 201	2
Net income (loss)	\$92,740		\$(338,433	)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(1,577	)	3,714	
Unrealized gain (loss) on marketable securities and restricted investments for the period (net of tax of \$2,241 and \$(711), respectively)	(27,370	)	8,578	
Less: reclassification for (gains) losses included in net income (loss) (net of tax of \$0 and \$0, respectively)	_		(16	)
Unrealized gain (loss) on marketable securities and restricted investments	(27,370	)	8,562	
Unrealized gain (loss) on derivative instruments for the period (net of tax of \$(1,101) and \$1,104, respectively)	1,220		(7,303	)
Less: reclassification for (gains) losses included in net income (loss) (net of tax of \$3,476 and \$1,774, respectively)	(4,157	)	(5,412	)
Unrealized gain (loss) on derivative instruments	(2,937	)	(12,715	)
Other comprehensive income (loss), net of tax	(31,884	)	(439	)
Comprehensive income (loss)	\$60,856		\$(338,872	)

Components and details of accumulated other comprehensive income (loss) at June 30, 2013 and December 31, 2012 were as follows (in thousands):

Components of Comprehensive Income (Loss)	Foreign Currency Translation		Unrealized Gain (Loss) on Marketable	l	Unrealized Gain (Loss) on Derivativ	e	Total	
Balance as of December 31, 2012	Adjustment \$(38,485	)	Securities \$51,243		Instruments \$(2,579	)	\$10,179	
Other comprehensive income (loss) before reclassifications	(1,577	)	(27,370 )	)	1,220		(27,727	)
Amounts reclassified from accumulated other comprehensive income (loss)	_		_		(4,157	)	(4,157	)
Net other comprehensive income (loss) for the period Balance as of June 30, 2013	(1,577 \$(40,062	)	(27,370 ) \$23,873	)	(2,937 \$(5,516	)	(31,884 \$(21,705	)

Details of Accumulated Other Comprehensive Income (Loss)	Amount Reclassifie Three Months Ended June 30, 2013	Income Statement Line Item	
Gains and (losses) on derivative contracts			
Foreign Exchange Forward Contracts	<b>\$</b> —	\$13,115	Net sales
Interest Rate and Cross Currency Swap Contracts	(302	(596)	Interest expense
Cross Currency Swap Contracts	(2,912	(4,886)	Foreign currency gain (loss)
	(3,214	7,633	Total before tax
	_	3,476	Tax expense
	\$(3,214	\$4,157	Total net of tax

Components of Comprehensive Income (Loss)		Foreign Currency Translation Adjustment		Unrealized Gain (Loss) or Marketable Securities		Unrealized Gain (Loss) on Derivative Instruments		Total	
Balance as of December 31, 2011	\$(48,381	)	\$24,431		\$18,913		\$(5,037	)	
Other comprehensive income (loss) before eclassifications		3,714		8,578		(7,303	)	4,989	
Amounts reclassified from accumulated othe comprehensive income (loss)				(16	)	(5,412	)	(5,428	)
Net other comprehensive income (loss) for the Balance as of June 30, 2012	ne period	3,714 \$(44,667	)	8,562 \$32,993		(12,715 \$6,198	)	(439 \$(5,476	)
Details of Accumulated Other Comprehensive Income (Loss)	Amount Reclassified Three Months Ended June 30, 2012		Six Months Ended June 30, 2012		Ι	Income Statement Line Item			n
Gains and (losses) on marketable securities and restricted investments	vane 30, 2	012	our .	20, 2012					
	\$3 - 3		\$16 — 16		7	Other income ( Fax expense Fotal net of tax		pense), ne	ŧ
Gains and (losses) on derivative contracts	3		10			i otai net oi tax			
Foreign Exchange Forward Contracts Interest Rate and Cross Currency Swap	3,385		10,09	95	1	Net sales			
Contracts	(2,215	)	(2,53)	0	) I	nterest expens	e		
Cross Currency Swap Contract	(5,382 (4,212	)	(379 7,186	•		Foreign currency gain (loss) Total before tax			
	17	,	1,774			Tax expense			
	\$(4,229	)	\$5,412		Total net of tax				
37									

#### Note 18. Statement of Cash Flows

The following table presents a reconciliation of net income (loss) to net cash provided by operating activities for the six months ended June 30, 2013 and June 30, 2012 (in thousands):

	Six Months Ended			
	June 30, 2013		June 30, 2012	
Net income (loss)	\$92,740		\$(338,433	. `
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating	$\Psi J 2, 7 + 0$		Ψ(330,733	,
activities:				
Depreciation and amortization	116,084		138,229	
Impairment and loss (gain) on disposal of long-lived assets	4,300		350,213	
Impairment of project assets			3,227	
Share-based compensation	23,918		6,933	
Remeasurement of monetary assets and liabilities	(6,935	)	(561	)
Deferred income taxes	(7,769	)	4,896	•
Excess tax benefit from share-based compensation arrangements	(55,695	)	(66,853	)
Provision for doubtful accounts receivable	_		2,260	
Gain on sales of marketable securities, and restricted investments, net			(16	)
Other operating activities	(2,903	)	18	
Changes in operating assets and liabilities:				
Accounts receivable, trade and unbilled and retainage	341,357		114,592	
Prepaid expenses and other current assets	93,438		94,214	
Other assets	449		83,977	
Inventories and balance of systems parts	75,120		(280,027	)
Project assets and deferred project costs	(670,456	)	82,412	
Accounts payable	(129,314	)	28,018	
Income taxes payable	28,256		37,959	
Accrued expenses and other liabilities	350,203		132,350	
Accrued solar module collection and recycling liability	36,035		18,927	
Total adjustments	196,088		750,768	
Net cash provided by operating activities	\$288,828		\$412,335	

#### Note 19. Segment Reporting

We operate our business in two segments. Our components segment involves the design, manufacture, and sale of solar modules which convert sunlight into electricity. Third-party customers of our components segment include project developers, system integrators, and owners and operators of photovoltaic ("PV") solar power systems.

Our second segment is our fully integrated systems business ("systems segment"), through which we provide a complete turn-key PV solar power systems, or solar solutions that draw upon our capabilities, which include (i) project development, (ii) EPC services, (iii) operating and maintenance ("O&M") services, and (iv) project finance expertise. We may provide our full EPC service or any combination of individual products and services within our EPC capabilities depending upon the customer and market opportunity. All of our systems segment products and services are for PV solar power systems which use our solar modules, and such products and services are sold directly to investor owned utilities, independent power developers and producers, commercial and industrial companies, and other system owners.

In our operating segment financial disclosures, we include an allocation of sales value for all solar modules manufactured by our components segment and installed in projects sold or built by our systems segment in the net sales of our components segment. In the gross profit of our operating segment disclosures, we include the corresponding cost of sales value for the solar modules

installed in projects sold or built by our systems segment in the components segment. The cost of solar modules is comprised of the manufactured cost incurred by our components segment.

Refer to Note 25. "Segment and Geographical Information," in our Annual Report on Form 10-K for the year ended December 31, 2012 for a complete discussion of our segment reporting.

Financial information about our operating segments during the three and six months ended June 30, 2013 and June 30, 2012 was as follows (in thousands):

	Three Months Ended			Three Months Ended				
	June 30, 2013			June 30, 2012				
	Components	Systems	Total	Components	Systems	Total		
Net sales	\$192,908	\$326,852	\$519,760	\$287,681	\$669,651	\$957,332		
Gross profit	\$(8,193)	\$148,291	\$140,098	\$(10,352)	\$254,093	\$243,741		
(Loss) income before income taxes	\$(67,348)	\$108,410	\$41,062	\$(92,917)	\$228,264	\$135,347		
Goodwill	\$6,097	\$68,833	\$74,930	<b>\$</b> —	\$65,444	\$65,444		
Total assets	\$4,140,842	\$2,727,284	\$6,868,126	\$3,565,152	\$1,922,182	\$5,487,334		
	Six Months Er	nded		Six Months Er	nded			
	Six Months Er June 30, 2013	nded		Six Months Er June 30, 2012	nded			
		nded Systems	Total		nded Systems	Total		
Net sales	June 30, 2013		Total \$1,274,965	June 30, 2012		Total \$1,454,387		
Net sales Gross profit	June 30, 2013 Components	Systems		June 30, 2012 Components	Systems			
	June 30, 2013 Components \$549,504	Systems \$725,461	\$1,274,965	June 30, 2012 Components \$455,811	Systems \$998,576	\$1,454,387		
Gross profit (Loss) income before	June 30, 2013 Components \$549,504 \$3,416	Systems \$725,461 \$306,008	\$1,274,965 \$309,424	June 30, 2012 Components \$455,811 \$(32,811)	Systems \$998,576 \$353,297	\$1,454,387 \$320,486		

#### Product Revenue

The following table sets forth the total amounts of solar modules and solar power systems net sales recognized for the three and six months ended June 30, 2013 and June 30, 2012. For the purposes of the following table, (i) Solar module revenue is composed of total revenues from the sale of solar modules to third parties, which excludes any solar modules installed in our systems segment product or service offerings and (ii) Solar power system revenue is composed of total revenues from the sale of our solar power systems and related products and services including the solar modules installed in such solar power systems.

	Three Month	ns Ended	Six Months Ended		
(Dollars in thousands)	June 30,	June 30,	June 30,	June 30,	
(Donars in thousands)	2013	2012	2013	2012	
Solar module revenue	\$81,304	\$54,598	\$274,554	\$122,007	
Solar power system revenue	438,456	902,734	1,000,411	1,332,380	
Net sales	\$519,760	\$957,332	\$1,274,965	\$1,454,387	

#### Note 20. Subsequent Events

On August 5, 2013, First Solar acquired all of the cadmium telluride PV specific intellectual property assets (the "Intellectual Property") of General Electric Company ("GE") pursuant to a Master Transaction Agreement and an Intellectual Property Purchase Agreement (the "Agreements"), by and between First Solar and GE and certain of their subsidiaries. Pursuant to the Agreements, First Solar received the Intellectual Property and GE received 1,750,000

shares of First Solar common stock, which had a market value of \$83.8 million on August 5, 2013.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Cautionary Statement Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Securities Exchange Act of 1934 (the "Exchange Act") and the Securities Act of 1933, which are subject to risks, uncertainties, and assumptions that are difficult to predict. All statements in this Quarterly Report on Form 10-Q, other than statements of historical fact, are forward-looking statements. These forward-looking statements are made pursuant to safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements include statements, among other things, concerning: our business strategy, including anticipated trends and developments in and management plans for our business and the markets in which we operate; future financial results, operating results, revenues, gross margin, operating expenses, products, projected costs, warranties, solar module efficiency and balance of systems ("BoS") cost reduction roadmaps, restructuring, product reliability and capital expenditures; our ability to continue to reduce the cost per watt of our solar modules; our ability to reduce the costs to construct photovoltaic ("PV") solar power systems; research and development programs and our ability to improve the conversion efficiency of our solar modules; sales and marketing initiatives; and competition. In some cases, you can identify these statements by forward-looking words, such as "estimate," "expect," "anticipate," "project," "plan," "intend," "be "forecast," "foresee," "likely," "may," "should," "goal," "target," "might," "will," "could," "predict," "continue" and the negat these words and other comparable terminology. Forward-looking statements are only predictions based on our current expectations and our projections about future events. All forward-looking statements included in this Quarterly Report on Form 10-Q are based upon information available to us as of the filing date of this Quarterly Report on Form 10-Q. You should not place undue reliance on these forward-looking statements. We undertake no obligation to update any of these forward-looking statements for any reason. These forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to differ materially from those expressed or implied by these statements. These factors include, but are not limited to, the matters discussed in Item 1A: "Risk Factors," of our Annual Report on Form 10-K for the year ended December 31, 2012, as updated and supplemented by the risk factors included in our Prospectus dated June 12, 2013 filed with the SEC pursuant to Rule 424(b)(5) (the "Prospectus") and elsewhere in this Quarterly Report on Form 10-Q, in our Annual Report on Form 10-K and in the Prospectus and other factors. You should carefully consider the risks and uncertainties described under this section.

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and the accompanying notes contained in this Quarterly Report on Form 10-Q. Unless expressly stated or the context otherwise requires, the terms "we," "our," "us," "Company," and "First Solar" refer to First Solar, Inc. and its subsidiaries.

When referring to our manufacturing capacity, total sales and solar module sales, the unit of electricity in watts for megawatts ("MW") and gigawatts ("GW") is direct current ("DC") unless otherwise noted. When referring to our PV solar power systems, the unit of electricity in watts for MW and GW is alternating current ("AC") unless otherwise noted.

#### **Executive Overview**

We are a premier global provider of solar energy solutions. We manufacture and sell PV solar modules with an advanced thin-film semiconductor technology, and we develop, design, construct, and sell PV solar power systems that use the solar modules we manufacture. We are the world's largest thin-film PV solar module manufacturer and one of the world's largest PV solar module manufacturers.

In addressing overall global demand for PV solar electricity, we have developed a differentiated, fully integrated systems business that can provide a competitively priced turn-key utility-scale PV system solution for system owners

and competitively priced electricity to utility end-users. Our fully integrated systems business, which uses the solar modules we manufacture, has enabled us to increase module throughput, drive cost reduction across the value chain, identify and break constraints to sustainable markets, and deliver compelling solutions to our customers and end-users. With our fully integrated systems business, we believe we are in a position to expand our business in economically sustainable markets (in which support programs are minimal), which are developing in areas that have a combination of abundant solar resources, relatively high current electricity costs and sizable electricity demand. We are committed to continually lowering the cost of solar electricity, and in the long-term, we plan to compete on an economic basis with conventional fossil-fuel-based peaking power generation.

In furtherance of our goal of delivering affordable solar electricity, we are continually focused on reducing PV solar power system costs in five primary areas: module manufacturing, BoS costs (consisting of the costs of the components of a solar power system other than the solar modules that we manufacture, such as inverters, mounting hardware, trackers, grid interconnection equipment, wiring and other devices, and installation labor costs), project development costs, the cost of capital, and the operating expenses of a PV solar system. First, with respect to our module manufacturing costs, our advanced technology has allowed us to

reduce our average module manufacturing costs to among the lowest in the world for modules produced on a commercial scale, based on publicly available information. In the three months ended June 30, 2013, our total average manufacturing costs were \$0.67 per watt, which is competitive on a comparable basis with those of traditional crystalline silicon solar module manufacturers, based on publicly available information. By continuing to improve conversion efficiency, increasing production line throughput, and lowering raw material costs, we believe that we can further reduce our manufacturing costs per watt and maintain cost competitiveness with traditional crystalline silicon solar module manufacturers. Second, with respect to our planned BoS cost reduction roadmap, we have aggressive programs which target key improvements in components and system design, which, when combined with continued improvements in solar module conversion efficiency, volume procurement around standardized hardware platforms, use of innovative installation techniques and know how, and accelerated installation times, are expected to result in substantial reductions in our BoS costs resulting in a lower system levelized cost of energy. Third, with respect to our project development costs, we seek optimal site locations in an effort to minimize transmission and permitting costs, and to accelerate lead times to electricity generation. Fourth, with respect to the cost of capital, by continuing to demonstrate the financial viability and operational performance of our utility-scale PV solar power systems and increasing our PV solar power system operating experience, we believe we can continue to lower the cost of capital associated with our PV solar power systems, thereby further enhancing the economic viability of our projects and lowering the cost of electricity generated by PV solar power systems that incorporate our modules and technology. The remaining primary PV solar system cost relates to the actual operating expenses of a PV solar power system, which includes the operations and maintenance costs of the plant. We believe that our operations and maintenance services are an important aspect to the overall future reduction expected in the levelized cost of electricity ("LCOE") of a PV solar power system through seamless grid integration, increased reliability and maximization of availability of the PV solar power systems we operate and maintain for our customers.

We believe that combining our reliable, low-cost module manufacturing capability with our systems business enables us to more rapidly reduce the price of solar electricity, accelerate the adoption of our technology in utility-scale PV solar power systems, and identify and remove constraints to the successful migration to sustainable solar markets around the world. Our vertically integrated capabilities enable us to maximize value and mitigate risk for our customers and thereby deliver meaningful PV energy solutions to varied energy problems worldwide. We offer leadership across the entire solar value chain, resulting in more reliable and cost effective PV energy solutions for our customers, and furthering our mission to create enduring value by enabling a world powered by clean, affordable solar electricity.

#### **Business Segments**

We operate our business in two segments. Our components segment involves the design, manufacture, and sale of solar modules which convert sunlight into electricity. Third-party customers of our components segment include project developers, system integrators, and owners and operators of PV solar power systems.

Our second segment is our fully integrated systems business ("systems segment"), through which we provide complete turn-key PV solar power systems, or solar solutions that draw upon our capabilities, which include (i) project development, (ii) engineering, procurement, and construction ("EPC") services, (iii) operating and maintenance ("O&M") services, and (iv) project finance expertise, all as described in more detail below. We may provide our full EPC services or any combination of individual products and services within our EPC capabilities depending upon the customer and market opportunity. All of our systems segment products and services are for PV solar power systems which use our solar modules, and such products and services are sold directly to investor owned utilities, independent power developers and producers, commercial and industrial companies, and other PV solar power system owners.

During project development, we obtain land and land rights for the development of PV solar power systems incorporating our modules, negotiate long-term power purchase agreements ("PPA") with potential purchasers of the

electricity to be generated by those plants or develop plants in regulated markets where feed-in-tariff ("FiT") or similar structures are in place, manage the interconnection and transmission process, negotiate agreements to interconnect the systems to the electricity grid, and obtain the permits which are required prior to the construction of the PV solar power systems, including applicable environmental and land use permits. We also buy projects in various stages of development and continue developing those projects with system designs incorporating our own modules. We sell developed PV solar power systems to system operators who wish to own generating facilities, such as utilities, or to investors who are looking for long-term investment vehicles that are expected to generate consistent returns.

We provide EPC services to projects developed by us, to projects developed by independent solar power project developers, and directly to system owners such as utilities. EPC products and services include engineering design and related services, BoS procurement, advanced development of grid integration solutions, and construction contracting and management. Depending on the customer and market need, we may provide our full EPC services or any combination of individual products and services within our EPC capabilities. An example of such combination of individual services would be

providing engineering design and procurement of BoS parts ("EP" services) for a third party constructing a PV solar power system.

We have a comprehensive O&M service offering with multiple PV solar power systems in operation. Utilizing a state of the art Global Operations Center, located in Mesa, Arizona, our team of O&M experts provide comprehensive services including North America Electric Reliability Corporation ("NERC") compliance, energy forecasting, 24/7 monitoring and control, PPA and Large Generator Interconnection Agreement ("LGIA") compliance, performance engineering analysis, turn-key maintenance services including spare parts and breakdown repair, and environmental services.

Our project finance group is primarily responsible for negotiating and executing the sale of PV solar power systems incorporating our modules which allows us to optimize the value of our project development portfolio. This group is experienced in arranging for and structuring financing for projects incorporating our modules including non-recourse project debt financing in the bank loan market and debt capital markets and project equity capital from tax oriented and strategic industry equity investors.

See Note 19. "Segment Reporting," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

#### Market Overview

The solar industry continues to experience a challenging business environment, categorized by intense pricing competition, both at the module and system level, with many solar companies generating operating losses or little to no operating income. In the aggregate, manufacturers of solar modules and cells have installed production capacity that significantly exceeds global demand. We believe this structural imbalance between supply and demand (i.e., where production capacity significantly exceeds current and near term future expected global demand) may continue for the foreseeable future, and we expect it will continue to put pressure on pricing and our results of operations through the remainder of 2013 and at least into 2014. We further believe that this structural imbalance will remain unfavorable for solar companies that are primarily module manufacturers, but that companies with established expertise and meaningful PV generation solutions in other areas of the solar value chain, such as project development, EPC capabilities, and O&M services, are more likely to develop economically sustainable businesses. In light of such market realities, we continue to execute against our Long Term Strategic Plan described below under which we are focusing on our competitive strengths. A key core strength is our differentiated, vertically integrated business model that enables us to provide utility-scale PV generation solutions to sustainable geographic markets that have an immediate need for mass-scale PV electricity.

Solar markets worldwide continue to develop, in part aided by demand elasticity resulting from declining industry average selling prices, both at the module and system level, which make solar power more affordable to new markets, and we have continued to develop our localized presence and expertise in these markets. In Australia, we announced in July 2013 that our Australian subsidiary will be constructing Australia's largest PV solar power systems for AGL Energy Limited, by constructing a 102 MW AC solar plant at Nyngan and a 53 MW AC solar plant at Broken Hill, both in New South Wales, Australia.

In North America, we continue to execute on our advanced-stage utility-scale project pipeline. We continue to make construction progress on what are currently or will be among the world's largest PV solar power systems, including: the 550 MW AC Topaz Solar Farm, located in San Luis Obispo County, California; the 550 MW AC Desert Sunlight Solar Farm, located west of Blythe, California; the 290 MW AC Agua Caliente project in Yuma County, Arizona; and the 230 MW AC Antelope Valley Solar Ranch One project ("AVSR"), located just north of Los Angeles, California. The Agua Caliente project is currently the largest operating PV solar power system in the world and has achieved a

peak generating capacity of more than 250 MW AC while connected to the electrical grid. We expect a substantial portion of our consolidated net sales, operating income and cash flows through the end of 2014 to be derived from these projects. Each of these projects are greater than fifty percent completed as of June 30, 2013 in terms of the overall construction progress rather than currently generating capacity. We continue to advance the development and selling efforts for the other projects included in our advanced-stage utility-scale project pipeline, and we continue to develop our early-to-mid stage project pipeline and evaluate acquisitions of projects to continue to add to our advanced-stage utility-scale project pipeline. In June 2013, we announced the approval of a PPA from the New Mexico Public Regulatory Commission for the 50 MW AC Macho Springs Solar project in Luna County, New Mexico, which will be the state's largest solar PV solar power system when completed. In July 2013, we announced that we began construction on Macho Springs. In July 2013, we announced the entry into agreements to construct three PV solar power systems totaling 23 MW AC in New Mexico for PNM Resources, Inc. In August 2013 we announced the acquisition from Element Power of an approximately 1.5 GW DC pipeline of various stage development projects in the U.S. and Mexico.

Industry module average selling prices continued to experience downward pressure, although the rate of average selling price declines experienced in some markets over the last two years has begun to lessen. Lower industry module pricing, while currently challenging for solar manufacturers (particularly manufacturers with high cost structures), is expected to continue to contribute to global market diversification and volume elasticity. Over time, declining average selling prices are consistent with the erosion of one of the primary historical constraints to widespread solar market penetration, its affordability. In the near term, however, in light of industry-wide manufacturing capacity that exceeds demand, growing worldwide demand is not expected to absorb industry wide module supply without further inventory build-up and/or price reductions, which could adversely affect our results of operations. If competitors reduce module pricing to levels below their cash manufacturing costs, or are able to operate at negative or minimal operating margins for sustained periods of time, our results of operations could be further adversely affected. We continue to mitigate this uncertainty in part by executing on and building our advance-stage utility-scale systems pipeline as a buffer against demand fluctuations, accelerating our module efficiency improvement and BoS cost reduction roadmaps to maintain and increase our competitiveness, profitability and capital efficiency, adjusting our production plans and capacity utilization to match our expected demand, and continuing the development of worldwide geographic markets, including those in India, Australia, the Middle East, Latin America, and Asia.

In the components business, we continue to face intense competition from manufacturers of crystalline silicon solar modules and other types of solar modules and PV systems. Solar module manufacturers compete with one another in several product performance attributes, including reliability and selling price per watt, and, with respect to solar power systems, return on equity ("ROE") and LCOE, meaning the net present value of total life cycle costs of the solar power project divided by the quantity of energy which is expected to be produced over the system's life. We are among the lowest cost PV module manufacturers in the solar industry, based on publicly available information. This cost competitiveness is reflected in the price at which we sell our modules and fully integrated PV solar power systems and enables our PV solar power systems to compete favorably in respect of their ROE or LCOE. Our cost competitiveness is based in large part on our proprietary technology (which enables conversion efficiency improvements and enables us to produce a module in less than 2.5 hours using a continuous and highly automated industrial manufacturing process, as opposed to a batch process), our scale, and our operational excellence. In addition, our modules use approximately 1-2% of the amount of the polysilicon that is used to manufacture traditional crystalline silicon solar modules. The cost of polysilicon is a significant driver of the manufacturing cost of crystalline silicon solar modules, and the timing and rate of change in the cost of silicon feedstock and polysilicon could lead to changes in solar module pricing levels. Polysilicon costs have declined over the past several years, contributing to a decline in our manufacturing cost competitiveness over traditional crystalline silicon module manufacturers. Given the lower conversion efficiency of our modules compared to many types of crystalline silicon modules, there may be higher BoS costs associated with systems using our modules. Thus, to compete effectively on the basis of LCOE, our modules need to maintain a certain cost advantage per watt compared to crystalline silicon-based modules with higher conversion efficiencies. We continue to reduce BoS costs associated with PV solar power systems using our modules. We believe we can continue to reduce BoS costs by improving module conversion efficiency, leveraging volume procurement around standardized hardware platforms, using innovative installation techniques and know how, and accelerating installation times. BoS costs can represent a significant portion of the costs associated with the construction of a typical utility-scale PV solar power system.

While our modules and PV solar power systems are currently competitive in these cost, reliability and performance attributes, there can be no guarantee such competitiveness will continue to exist in the future to the same extent or at all. Any declines in the competitiveness of our products could result in additional margin compression, further declines in the average selling prices of our solar modules, erosion in our market share for modules and PV solar power systems, decreases in the rate of net sales growth, and/or declines in overall net sales. We have taken, and continue to take, various actions to mitigate the potential impact resulting from competitive pressures, including adjusting our pricing policies as necessary, accelerating progress along our module efficiency improvement and BoS cost reduction roadmaps, and further focusing our research and development on increasing the conversion efficiency

of our solar modules.

As we continue to expand our systems business into sustainable markets, we can offer value beyond the solar module, reduce our exposure to module-only competition, provide differentiated product offerings to minimize the impact of solar module commoditization, and provide comprehensive utility-scale PV solar power system solutions that significantly reduce solar electricity costs. Thus, our systems business allows us to play a more active role than many of our competitors in managing the demand for our solar modules. Finally, we continue to form and develop strong relationships with our customers and strategic partners around the world and continue to develop our range of product offerings, including EPC capabilities and O&M services, in order to enhance the competitiveness of systems using our solar modules.

For example, we have and expect in the future to form joint ventures or other business arrangements with project developers in certain strategic markets in order to provide our modules and potential systems business PV generation solutions to the projects developed by such ventures.

### GE Solar Technology Purchase and Strategic Commercial Relationship

On August 5, 2013 we acquired all of the CdTe PV specific intellectual property assets of General Electric Company ("GE") pursuant to certain transaction and purchase agreements in exchange for 1.75 million shares of First Solar common stock. The purchase of such intellectual property is expected to further advance our solar module efficiency roadmap and is expected to reduce the LCOE of PV solar power systems that incorporate our modules. In addition to the purchase of such intellectual property, our research and development associates will collaborate with GE Global Research Center on knowledge transfer and future technology development to further advance CdTe solar technology and module efficiencies. GE will also have the ability to purchase our modules with GE specific branding for future global GE deployments.

See Note 20. "Subsequent Events," for further discussion of the consideration paid for the CdTe specific intellectual property assets.

## TetraSun Acquisition

In April 2013, we completed the acquisition of TetraSun, Inc. ("TetraSun"), a company that is in the advanced stages of developing a novel, high-efficiency, low-cost crystalline silicon technology. We believe that when the technology is successfully transitioned to commercial manufacturing scale, the innovative cell architecture developed by TetraSun is capable of conversion efficiencies exceeding 21 percent with commercial-scale manufacturing costs comparable to conventional multicrystalline silicon solar modules. We expect modules incorporating this technology to complement our current CdTe module and systems offerings by allowing us to expand our leadership position and effectively address markets beyond the utility-scale solar sector, notably in space constrained commercial and residential applications, including rooftop applications. In such applications, we expect our high-efficiency modules based on the TetraSun technology to be competitively differentiated by enabling solar systems with high energy density in constrained spaces at competitive pricing. We are in the process of evaluating and developing distribution channels for PV modules incorporating this technology in Japan and other target markets. We are currently targeting commencement of commercial-scale manufacturing of PV cells incorporating this technology, and third-party assembly of such cells into modules, by the end of 2014 or early 2015. We expect to market and sell such high efficiency modules using the First Solar name or through co-branding with strategic partners.

#### Certain Trends and Uncertainties

We believe that our continuing operations may be favorably or unfavorably impacted by the following trends and uncertainties that may affect our financial condition and results of operations. See "Risk Factors" in Part I, Item 1A of the Company's Annual Report on Form 10-K filed with the SEC on February 27, 2013, the risk factors included in the Prospectus and elsewhere in this report (the "Risk Factors") for a discussion of other risks that may affect our financial condition and results of operations.

Long Term Strategic Plan

In May 2012 and April 2013, we provided information regarding our long term strategic plan ("Long Term Strategic Plan" or "LTSP") to transition our business to primarily sustainable opportunities by the end of 2016. In executing the LTSP we are focusing on providing solar PV generation solutions using our modules to sustainable geographic markets that we believe have a compelling need for mass-scale PV electricity, including markets throughout the Americas, Asia, the Middle East, and Africa. As part of our LTSP, we are focusing on opportunities in which our solar PV generation solutions will compete directly with fossil fuel offerings on an LCOE basis. Execution of the LTSP entails a reallocation of resources around the globe, in particular dedicating resources to regions such as Latin America, Asia, the Middle East, and Africa where we have not traditionally conducted significant business to date. We are evaluating and managing closely the appropriate level of resources required as we transition into and penetrate

these specific markets. We have and intend to continue to dedicate significant capital and human resources to reduce the total installed cost of solar PV generation, to optimize the design and logistics around our solar PV generation solutions, and to ensure that our solutions integrate well into the overall electricity ecosystem of each specific market. We expect that, over time, an increasing portion of our consolidated net sales, operating income and cash flows will come from solar offerings in the sustainable markets described above as we execute on our LTSP, and that, over time, larger relative contributions to our overall financial performance will continue to come from systems offerings in comparison to module only sales. The timing, execution and financial impacts of our LTSP are subject to risks and uncertainties, as described in the Risk Factors.

We are focusing our resources in those markets and energy applications in which solar power can be a least-cost, best-fit energy solution, particularly in regions with high solar resources, significant current or projected electricity demand and/or relatively

high existing electricity prices. As part of these efforts, we continue to expand resources globally, including by appointing country heads and supporting professional, sales and other staff in target sustainable markets. Accordingly we are shifting current costs and expect to incur additional costs over time as we establish a localized business presence in these regions.

We expect joint ventures or other business arrangements with strategic partners to be a key part of our LTSP, and we have begun initiatives in several markets using such arrangements to expedite our penetration of those markets and establish relationships with potential customers and policymakers. Some of these business arrangements have and are expected in the future to involve significant investments or other allocations of capital on our part. We are in the process of developing relationships with policymakers, regulators, and especially end customers in each of these markets with a view to creating markets for utility scale PV solar power systems. We sell solar power solutions that include our modules directly to end customers, including independent power producers, utilities, retail electricity providers and commercial and industrial customers. Depending on the market opportunity, our sales offerings range from third party module only sales, to module sales with a range of engineering, procurement and construction services and solutions, to full turn-key PV solar power system sales. We expect these sales offerings to continue to evolve over time as we work with our customers to optimize how our PV solar generation solutions can best meet our customers' energy and economic needs.

In order to create or maintain a market position in certain strategically targeted markets our offerings from time to time may need to be competitively priced at levels associated with minimal gross profit margins, which may adversely affect our results of operations. We expect the profitability associated with our various sales offerings to vary from one another over time, and possibly vary from our internal long-range profitability expectations and targets, depending on the market opportunity and the relative competitiveness of our offering compared with other energy solutions, fossil fuel based or otherwise, that are available to potential customers.

We expect to use our working capital, the availability under our Revolving Credit Facility, or enter into non-recourse project financing to finance the construction of certain of our PV solar power systems, if the sale of such systems prior to construction beginning does not meet our economic return expectations or we cannot sell under terms and conditions that are favorable to us. We are also currently evaluating and may in the future decide to retain ownership of one or more of our PV solar power systems for a period of time up to the useful life of the PV solar power system if we determine it would be of economic and strategic benefit to do so. If, for example, we cannot sell a PV solar power system at economics that are attractive to us or potential customers are unwilling to assume the risks and rewards typical of PV solar power system ownership, we may instead elect to own and operate such PV solar power system. Additionally, our joint ventures and other business arrangements with strategic partners have and may in the future result in us temporarily retaining a minority or non-controlling ownership interest in the underlying systems projects we develop, supply modules to, or construct potentially for a period of up to several years.

## Construction of Some of the World's Largest Solar PV Power Systems

We expect a substantial portion of our consolidated net sales, operating income and cash flows through the end of 2014 to be derived from several large projects in North America, including the following projects which are currently or will be among the world's largest PV solar power systems: the 550 MW AC Topaz Solar Farm, located in San Luis Obispo County, California; the 550 MW AC Desert Sunlight Solar Farm, located west of Blythe, California; the 290 MW AC Agua Caliente project located in Yuma County, Arizona; and the 230 MW AC AVSR project, located just north of Los Angeles, California. Please see the tables under "Management's Discussion and Analysis of Financial Condition and Results of Operations-Financial Operations Overview-Net Sales-Systems Project Pipeline" for additional information about these and other projects within our systems business advanced-stage project pipeline. Construction progress of these projects is subject to risks and delays as described in the Risk Factors. Revenue recognition for these and other systems projects is in many cases not linear in nature due to the timing of when all revenue recognition criteria have been or are expected to be met, and consequently period over period comparisons of results of operations may not be meaningful. As we progress construction towards substantial completion of these four PV power systems, which is expected to occur in late 2013 through 2014, we expect to have a larger portion of our net

sales, operating income and cash flows come from future sales of solar offerings outside of North America, pursuant to our LTSP described above. North America however, will continue to represent a meaningful portion of our net sales, operating income and cash flows as a significant portion of our advance-stage project pipeline, excluding the projects above, is also comprised of projects in North America.

Manufacturing Capacity

As of June 30, 2013, we had 28 installed production lines with an annual global manufacturing capacity of approximately 2.2 GW at our manufacturing plants in Perrysburg, Ohio, and Kulim, Malaysia. Production at one or more of our manufacturing plants has and may in the future be idled temporarily to better align production with expected market demand and to allow us to implement upgraded process technologies as part of our module conversion efficiency improvement roadmap. The Company expects to produce between 1.6 GW to 1.7 GW of solar modules in 2013.

### Restructuring

We have undertaken a series of restructuring initiatives as further described in Note 4. "Restructuring," to our condensed consolidated financial statements included in this Form 10-Q. In February 2012 and April 2012, respectively, we announced material restructuring initiatives intended to (i) align the organization with our Long Term Strategic Plan, including expected sustainable market opportunities, (ii) accelerate operating cost reductions and improve overall operating efficiency, and (iii) better align production capacity and geographic location of such capacity with expected geographic market requirements and demand.

Such restructuring initiatives resulted in charges to restructuring expense of \$4.7 million and \$420.1 million in the six months ended June 30, 2013 and June 30, 2012, respectively. The most significant actions taken as part of these restructuring activities were the decisions to close our manufacturing operations comprised of 8-lines of installed manufacturing capacity in Frankfurt (Oder), Germany at the end of 2012 due to the lack of policy support for utility-scale solar projects in Europe and to not proceed with our previously planned 4-line manufacturing plant in Vietnam or 2-line manufacturing plant in France, based upon expected future market demand and our focus on providing utility-scale PV generation solutions primarily to sustainable geographic markets. Financial Operations Overview

The following describes certain captions in our condensed consolidated statements of operations and some of the factors that affect our operating results.

Net sales

#### **Components Business**

We generally price and sell our solar modules per watt of name plate power. During the six months ended June 30, 2013, a significant portion of net sales from the components business was related to modules included in our PV solar power systems described below under "Net Sales — Systems Business." Other than the modules included in our PV solar power systems, we sold the majority of our solar modules to PV solar power system project developers, system integrators, and operators headquartered in the United States, Germany, India, and France, which primarily integrate them into PV solar power systems that they own, operate, or construct.

We have entered into module sales agreements with customers worldwide for specific projects or volumes of modules through the remainder of 2013 and to a lesser extent thereafter. During the three and six months ended June 30, 2013, 24% and 44%, respectively of our components business net sales, excluding modules included in our PV solar power systems, were denominated in Euro and were subject to fluctuations in the exchange rate between the Euro and U.S. dollar. During the three and six months ended June 30, 2012, 97% and 62%, respectively of our components business net sales, excluding modules included in our PV solar power systems, were denominated in Euro and were subject to fluctuations in the exchange rate between the Euro and U.S. dollar.

Under our typical customer sales contracts for solar modules, we transfer title and risk of loss to the customer and recognize revenue upon shipment. Pricing is typically fixed or determinable at the time of shipment, and our customers do not typically have extended payment terms. Customers do not have rights of return under these sales contracts. Our revenue recognition policies for the components business are described further in Note 2. "Summary of Significant Accounting Policies," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

**Systems Business** 

Through our fully integrated systems business, we provide complete turn-key solar power system solutions using our solar modules, which may include project development, EPC services, O&M services, and project finance expertise.

Net sales from our systems business are impacted by numerous factors, including the cost competitiveness of our systems offerings in comparison to our competitors' solar power systems and other forms of electricity generation, the magnitude and effectiveness of support programs, and other solar power system demand drivers.

Revenue Recognition — Systems Business. Revenue recognition for our systems projects are in many cases not linear in nature due to the timing of when all revenue recognition criteria have been met, and consequently period over period comparisons of results of operations may not be meaningful. We typically use the percentage-of-completion method using actual costs incurred over total estimated costs to construct a project (including module costs) as our standard accounting policy, but we only apply this

method after all revenue recognition criteria have been met. There are also many instances in which we recognize revenue only after a project has been completed, primarily due to a project not being sold prior to completion or because all revenue recognition criteria are not met until the project is completed. Our revenue recognition policies for the systems business are described in further detail in Note 2. "Summary of Significant Accounting Policies," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

#### Systems Project Pipeline

The following tables summarize, as of August 6, 2013, our approximately 3.1 GW AC systems business advanced-stage project pipeline. As of June 30, 2013, for the Projects Sold/ Under Contract in our advanced-stage project pipeline of approximately 2.2 GW AC, we have recognized revenue with respect to the equivalent of approximately 900 MW AC. Such MW AC equivalent amount refers to the ratio of revenue recognized for the Projects Sold/ Under Contract in our advanced-stage project pipeline compared to total contracted revenue for such projects, multiplied by the total MW AC for such projects. The remaining revenue to be recognized subsequent to June 30, 2013 for the Projects Sold/Under Contract in our advanced-stage project pipeline is expected to be approximately \$4.3 billion. The substantial majority of such amount is expected to be recognized as revenue through the later of the substantial completion or project sale closing dates of the Projects Sold/ Under Contract. The remaining revenue to be recognized does not have a direct correlation to expected remaining module shipments for such Projects Sold/Under Contract as expected module shipments do not represent total systems revenue and do not consider the timing of when all revenue recognition criteria are met including timing of module installation. The actual volume of modules installed in our Projects Sold/ Under Contract will be greater than the Project Size in MW AC as module volumes required for a project are based upon MW DC, which will be greater than the MW AC size pursuant to a DC-AC ratio typically ranging from 1.2 to 1.4. Such ratio varies across different projects due to various system design factors. Projects are removed from our advanced-stage project pipeline tables below once we have completed construction and after substantially all revenue has been recognized.

As we continue to execute against our LTSP, we continually seek to make additions to our advance stage project pipeline. We are actively developing our early to mid-stage project pipeline in order to secure PPAs and we are also pursuing opportunities to acquire advance-stage projects, which already have PPAs in place. In 2013, we have acquired 283 MW AC of advance-stage projects through August 6, 2013 and we expect to acquire additional advance-stage projects when such acquisitions meet our strategic and/or our return on investment requirements.

# Projects Sold/Under Contract

(includes uncompleted sold projects, projects under sales contracts subject to conditions precedent, and EPC agreements including partner developed projects that we will or are constructing)

				Expected Year
Project/Location	Project Size in	Power Purchase	Third Party	Revenue
Floject/Location	MW AC (1)	Agreement ("PPA")	Owner/Purchaser	Recognition Will Be
				Completed By
Topaz, California	550	PG&E	MidAmerican	2014
Descrit Synlight Colifornia	550	PG&E / SCE	NextEra / GE /	2014
Desert Sunlight, California	330	PURE / SCE	Sumitomo	2014
Agua Caliente, Arizona	290	PG&E	NRG /	2013
Agua Canente, Arizona	290	ruae	MidAmerican	2013
AVSR, California	230	PG&E	Exelon	2013/2014
AGL, Australia	155	AGL	AGL (2) (7)	2015
Campo Verde, California	139	SDG&E	Southern	2013
Imperial Energy Center South,	130	SDG&E	Tanaska (2)	2013
California	130	SDUKE	Tenaska (2)	2015

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Copper Mountain 2, Nevada	58	PG&E	Sempra (2)	2015(3)
Amherstburg 1, Belmont, and Walpole ("ABW"), Ontario, Canada	50	OPA (5)	GE/ Alterra	2013
PNM2, New Mexico	22	UOG(4)	PNM(2)	2013
DEWA, UAE	13	DEWA	DEWA(2)	2013
Total	2.187			

Projects Permitted with Executed PPA – Not Sold/Contracted (includes under construction or completed projects that are not yet sold or subject to a sales contract)

Project/Location	Project Size in MW AC (1)	Power Purchase Agreement (PPA)	Expected Year Revenue Recognition Will Be Completed By
Solar Gen 2, California	150	SDG&E	2014
Macho Springs, New Mexico	50	El Paso Electric	2014
Lost Hills, California	32	PG&E	2015 (8)
Maryland Solar, Maryland	20	FE Solutions	2013
Total	252		

Projects in Development with Executed PPA or Awarded Projects- Not Sold/ Contracted

Project / Project Size in M		Power Purchase	Expected Year		
Project/Location	AC (1)	Agreement ("PPA")	Revenue Recognition		
			Will Be Completed By		
Stateline, California	300	SCE	2016		
Silver State South, Nevada	250	SCE	2016		
North Star, California	60	PG&E	2015		
Cuyama, California	40	PG&E	2015/2016 (6)		
PNM3, New Mexico	23	UOG (2) (4)	2014		
Total	673				

#### Key:

The volume of modules installed in MW DC ("direct current") will be higher than the MW AC ("alternating current")

- (1) size pursuant to a DC-AC ratio typically ranging from 1.2 to 1.4. Such ratio varies across different projects due to various system design factors
- (2) EPC contract or partner developed project
- First 92 MW AC phase was completed in 2012. Remaining phase is 58 MW AC for which substantial completion is expected in 2015
- (4) UOG = Utility Owned Generation
- (5) OPA = Ontario Power Authority RESOP program
- (6) PPA term does not begin until 2019
- (7) First Solar will own five percent of projects
- (8) Project has short-term PPA that begins in 2015 with PG&E PPA beginning in 2019

#### Cost of sales

#### Components Business

Our cost of sales includes the cost of raw materials and components for manufacturing solar modules, such as tempered back glass, transparent conductive oxide coated front glass, cadmium telluride, laminate, connector assemblies, laminate edge seal, and other materials and components. Our cost of sales also includes direct labor for the manufacturing of solar modules and manufacturing overhead such as engineering, equipment maintenance, environmental health and safety, quality and production control, and procurement costs. Cost of sales also includes depreciation of manufacturing plant and equipment and facility-related expenses. In addition, we record shipping, warranty and any obligation for solar module collection and recycling costs within cost of sales.

Our manufacturing cost per watt, which is an operating metric we use as an indicator of manufacturing cost competitiveness, represents the current manufacturing and associated costs incurred to produce and sell solar modules during a period divided by the number of salable watts produced in the same period. Beginning in 2013, our cost per watt excludes any costs associated with our manufacturing plants in Frankfurt (Oder), Germany, which closed

manufacturing operations at the end of 2012.

Overall, we expect our cost per watt to decrease over the next several years due to an increase in watts per solar module, through improved conversion efficiencies, an increase in unit output per production line, and ongoing reductions in variable and fixed costs. This expected decrease in cost per watt would be partially offset during periods in which we have underutilized installed manufacturing capacity.

**Systems Business** 

Within our systems business, project-related costs include standard EPC costs (consisting primarily of BoS costs for inverters, electrical and mounting hardware, project management and engineering costs, and engineering and construction labor costs), site specific costs, and development costs (including transmission upgrade costs, interconnection fees, and permitting costs).

As further described in Note 19. "Segment Reporting," to our condensed consolidated financial statements included within this Quarterly Report on Form 10-Q, at the time when all revenue recognition criteria are met, we include the sale of our solar modules manufactured by our components business and used by our systems business within net sales of our components business. Therefore, the related cost of sales are also included within our components business at that time. The cost of solar modules is comprised of the manufactured inventory cost incurred by our components segment.

### Gross profit

Gross profit is affected by numerous factors, including our module and system average selling prices, market demand, market mix, our manufacturing costs, BoS costs, project development costs, the effective utilization of our production capacity and facilities, and foreign exchange rates. Gross profit is also affected by the mix of net sales generated by our components and systems businesses. Gross profit for our systems business excludes the sales and cost of sales for solar modules, used in our systems projects which we include in the gross profit of our components business.

## Research and development

Research and development expense consists primarily of salaries and personnel-related costs, the cost of products, materials, and outside services used in our process and product research and development activities for both the components and systems businesses and depreciation and amortization expense associated with research and development specific facilities and intangible assets. We acquire equipment for general use in our process and product development and record the depreciation of this equipment as research and development expense. Currently, the substantial majority of our research and development expenses are attributable to our components segment.

We maintain a number of programs and activities to improve our technology and processes in order to enhance the performance and reduce the costs of our solar modules and PV solar power systems using our modules.

## Selling, general and administrative

Selling, general and administrative expense consists primarily of salaries and other personnel-related costs, professional fees, insurance costs, travel expenses, and other business development and selling expenses. We expect selling, general and administrative expense to decline over time as we reduce costs in connection with our LTSP.

Our systems business has certain of its own dedicated administrative key functions, such as accounting, legal, finance, project finance, human resources, procurement, and marketing. Costs for these functions are recorded and included within selling, general and administrative costs for our systems segment. Our corporate key functions consist primarily of company-wide corporate tax, corporate treasury, corporate accounting/finance, corporate legal, investor relations, corporate communications and government relations, and executive management functions. These corporate functions and the assets supporting such functions benefit both the components and systems segments. We allocate corporate costs to the components and systems segments as part of selling, general and administrative costs, based upon the estimated benefits provided to each segment from these corporate functions. We determine the estimated benefits provided to each segment for these corporate costs based upon a combination of the estimated time spent by corporate employees supporting each segment and the average relative selling, general and administrative costs

incurred by each segment before such corporate allocations.

## Production start-up

Production start-up expense consists primarily of salaries and personnel-related costs and the cost of operating a production line before it has been qualified for full production, including the cost of raw materials for solar modules run through the production line during the qualification phase. It also includes all expenses related to the selection of a new site and the related legal and regulatory costs, and the costs to maintain our plant replication program, to the extent we cannot capitalize these expenditures. In general, we expect production start-up expense per production line to be higher when we build an entirely new manufacturing facility compared with the addition of new production lines at an existing manufacturing facility or implementing changes to our manufacturing process at such existing facilities, primarily due to the additional infrastructure investment required when building an entirely new facility. Production start-up expense is attributable to our components segment.

#### Restructuring

Restructuring expenses include those expenses incurred related to material restructuring initiatives and include severance and employee termination costs, asset impairment and asset impairment related costs that are directly related to our restructuring initiatives, costs associated with contract terminations and other restructuring related costs. See Note 4. "Restructuring," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for more information. Expenses recognized for restructuring activities are discussed further above under "Executive Overview –Restructuring."

Foreign currency (loss) gain

Foreign currency (loss) gain consists of gains and losses resulting from holding assets and liabilities and conducting transactions denominated in currencies other than our subsidiaries' functional currencies.

Interest income

Interest income is earned on our cash, cash equivalents, marketable securities, and restricted cash and investments. Interest income also includes interest received from notes receivable and any interest collected for late customer payments.

Interest expense, net

Interest expense is incurred on various debt financings. We capitalize interest expense into our property, plant and equipment or project assets when such costs qualify for interest capitalization, reducing the amount of interest expense reported in any given period.

Other income (expense), net

Other income (expense), net is primarily comprised of other miscellaneous items, changes in fair value of foreign exchange contracts and realized gains/losses on the sale of fixed marketable securities.

Income tax expense

Income taxes are imposed on our taxable income by taxing authorities in the various jurisdictions in which we operate, principally the United States, Germany, and Malaysia. The statutory federal corporate income tax rate in the United States is 35.0%, while the tax rates in Germany and Malaysia are approximately 30.2% and 25.0%, respectively. In Malaysia, we have been granted a long-term tax holiday, scheduled to expire in 2027, pursuant to which substantially all of our income earned in Malaysia is exempt from income tax.

Use of estimates

Our discussion and analysis of our financial condition and results of operations are based upon our unaudited condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP for interim financial information. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amount of assets, liabilities, net sales, and expenses and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to percentage-of-completion revenue recognition, estimates of future cash flows from and the economic useful lives of long-lived assets, certain accrued liabilities, income taxes and tax valuation allowances, reportable segment allocations, product warranties and manufacturing excursions, accrued collection and recycling expense, and goodwill. We base our estimates on

historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and amounts reported in our results of operations.

## Results of Operations

The following table sets forth our condensed consolidated statements of operations as a percentage of net sales for the periods indicated:

	Three Mon	ths E	nded		Six Months	End	ed	
	June 30,		June 30,		June 30,		June 30,	
	2013		2012		2013		2012	
Net sales	100.0	%	100.0	%	100.0	%	100.0	%
Cost of sales	73.0	%	74.5	%	75.7	%	78.0	%
Gross profit	27.0	%	25.5	%	24.3	%	22.0	%
Research and development	6.0	%	3.4	%	4.8	%	4.7	%
Selling, general and administrative	12.7	%	5.5	%	11.0	%	9.9	%
Production start-up	0.3	%	0.1	%	0.2	%	0.3	%
Restructuring	0.5	%	2.0	%	0.4	%	28.9	%
Operating income (loss)	7.5	%	14.6	%	7.9	%	(21.8	)%
Foreign currency (loss) gain	(0.2	)%	0.1	%		%	_	%
Interest income	0.7	%	0.4	%	0.7	%	0.4	%
Interest expense, net	(0.2	)%	(0.8	)%	(0.1	)%	(0.6	)%
Other income (expense), net	0.1	%	(0.1	)%		%	(0.2	)%
Income tax expense	1.4	%	2.5	%	1.1	%	1.2	%
Net income (loss)	6.5	%	11.6	%	7.3	%	(23.3	)%

### Segment Overview

We operate our business in two segments. Our components segment involves the design, manufacture, and sale of solar modules which convert sunlight into electricity. Third-party customers of our components segment include project developers, system integrators, and owners and operators of PV solar power systems.

Our second segment is our fully integrated systems business ("systems segment"), through which we provide complete turn-key PV solar power systems, or solar solutions that draw upon our capabilities, which include (i) project development, (ii) EPC services, (iii) O&M services, and (iv) project finance expertise. We may provide our full EPC services or any combination of individual products and services within our EPC capabilities depending upon the customer and market opportunity. All of our systems segment products and services are for PV solar power systems which use our solar modules, and such products and services are sold directly to investor owned utilities, independent power developers and producers, commercial and industrial companies, and other PV solar power system owners.

In our operating segment financial disclosures, we include an allocation of net sales value for all solar modules manufactured by our components segment and installed in projects sold or built by our systems segment in the net sales of our components segment. In the gross profit of our operating segment disclosures, we include the corresponding cost of sales value for the solar modules installed in projects sold or built by our systems segment in the components segment. The cost of solar modules is comprised of the manufactured cost incurred by our components segment.

See Note 19. "Segment Reporting," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for more information.

See also Item 2: "Management's Discussion and Analysis of Financial Condition and Results of Operations - Financial Operations Overview - Net Sales - Systems Project Pipeline" for a description of the projects in our advanced-stage project pipeline. Due to the distinct size, profitability and terms of the underlying sales arrangements for each project under construction, timing of meeting all revenue recognition criteria may create uneven net sales and gross profit patterns, making year over year comparisons less meaningful.

#### Product Revenue

The following table sets forth the total amounts of solar modules and solar power systems net sales for the three and six months ended June 30, 2013 and June 30, 2012. For the purpose of the below table, (a) Solar module revenue is composed of total net sales from the sale of solar modules to third parties, and (b) Solar power system revenue is composed of total net sales from the sale of PV solar power systems and related services and solutions including the solar modules installed in the PV solar power systems we develop and construct.

	Three Months Ended		Six Months Ended	
(Dallars in they sands)	June 30,	June 30,	June 30,	June 30,
Pollars in thousands)	2013	2012	2013	2012
Solar module revenue	\$81,304	\$54,598	\$274,554	\$122,007
Solar power system revenue	438,456	902,734	1,000,411	1,332,380
Net sales	\$519,760	\$957,332	\$1,274,965	\$1,454,387

Three Months Ended June 30, 2013 and June 30, 2012

The explanations below include discussions of the results of operations for both our components and systems segments for net sales, costs of sales, and income (loss) before income taxes.

#### Net sales

Three Month	s Ended	
June 30, 2013	June 30, 2012	Three Month Period Change
\$192,908	\$287,681	\$(94,773 ) (33 )%
326,852	669,651	(342,799 ) (51 )%
\$519,760	\$957,332	\$(437,572) (46)%
	June 30, 2013 \$192,908 326,852	2013 2012 \$192,908 \$287,681 326,852 669,651

The 46% decrease in net sales during the three months ended June 30, 2013 compared with the three months ended June 30, 2012 was primarily due to a 51% decrease in net sales from our systems segment, combined with a 33% decrease in net sales from our components segment.

Net sales from our components segment, which includes solar modules used in our systems projects, decreased \$94.8 million primarily due to a 20% decrease in average selling prices and a 16% decrease in the volume of watts sold.

Net sales from our systems segment, which excludes solar modules used in our systems projects, decreased by \$342.8 million, primarily due to decreases in net sales from our AVSR, Silver State North, Copper Mountain and Agua Caliente projects, partially offset by increases in net sales from our Topaz project. The decrease in net sales is primarily due to the number and size of projects under construction between the periods as well as the timing of when all revenue recognition criteria have been met.

## Cost of sales

	Three Months	Ended	
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month Period Change
Cost of Sales			
Components	\$201,101	\$298,033	\$(96,932 ) (33 )%
Systems	178,561	415,558	(236,997 ) (57 )%
Total Cost of Sales	\$379,662	\$713,591	\$(333,929) (47)%
% of net sales	73.0 %	74.5 %	

The 47% decrease in cost of sales during the three months ended June 30, 2013 compared with the three months ended June 30, 2012 was primarily due to a \$237.0 million decrease in cost of sales in our systems segment primarily for BoS and other construction costs related to a decrease in the number and size of various utility-scale solar power systems under construction or the timing of when all revenue recognition criteria have been met between the periods. Additionally, cost of sales decreased by \$96.9 million in our components segment cost of sales. These decreases were primarily due to a 16% decrease in the volume of watts sold, a \$16.5 million decrease in underutilization of our

manufacturing capacity, a \$12.5 million decrease in expense for costs associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion and a \$7.4 million decrease related to accelerated depreciation for certain manufacturing equipment that was replaced as part of our planned equipment upgrade program in the first quarter of 2012.

Our average manufacturing cost per watt decreased by \$0.11, or 14%, from \$0.78 in the three months ended June 30, 2012 to \$0.67 in the three months ended June 30, 2013. The decrease is the result of increased module efficiencies realized, the closure of our German manufacturing plants at the end of 2012, and lower underutilization during the three months ended June 30, 2013.

#### Gross profit

	Timee Month	Lilaca	
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month Period Change
Gross profit	\$140,098	\$243,741	\$(103,643) (43)%
% of net sales	27.0 %	25.5 %	

Three Months Ended

Three Months Ended

Three Months Ended

Gross profit as a percentage of net sales increased by 1.5 percentage points in the three months ended June 30, 2013 compared with the three months ended June 30, 2012. This increase was primarily due to a 2.0 percentage point increase in systems segment gross profit due to the mix of higher gross profit projects under construction between the periods, a 1.3 percentage point increase related to reduced costs associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion and a 0.8 percentage point increase due to accelerated depreciation on certain manufacturing equipment that have been replaced as part of our planned equipment upgrade programs in 2012. These increases were partially offset by a 2.2 percentage point decrease due to lower gross profit for modules sold in our systems business due to a reduction in estimated average selling prices and a 0.4 percentage point decrease related to a decrease in lower cost or market inventory write-downs between the periods.

## Research and development

	Timee Months	Lilucu			
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month	Period Chan	ge
Research and development	\$30,964	\$32,365	\$(1,401)	(4)	%
% of net sales	6.0 %	3.4 %			

The decrease in research and development expense of \$1.4 million was primarily due to a \$1.4 million decrease in testing and qualification materials expense and a \$0.3 million decrease in personnel-related expenses. These decreases were partially offset by increases of \$0.3 million in facilities, utilities and other expenses.

During the three months ended June 30, 2013, we continued the development of solar modules with increased efficiencies at converting sunlight into electricity and increased the average conversion efficiency of our solar modules from 12.6% for the three months ended June 30, 2012 to 13.0% for the three months ended June 30, 2013.

#### Selling, general and administrative

	Timee Mondis	Liided		
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month Period	
(Donars in thousands)	Julic 30, 2013	June 30, 2012	Change	
Selling, general and administrative	\$66,265	\$52,184	\$14,081 27	%
% of net sales	12.7 %	5.5 %		

The increase in selling, general and administrative expense of \$14.1 million between the periods was primarily due to a \$15.1 million increase in personnel-related expenses, driven by an increase in share-based compensation of \$24.6 million, partially offset by a decrease in salaries of \$9.5 million, a \$2.7 million increase in professional service costs and a \$1.4 million increase in project and business development costs. For the three months ended June 30, 2013, share-based compensation expense increased from the three months ended June 30, 2012, primarily as a result of the impact of a change in our estimated forfeiture rate for share-based compensation awards in the three months ended June 30, 2012 in addition to an increase in actual forfeitures. These increases were partially offset by decreases of \$4.7

million in infrastructure expenses and \$0.4 million in travel and training expenses.

Production start-up

	Three Months Ended					
(Dollars in thousands)	Juna 20, 2012	Juna 20, 2012	Three Month Period Change			
(Donars in thousands)	Julie 30, 2013	Julie 30, 2012	Change			
Production start-up	\$1.392	\$533	\$859	161		

During the three months ended June 30, 2013 and June 30, 2012, we incurred \$1.4 million and \$0.5 million, respectively, of production start-up expenses primarily for our global manufacturing personnel dedicated to the installation and implementation of new equipment, equipment upgrades and process improvements for existing plants.

0.3 % 0.1

#### Restructuring

% of net sales

	Three Months Ended				
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month Period Change		
Restructuring	\$2,381	\$19,000	\$(16,619 ) (87 )%		
% of net sales	0.5 %	2.0 %			

During the three months ended June 30, 2013 and June 30, 2012, we incurred \$2.4 million and \$19.0 million, respectively, of restructuring expenses due to charges relating to the previously announced February 2012 manufacturing restructuring and April 2012 European restructuring initiatives, which included charges associated with the closure of our German manufacturing plants at the end of 2012. See Note 4. "Restructuring," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

#### Foreign currency (loss) gain

	Inree Months Ended				
(Dollars in thousands)	June 30,	June 30,	Three Month Period		
	2013	2012	Change		
Foreign currency (loss) gain	\$(1,068)	\$1,015	\$(2,083) 205 %		

Foreign currency gain decreased during the three months ended June 30, 2013 compared to the three months ended June 30, 2012, primarily due to differences between our economic hedge positions and the underlying exposure, and changes in the associated exchange rates.

#### Interest income

	Three Mon	Three Months Ended					
(Dollars in thousands)	June 30,	June 30,	Three Mo	nth Period			
(Dollars in thousands)	2013	2012	Change				
Interest income	\$3,405	\$3,379	\$26	1	%		

Interest income remained consistent during the three months ended June 30, 2013 compared with the three months ended June 30, 2012.

#### Interest expense, net

	Three Months Ended				
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Montl	n Period Ch	ange
Interest expense, net	\$(875	\$(7,372)	) \$6,497	(88)	)%

Interest expense, net of amounts capitalized, decreased during the three months ended June 30, 2013 compared with the three months ended June 30, 2012, primarily as a result of \$4.7 million in expense during the three months ended

%

June 30, 2012 associated with the early repayment of a German credit facility agreement. The remaining decrease is primarily related to a decrease in long-term debt between the periods.

Other income (expense), net

	Three Mont	Three Months Ended				
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Mor	nth Period C	hange	
Other income (expense), net	\$504	\$(1,334	) \$1,838	(138	)%	

Other income, net, increased during the three months ended June 30, 2013 compared with the three months ended June 30, 2012, primarily as a result of timing differences of various immaterial miscellaneous items.

Income (Loss) Before Income Taxes

	Three Mon	Three Months Ended				
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month Period Ch	nange		
Income (loss) before income taxes						
Components	\$(67,348	) \$(92,917	) \$25,569 (28	)%		
Systems	108,410	228,264	(119,854 ) (53	)%		
Total income (loss) before income taxes	\$41,062	\$135,347	\$(94,285) (70	)%		

Components segment loss before income taxes decreased by \$25.6 million, during the three months ended June 30, 2013 compared with the three months ended June 30, 2012, primarily from a decrease in underutilization of our manufacturing capacity, a decrease in expenses for costs associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion, a decrease related to accelerated depreciation for certain manufacturing equipment that was replaced as part of our planned equipment upgrade program in the first quarter of 2012, a decrease in restructuring expense and a decrease of other warranty expense. These decreases were partially offset by a decrease in average selling price and sales volumes and an increase in share-based compensation expense as discussed further above.

Systems segment income before income taxes decreased \$119.9 million, during the three months ended June 30, 2013 compared with the three months ended June 30, 2012, primarily due to a decrease in systems segment net sales during the three months ended June 30, 2013 compared with the three months ended June 30, 2012, due to a decrease in the number and size of projects under construction for which all revenue recognition criteria were met.

Income tax expense

	Three Months	Ended	
(Dollars in thousands)	June 30, 2013	June 30, 2012	Three Month Period Change
Income tax expense	\$7,464	\$24,364	\$(16,900 ) (69 )%
Effective tax rate	18.2 %	18.0 %	

Income tax expense decreased by \$16.9 million during the three months ended June 30, 2013 compared with the three months ended June 30, 2012. Substantially all of this decrease resulted from a \$94.3 million decrease in income before income taxes, partially offset by a greater percentage of profits earned in higher tax jurisdictions. See Note 16. "Income Taxes," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

Six Months Ended June 30, 2013 and June 30, 2012

The explanations below include discussion of the results of operations for both our components and systems segments for net sales, costs of sales, and income (loss) before income taxes.

	Six Months l	Six Months Ended			
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month Period	Change	
Net Sales					
Components	\$549,504	\$455,811	\$93,693	%	
Systems	725,461	998,576	(273,115 ) (27	)%	
Total Net sales	\$1.274.965	\$1,454,387	\$(179.422 ) (12	)%	

The 12% decrease in net sales during the six months ended June 30, 2013 compared with the six months ended June 30, 2012 was primarily due to a 27% decrease in net sales from our systems segment, partially offset by a 21% increase in net sales from our components segment.

Net sales from our components segment, which includes solar modules used in our systems projects, increased \$93.7 million, primarily due to a 56% increase in the volume of watts sold, partially offset by a 22% decrease in module average selling prices.

Net sales from our systems segment, which excludes solar modules used in our systems projects, decreased by \$273.1 million, primarily due to decreases in net sales from our Agua Caliente, AVSR and Silver State North projects, partially offset by increases in net sales from our Topaz and Imperial Energy Center South projects. The decrease in net sales is primarily due to the number and size of projects under construction and the progress on such construction between the periods as well as the timing of when all revenue recognition criteria have been met.

#### Cost of sales

	Six Months Ended				
(Dollars in thousands)	June 30, 2013 June 30, 2012 Six Month Period Chan	ge			
Cost of Sales					
Components	\$546,088 \$488,622 \$57,466 12	%			
Systems	419,453 645,279 (225,826 ) (35	)%			
Total Cost of Sales	\$965,541 \$1,133,901 \$(168,360) (15	)%			
% of net sales	75.7 % 78.0 %				

The 15% decrease in cost of sales during the six months ended June 30, 2013 compared with the six months ended June 30, 2012 was primarily due to a \$225.8 million decrease in costs of sales in our systems segment primarily for BoS and other construction costs related to the relative number and size of various utility-scale solar power systems under construction and the progress on such construction between the periods as well as the timing of when all revenue recognition criteria have been met. Additionally, cost of sales increased by \$57.5 million in our components segment. These increases were primarily due to a 56% increase in the volume of watts sold, partially offset by a \$39.5 million decrease in expense for costs associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion, a \$20.4 million decrease for certain lower of cost or market inventory write-downs primarily as a result of declines in market pricing during the first quarter of 2012 combined with continued cost reductions and an \$18.4 million decrease related to accelerated depreciation for certain manufacturing equipment that was replaced as part of our planned equipment upgrade program in the first quarter of 2012.

Our average manufacturing cost per watt decreased by \$0.07, or 9%, from \$0.75 in the six months ended June 30, 2012 to \$0.68 in the six months ended June 30, 2013. The decrease is the result of increased module efficiencies realized and the closure of our German manufacturing plants at the end of 2012.

Gross profit

Six Months Ended

 (Dollars in thousands)
 June 30, 2013
 June 30, 2012
 Six Month Period Change

 Gross profit
 \$309,424
 \$320,486
 \$(11,062)
 )%

 % of net sales
 24.3
 %
 22.0
 %

Gross profit as a percentage of net sales increased by 2.3 percentage points in the six months ended June 30, 2013 compared with the six months ended June 30, 2012. This increase was primarily attributable to a 2.7 percentage point increase related to reduced costs associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion, a 1.5 percentage point increase related to a write-down of certain inventories between the periods and a 1.0 percentage point increase due to reduced accelerated depreciation on certain manufacturing equipment that have been replaced as part of our planned equipment upgrade programs. These increases were partially offset by a 2.6 percentage point decrease due to lower gross profit for modules sold in our components segment primarily due to lower average selling prices compared to module production costs between periods and a 0.3 percentage point decrease in systems gross profit due to a the mix of higher gross profit projects under construction between the periods.

#### Research and development

	Six Months Ended				
(Dollars in thousands)	June 30, 2013	3 June 30, 20	12 Six N	Month Period	Change
Research and development	\$60,895	\$68,449	\$(7,5	554 ) (11	)%
% of net sales	4.8	6 4.7	%		

The decrease in research and development expense of \$7.6 million was primarily due to a \$4.9 million decrease in testing and qualification materials expense and a \$3.6 million decrease in personnel-related expenses. These decreases were partially offset by increases of \$0.9 million in facilities, utilities and other expenses.

During the six months ended June 30, 2013, we continued the development of solar modules with increased efficiencies at converting sunlight into electricity and increased the average conversion efficiency of our solar modules from 12.5% for the six months ended June 30, 2012 to 12.9% for the six months ended June 30, 2013.

#### Selling, general and administrative

	DIA MOINING EI	laca			
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month	Period Chang	ge
Selling, general and administrative	\$140,730	\$144,004	\$(3,274	) (2	)%
% of net sales	11.0 %	9.9 %			

Six Months Ended

The decrease in selling, general and administrative expense of \$3.3 million between the periods was primarily due to a \$16.0 million decrease in expense related to the 2008-2009 manufacturing excursion, a \$3.7 million decrease in infrastructure expenses and a \$0.6 million decrease in travel and training expenses. These decreases were partially offset by increases of \$9.6 million in personnel-related expenses driven primarily by an increase in share-based compensation of \$23.1 million, partially offset by a decrease in salaries of \$13.5 million. For the six months ended June 30, 2013, share-based compensation expense increased from the six months ended June 30, 2012, primarily as a result of the impact of a change in our estimated forfeiture rate for share-based compensation awards in the six months ended June 30, 2012. Our restructuring activities resulted in an increase in actual forfeitures during the second quarter of 2012 compared to historical experience prior to such restructuring activities. These decreases were also partially offset by increases of \$5.8 million in professional service costs, and \$1.6 million in project and business development costs.

#### Production start-up

	Six Months Er	naea			
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month l	Period Change	÷
Production start-up	\$2,768	\$4,591	\$(1,823	) (40	)%
% of net sales	0.2 %	0.3 %			

During the six months ended June 30, 2013 and June 30, 2012, we incurred \$2.8 million and \$4.6 million, respectively, of production start-up expenses primarily for our global manufacturing personnel dedicated to the installation and implementation of new equipment, equipment upgrades and process improvements for existing plants.

Restructuring

Six Months Ended

(Dollars in thousands)

Restructuring

\$4,728

\$420,065

\$(415,337) (99)

\$0.4

\$28.9

During the six months ended June 30, 2013 and June 30, 2012, we incurred \$4.7 million and \$420.1 million, respectively, of restructuring expenses due to charges relating to the previously announced February 2012 manufacturing restructuring and April 2012 European restructuring initiatives, which included charges associated with the closure of our German manufacturing plants at the end of 2012 and our decision to not move forward with our previously planned 4-line manufacturing plant in Vietnam. See Note 4. "Restructuring," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

Foreign currency (loss) gain

	Six Months Ended					
(Dollars in thousands)	June 30, 2013			Six Month Period Change		
Foreign currency (loss) gain	\$550	\$31	\$519	1,674	%	

Foreign currency gain increased during the six months ended June 30, 2013 compared to the six months ended June 30, 2012, primarily due to differences between our economic hedge positions and the underlying exposure, and changes in the associated exchange rates.

Interest income

	Six Months Ended				
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month Period Change		
Interest income	\$8,352	\$6,290	\$2,062	33	%

Interest income increased \$2.1 million during the six months ended June 30, 2013 compared with the six months ended June 30, 2012, primarily due to interest received from notes receivable, affiliate of \$1.4 million, combined with increased interest received from marketable securities.

Interest expense, net

	Six Months Ended					
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month Period Change			
Interest expense, net	\$(1,625	) \$(8,292	) \$6,667	(80	)%	

Circ Mandles Ended

Interest expense, net of amounts capitalized, decreased during the six months ended June 30, 2013 compared with the six months ended June 30, 2012, primarily as a result of \$4.7 million in expense during the six months ended June 30, 2012 associated with the early repayment of a German credit facility agreement. The remaining decrease is primarily related to a decrease in long-term debt between the periods.

Other income (expense), net

•	Six Month	ns Ended				
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month Period Change			
Other income (expense), net	\$(329	) \$(2,545	) \$2,216	(87	)%	

Other expense, net, decreased during the six months ended June 30, 2013 compared with the six months ended June 30, 2012, primarily as a result of the timing differences of various immaterial miscellaneous items.

Income (Loss) Before Income Taxes

	Six Months End	ded		
(Dollars in thousands)	,	une 30, 2012	Six Month Period Char	nge
Income (loss) before income taxes				
Components	\$(116,886 ) \$(	3(606,371)	\$489,485 (81	)%
Systems	224,137 28	285,232	(61,095) (21	)%
Total income (loss) before income taxes	\$107,251 \$(	5(321,139)	\$428,390 (133	)%

Components segment loss before income taxes decreased by \$489.5 million, during the six months ended June 30, 2013 compared with the six months ended June 30, 2012, primarily from reduced restructuring expenses, a decrease in expense associated with our voluntary remediation efforts for our 2008-2009 manufacturing excursion, a decrease for certain lower of cost or market inventory write-downs between the periods, a decrease related to accelerated depreciation for certain manufacturing equipment that was replaced as part of our planned equipment upgrade program in the first quarter of 2012 and a decrease in average selling prices between the periods. These decreases were partially offset by an increase in sales volume between the periods.

Systems segment income before income taxes decreased \$61.1 million, during the six months ended June 30, 2013 compared with the six months ended June 30, 2012, primarily due to decreased systems segment net sales during the six months ended June 30, 2013 compared with the six months ended June 30, 2012, due to a decrease in the number and size of projects under construction and the progress of such construction for which all revenue recognition criteria were met.

#### Income tax expense

	Six Months Ei	nded	
(Dollars in thousands)	June 30, 2013	June 30, 2012	Six Month Period Change
Income tax expense	\$14,511	\$17,294	\$(2,783) (16)%
Effective tax rate	13.5 %	(5.4)%	

Income tax expense decreased by \$2.8 million during the six months ended June 30, 2013 compared with the six months ended June 30, 2012. Substantially all of this decrease resulted from a \$28.6 million decrease in pre-tax income in jurisdictions for which a tax expense or benefit can be recognized. See Note 16. "Income Taxes," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

#### Critical Accounting Policies and Estimates

In preparing our financial statements in conformity with U.S. GAAP, we make estimates and assumptions about future events that affect the amounts of reported assets, liabilities, net sales, and expenses, as well as the disclosure of contingent liabilities in our condensed consolidated financial statements and the related notes thereto. Some of our accounting policies require the application of significant judgment by management in the selection of the appropriate assumptions for making these estimates. We base our judgments and estimates on our historical experience, our forecasts, available market information and other available information as appropriate. We believe that the assumptions, judgments, and estimates involved in the accounting for percentage-of-completion revenue recognition, accrued solar module collection and recycling liability, product warranties and manufacturing excursions, accounting for income taxes, reportable segment allocations, long-lived asset impairments, and goodwill have the greatest potential impact on our condensed consolidated financial statements. The actual results experienced by us may differ materially and adversely from our estimates. To the extent there are material differences between our estimates and the actual results, our future results of operations will be affected.

For a complete description of our critical accounting policies that affect our more significant judgments and estimates used in the preparation of our condensed consolidated financial statements, refer to our Annual Report on Form 10-K for the year ended December 31, 2012 filed with the Securities and Exchange Commission. There have been no material changes in any of our critical accounting policies during the six months ended June 30, 2013.

## **Recent Accounting Pronouncements**

See Note 3. "Recent Accounting Pronouncements," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for a summary of recent accounting pronouncements.

#### Liquidity and Capital Resources

As of June 30, 2013, we believe that our cash, cash equivalents, marketable securities, cash flows from operating activities including the contracted portion of our advanced-stage project pipeline, availability under our Revolving Credit Facility considering minimum liquidity covenant requirements, and access to the capital markets will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months. We intend to continue to carefully execute our LTSP and manage credit and market risk. However, if our financial results or operating plans change from our current assumptions, we may not have sufficient resources to support the execution of our LTSP.

Cash generated from operations including the contracted portion of our advanced-stage project pipeline is our primary source of operating liquidity and we believe that internally generated cash flows combined with our existing cash and cash equivalents, marketable securities, and availability under our Revolving Credit Facility considering minimum liquidity covenant requirements, are sufficient to support day-to-day business operations. We monitor our working capital to ensure we have adequate liquidity, both domestically and internationally, to support the execution of our LTSP.

In June 2013, we sold 9.7 million shares of common stock for proceeds of \$428.2 million, net of issuance costs. In July 2013, we entered into an amendment to our Revolving Credit Facility, which extended \$450.0 million in availability through July 2018. Additionally, we have an active shelf registration statement filed with the SEC for issuance of debt or equity securities if needed.

We intend to maintain appropriate debt levels based upon cash flow expectations, the overall cost of capital and expected cash requirements for operations, capital expenditures, and discretionary strategic spending. In the future, we may also engage in one or more debt or equity financings potentially including project specific non-recourse debt financings. We believe that when necessary, we will have adequate access to the capital markets, although our ability to raise capital on terms commercially acceptable to us could be constrained if there is insufficient lender or investor interest due to industry-wide or company-specific concerns. Such financings could result in increased debt service expenses or dilution to our existing stockholders. If we are unable to obtain debt or equity financing on reasonable terms, we may be unable to execute our LTSP.

As of June 30, 2013, we had \$1,285.3 million in cash, cash equivalents, and marketable securities compared with \$1,003.9 million as of December 31, 2012. Cash, cash equivalents, and marketable securities as of June 30, 2013 increased primarily as the result of cash generated from operating activities and the proceeds from an equity offering, partially offset by the repayment of long-term debt. As of June 30, 2013 and December 31, 2012, \$829.2 million and \$548.5 million, respectively, of our cash, cash equivalents, and marketable securities were held by foreign subsidiaries and are generally based in U.S. dollar and Euro denominated holdings. We utilize a variety of tax planning and financing strategies in an effort to ensure that our worldwide cash is available in the locations in which it is needed.

Our expanding systems business requires liquidity and is expected to continue to have significant liquidity requirements in the future. The net amount of our project assets, deferred project costs and payments and billings for deferred project costs, which approximates our net capital investment in under development, under construction and completed PV solar power systems as of June 30, 2013 was \$408.3 million. Solar power project development and construction cycles, which span the time between the identification of a site location to the commercial operation of a PV solar power system, vary substantially and can take many years to mature. As a result of these long project cycles, we may need to make significant up-front investments of resources in advance of the receipt of any cash from the sale of such PV solar power systems. These amounts include payment of interconnection and other deposits (some of which are non-refundable), posting of letters of credit, and incurring engineering, permitting, legal, and other expenses. Additionally, we may have to use our working capital, the availability under our Revolving Credit Facility,

or enter into non-recourse project financing to finance the construction of our systems projects, if such projects cannot be sold before construction begins. Depending upon the size and number of projects that we are developing and self-financing the construction of, the systems business has and is expected in the future to require significant liquidity. For example, we may have to substantially complete the construction of a systems project before such project is sold. Delays in construction progress or in completing the sale of our systems projects which we are self-financing may also impact our liquidity. We have historically financed these up-front investments for project development and when necessary, construction, primarily using working capital.

Additionally, we may in the future decide to retain ownership of one or more of our systems projects for a period of time up to the useful life of the PV solar power system if we determine it would be of economic and strategic benefit to do so. If, for example, we cannot sell a systems project at economics that are attractive to us or potential customers are unwilling to assume the risks and rewards typical of PV solar power system ownership, we may instead elect to own and operate such systems project. Any such decision to own and operate a PV solar power system is expected to impact liquidity depending upon the size and cost of the project. If such decision is made, we may elect to enter into temporary or long-term non-recourse project financing to reduce the impact on our liquidity and working capital.

The following considerations have impacted or are expected to impact our liquidity in the remainder of 2013 and beyond:

The amount of accounts receivable, unbilled as of June 30, 2013 was \$222.6 million and primarily represented revenues recognized on the construction work performed on systems projects in advance of billing the customer under the terms of the underlying construction contracts. Such construction costs have been funded with working capital and the unbilled amounts are expected to be billed and collected from customers during the next twelve months.

Additionally, as of June 30, 2013, we had \$237.8 million of current and \$237.6 million of noncurrent retainage, which represents the portion of a systems project 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. Such retainage amounts relate to construction costs already incurred and construction work already performed.

The amount of finished goods inventory ("solar module inventory") and BoS parts as of June 30, 2013 was \$406.6 million. As we continue with the construction of our advanced-stage project pipeline we must produce solar modules and procure BoS parts in the required volumes to support our planned construction schedules. As part of the normal construction cycle, we typically must manufacture modules or acquire the necessary BoS parts for construction activities in advance of receiving payment for such materials. Once solar modules and BoS parts are installed in a project, such installed amounts are classified as either project assets, deferred project costs, or cost of sales depending upon whether the project is subject to a definitive sales contract and whether all revenue recognition criteria have been met. Accordingly, as of any balance sheet date, our solar module inventory represents solar modules that will be installed in our advanced-stage project pipeline or that we expect to sell to third parties.

There may be a delay in when our solar module inventory and BoS parts can be converted into cash compared to a typical third-party module sale. Such timing differences temporarily reduce our liquidity to the extent that we have already paid for our BoS parts or the underlying costs to produce our solar module inventory. As previously announced, we have adjusted, and will in the future adjust, as necessary, our manufacturing capacity and planned solar module production levels, to match expected market demand. Any decrease in planned production reduces our risk and the impact on liquidity of having excess solar module inventories that we must sell to third parties as we execute our LTSP and respond to market pricing uncertainties for solar modules. Our solar module inventory as of June 30, 2013, is expected to primarily support our systems business, including our advanced-stage project pipeline, with the remaining amounts being used to support expected near term demand for third-party module sales. As of June 30, 2013, approximately \$178 million or 64% of our solar module inventory was either on-site or in-transit to our systems projects. Of this amount, approximately \$43 million of solar module inventories or 15% of the total solar module inventory balance was physically segregated for the purpose of qualifying a project for the Department of Treasury's Section 1603 cash grant program prior to the program's expiration in December 2011. Such segregated solar module inventory is expected to be installed in the underlying systems project in the normal course of our construction, which has not yet begun. All BoS parts are for our systems business projects.

We expect to commit working capital during the remainder of 2013 and beyond to acquire solar power projects in various stages of development including advance-stage projects with PPAs and continue developing those projects as necessary. Depending upon the size and stage of development, costs to acquire such solar power projects could be significant. When evaluating project acquisition opportunities, we consider both the strategic and financial benefits of any such acquisitions.

In connection with the execution of our LTSP, we expect joint ventures or other business arrangements with strategic partners to be a key part of our strategy. We have begun initiatives in several markets to expedite our penetration of those markets and establish relationships with potential strategic partners, customers, and policymakers. Many of these business arrangements are expected to involve a significant cash investment or other allocation of working capital that could reduce our liquidity or requires us to pursue additional sources of financing, assuming such sources

are available to us. Additionally, in order to execute our LTSP in such markets, we have elected, and may in the future elect or be required to temporarily retain a minority or non-controlling ownership interest in the underlying systems projects we develop, supply modules to, or construct. Any such retained ownership interest is expected to impact our liquidity to the extent we do not obtain new sources of capital to fund such investments.

Our restructuring initiatives are expected to result in total remaining cash payments of up to \$13 million. Such cash payments are primarily related to severance costs for reductions in force as a result of such restructuring initiatives.

In connection with our LTSP, we may elect to undertake future restructuring actions as we continue to align our manufacturing production capacity with market demand, evaluate our cost structure and identify potential cost savings opportunities, and focus our resources on developing target sustainable markets. We may in the future incur additional restructuring costs, which may be significant (including potentially the repayment of debt facilities and other amounts,

the payment of severance to terminated employees, and other restructuring related costs) that could reduce our liquidity position to the point where we need to pursue additional sources of financing, assuming such sources are available to us. See Note 4. "Restructuring," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

During the remainder of 2013, we expect to spend up to \$230 million for capital expenditures, primarily related to expenditures for improvements and enhancements to existing machinery and equipment, which we believe will increase our solar module efficiencies. A majority of our remaining capital expenditures for 2013 will be incurred in foreign currencies and are therefore subject to fluctuations in currency exchange rates.

Under the sales agreements for a limited number of our solar power projects, we may be required to rescind the sale of such projects if certain events occur, such as not achieving commercial operation of the project within a certain time frame. Although we consider the possibility that we would be required to rescind the sale of any of our solar power projects to be remote, our current working capital and other available sources of liquidity may not be sufficient to make any required payments. If we are required to rescind the sale of a solar power project, we would have the ability to market and sell such project at then current market pricing, which could be at a lower than expected price to the extent the event requiring a rescission impacts the project's marketability or related tax benefits. Our liquidity may also be impacted as the time between the rescission of the sale for a project and the potential sale of such project could take several months. Alternatively, we may determine that the most economically attractive solution for any such project is for us to own and operate the project, which would have a longer term impact on our liquidity compared to the sale of a project.

The unprecedented disruption in the credit markets that began in 2008 and the current instability in Europe have had a significant adverse impact on a number of financial institutions. The ongoing sovereign debt problems in Europe and its impact on the balance sheets and lending practices of European banks in particular could negatively impact our access to, and cost of, capital, and therefore could have an adverse effect on our business, results of operations, financial condition and competitive position. It could also similarly affect our customers and therefore limit the demand for our systems projects or solar modules. As of June 30, 2013 our liquidity and marketable securities and restricted investments have not been materially adversely impacted by the current credit environment, and we believe that they will not be materially adversely impacted in the near future. We will continue to closely monitor our liquidity and the credit markets. However, we cannot predict with any certainty the impact to us of any further disruption in the current credit environment.

## **Cash Flows Descriptions**

The following table summarizes the key cash flow metrics for the six months ended June 30, 2013 and June 30, 2012 (in thousands):

	June 30, 2013	June 30, 2012	
Net cash provided by operating activities	\$288,828	\$412,335	
Net cash used in investing activities	(437,620	) (301,303	)
Net cash provided by (used in) financing activities	177,221	(85,906	)
Effect of exchange rate changes on cash and cash equivalents	(1,066	) (505	)
Net increase in cash and cash equivalents	\$27,363	\$24,621	

#### **Operating Activities**

Six Months Ended

Cash provided by operating activities was \$288.8 million during the six months ended June 30, 2013 compared with cash provided by operating activities of \$412.3 million during the six months ended June 30, 2012. The decrease in net cash provided by operating activities during the six months ended June 30, 2013 was primarily due to an increase in cash paid to suppliers and associates, which was partially offset by an increase in cash received from customers. Also partially offsetting the decrease was an increase in the excess tax benefits related to share-based compensation arrangements, which decreased our operating cash flow for the six months ended June 30, 2013 by \$55.7 million compared to a \$66.9 million decrease for the six months ended June 30, 2013. In addition, income taxes paid, net decreased from net payments of \$25.6 million during the six months ended June 30, 2012 to net payments of \$6.0 million during the six months ended June 30, 2013.

**Investing Activities** 

Cash used in investing activities was \$437.6 million during the six months ended June 30, 2013, compared with \$301.3 million during the six months ended June 30, 2012. Cash used in investing activities during the six months ended June 30, 2013 included capital expenditures of \$156.9 million, which decreased from \$282.0 million during the six months ended June 30, 2012. The decrease in capital expenditures was in accordance with our LTSP. Also, we increased our net investment in marketable securities by \$255.5 million during the six months ended June 30, 2013 compared with a decrease in our net investment in marketable securities of \$68.9 million during the six months ended June 30, 2012. We also increased our investment in equity and cost method investments by \$14.9 million in accordance with our LTSP during the six months ended June 30, 2013. Acquisitions, net of cash acquired, resulted in payments of \$30.7 million in the six months ended June 30, 2013 compared to \$2.4 million in the six months ended June 30, 2012. Based upon reductions in our estimated future end-of-life collection and recycling costs we determined no incremental funding was needed for the purchase of restricted investments during the six months ended June 30, 2013, compared to \$80.7 million in purchases of restricted investments during the six months ended June 30, 2012. The remaining change in cash used in investing activities during the six months ended June 30, 2013 included a change in restricted cash of \$5.1 million, which decreased from \$21.5 million in the six months ended June 30, 2012 as well as a payment received on our note receivable, affiliate of \$17.1 million in the six months ended June 30, 2013.

#### Financing Activities

Cash provided by financing activities was \$177.2 million during the six months ended June 30, 2013 compared with cash used in financing activities of \$85.9 million during the six months ended June 30, 2012. Cash provided by financing activities during the six months ended June 30, 2013 resulted primarily from the net cash proceeds from our June 2013 equity offering of \$430.4 million, the proceeds of borrowings under long-term debt of \$335.0 million and excess tax benefit from share-based compensation arrangements of \$55.7 million, partially offset by the repayment of long-term debt of \$635.9 million and the repayment of economic development funding of \$8.3 million.

Cash used by financing activities during the six months ended June 30, 2012 resulted primarily from the proceeds of borrowings under long-term debt of \$590.0 million and excess tax benefits from share-based compensation arrangements of \$66.9 million, partially offset by the repayments of long-term debt of \$735.3 million and the repayment of economic development funding of \$6.8 million.

## **Contractual Obligations**

Our contractual obligations have not materially changed since the end of 2012 other than in the ordinary course of business. See also our Annual Report on Form 10-K for the year ended December 31, 2012 for additional information regarding our contractual obligations.

**Off-Balance Sheet Arrangements** 

We had no off-balance sheet arrangements as of June 30, 2013.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes from the information previously provided under Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2012.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of June 30, 2013 of the effectiveness of our "disclosure controls and procedures" as defined in Exchange Act Rule 13a-15(e). Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of June 30, 2013 our disclosure controls and procedures were effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC and is accumulated and communicated to our management as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our "internal control over financial reporting" as defined in Exchange Act Rule 13a-15(f) to determine whether any changes in our internal control over financial reporting occurred during the quarter ended June 30, 2013 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Based on that evaluation, there have been no such changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during the quarter ended June 30, 2013.

#### CEO and CFO Certifications

We have attached as exhibits to this Quarterly Report on Form 10-Q the certifications of our Chief Executive Officer and Chief Financial Officer, which are required in accordance with the Exchange Act. We recommend that this Item 4 be read in conjunction with those certifications for a more complete understanding of the subject matter presented.

#### Limitations on the Effectiveness of Controls

Control systems, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control systems' objectives are being met. Further, the design of any control systems must reflect the fact that there are resource constraints, and the benefits of all controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of error or mistake. Control systems can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

#### PART II. OTHER INFORMATION

#### Item 1. Legal Proceedings

In the ordinary conduct of our business, we are subject to periodic lawsuits, investigations, and claims, including, but not limited to, routine employment matters. Although we cannot predict with certainty the ultimate resolution of lawsuits, investigations, and claims asserted against us, we do not believe that any currently pending legal proceeding to which we are a party to will have a material adverse effect on our business, results of operations, cash flows, or financial condition.

#### Class Action

On March 15, 2012, a purported class action lawsuit titled Smilovits v. First Solar, Inc., et al., Case No. 2:12-cv-00555-DGC, was filed in the United States District Court for the District of Arizona (hereafter "Arizona District Court") against the Company and certain of our current and former directors and officers. The complaint was filed on behalf of purchasers of the Company's securities between April 30, 2008, and February 28, 2012. The complaint generally alleges that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 by making false and misleading statements regarding the Company's financial performance and prospects. The action includes claims for damages, and an award of costs and expenses to the putative class, including attorneys' fees. The Company believes it has meritorious defenses and will vigorously defend this action.

On July 23, 2012, the Arizona District Court issued an order appointing as lead plaintiffs in the class action the Mineworkers' Pension Scheme and British Coal Staff Superannuation Scheme (collectively "Pension Schemes"). The Pension Schemes filed an amended complaint on August 17, 2012, which contains similar allegations and seeks similar relief as the original complaint. Defendants filed a motion to dismiss on September 14, 2012. On December 17, 2012, the court denied Defendants' motion to dismiss. On February 26, 2013, the court directed the parties to begin class certification discovery, and ordered a further scheduling conference to set the merit discovery schedule after the issue of class certification has been decided. On June 21, 2013, the Pension Schemes filed a motion for class certification.

The action is still in the initial stages and there has been no merits discovery. Accordingly, we are not in a position to assess whether any loss or adverse effect on our financial condition is probable or remote or to estimate the range of potential loss, if any.

#### **Derivative Actions**

On April 3, 2012, a derivative action titled Tsevegmid v. Ahearn, et al., Case No. 1:12-cv-00417-CJB, was filed by a putative stockholder on behalf of the Company in the United States District Court for the District of Delaware (hereafter "Delaware District Court") against certain current and former directors and officers of the Company, alleging breach of fiduciary duties and unjust enrichment. The complaint generally alleges that from June 1, 2008, to March 7, 2012, the defendants caused or allowed false and misleading statements to be made concerning the Company's financial performance and prospects. The action includes claims for, among other things, damages in favor of the Company, certain corporate actions to purportedly improve the Company's corporate governance, and an award of costs and expenses to the putative plaintiff stockholder, including attorneys' fees. On April 10, 2012, a second derivative complaint was filed in the Delaware District Court. The complaint, titled Brownlee v. Ahearn, et al., Case No. 1:12-cv-00456-CJB, contains similar allegations and seeks similar relief to the Tsevegmid action. By Court order on April 30, 2012, pursuant to the parties' stipulation, the Tsevegmid action and the Brownlee action were consolidated into a single action in the Delaware District Court and defendants filed a motion to challenge Delaware as the appropriate venue for the consolidated action on May 15, 2012. On March 4, 2013, the magistrate judge issued a Report and Recommendation recommending to the Court that defendants' motion be granted and that the case be transferred to the District of Arizona. On July 12, 2013, the Court adopted the magistrate judge's Report and Recommendation and ordered the case transferred to the District of Arizona.

On April 12, 2012, a derivative complaint was filed in the Arizona District Court, titled Tindall v. Ahearn, et al., Case No. 2:12-cv-00769-ROS. In addition to alleging claims and seeking relief similar to the claims and relief asserted in the Tsevegmid and Brownlee actions, the Tindall complaint alleges violations of Sections 14(a) and 20(b) of the Securities Exchange Act of 1934. On April 19, 2012, a second derivative complaint was filed in the Arizona District Court, titled Nederhood v. Ahearn, et al., Case No. 2:12-cv-00819-JWS. The Nederhood complaint contains similar allegations and seeks similar relief to the Tsevegmid and Brownlee actions. On May 17, 2012 and May 30, 2012, respectively, two additional derivative complaints, containing similar allegations and seeking similar relief as the Nederhood complaint, were filed in Arizona District Court: Morris v. Ahearn, et al., Case No. 2:12-cv-01031-JAT and Tan v. Ahearn, et al., 2:12-cv-01144-NVW.

On July 17, 2012, the Arizona District Court issued an order granting First Solar's motion to transfer the derivative actions to Judge David Campbell, the judge to whom the Smilovits class action is assigned. On August 8, 2012, the Court consolidated the four derivative actions pending in Arizona District Court, and on August 31, 2012, Plaintiffs filed an amended complaint. Defendants filed a motion to stay the action on September 14, 2012. On December 17, 2012, the Court granted Defendants' motion to stay pending resolution of the Smilovits class action. The Company intends to move the Court for an order consolidating the two derivative actions transferred from the Delaware District Court with the stayed Arizona derivative actions.

On July 16, 2013, a derivative complaint was filed in the Superior Court of Arizona, Maricopa County, titled Bargar et al. v. Ahearn et al., Case No. CV2013-009938, by a putative shareholder against certain current and former directors and officers of the Company. The complaint contains similar allegations to the Delaware and Arizona derivative cases, and includes claims for, among other things, breach of fiduciary duties, insider trading, unjust enrichment, and waste of corporate assets.

The Company believes that plaintiffs in the derivative actions lack standing to pursue litigation on behalf of First Solar. The derivative actions are still in the initial stages and there has been no discovery. Accordingly, we are not in a position to assess whether any loss or adverse effect on our financial condition is probable or remote or to estimate the range of potential loss, if any.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A: Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2012 and the section titled "Risk Factors" included in the Prospectus, which could materially affect our business, results of operations, cash flows, or financial condition. The risks described in our Annual Report on Form 10-K and the Prospectus are not the only risks facing the Company. Additional risks and uncertainties not currently known to us or that we currently deem

to be immaterial also may materially adversely affect our business, financial condition, or future results. There have been no material changes in the risk factors contained in our Annual Report on Form 10-K, as updated and supplemented by the risk factors contained in the Prospectus.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

On July 30, 2013, First Solar amended its change in control severance agreements with James Hughes, Mark Widmar, Georges Antoun, Carol Campbell, Tymen de Jong, Raffi Garabedian, Mary Beth Gustafsson, Tomas Kuster, Louis Moore, Azmat Siddiqi and Timothy Rebhorn (the "Executives"), respectively. The amendment pertains to provisions relating to Section 409A of the Internal Revenue Code of 1986, as amended, and the regulation thereunder. In additional to updating the definition of a "change in control" to be consistent with the regulatory definition, the amendment, provides that, in the event of certain terminations in anticipation of a qualifying change in control, severance payable to such terminated Executive will continue to be paid under the current employment agreement (i.e., in installments), but that the applicable Executives will receive an additional lump-sum payment equal to the difference between the benefits under the two agreements, payable at the time provided in the change in control severance agreement. Additionally, in such cases, executive medical benefits under the employment agreement will apply, but overlap with the additional period of benefits coverage under the change in control severance agreement, so that once the period in the employment agreement expires, the executive will be covered under the balance of time remaining under the longer period in the change in control severance agreement.

#### Item 6. Exhibits

The following exhibits are filed with this Quarterly Report on Form 10-Q:

Exhibit	Exhibit Description
Number	Exhibit Description
4.1	Second Amendment to the Malaysian Euro Facility Agreement
10.1	Amendment to Change in Control Severance Agreement
31.01	Certification of Chief Executive Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to
	Section 302 of the Sarbanes-Oxley Act of 2002
31.02	Certification of Chief Financial Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to
	Section 302 of the Sarbanes-Oxley Act of 2002
32.01*	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section
	1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

# **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FIRST SOLAR, INC. By: /s/ MARK R. WIDMAR Mark R. Widmar Principal Accounting Officer

August 7, 2013